United States Army

Fort Monmouth, New Jersey

Underground Storage Tank Closure and Site Investigation Report

Building 2018
Charles Wood

NJDEP UST Registration No. 0192486-2
NJDEP Closure Approval No. C-91-2837
Spill Case No. 90-09-05-1616

May 2000

Volume 1 of 2

UNDERGROUND STORAGE TANK
CLOSURE AND SITE INVESTIGATION REPORT

BUILDING 2018

CHARLES WOOD
NJDEP UST REGISTRATION NO. 0192486-2
NJDEP CLOSURE APPROVAL NO. C-91-2837
SPILL CASE NO. 90-09-05-1616

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PREPARED FOR:

UNITED STATES ARMY, FORT MONMOUTH, NEW JERSEY
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EXECUTIVE SUMMARY

UST Closure

On November 8, 1991, a steel underground storage tank (UST) was closed by removal in accordance with the New Jersey Department of Environmental Protection (NJDEP) Closure Approval No. C-91-2837 at U.S. Army Fort Monmouth, Fort Monmouth, New Jersey. The UST, NJDEP Registration No. 0192486-2, was located immediately adjacent to Building 2018 in the Main Post area of U.S. Army, Fort Monmouth. UST No. 0192486-2 was a 1,000-gallon No. 2 fuel oil UST. The UST fill port was located directly above the tank. The tank closure was performed by Cleaning Up The Environment Inc. (CUTE).

Site Assessment - Soil

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

On November 8, 1991, following the removal of the UST, post-excavation soil samples 1 and 3 were collected from two (2) locations along the sidewalls of the UST excavation at a depth of 4.5 feet below ground surface (bgs). Sample 2 was collected from the base of the excavation at a depth of 5.0 feet bgs. Samples 4 and 5 were collected from two (2) locations along the former piping length of the excavation, which was approximately 12 feet in length. The piping samples were collected at a depth of 3.0 feet bgs. Sample 6 was collected from the interior of Building 2018, at a depth of 0.5 feet bgs. All samples were analyzed for total petroleum hydrocarbons (TPHC). Sample 3 was also analyzed for semivolatile organic compounds plus 15 tentatively identified compounds (SVOCs).

A petro-tight tank test was performed on the UST on September 4, 1990 by TankTest Inc. (TTI). The tank test was performed in order to provide information on the possible source of contamination in the area.

Findings - Soil

All post-excavation soil samples collected from the UST excavation and from below piping associated with the former UST at Building 2018 contained TPHC concentrations which exceeded the NJDEP residential direct contact total organic contaminants soil cleanup criteria of 10,000 milligrams per kilogram (mg/kg) (N.J.A.C. 7:26D and revisions dated February 3, 1994). Samples 1, 2, 5, and 6 contained levels of TPHC ranging in concentration from 60.0 mg/kg to 1,000.0 mg/kg. Samples 3 and 4 contained TPHC at 20,000.0 mg/kg, and 9,000.0 mg/kg,

respectively. Sample 3 also contained acenaphthene at 2.1 mg/kg, and bis(2-ethylhexyl)phthalate at 11.0 mg/kg. The semivolatile results were below the NJDEP residential direct contact and impact to groundwater soil cleanup criteria.

The petro-tight tank test conducted on September 5, 1990 was proven inconclusive due to excessive product loss. The test initially involved filling the stand pipe and the tank completely full of product. As product was introduced into the stand pipe, a meter read any loss of product. The test had indicated a leak in excess of 2.0 gallons of product per hour, however due to insufficient data, the test was inconclusive. TTI recognized several factors that may have contributed to the excessive loss of product. The tank could have had a large "vapor pocket" which can be caused by improper tank ventilation. Another reason for product loss could have been due to a break in either the vent pipe or the product lines, however, the tank would have needed to be uncovered in order to confirm that hypothesis. TTI would have needed to perform additional tests to conclude an actual leak in the UST. No other tests were performed on UST No. 0192486-2.

Based on the result of the petro-tight tank test, the Directorate of Public Works (DPW) has concluded that an historical discharge was associated with the UST. On September 5, 1990, a spill was reported to the NJDEP "Hotline" for UST No. 0192486-2 and was assigned Spill Case No. 90-09-05-1616.

Site Restoration

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

Site Assessment - Groundwater

One shallow overburden monitoring well (MW-1) was installed at the Building 2018 area approximately 10 feet north of the UST excavation in the assumed downgradient direction. The water table is approximately 7.39 feet below ground surface.

On November 27, 1995 and December 18, 1995, MW-1 was sampled for volatile organic compounds calibrated for xylene plus 15 tentatively identified compounds (VOCs), and semivolatile organic compounds plus 15 tentatively identified compounds (SVOCs). Sampling and analysis were performed in accordance with the NJDEP *Field Sampling Procedures Manual* and the *Technical Requirements For Site Remediation.*

Findings - Groundwater

The sample collected from MW-1 on November 27, 1995, contained chloroform at 25.0 micrograms per liter (ug/l). This exceeded the Ground Water Quality Standard (GWQS) for chloroform of 6 ug/l. All other groundwater analytical results were either below the detection limit or in compliance with the New Jersey Groundwater Quality Standard (GWQS).

The sample collected from MW-1 on December 18, 1995, contained chloroform at 31.0 micrograms per liter (ug/l). This exceeded the Ground Water Quality Standard (GWQS) for chloroform of 6 ug/l. All other groundwater analytical results were either below the detection limit or in compliance with the New Jersey Groundwater Quality Standard (GWQS).

The depth to the water table was 7.27 feet below grade on November 27, 1995, and 7.39 feet below grade on December 18, 1995.

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 for Site Remediation.*

Conclusions and Recommendations

Tha analytical results for all post-excavation soil samples collected from the UST closure excavation at building 2018 were below the NJDEP soil cleanup criteria for total organic contaminants.

Based on the analytical results of the groundwater samples collected on November 27, 1995 and December 18, 1995, groundwater quality at the Building 2018 UST closure site exceeds the New Jersey Groundwater Quality Standard for VOCs.

Groundwater quality at the Building 2018 UST closure site exceeds the GWQC for chloroform. The trace concentrations of methylene chloride detected during both rounds are attributed to sampling and/or analytical interference, a common source of laboratory interference.

Additional data collection is recommended for Building 2018. 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 chloroform. This is to determine if the chloroform previously detected is migrating in the groundwater or is due to interference from sampling-induced turbidity.

Should the recommended groundwater sampling indicate that the groundwater complies with the applicable groundwater quality criteria, no further action is proposed.

1.0 UNDERGROUND STORAGE TANK DECOMMISSIONING ACTIVITIES

1.1 OVERVIEW

One underground storage tank (UST), New Jersey Department of Environmental Protection (NJDEP) Registration No. 0192486-2, was closed at Building 2018 at U.S. Army Fort Monmouth, Fort Monmouth, New Jersey on November 8, 1991. Refer to site location map on Figure 1. This report presents the results of the DPW's implementation of the UST Decommissioning/Closure Plan submitted to the NJDEP on July 12, 1991. The plan was approved on October 22, 1991 and assigned TMS No. C-91-2837. The UST was a steel 1,000-gallon tank with fiberglass coating containing No. 2 fuel oil.

Decommissioning activities for UST No. 0192486-2 complied with all applicable Federal, State and Local laws and ordinances in effect at the date of decommissioning. These laws included but were not limited to: N.J.A.C. 7:14B-1 et seq., N.J.A.C. 5:23-1 et seq., and Occupational Safety and Health Administration (OSHA) 1910.146 & 1910.120. All permits including but not limited to the NJDEP-approved Decommissioning/Closure Plan were posted onsite for inspection. CUTE Inc., the contractor that conducted the decommissioning activities, is registered and certified by the NJDEP for performing UST closure activities. Closure of UST No. 0192486-2 proceeded under the approval of the NJDEP Bureau of Underground Storage Tanks (NJDEP-BUST). The NJDEP-BUST closure approval and signed certifications for UST No. 0192486-2 are included in Appendices A and B, respectively.

Based on result of the petro-tight tank test, the DPW has concluded that an historical discharge was associated with the UST. On September 5, 1990, a spill was reported to the NJDEP "Hotline" for UST No. 0192486-2 and was assigned Spill Case No. 90-09-05-1616.

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

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

1.2 SITE DESCRIPTION

Building 2018 is located in the northeastern portion of the Charles Wood area of Fort Monmouth, as shown on Figure 1. UST No. 0192486-2 was located southwest of Building 2018 and appurtenant piping ran approximately 4 feet northeast from the excavation to Building 2018. The fill port area was located directly above the tank. A site map is provided on Figure 2.

Regional Geology

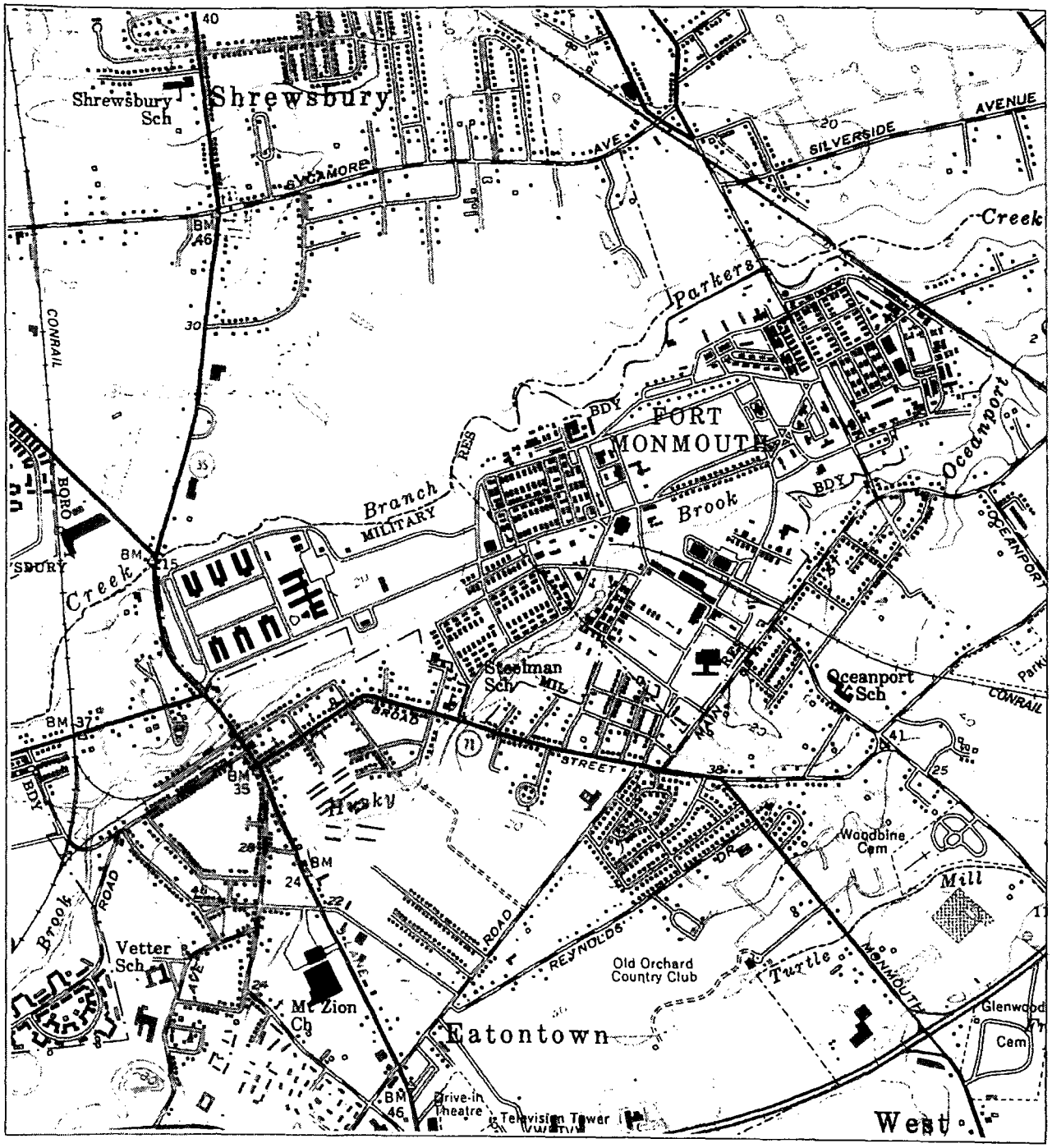
Monmouth County lies within the New Jersey Section of the Atlantic Coastal Plain physiographic province. The Main Post, Charles Wood, and the Evans areas are located in what may be referred to as the Outer Coastal Plain subprovince, or the Outer Lowlands.

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).

BCM ENGINEERS
A Division of Versar

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



Source: Long Branch, New Jersey Quadrangle

Project No. 09-5004-14

Figure 1
Site Location Map

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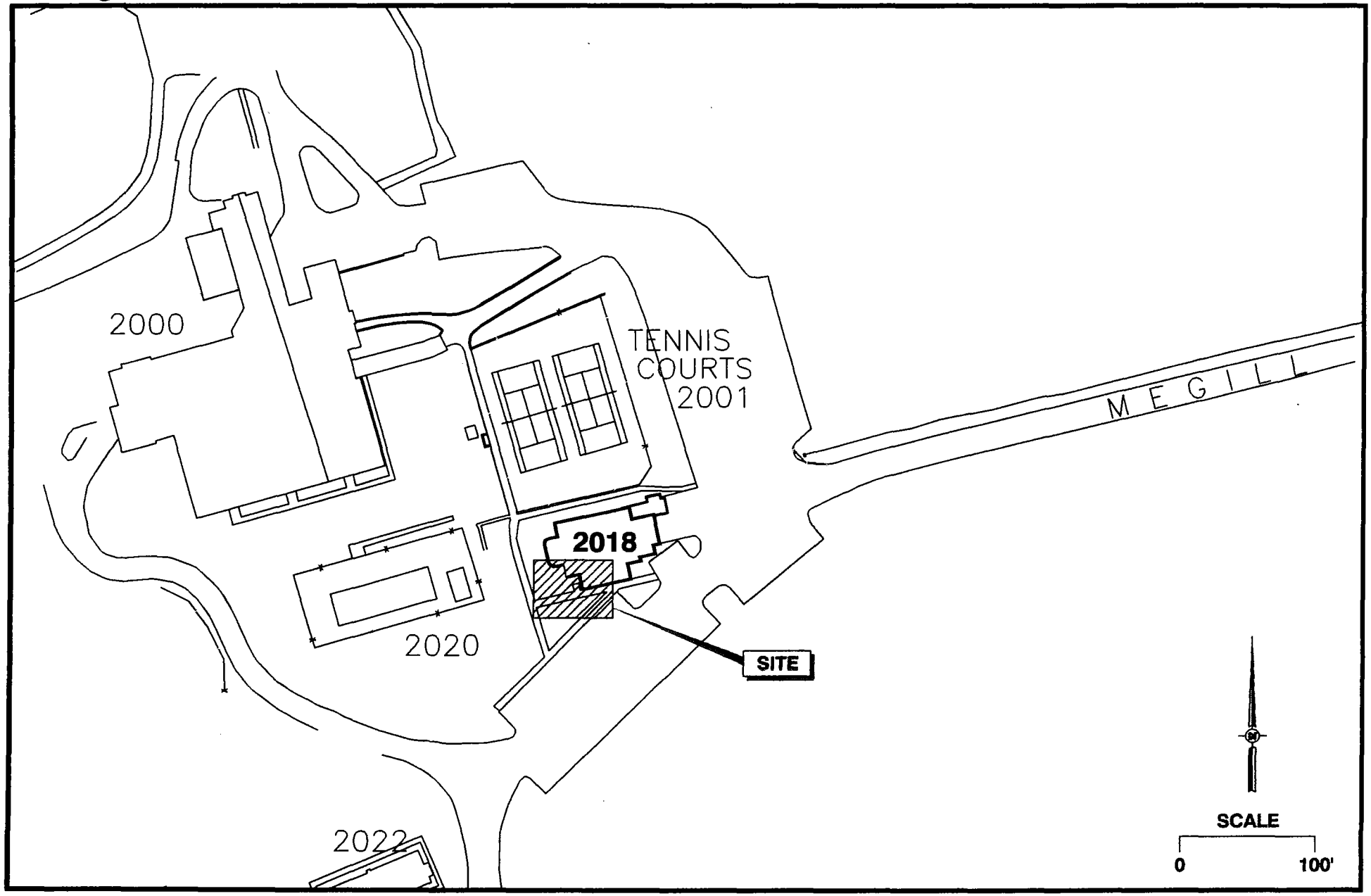
U.S. Army
Department of Public Works
Fort Monmouth, New Jersey



Project No. 09-5004-08

Figure 2
Building 2018
Site Map

Local Geology

Based on the regional geologic map (Jablonski, 1968), the Cretaceous age Red Bank and Tinton Sands outcrop at the Charles Wood 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).

Over the last 80 years, the natural topography of Fort Monmouth has been altered by excavation and filling activities by the military. Topographic elevations for the Charles Wood area range from 20 feet above mean seal level (MSL) to 71 feet above MSL.

Hydrogeology

The water table aquifer at the Charles Wood 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 Charles Wood 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 depth to the water table measured on June 8, 9, and 10, 1993, in the Building 2500 monitoring well MW-1, MW-2, MW-3, and MW-4, were approximately 7 feet below grade for each well.

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 Charles Wood 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 Charles Wood 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 Charles Wood area, which primarily consisted of fine-to-medium grained sands, with occasional lenses or laminations of gravel silt and/or clay.

1.3 HEALTH AND SAFETY

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

1.4 REMOVAL OF UNDERGROUND STORAGE TANK

1.4.1 General Procedures

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

1.4.2 Underground Storage Tank Excavation and Cleaning

Prior to UST decommissioning activities, surficial soil was removed to expose the UST and associated piping. All free product present in the piping was drained into the UST, and the UST was purged to remove vapors prior to cutting and removal of the piping. After removal of the associated piping, a manway was made in the UST to allow for proper cleaning. The UST was completely emptied of all liquids prior to removal from the ground. The UST was cleaned prior to removal from the excavation in accordance with the NJDEP-BUST regulations. After the UST was removed from the excavation, it was staged on polyethylene sheeting and examined for holes. Two pinholes were noted in one side of the UST. Soils surrounding the UST were screened visually and with an OVA for evidence of contamination. No evidence of contamination was observed.

Soil screening was also performed along the piping associated with the UST. No contamination was noted anywhere along the piping length.

1.5 UNDERGROUND STORAGE TANK TRANSPORTATION AND DISPOSAL

The tank was transported by CUTE Inc. to a metal recycling facility for disposal in compliance with all applicable regulations and laws.

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

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

1.6 MANAGEMENT OF EXCAVATED SOILS

Based on OVA air monitoring and analytical results from the post-excavation soil samples, no soils exhibited signs of contamination. Therefore, the excavated soils were used as backfill following removal of the UST.

2.0 SITE INVESTIGATION ACTIVITIES

2.1 OVERVIEW

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

The following Parties participated in Closure and Site Investigation Activities.

- Closure Contractor: Fabiano and Sons, Inc.
  Closure Supervisor: Anthony Fabiano
  Phone Number: (908)571-1004
  NJDEP Company Certification No.: PLE 01349

- Subsurface Evaluator: Dinkerrai M. Desai
  Employer: U.S. Army, Fort Monmouth
  Phone Number: (908)532-1475
  NJDEP Certification No.: E0002266

- Analytical Laboratory: Environmental Profile Laboratories
  Contact Person: Daniel Wright
  Phone Number: (908)244-6278
  NJDEP Company Certification No.: 15526

2.2 FIELD SCREENING/MONITORING

Field screening was performed by a NJDEP Certified Sub-Surface Evaluator using an OVA and visual observations to identify potentially contaminated material. Soil excavated from around the tank and appurtenant piping, as well as the UST excavation sidewalls and bottom, did not exhibit any evidence of potential contamination.

2.3 SOIL SAMPLING

On November 8, 1991, post-excavation soil samples 1, and 3 were collected from two (2) locations along the sidewalls of the UST excavation at a depth of 4.5 feet bgs. Sample 2 was collected from the base of the excavation at a depth of 5.0 feet bgs. Samples 4, and 5 were collected from two (2) locations along the former piping length of the excavation, which was approximately 12 feet in length. The piping samples were collected at a depth of 3 feet bgs. Sample 6 was collected from the interior of Building 2018, at a depth of 0.5 feet bgs. All samples were analyzed for TPHC. Sample 3 was also analyzed for SVOCs.

The site assessment was performed by U.S. Army personnel in accordance with the NJDEP *Technical Requirements* and the NJDEP *Field Sampling Procedures Manual.* A summary of sampling activities including parameters analyzed is provided in Table 1. The post-excavation soil samples were collected using polystyrene scoops. Actual soil TPHC values may be higher than reported, due to sample utensil absorbency. If absorbency resulted in reducing the actual soil TPHC concentration by 50 %, the highest soil contaminant would have been 40,000 mg/kg, which exceeds the applicable NJDEP soil cleanup standard for total organic contaminants of 10,000 mg/kg. Following soil sampling activities, the samples were chilled and delivered to Environmental Profile Laboratories located in Toms River, New Jersey, for analysis.

2.4 GROUNDWATER SAMPLING

2.4.1 Monitoring Well Installation

One shallow monitoring well (MW-1) was installed at the Building 2018 approximately 10 feet north of the UST excavation. in the assumed downgradient direction. The water table is approximately 7.39 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 well was constructed with 4-inch (ID) PVC riser and 0.020 slotted PVC well screen. A silica sand pack was installed in the annulus between each borehole wall and the screen. The sand pack was extended approximately 2 feet above the top of the screen. The sand pack above the well screen was graded down to a fine sand to minimize grout intrusion.

The boreholes were tremie-grouted with bentonite-cement grout from the top of the sand pack to 0.5 inches bgs. The wells were secured with steel protective casings with a stick up that is approximately 2 feet above ground surface. The steel protective casings were set in place with concrete, which was placed in the remaining open boreholes. The elevation of the well rises were surveyed to the nearest 0.01 feet by a New Jersey-licensed surveyor. The well permit numbers were marked on each well casing as required.

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

2.4.1 Monitoring Well Sampling

On November 27, 1995 and December 18, 1995, MW-1 was sampled for volatile organic compounds calibrated for xylene plus 15 tentatively identified compounds (VOCs), methyl tertiary butyl ether, tertiary butyl alcohol, and semivolatile organic compounds plus 15 tentatively identified compounds (SVOCs). Sampling and analysis were performed in accordance with the NJDEP *Field Sampling Procedures Manual* and the *Technical Requirements For Site Remediation.*

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

TABLE 1

SUMMARY OF SAMPLING ACTIVITIES
BUILDING 2018, CHARLES WOOD
FORT MONMOUTH, NEW JERSEY

Sample ID	Date of Collection	Matrix	Sample Type	Analytical Parameters (and USEPA Methods) *	Sampling Method
Site 1	11/8/91	Soil	Post-Excavation	TPHC	Stainless Steel Scoop
Site 2	11/8/91	Soil	Post-Excavation	TPHC	Stainless Steel Scoop
Site 3	11/8/91	Soil	Post-Excavation	TPHC, SVOCs	Stainless Steel Scoop
Site 4	11/8/91	Soil	Post-Excavation	TPHC	Stainless Steel Scoop
Site 5	11/8/91	Soil	Post-Excavation	TPHC	Stainless Steel Scoop
Site 6	11/8/91	Soil	Post-Excavation	TPHC	Stainless Steel Scoop
MW-1	11/27/95	Aqueous	Groundwater	VOCs, SVOCs	Teflon Bottom Bailer
MW-1	12/18/95	Aqueous	Groundwater	VOCs, SVOCs	Teflon Bottom Bailer

* Note:

TPHC	Total Petroleum Hydrocarbons (Method 418.1 / soil and aqueous)
SVOCs	Semivolatile Organic Compounds plus 15 tentatively identified compounds (Method 625 / soil and aqueous)
VOCs	Volatile Organic Compounds calibrated for xylene plus 15 tentatively identified compounds (Method 524.2 / aqueous)

3.0 CONCLUSIONS AND RECOMMENDATIONS

3.1 SOIL SAMPLING RESULTS

To evaluate soil conditions following removal of the UST and associated piping, post-excavation soil samples were collected from a total of six (6) locations on November 8, 1991. All samples were analyzed for TPHC. In addition, one sample (sample 3) was analyzed for SVOCs. The post-excavation sampling results were compared to the NJDEP residential direct contact total organic contaminants soil cleanup criteria of 10,000 mg/kg (N.J.A.C. 7:26D and revisions dated February 3, 1994). A summary of the analytical results and comparison to the NJDEP soil cleanup criteria is provided in Table 2 and the soil sampling results are shown on Figure 3. The analytical data package is provided in Appendix F.

All post-excavation soil samples collected on November 8, 1991, from the UST excavation and from below piping associated with the UST contained concentrations of TPHC which exceeded the NJDEP soil cleanup criteria of 10,000 mg/kg. Post-excavation soil samples 1, 2, 5, and 6 contained levels of TPHC ranging in concentrations of 60.0 mg/kg to 1,000 mg/kg. Samples 3, and 4 contained TPHC at 20,000.0 mg/kg, and 9,000 mg/kg, respectively. Sample 3 also contained acenaphthene at 2.1 mg/kg, and bis(2-ethylhexyl)phthalate at 11.0 mg/kg. The SVOCs were below the NJDEP residential direct contact and impact to groundwater soil cleanup criteria.

3.2 GROUNDWATER SAMPLING RESULTS

All VOC results, with the exception to chloroform, were either below the detection limit or in compliance with the New Jersey Groundwater Quality Standard (GWQS).

The sample collected from MW-1 on November 27, 1995, contained chloroform at 25.0 ug/l, and naphthalene at 11.0 ug/l. This exceeded the NJDEP Groundwater Quality Standard for chloroform of 6.0 ug/l. The sample also contained napthalene at 4.0 ug/l. No other compounds were detected. The trip and field blanks contained methylene chloride at 0.70 ug/l and 0.60 ug/l, respectively. No other compounds were detected.

The sample collected from MW-1 on December 18, 1995, contained methylene chloride at 0.50 ug/l, chloroform at 31.0 ug/l, and napthalene at 2.7 ug/l. This exceeded the NJDEP Groundwater Quality Standard for chloroform of 6.0 ug/l. No other compounds were detected. Both the trip and field blanks contained methylene chloride at 1.4 ug/l. No other compounds were detected.

No product or sheen was observed in MW-1 on either of the sampling dates. The depth to the water table in MW-1 was 7.27 feet below grade on November 27, 1995, and 7.39 feet below grade on December 18, 1995.

All groundwater analytical results are presented in Table 3 and shown on Figure 4. The groundwater analytical data package is provided in Appendix D. The full data package, including quality control, is on file at U.S. Army Fort Monmouth, DPW.

3.3 CONCLUSIONS AND RECOMMENDATIONS

The analytical results for all post-excavation soil samples collected from the UST closure excavation at Building 2018 were below the NJDEP soil cleanup criteria for total organic contaminants.

Based on the analytical results of the groundwater samples collected on November 27, 1995 and December 18, 1995, groundwater quality at the Building 2018 UST closure site exceeds the New Jersey Groundwater Quality Standard for VOCs.

Groundwater quality at the Building 2018 UST closure site exceeds the GWQC for chloroform. The trace concentrations of methylene chloride detected during both rounds are attributed to sampling and/or analytical interference, a common source of laboratory interference.

Additional data collection is recommended for Building 2018. 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 chloroform. This is to determine if the chloroform previously detected is migrating in the groundwater or is due to interference from sampling-induced turbidity.

Should the recommended groundwater sampling indicate that the groundwater complies with the applicable groundwater quality criteria, no further action is proposed.

TABLE 2

POST-EXCAVATION SOIL SAMPLING RESULTS
BUILDING 2018, CHARLES WOOD
FT. MONMOUTH, NEW JERSEY

Sample ID/Depth	Sample Laboratory ID	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
Site 1/4.5-5.0'	6859.1	11/08/91	11/14/91	TPHC	50	yes	1,000.0	10,000	--
Site 2/5.0-5.5'	6859.2	11/08/91	11/14/91	TPHC	10	yes	140.0	10,000	--
Site 3/4.5-5.0'	6859.3	11/08/91	11/14/91	TPHC	1,000	yes	20,000.0	10,000	Yes
Site 4/3.0-3.5'	6859.4	11/08/91	11/14/91	TPHC	1,000	yes	9,000.0	10,000	--
Site 5/3.0-3.5'	6859.5	11/08/91	11/14/91	TPHC	10	yes	60.0	10,000	--
Site 6/0.0-0.5'	6859.6	11/08/91	11/14/91	TPHC	10	yes	100.0	10,000	--

Notes:
* Cleanup criteria for total organics
-- Not applicable / does not exceed criteria
TPHC Total Petroleum Hydrocarbons

TABLE 2

POST-EXCAVATION SOIL SAMPLING RESULTS
BUILDING 2018, CHARLES WOOD, 91-614
FORT MONMOUTH, NEW JERSEY
SEMIVOLATILE 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
Site 3/4.5-5.0'	11/08/91	11/21/91	N-nitroso-dimethylamine	3.8	--	ND	--	--
			bis(2-Chloroethyl)Ether	3.8	--	ND	0.66/10	--
			1,3-Dichlorobenzene	3.8	--	ND	5,100/100	--
			1,4-Dichlorobenzene	3.8	--	ND	570/100	--
			Benzyl alcohol	3.8	--	ND	10,000/50	--
			1,2-Dichlorobenzene	3.8	--	ND	5,100/50	--
			bis(2-chloroisopropyl)ether	3.8	--	ND	2,300/10	--
			N-Nitroso-Di-n-propylamine	3.8	--	ND	0.66/10	--
			Hexachloroethane	3.8	--	ND	6/100	--
			Nitrobenzene	3.8	--	ND	28/10	--
			Isophorone	3.8	--	ND	1,100/50	--
			Benzoic Acid	3.8	--	ND	--	--
			bis(2-Chloroethoxy)methane	3.8	--	ND	--	--
			1,2,4-Trichlorobenzene	3.8	--	ND	68/100	--
			Naphthalene	3.8	--	ND	230/100	--
			Hexachlorobutadiene	3.8	--	ND	1/100	--
			2-Methylnaphthalene	3.8	--	ND	--	--
			Hexachlorocyclopentadiene	3.8	--	ND	400/100	--
			2-Chloronaphthalene	3.8	--	ND	--	--
			Dimethylnaphthalene	3.8	--	ND	10,000/50	--
			Acenaphthylene	3.8	--	ND	--	--
			Acenaphthene	3.8	--	2.1 J	3,400/100	--
			Dibenzofuran	3.8	--	ND	--	--
			2,6-Dinitrotoluene	3.8	--	ND	1/10	--
			2,4-Dinitrotoluene	3.8	--	ND	1/10	--
			Diethylphthalate	3.8	--	ND	10,000/50	--
			4-Chlorophenyl-phenylether	3.8	--	ND	--	--
			Fluorene	3.8	--	ND	2,300/100	--
			N-Nitrosodiphenylamine	3.8	--	ND	140/100	--

TABLE 2

POST-EXCAVATION SOIL SAMPLING RESULTS
BUILDING 2018, CHARLES WOOD, 91-614
FORT MONMOUTH, NEW JERSEY
SEMIVOLATILE ORGANICS (continued)

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
Site 3/4.5-5.0'	11/08/91	11/21/91	4-Bromophenyl-phenylether	3.8	--	ND	--	--
			Hexachlorobenzene	3.8	--	ND	0.66/100	--
			Phenanthrene	3.8	--	ND	--	--
			Anthracene	3.8	--	ND	10,000/100	--
			Di-n-butylphthalate	3.8	--	ND	5,700/100	--
			Fluoranthene	3.8	--	ND	2,300/100	--
			Benzidine	3.8	--	ND	--	--
			Pyrene	3.8	--	ND	1,700/100	--
			Butylbenzylphthalate	3.8	--	ND	--	--
			3,3'-Dichlorobenzidine	3.8	--	ND	2/100	--
			Benzo(a)anthracene	3.8	--	ND	0.9/500	--
			bis(2-ethylhexyl)phthalate	3.8	--	11.0	49/100	--
			Chrysene	3.8	--	ND	9/500	--
			Di-n-octylphthalate	3.8	--	ND	1,100/100	--
			Benzo(b)fluoranthene	3.8	--	ND	--	--
			Benzo(k)fluoranthene	3.8	--	ND	0.9/500	--
			Benzo(a)pyrene	3.8	--	ND	0.66/100	--
			Indeno(1,2,3-cd)pyrene	3.8	--	ND	0.9/500	--
			Dibenz(a,h)perylene	3.8	--	ND	0.66/100	--
			1,2-Diphenylhydrazine	3.8	--	ND	--	--

NOTE:
(J) Indicates detected below sample quantitation limit
(ND) Indicates compound not detected

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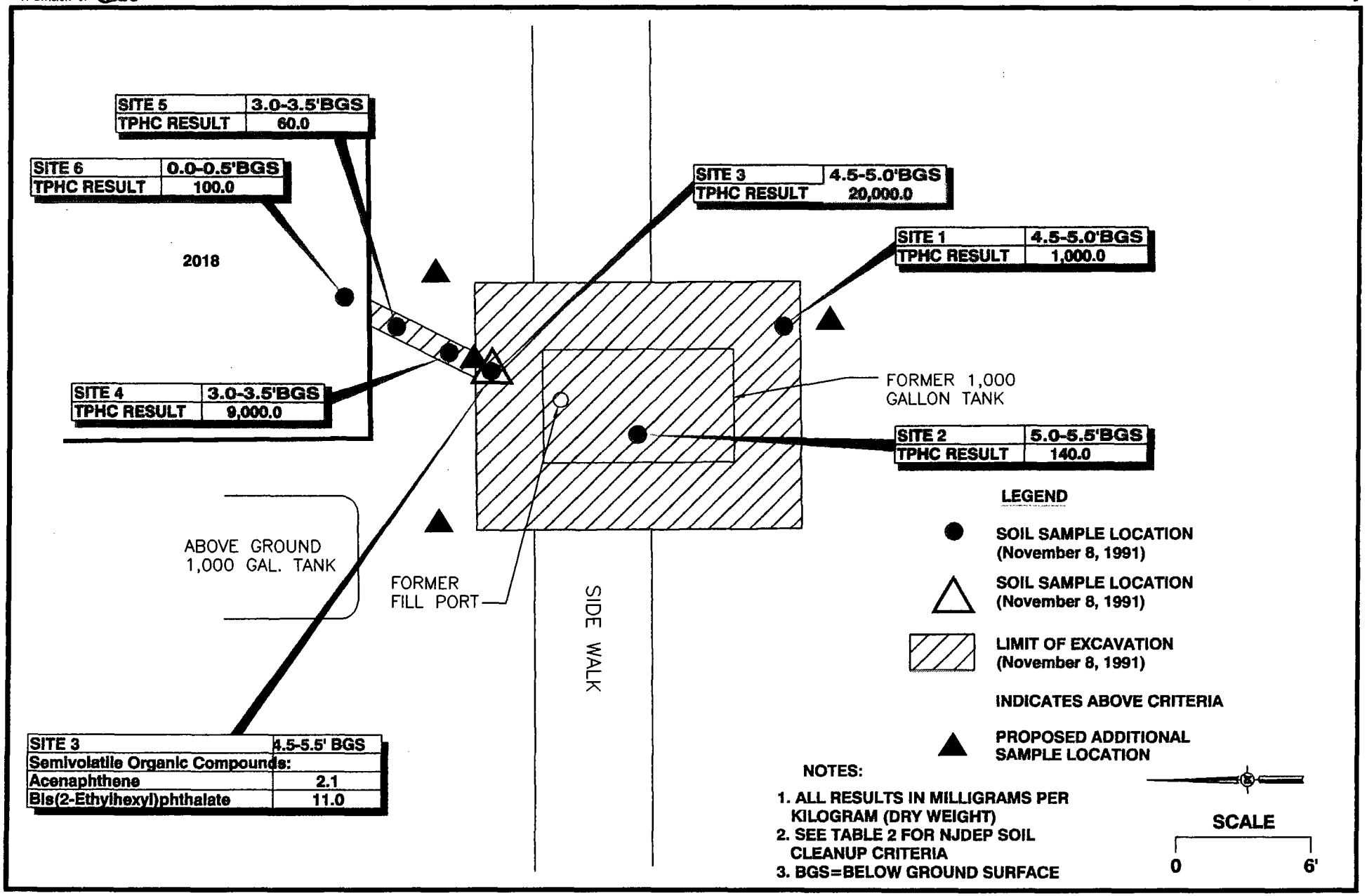


Project No. 09-5004-08

Figure 3
Building 2018
Soil Sampling Results

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 2018, MAIN POST, MW-1
FT. MONMOUTH, NEW JERSEY

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	11/27/95	12/5/95	VOLATILE ORGANICS:					
			Dichlorodifluoromethane	0.50	--	ND	--	--
			Chloromethane	0.50	--	ND	--	--
			Vinyl Chloride	0.50	--	ND	--	--
			Bromomethane	0.50	--	ND	5	--
			Chloroethane	0.50	--	ND	--	--
			Trichlorofluoromethane	0.50	--	ND	--	--
			1,1-Dichloroethene	0.50	--	ND	2	--
			Methylene Chloride	0.50	--	ND	100	--
			1,2-Dichloroethene (trans)	0.50	--	ND	2	--
			1,1 Dichloroethane	0.50	--	ND	70	--
			2,2-Dichloropropane	0.50	--	ND	--	--
			cis-1,2-Dichloroethene	0.50	--	ND	--	--
			Bromochloromethane	0.50	--	ND	10	--
			Chloroform	25	--	25	6	YES
			1,1,1-Trichloroethane	0.50	--	ND	--	--
			Carbon Tetrachloride	0.50	--	ND	2	--
			1,1-Dichloropropene	0.50	--	ND	30	--
			Benzene	0.50	--	ND	--	--
			1,2-Dichloroethane	0.50	--	ND	2	--
			Trichloroethene	0.50	--	ND	1	--
			1,2-Dichloropropane	0.50	--	ND	1	--
			Dibromomethane	0.50	--	ND	NA	--
			Bromodichloromethane	0.50	--	ND	--	--
			cis-1,3-Dichloropropene	0.50	--	ND	1	--
			Toluene	0.50	--	ND	10	--
			trans-1,3-Dichloropropene	0.50	--	ND	3	--
			1,1,2-Trichloroethane	0.50	--	ND	1	--
			Tetrachloroethene	0.50	--	ND	NA	--
			1,3-Dichloropropane	0.50	--	ND	4	--
			Dibromochloromethane	0.50	--	ND	10	--
			1,2-Dibromomethane	0.50	--	ND	1	--
			Chlorobenzene	0.50	--	ND	2	--

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 2018, MAIN POST, MW-1
FORT MONMOUTH, NEW JERSEY

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	11/27/95	12/5/95	VOLATILE ORGANICS (Continued):					
			1,1,2,2-Tetrachloroethane	0.50	--	ND	1,000	--
			Ethylbenzene	0.50	--	ND	--	--
			Xylenes (Total)	0.50	--	ND	4	--
			Styrene	0.50	--	ND	700	--
			Bromoform	0.50	--	ND	40	--
			Isopropylbenzene	0.50	--	ND	100	--
			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	600	--
			4-Isopropyltoluene	0.50	--	ND	75	--
			1,4-Dichlorobenzene	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	11	--	11	--	--
			1,2,3-Trichlorobenzene	0.50	--	ND	--	--
			Methy-tertiary butyl ether	0.50	--	ND	--	--
			tertiary-Butyl alcohol	2.0	--	ND	--	--
			VOLATILE TICS:					
			Column Bleed	--	--	1 J	--	--
			Column Bleed	--	--	1 J	--	--
			Benzene, 1-methyl-2-propyl-	--	--	1 J	--	--
			Column Bleed	--	--	1 J	--	--
			Column Bleed	--	--	2 J	--	--
			TOTAL TICS:	--	--	6	--	--

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 2018, MAIN POST, MW-1
FORT MONMOUTH, NEW JERSEY

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	11/27/95	12/8/95	SEMIVOLATILES:					
			N-Nitrosodiethylamine	2	--		20	--
			bis(2 chloroethyl)Ether	1	--	ND	10	--
			1,3-Dichlorobenzene	2	--	ND	600	--
			1,4-Dichlorobenzene	1	--	ND	75	--
			1,2-Dichlorobenzene	2	--	ND	600	--
			bis(2-chloroisopropyl)Ether	5	--	ND	300	--
			N-Nitroso-Di-n-propylamine	2	--	ND	20	--
			Hexachloroethane	1	--	ND	10	--
			Nitrobenzene	2	--	ND	10	--
			Isophorone	1	--	ND	100	--
			bis(2-Chloroethoxy)Methane	3	--	ND	--	--
			1,2,4-Trichlorobenzene	2	--	ND	9	--
			Naphthalene	4	--	4	--	--
			Hexachlorobutadiene	2	--	ND	1	--
			Hexachlorocyclopentadiene	12	--	ND	50	--
			2-Chloronaphthalene	1	--	ND	--	--
			Dimethyl Phthalate	1	--	ND	--	--
			Acenaphthylene	5	--	ND	NA	--
			2,6-Dinitrotoluene	2	--	ND	NA	--
			Acenaphthene	3	--	ND	400	--
			2,4-Dinitrotoluene	3	--	ND	10	--
			Diethylphthalate	1	--	ND	5,000	--
			Fluorene	3	--	ND	300	--
			4-Chlorophenyl-phenlyether	3	--	ND	--	--
			N-Nitrosodiphenylamine	6	--	ND	20	--
			1,2-Diphenylhydrazine	6	--	ND	0.04	--
			4-Bromophenyl-phenylether	2	--	ND	--	--
			Hexachlorobenzene	2	--	ND	10	--
			Phenanthrene	2	--	ND	NA	--
			Anthracene	2	--	ND	2,000	--
			Di-n-butylphthalate	5	--	ND	900	--
			Fluoranthene	1	--	ND	300	--
			Benzidine	1	--	ND	50	--
			Pyrene	2	--	ND	200	--
			Butylbenzylphthalate	9	--	ND	100	--
			Benzo(a)Anthracene	2	--	ND	NA	--
			3,3-Dichlorobenzidine	15	--	ND	60	--
			Chrysene	2	--	ND	NA	--
			bis(2-Ethylhexyl)Phthalate	4	--	ND	30	--
			Di-n-Octyl Phthalate	2	--	ND	100	--
			Benzo(b)Fluoranthene	1	--	ND	NA	--
			Benzo(k)Fluoranthene	2	--	ND	NA	--
			Benzo(a)Pyrene	2	--	ND	NA	--

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 2018, MAIN POST, MW-1
FORT MONMOUTH, NEW JERSEY

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	11/27/95	12/8/95	SEMIVOLATILES(continued):					
			Indeno(1,2,3-cd)pyrene	2	--	ND	NA	--
			Dibenzo(a,h)anthracene	3	--	ND	NA	--
			Benzo(g,h,i)perylene	2	--	ND	NA	--
			VOLATILE TICS:					
			Benzene, 1,2,4,5-tetramethyl	--	--	2 J	--	--
			Naphthalene, 2-methyl-	--	--	9 J	--	--
			Naphthalene, 1-methyl-	--	--	8 J	--	--
			Naphthalene, 1,6-dimethyl-	--	--	3 J	--	--
			Naphthalene,1,3-dimethyl-	--	--	5 J	--	--
			Naphthalene, 2,7-dimethyl-	--	--	3 J	--	--
			Naphthalene, 1,6-dimethyl-	--	--	2 J	--	--
			Hexadeconoic acid	--	--	8 J	--	--
			TOTAL TICS:	--	--	40	--	--

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 2018, MAIN POST, TRIP BLANK
FT. MONMOUTH, NEW JERSEY

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQC (ug/l)	Exceeds Criteria
Trip Blank	11/27/95	12/5/95	VOLATILE ORGANICS:					
			Dichlorodifluoromethane	0.50	--	ND	--	--
			Chloromethane	0.50	--	ND	--	--
			Vinyl Chloride	0.50	--	ND	--	--
			Bromomethane	0.50	--	ND	5	--
			Chloroethane	0.50	--	ND	--	--
			Trichlorofluoromethane	0.50	--	ND	--	--
			1,1-Dichloroethene	0.50	--	ND	2	--
			Methylene Chloride	0.70	--	0.70 B	100	--
			1,2-Dichloroethene (trans)	0.50	--	ND	2	--
			1,1 Dichloroethane	0.50	--	ND	70	--
			2,2-Dichloropropane	0.50	--	ND	--	--
			cis-1,2-Dichloroethene	0.50	--	ND	--	--
			Bromochloromethane	0.50	--	ND	10	--
			Chloroform	0.50	--	ND	6	--
			1,1,1-Trichloroethane	0.50	--	ND	--	--
			Carbon Tetrachloride	0.50	--	ND	2	--
			1,1-Dichloropropene	0.50	--	ND	30	--
			Benzene	0.50	--	ND	--	--
			1,2-Dichloroethane	0.50	--	ND	2	--
			Trichloroethene	0.50	--	ND	1	--
			1,2-Dichloropropane	0.50	--	ND	1	--
			Dibromomethane	0.50	--	ND	NA	--
			Bromodichloromethane	0.50	--	ND	--	--
			cis-1,3-Dichloropropene	0.50	--	ND	1	--
			Toluene	0.50	--	ND	10	--
			trans-1,3-Dichloropropene	0.50	--	ND	3	--
			1,1,2-Trichloroethane	0.50	--	ND	1	--
			Tetrachloroethene	0.50	--	ND	NA	--
			1,3-Dichloropropane	0.50	--	ND	4	--
			Dibromochloromethane	0.50	--	ND	10	--
			1,2-Dibromomethane	0.50	--	ND	1	--
			Chlorobenzene	0.50	--	ND	2	--
			1,1,2,2-Tetrachloroethane	0.50	--	ND	1,000	--
			Ethylbenzene	0.50	--	ND	--	--
			Xylenes (Total)	0.50	--	ND	4	--
			Styrene	0.50	--	ND	700	--
			Bromoform	0.50	--	ND	40	--
			Isopropylbenzene	0.50	--	ND	100	--
			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	--	--

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 2018, MAIN POST, TRIP BLANK
FORT MONMOUTH, NEW JERSEY

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQC (ug/l)	Exceeds Criteria
Trip Blank	11/27/95	12/5/95	VOLATILE ORGANICS (Continued):					
			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	75	--
			1,4-Dichlorobenzene	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	--	--
			Methy-tertiary butyl ether	0.50	--	ND	--	--
			tertiary-Butyl alcohol	2.0	--	ND	--	--
			VOLATILE TICS:					
			Furan, tetraydro-	--	--	3 J	--	--
			Column Bleed	--	--	1 J	--	--
			TOTAL TICS:	--	--	4	--	--

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 2018, MAIN POST, FIELD BLANK
FT. MONMOUTH, NEW JERSEY

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQC (ug/l)	Exceeds Criteria
Field Blank	11/27/95	12/5/95	VOLATILE ORGANICS:					
			Dichlorodifluoromethane	0.50	--	ND	--	--
			Chloromethane	0.50	--	ND	--	--
			Vinyl Chloride	0.50	--	ND	--	--
			Bromomethane	0.50	--	ND	5	--
			Chloroethane	0.50	--	ND	--	--
			Trichlorofluoromethane	0.50	--	ND	--	--
			1,1-Dichloroethene	0.50	--	ND	2	--
			Methylene Chloride	0.60 B	--	0.60 B	100	--
			1,2-Dichloroethene (trans)	0.50	--	ND	2	--
			1,1 Dichloroethane	0.50	--	ND	70	--
			2,2-Dichloropropane	0.50	--	ND	--	--
			cis-1,2-Dichloroethene	0.50	--	ND	--	--
			Bromochloromethane	0.50	--	ND	10	--
			Chloroform	0.50	--	ND	6	--
			1,1,1-Trichloroethane	0.50	--	ND	--	--
			Carbon Tetrachloride	0.50	--	ND	2	--
			1,1-Dichloropropene	0.50	--	ND	30	--
			Benzene	0.50	--	ND	--	--
			1,2-Dichloroethane	0.50	--	ND	2	--
			Trichloroethene	0.50	--	ND	1	--
			1,2-Dichloropropane	0.50	--	ND	1	--
			Dibromomethane	0.50	--	ND	NA	--
			Bromodichloromethane	0.50	--	ND	--	--
			cis-1,3-Dichloropropene	0.50	--	ND	1	--
			Toluene	0.50	--	ND	10	--
			trans-1,3-Dichloropropene	0.50	--	ND	3	--
			1,1,2-Trichloroethane	0.50	--	ND	1	--
			Tetrachloroethene	0.50	--	ND	NA	--
			1,3-Dichloropropane	0.50	--	ND	4	--
			Dibromochloromethane	0.50	--	ND	10	--
			1,2-Dibromomethane	0.50	--	ND	1	--
			Chlorobenzene	0.50	--	ND	2	--
			1,1,2,2-Tetrachloroethane	0.50	--	ND	1,000	--
			Ethylbenzene	0.50	--	ND	--	--
			Xylenes (Total)	0.50	--	ND	4	--
			Styrene	0.50	--	ND	700	--
			Bromoform	0.50	--	ND	40	--
			Isopropylbenzene	0.50	--	ND	100	--
			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	--	--

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 2018, MAIN POST, FIELD BLANK
FORT MONMOUTH, NEW JERSEY

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQC (ug/l)	Exceeds Criteria
Field Blank	11/27/95	12/5/95	VOLATILE ORGANICS (Continued):					
			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	75	--
			1,4-Dichlorobenzene	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	--	--
			Methy-tertiary butyl ether	0.50	--	ND	--	--
			tertiary-Butyl alcohol	2.0	--	ND	--	--
			VOLATILE TICS:					
			Column Bleed	--	--	1 J	--	--
			Furan, tetrahydro-	--	--	3 J	--	--
			Column Bleed	--	--	1 J	--	--
			Unknown Hydrocarbon	--	--	2 J	--	--
			TOTAL TICS:	--	--	7	--	--

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 2018, MAIN POST, FIELD BLANK
FORT MONMOUTH, NEW JERSEY

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQC (ug/l)	Exceeds Criteria
Field Blank	11/27/95	12/8/95	SEMIVOLATILES:					
			N-Nitrosodiethylamine	2	--	ND	20	--
			bis(2 chloroethyl)Ether	1	--	ND	10	--
			1,3-Dichlorobenzene	2	--	ND	600	--
			1,4-Dichlorobenzene	1	--	ND	75	--
			1,2-Dichlorobenzene	2	--	ND	600	--
			bis(2-chloroisopropyl)Ether	5	--	ND	300	--
			N-Nitroso-Di-n-propylamine	2	--	ND	20	--
			Hexachloroethane	1	--	ND	10	--
			Nitrobenzene	2	--	ND	10	--
			Isophorone	1	--	ND	100	--
			bis(2-Chloroethoxy)Methane	3	--	ND	--	--
			1,2,4-Trichlorobenzene	2	--	ND	9	--
			Naphthalene	2	--	ND	--	--
			Hexachlorobutadiene	2	--	ND	1	--
			Hexachlorocyclopentadiene	12	--	ND	50	--
			2-Chloronaphthalene	1	--	ND	--	--
			Dimethyl Phthalate	1	--	ND	--	--
			Acenaphthylene	5	--	ND	NA	--
			2,6-Dinitrotoluene	2	--	ND	NA	--
			Acenaphthene	3	--	ND	400	--
			2,4-Dinitrotoluene	3	--	ND	10	--
			Diethylphthalate	1	--	ND	5,000	--
			Fluorene	3	--	ND	300	--
			4-Chlorophenyl-phenlyether	3	--	ND	--	--
			N-Nitrosodiphenylamine	6	--	ND	20	--
			1,2-Diphenylhydrazine	6	--	ND	0.04	--
			4-Bromophenyl-phenylether	2	--	ND	--	--
			Hexachlorobenzene	2	--	ND	10	--
			Phenanthrene	2	--	ND	NA	--
			Anthracene	2	--	ND	2,000	--
			Di-n-butylphthalate	5	--	ND	900	--
			Fluoranthene	1	--	ND	300	--
			Benzidine	1	--	ND	50	--
			Pyrene	2	--	ND	200	--
			Butylbenzylphthalate	9	--	ND	100	--
			Benzo(a)Anthracene	2	--	ND	NA	--
			3,3-Dichlorobenzidine	15	--	ND	60	--
			Chrysene	2	--	ND	NA	--
			bis(2-Ethylhexyl)Phthalate	4	--	ND	30	--
			Di-n-Octyl Phthalate	2	--	ND	100	--
			Benzo(b)Fluoranthene	1	--	ND	NA	--
			Benzo(k)Fluoranthene	2	--	ND	NA	--

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 2018, MAIN POST, FIELD BLANK
FORT MONMOUTH, NEW JERSEY

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQC (ug/l)	Exceeds Criteria
Field Blank	11/27/95	12/8/95	SEMIVOLATILES(continued):					
			Benzo(a)Pyrene	2	--	ND	NA	--
			Indeno(1,2,3-cd)pyrene	2	--	ND	NA	--
			Dibenzo(a,h)anthracene	3	--	ND	NA	--
			Benzo(g,h,i)perylene	2	--	ND	NA	--
			VOLATILE TICS:					
			Unkown Hydrocarbon	--	--	5 J	--	--
			Hexadecanoic acid	--	--	2 J	--	--
			TOTAL TICS:	--	--	7	--	--

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 2018, MAIN POST, MW-1
FT. MONMOUTH, NEW JERSEY

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	12/18/95	1/4/96	VOLATILE ORGANICS:					
			Dichlorodifluoromethane	0.50	--	ND	--	--
			Chloromethane	0.50	--	ND	--	--
			Vinyl Chloride	0.50	--	ND	--	--
			Bromomethane	0.50	--	ND	5	--
			Chloroethane	0.50	--	ND	--	--
			Trichlorofluoromethane	0.50	--	ND	--	--
			1,1-Dichloroethene	0.50	--	ND	2	--
			Methylene Chloride	0.50	--	0.50 B	100	--
			1,2-Dichloroethene (trans)	0.50	--	ND	2	--
			1,1 Dichloroethane	0.50	--	ND	70	--
			2,2-Dichloropropane	0.50	--	ND	--	--
			cis-1,2-Dichloroethene	0.50	--	ND	--	--
			Bromochloromethane	0.50	--	ND	10	--
			Chloroform	31	--	31	6	YES
			1,1,1-Trichloroethane	0.50	--	ND	--	--
			Carbon Tetrachloride	0.50	--	ND	2	--
			1,1-Dichloropropene	0.50	--	ND	30	--
			Benzene	0.50	--	ND	--	--
			1,2-Dichloroethane	0.50	--	ND	2	--
			Trichloroethene	0.50	--	ND	1	--
			1,2-Dichloropropane	0.50	--	ND	1	--
			Dibromomethane	0.50	--	ND	NA	--
			Bromodichloromethane	0.50	--	ND	--	--
			cis-1,3-Dichloropropene	0.50	--	ND	1	--
			Toluene	0.50	--	ND	10	--
			trans-1,3-Dichloropropene	0.50	--	ND	3	--
			1,1,2-Trichloroethane	0.50	--	ND	1	--
			Tetrachloroethene	0.50	--	ND	NA	--
			1,3-Dichloropropane	0.50	--	ND	4	--
			Dibromochloromethane	0.50	--	ND	10	--
			1,2-Dibromomethane	0.50	--	ND	1	--
			Chlorobenzene	0.50	--	ND	2	--
			1,1,2,2-Tetrachloroethane	0.50	--	ND	1,000	--
			Ethylbenzene	0.50	--	ND	--	--
			Xylenes (Total)	0.50	--	ND	4	--
			Styrene	0.50	--	ND	700	--
			Bromoform	0.50	--	ND	40	--
			Isopropylbenzene	0.50	--	ND	100	--
			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	--	--

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 2018, MAIN POST, MW-1
FORT MONMOUTH, NEW JERSEY

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	12/18/95	1/4/96	VOLATILE ORGANICS (Continued):					
			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	75	--
			1,4-Dichlorobenzene	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	2.7	--	2.7	--	--
			1,2,3-Trichlorobenzene	0.50	--	ND	--	--
			Methy-tertiary butyl ether	0.50	--	ND	--	--
			tertiary-Butyl alcohol	2.0	--	ND	--	--
			VOLATILE TICS:					
			Benzene, 1,2,3-trimethyl-	--	--	1 J	--	--
			Column Bleed	--	--	2 J	--	--
			Benzene, 1-methyl-4-(1-methy	--	--	1 J	--	--
			TOTAL TICS:	--	--	4	--	--

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 2018, MAIN POST, MW-1
FORT MONMOUTH, NEW JERSEY

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	12/18/95	12/26/95	SEMIVOLATILES:					
			N-Nitrosodiethylamine	2	--	ND	20	--
			bis(2 chloroethyl)Ether	1	--	ND	10	--
			1,3-Dichlorobenzene	2	--	ND	600	--
			1,4-Dichlorobenzene	1	--	ND	75	--
			1,2-Dichlorobenzene	2	--	ND	600	--
			bis(2-chloroisopropyl)Ether	5	--	ND	300	--
			N-Nitroso-Di-n-propylamine	2	--	ND	20	--
			Hexachloroethane	1	--	ND	10	--
			Nitrobenzene	2	--	ND	10	--
			Isophorone	1	--	ND	100	--
			bis(2-Chloroethoxy)Methane	3	--	ND	--	--
			1,2,4-Trichlorobenzene	2	--	ND	9	--
			Naphthalene	2	--	ND	--	--
			Hexachlorobutadiene	2	--	ND	1	--
			Hexachlorocyclopentadiene	12	--	ND	50	--
			2-Chloronaphthalene	1	--	ND	--	--
			Dimethyl Phthalate	1	--	ND	--	--
			Acenaphthylene	5	--	ND	NA	--
			2,6-Dinitrotoluene	2	--	ND	NA	--
			Acenaphthene	3	--	ND	400	--
			2,4-Dinitrotoluene	3	--	ND	10	--
			Diethylphthalate	1	--	ND	5,000	--
			Fluorene	3	--	ND	300	--
			4-Chlorophenyl-phenlyether	3	--	ND	--	--
			N-Nitrosodiphenylamine	6	--	ND	20	--
			1,2-Diphenylhydrazine	6	--	ND	0.04	--
			4-Bromophenyl-phenylether	2	--	ND	--	--
			Hexachlorobenzene	2	--	ND	10	--
			Phenanthrene	2	--	ND	NA	--
			Anthracene	2	--	ND	2,000	--
			Di-n-butylphthalate	16	--	16	900	--
			Fluoranthene	1	--	ND	300	--
			Benzidine	1	--	ND	50	--
			Pyrene	2	--	ND	200	--
			Butylbenzylphthalate	9	--	ND	100	--
			Benzo(a)Anthracene	2	--	ND	NA	--
			3,3-Dichlorobenzidine	15	--	ND	60	--
			Chrysene	2	--	ND	NA	--
			bis(2-Ethylhexyl)Phthalate	4	--	ND	30	--
			Di-n-Octyl Phthalate	2	--	ND	100	--
			Benzo(b)Fluoranthene	1	--	ND	NA	--
			Benzo(k)Fluoranthene	2	--	ND	NA	--

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 2018, MAIN POST, MW-1
FORT MONMOUTH, NEW JERSEY

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	12/18/95	12/26/95	SEMIVOLATILES (continued):					
			Benzo(a)Pyrene	2	--	ND	NA	--
			Indeno(1,2,3-cd)pyrene	2	--	ND	NA	--
			Dibenzo(a,h)anthracene	3	--	ND	NA	--
			Benzo(g,h,i)perylene	2	--	ND	NA	--
			VOLATILE TICS:					
			NONE FOUND	--	--	--	--	--

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 2018, MAIN POST, TRIP BLANK
FT. MONMOUTH, NEW JERSEY

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQC (ug/l)	Exceeds Criteria
Trip Blank	12/18/95	12/29/96	VOLATILE ORGANICS:					
			Dichlorodifluoromethane	0.50	--	ND	--	--
			Chloromethane	0.50	--	ND	--	--
			Vinyl Chloride	0.50	--	ND	--	--
			Bromomethane	0.50	--	ND	5	--
			Chloroethane	0.50	--	ND	--	--
			Trichlorofluoromethane	0.50	--	ND	--	--
			1,1-Dichloroethene	0.50	--	ND	2	--
			Methylene Chloride	1.4	--	1.4 B	100	--
			1,2-Dichloroethene (trans)	0.50	--	ND	2	--
			1,1 Dichloroethane	0.50	--	ND	70	--
			2,2-Dichloropropane	0.50	--	ND	--	--
			cis-1,2-Dichloroethene	0.50	--	ND	--	--
			Bromochloromethane	0.50	--	ND	10	--
			Chloroform	0.50	--	ND	6	--
			1,1,1-Trichloroethane	0.50	--	ND	--	--
			Carbon Tetrachloride	0.50	--	ND	2	--
			1,1-Dichloropropene	0.50	--	ND	30	--
			Benzene	0.50	--	ND	--	--
			1,2-Dichloroethane	0.50	--	ND	2	--
			Trichloroethene	0.50	--	ND	1	--
			1,2-Dichloropropane	0.50	--	ND	1	--
			Dibromomethane	0.50	--	ND	NA	--
			Bromodichloromethane	0.50	--	ND	--	--
			cis-1,3-Dichloropropene	0.50	--	ND	1	--
			Toluene	0.50	--	ND	10	--
			trans-1,3-Dichloropropene	0.50	--	ND	3	--
			1,1,2-Trichloroethane	0.50	--	ND	1	--
			Tetrachloroethene	0.50	--	ND	NA	--
			1,3-Dichloropropane	0.50	--	ND	4	--
			Dibromochloromethane	0.50	--	ND	10	--
			1,2-Dibromomethane	0.50	--	ND	1	--
			Chlorobenzene	0.50	--	ND	2	--
			1,1,2,2-Tetrachloroethane	0.50	--	ND	1,000	--
			Ethylbenzene	0.50	--	ND	--	--
			Xylenes (Total)	0.50	--	ND	4	--
			Styrene	0.50	--	ND	700	--
			Bromoform	0.50	--	ND	40	--
			Isopropylbenzene	0.50	--	ND	100	--
			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	--	--

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 2018, MAIN POST, TRIP BLANK
FORT MONMOUTH, NEW JERSEY

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQC (ug/l)	Exceeds Criteria
Trip Blank	12/18/95	12/29/96	VOLATILE ORGANICS (Continued):					
			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	75	--
			1,4-Dichlorobenzene	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	--	--
			Methy-tertiary butyl ether	0.50	--	ND	--	--
			tertiary-Butyl alcohol	2.0	--	ND	--	--
			VOLATILE TICS:					
			Furan, tetraydro-	--	--	2 J	--	--
			Column Bleed	--	--	2 J	--	--
			Column Bleed	--	--	1 J	--	--
			TOTAL TICS:	--	--	5	--	--

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 2018, MAIN POST, FIELD BLANK
FT. MONMOUTH, NEW JERSEY

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQC (ug/l)	Exceeds Criteria
Field Blank	12/18/95	1/4/96	VOLATILE ORGANICS:					
			Dichlorodifluoromethane	0.50	--	ND	--	--
			Chloromethane	0.50	--	ND	--	--
			Vinyl Chloride	0.50	--	ND	--	--
			Bromomethane	0.50	--	ND	5	--
			Chloroethane	0.50	--	ND	--	--
			Trichlorofluoromethane	0.50	--	ND	--	--
			1,1-Dichloroethene	0.50	--	ND	2	--
			Methylene Chloride	1.4	--	1.4 B	100	--
			1,2-Dichloroethene (trans)	0.50	--	ND	2	--
			1,1 Dichloroethane	0.50	--	ND	70	--
			2,2-Dichloropropane	0.50	--	ND	--	--
			cis-1,2-Dichloroethene	0.50	--	ND	--	--
			Bromochloromethane	0.50	--	ND	10	--
			Chloroform	0.50	--	ND	6	--
			1,1,1-Trichloroethane	0.50	--	ND	--	--
			Carbon Tetrachloride	0.50	--	ND	2	--
			1,1-Dichloropropene	0.50	--	ND	30	--
			Benzene	0.50	--	ND	--	--
			1,2-Dichloroethane	0.50	--	ND	2	--
			Trichloroethene	0.50	--	ND	1	--
			1,2-Dichloropropane	0.50	--	ND	1	--
			Dibromomethane	0.50	--	ND	NA	--
			Bromodichloromethane	0.50	--	ND	--	--
			cis-1,3-Dichloropropene	0.50	--	ND	1	--
			Toluene	0.50	--	ND	10	--
			trans-1,3-Dichloropropene	0.50	--	ND	3	--
			1,1,2-Trichloroethane	0.50	--	ND	1	--
			Tetrachloroethene	0.50	--	ND	NA	--
			1,3-Dichloropropane	0.50	--	ND	4	--
			Dibromochloromethane	0.50	--	ND	10	--
			1,2-Dibromomethane	0.50	--	ND	1	--
			Chlorobenzene	0.50	--	ND	2	--
			1,1,2,2-Tetrachloroethane	0.50	--	ND	1,000	--
			Ethylbenzene	0.50	--	ND	--	--
			Xylenes (Total)	0.50	--	ND	4	--
			Styrene	0.50	--	ND	700	--
			Bromoform	0.50	--	ND	40	--
			Isopropylbenzene	0.50	--	ND	100	--
			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	--	--

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 2018, MAIN POST, FIELD BLANK
FORT MONMOUTH, NEW JERSEY

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQC (ug/l)	Exceeds Criteria
Field Blank	12/18/95	1/4/96	VOLATILE ORGANICS (Continued):					
			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	75	--
			1,4-Dichlorobenzene	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	--	--
			Methy-tertiary butyl ether	0.50	--	ND	--	--
			tertiary-Butyl alcohol	2.0	--	ND	--	--
			VOLATILE TICS:					
			Column Bleed	--	--	2 J	--	--
			Furan, tetrahydro-	--	--	1 J	--	--
			TOTAL TICS:	--	--	3	--	--

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 2018, MAIN POST, FIELD BLANK
FORT MONMOUTH, NEW JERSEY

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQC (ug/l)	Exceeds Criteria
Field Blank	12/18/95	12/26/95	SEMIVOLATILES:					
			Phenol	10	--	ND	4000	--
			bis(2 chloroethyl)Ether	10	--	ND	20	--
			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-methylnaphthanene	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-Nitroanline	25	--	ND	--	--
			Dimethyl Phthalate	10	--	ND	--	--
			Acenaphthylene	10	--	ND	NA	--
			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	--	--

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 2018, MAIN POST, FIELD BLANK
FORT MONMOUTH, NEW JERSEY

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQC (ug/l)	Exceeds Criteria
Field Blank	12/18/95	12/26/95	SEMIVOLATILES (Continued):					
			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	--
			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	--
			VOLATILE TICS:					
			Unkown Hydrocarbon	--	--	6 J	--	--

SOURCE: SMITH TECHNOLOGY CORPORATION (PROJECT NO. 09-5004-08)

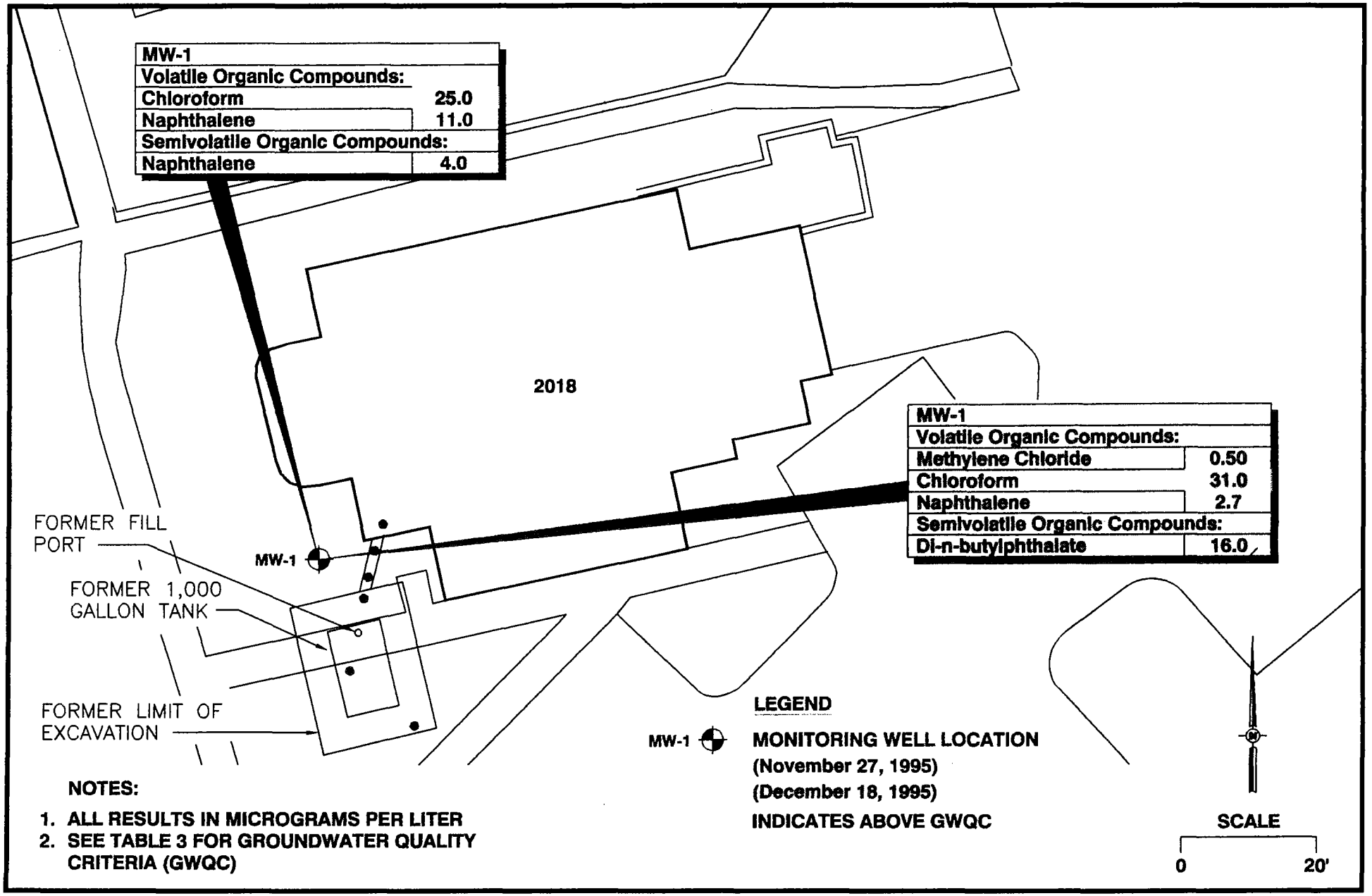
TABLE 3

DATA ANALYSIS QUALIFIER DEFINITIONS
GROUNDWATER SAMPLING
FORT MONMOUTH, NEW JERSEY

--:	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
GWQS:	Groundwater Quality Standards

BCM ENGINEERS
A Division of Bucknell

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



NOTES:

1. ALL RESULTS IN MICROGRAMS PER LITER
2. SEE TABLE 3 FOR GROUNDWATER QUALITY CRITERIA (GWQC)

Project No. 09-5004-08

Figure 4
Building 2018
Monitoring Well Location

APPENDIX A

NJDEP BUST CLOSURE APPROVAL

UNDERGROUND STORAGE TANK SYSTEM
CLOSURE APPROVAL

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND ENERGY

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

TMS # C-91-2837 **UST #** 0192486

U.S. Army Fort Monmouth
Building 2018
Fort Monmouth

(Monmouth County)

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

Removal of: 1 - 1000 gallon heating oil storage tanks

Site assessment: Three (3) soil samples will be taken for the tanks, and two (2) for every 15 feet of piping; samples will be collected and analyzed as per the Technical Guidance Document (TPHC).

ON-SITE MANAGER: Dinkerrai Desai TELEPHONE: (908) 532-1475

OWNER: U.S. Army TELEPHONE:

EFFECTIVE DATE: October 22, 1991

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

Kenneth Goldstein

KENNETH GOLDSTEIN, P.E., CHIEF
BUREAU OF UNDERGROUND STORAGE TANKS

APPENDIX B

CERTIFICATIONS

Let's protect our earth

State of New Jersey
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
CN 029
Trenton, N.J. 08625-0029

ATTN: BUST Program
(609) 984-3156

For State Use Only

Date Rec'd. _____
Auth. _____
Routing _____
UST NO. _____

STANDARD REPORTING FORM
for reporting activities at an UST facility:

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

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

(More than one tank can be listed per activity)

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

Answer questions 1 through 5 and others as applicable.

1. Company name and address (as it appears on registration questionnaire):
U.S. Army Fort Monmouth
DEH Bldg. #167
Fort Monmouth NJ 07703
ATTN. Dinkerrai Desai

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

3. Contact person for this activity:
Dinkerrai Desai
Telephone Number: (908) 532-1475

4. The identification number of the affected tank as it appears in Question Number 12 on the Registration Questionnaire:
2

5. Registration Number (if known): UST - 0192486

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

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

7. For CLOSURE (abandonment or removal – check all that apply):
   a. ☐ Abandonment
      Attach the necessary implementation schedule (3 copies) and all documentation needed for abandonment per N.J.A.C. 7:14B-9.1 (d).
   b. ☒ Removal UST PULLED 11/08/91
      Attach the necessary implementation schedule (3 copies).

8. For CHANGES IN HAZARDOUS SUBSTANCES STORED (check all that apply):
   a. ☐ Temporary Closure (12 month maximum time – see N.J.A.C. 7:14B-9.1(b)). Remove all hazardous substances; leave tank in place.
   b. ☐ Change in service from a regulated substance to a non-regulated substance. Tank must be cleaned and site assessment performed per N.J.A.C. 7:14B-9.1(e).
   c. ☐ Changes in service from one regulated hazardous substance to another regulated hazardous substance.
      Tank No. _____ Old _____ New _____
      Tank No. _____ Old _____ New _____
      Tank No. _____ Old _____ New _____
      (Attach additional sheets if more space is needed)

9. For TRANSFER OF OWNERSHIP:
   a. New Owner (operator) _____
   b. New Facility Name _____
      _____
      _____ NJ _____
      _____
      County
   c. Closing Attorney _____ Tele: (____) _____ – _____

10. For SUBSTANTIAL MODIFICATIONS (to include any retrofitted activity – e.g. the addition of spill/overfill protection, monitoring systems, cathodic protection, etc.):
   a. Type of Modification _____
   b. * NOTE * Substantial modifications require a permit under N.J.A.C. 7:14B-10.

11. For changes in FINANCIAL RESPONSIBILITY to (check appropriate changes and attach copies of new information):
   a. Policy Type: ☐
   b. Policy Number: ☐
   c. Other: ☐
   d. Company/Carrier: ☐
   e. Expiration Date: ☐

   _____
   _____
   _____
   (Specify)

NOTE: ALL appropriate and applicable permits, licenses and certificates required by the above activity(ies) from any local, state and/or federal agencies must be obtained separately from this notification.

CERTIFICATION

This registration form shall be signed by the highest ranking individual at the facility with overall responsibility for that facility (N.J.A.C. 7:14B-2.3 (a) 1).

"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 civil and criminal penalties for submitting false, inaccurate or incomplete information, including fines and/or imprisonment."

Signature: _____

Name (print or type): DinKerrai Desai

Title: ENVIRONMENTAL COORDINATOR Date: 11/15/91

SRF-1/90

APPENDIX C

SOIL ANALYTICAL DATA PACKAGE

ENVIRONMENTAL PROFILE LABORATORIES

ROUTE 37 BUSINESS PARK
SUITE 13
TOMS RIVER, NJ 08755
OFFICE: (908) 244-6278
FAX: (908) 244-6372

REPORT OF ANALYSIS

SERV-AIR INC.
PO BOX 369
FT. MONMOUTH, NJ

EPL ID # : 6859.1-.6
SAMPLE RECEIVED: 11/14/91
ANALYSIS START : 11/14/91
ANALYSIS COMPD. : 11/14/91

MATRIX: SOIL

TEST PARAMETERS: PETROLEUM HYDROCARBONS

SITE: B2018-S#1-#6

These samples were analyzed by Infrared Spectrophotometry.
Infrared Analyses: EPA METHOD 418.1 Results expressed as ppm.

CLIENT ID	EPL#	RESULTS (mg/Kg)	METHOD DETECTION LIMIT (mg/Kg)
91-612	6859.1	1000	50
91-613	6859.2	140	10
91-614	6859.3	20000	1000
91-615	6859.4	9000	1000
91-616	6859.5	60	10
91-617	6859.6	100	10

ND = NOT DETECTED

Daniel R. Wright

LABORATORY DIRECTOR
DANIEL WRIGHT

ENVIRONMENTAL PROFILE LABORATORIES
ROUTE 37 BUSINESS PARK
SUITE 13
TOMS RIVER, NJ 08755
OFFICE: (908) 244-6278
FAX: (908) 244-6372

LABORATORY ANALYSIS REPORT

CLIENT : Serv-Air Inc.

PROJECT: R2-519
BN+15 T=11

Report Number: 6859
Date Received: Nov. 14, 1991
Date Released: Nov. 22, 1991
Data Released By:

Daniel K. Wright
Laboratory Director

CLIENT: Serv-Air Inc.

SAMPLE LOCATION AND IDENTIFICATION

LAB ID NUMBER	SAMPLE IDENTIFICATION	MATRIX
6859.3	91-614	Soil

Environmental Profile Laboratories

CUSTOMER PURCHASE ORDER NO: R2-519

CHAIN OF CUSTODY RECORD

PROJECT NO.:

SAMPLER (SIGNATURE):

DATE / TIME 11-14-91

ANALYSIS PARAMETERS

CUSTOMER (NAME/ADDRESS) Sequoia Inc PO Box 368 Ft Monmouth NJ

SITE NAME: Bldg 84-116

PHONE NO:

FAX NO:

LAB SAMPLE ID NUMBER	DATE/TIME	SAMPLE MATRIX	CUSTOMER SAMPLE LOCATION/ID NUMBER	NUMBER OF CONTAINERS	TPHC	BN+15	PRESERVATION METHOD	REMARKS
6859.1	11/8 10:20	SOIL	91-612	1	X			ANALYZE FOR
2	" 10:25	"	91-613	1	X	X		BN+15 ONE
3	" 10:30	"	91-614	1	X	X		SAMPLE IF
4	" 11:30	"	91-615	1	X			CONCENTRATION
5	" 15:10	"	91-616	1	X			100PPM TPHC
6	" 15:15	"	91-611	1	X			

Relinquished By (Signature)	DATE / TIME	Received By (Signature)	METHOD OF SHIPPING:
Relinquished By (Signature)	DATE / TIME 11/14 | 800 AM	Received By (Signature) R.G. Miller	SHIPPED BY (Signature):
Relinquished By (Signature)	DATE / TIME	Received For Lab By (Signature): R.G. Miller	DATE / TIME 11/14/91

NOTE: A DRAWING DEPICTING SAMPLE LOCATION SHOULD BE ATTACHED OR DRAWN ON THE REVERSE SIDE OF THIS CHAIN OF CUSTODY.

LABORATORY CHRONICLE

SAMPLE NUMBER	6859.3						
Received & Refrigerated Date	11/14/91						
Organics Extraction Date							
BN/ABN	NA						
PCB's	NA						
Analysis Date							
BN/ABN	11/21/91						
PCB's	NA						
Volatiles	NA						
TPHC's	NA						
Metals	NA						
Total Solids	NA						
Organic Supervisor Review & Approval	Brian K. McKee						11/30/91
Inorganic Supervisor Review & Approval							

METHOD SUMMARY

Base Neutrals / Acid Extractables

The semivolatile samples in this report have been analyzed using the method cited in the USEPA-CLP-IFB version 2/88. The CLP semivolatile method is based on USEPA Method 625 and SW-846 method 8270.

Three base/neutral and three acid surrogates are added to each sample. Aqueous samples are extracted with methylene chloride;soil samples are extracted with a 1 to 1 solution of methylene chloride and acetone. The extracts are then concentrated and the internal standards are added. An Hewlett Packard 5890 GC coupled to the HP 5970 MSD was used for the analysis and data collection.

GC/MS

ORGANIC NON-CONFORMANCE SUMMARY

GC/MS TUNE FREQUENCY:- All samples,blanks,standards and matrix spikes were analyzed within the respective 12 hour tune periods.

INITIAL CALIBRATION REQUIREMENTS:
No CCC or SPCC compound was outside of QC limits.

CONTINUING CALIBRATION REQUIREMENTS:
No CCC or SPCC compound was outside of QC limits

DETECTION LIMITS:- Detection limits and search results were modified by dilution or percent solid.*

* All values reported on a DRY WEIGHT basis where applicable

MATRIX SPIKE RECOVERY:- No matrix spike compound was outside QC limits

INTERNAL STANDARD AREA:-

CLIENT ID #.	NUMBER OF INTERNAL STANDARD AREA(S) out of QC limits.
None	0

SURROGATE RECOVERY:-

Client ID #	Surrogates outside QC limits
None	0

ANALYSIS TIME:- All samples were extracted and analyzed within the prescribed holding times.

DATA REPORTING QUALIFIERS

For reporting results to EPA, the following "results qualifiers" are used:

VALUE - If the result is a value greater than or equal to the detection limit, report the value.

U - Indicates the compound was analyzed for but was not detected. Report the minimum detection limit for the sample with the U, "10U". This is not necessarily the instrument detection limit. The figure represents the minimum detection limit attainable for this particular sample based on any concentration or dilution that may have been required.

J - Indicates an estimated value. This flag is used:

1) When estimating a concentration for tentatively identifid compounds (library search hits) where a 1:1 response is assumed.
2) When the mass spectral data indicated the identification criteria, however, the result was less than the specified detection limit but greater than zero. If the detection limit was 10ug/L and a concentration of 3ug/L was calculated, report as "3J".

B - Indicates the analyte was found in the blank as well as the sample; report as "12B".

E - Indicates the analyte concentration exceeds the calibrated range of the GC/MS instrument for that specific analysis.

D - This flag identifies all compounds identified in an analysis at a secondary dilution factor.

Environmental Profile Laboratories
BASE/NEUTRAL/ACID ANALYSIS DATA

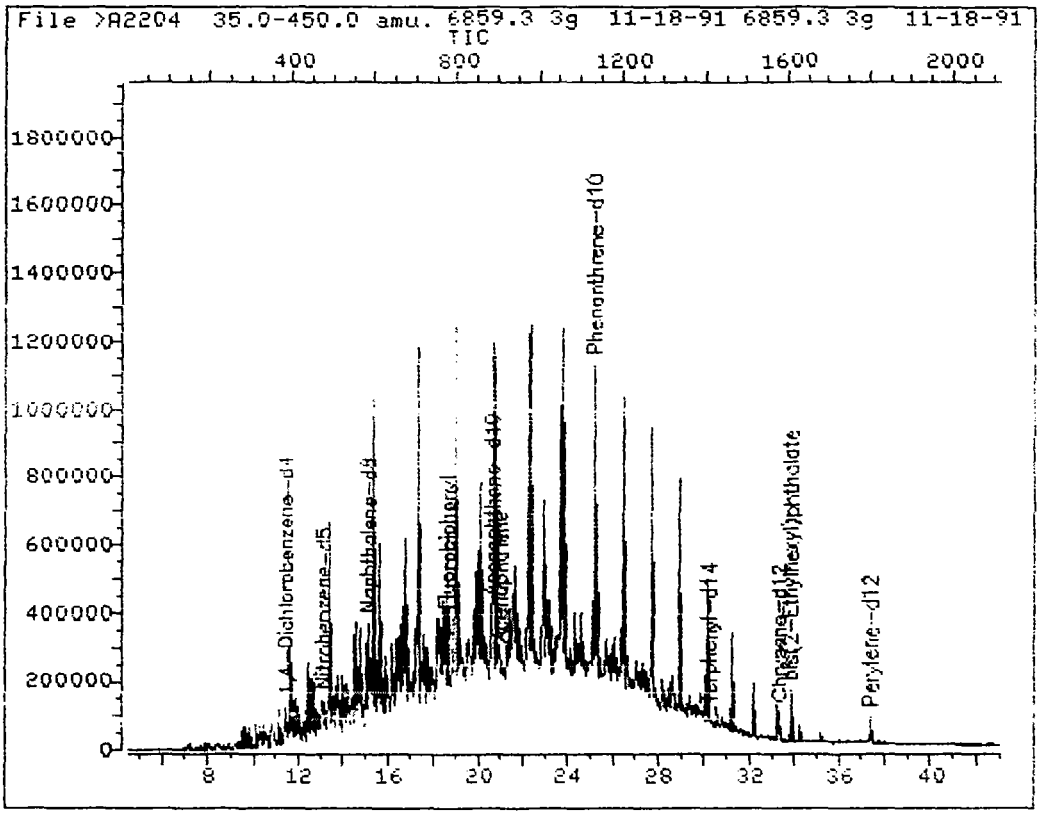
JOB NUMBER		MATRIX	Soil
SAMPLE NAME	6859.3 3g 11-18-91	DILUTION FACTOR	10.00
CLIENT ID		QA BATCH	
DATA FILE	>A2204	DATE ANALYZED	11/21/91

COMPOUND	UG/KG	MDL	COMPOUND	UG/KG	MDL
N-nitroso-dimethylamine	ND	3800	Diethylphthalate	ND	3800
bis(2-Chloroethyl)Ether	ND	3800	4-Chlorophenyl-phenylether	ND	3800
1,3-Dichlorobenzene	ND	3800	Fluorene	ND	3800
1,4-Dichlorobenzene	ND	3800	N-Nitrosodiphenylamine	ND	3800
Benzyl alcohol	ND	3800	4-Bromophenyl-phenylether	ND	3800
1,2-Dichlorobenzene	ND	3800	Hexachlorobenzene	ND	3800
bis(2-chloroisopropyl)ether	ND	3800	Phenanthrene	ND	3800
N-Nitroso-Di-n-propylamine	ND	3800	Anthracene	ND	3800
Hexachloroethane	ND	3800	Di-n-butylphthalate	ND	3800
Nitrobenzene	ND	3800	Fluoranthene	ND	3800
Isophorone	ND	3800	Benzidine	ND	3800
Benzoic Acid	ND	3800	Pyrene	ND	3800
bis(2-Chloroethoxy)methane	ND	3800	Butylbenzylphthalate	ND	3800
1,2,4-Trichlorobenzene	ND	3800	3,3'-Dichlorobenzidine	ND	3800
Naphthalene	ND	3800	Benzo(a)anthracene	ND	3800
Hexachlorobutadiene	ND	3800	bis(2-Ethylhexyl)phthalate	11000	3800
2-Methylnaphthalene	ND	3800	Chrysene	ND	3800
Hexachlorocyclopentadiene	ND	3800	Di-n-octylphthalate	ND	3800
2-Chloronaphthalene	ND	3800	Benzo(b)fluoranthene	ND	3800
Dimethylphthalate	ND	3800	Benzo(k)fluoranthene	ND	3800
Acenaphthylene	ND	3800	Benzo(a)pyrene	ND	3800
Acenaphthene	2100 J	3800	Indeno(1,2,3-cd)pyrene	ND	3800
Dibenzofuran	ND	3800	Dibenz(a,h)anthracene	ND	3800
2,6-Dinitrotoluene	ND	3800	Benzo(g,h,i)perylene	ND	3800
2,4-Dinitrotoluene	ND	3800	1,2-Diphenylhydrazine	ND	3800

Percent Solid of 86.0 is used for all Target compounds.

(J) Indicates detected below MDL
(B) Indicates also present in blank
(ND) Indicates compound not detected

TOTAL ION CHROMATOGRAM



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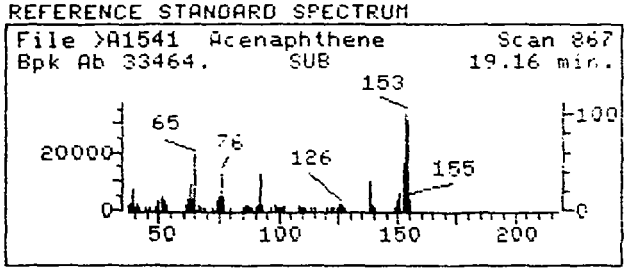
Name: 6859.3 3g 11-18-91
Misc: 6859.3 3g 11-18-91 BTL# 8

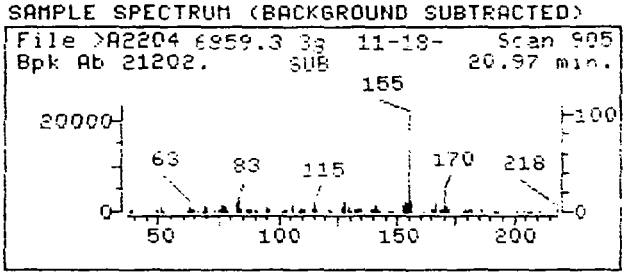
Id File: IDBNA::D4
Title: Semivolatile Organics (EPA Methods 625/8270) by GC/MS
Last Calibration: 911121 15:14

Operator ID: MARK
Quant Time: 911121 18:47
Injected at: 911121 18:04

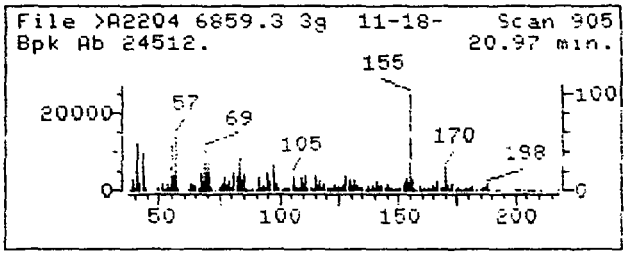
REFERENCE STANDARD SPECTRUM

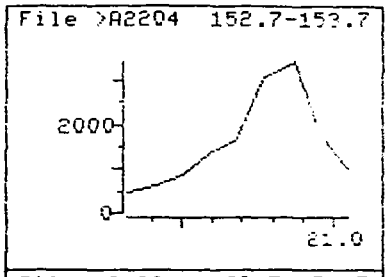


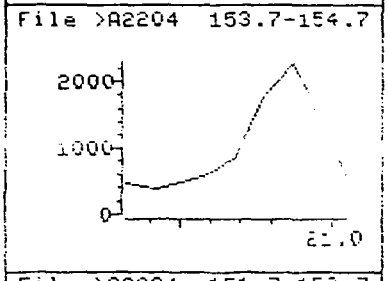
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

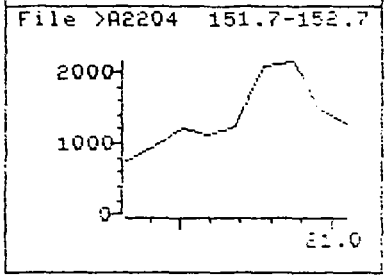


SAMPLE SPECTRUM (UNALTERED)









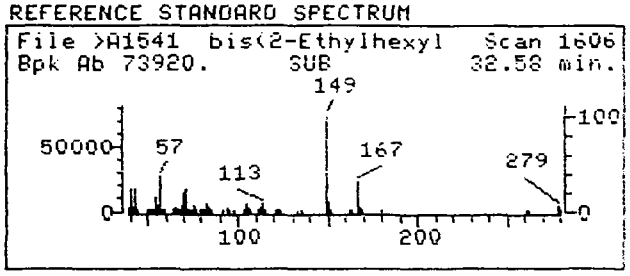
Data File: >A2204::D3
Name: 6859.3 3g 11-18-91
Misc: 6859.3 3g 11-18-91
Quant Time: 911121 18:47
Injected at: 911121 18.04

Quant Output File: >A2204::DB

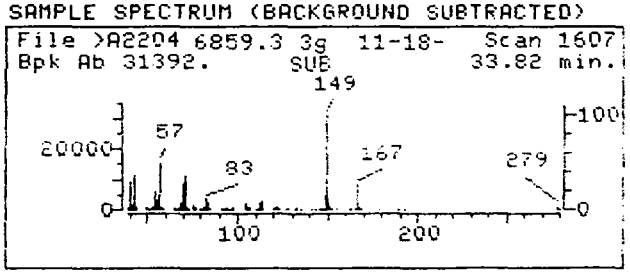
BTL# 8
Quant ID File: IDBNA::D4
Last Calibration: 911121 15:14

Compound No: 44
Compound Name: Acenaphthene
Scan Number: 905
Retention Time: 20.97 min.
Quant Ion: 153.0
Area: 12241
Concentration: 5.50 ng/uL
q-value: 81

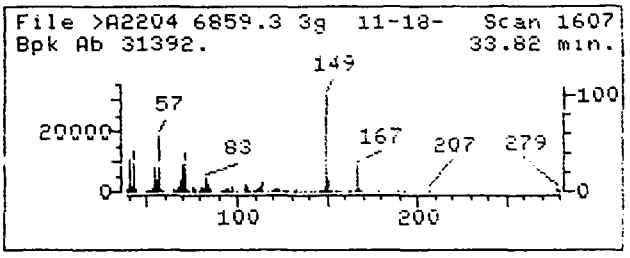
REFERENCE STANDARD SPECTRUM

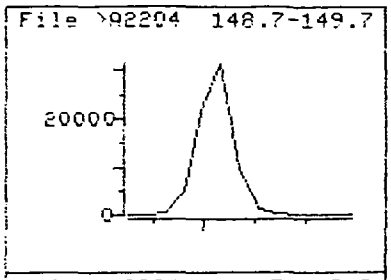


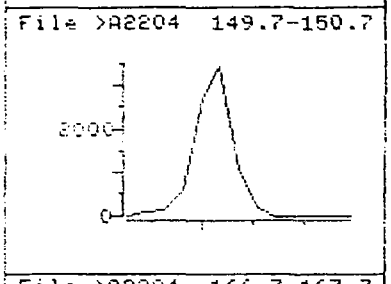
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

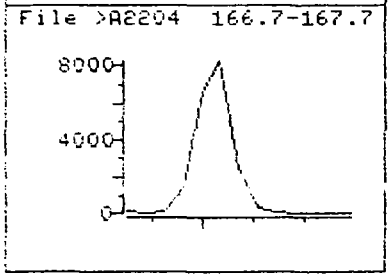


SAMPLE SPECTRUM (UNALTERED)









Data File: >A2204::D3 Quant Output File: ^A2204::DB
Name: 6859.3 3g 11-18-91
Misc: 6859.3 3g 11-18-91 BTL# 8
Quant Time: 911121 18:47 Quant ID File: IDBNA::D4
Injected at: 911121 18:04 Last Calibration: 911121 15:14

Compound No: 73
Compound Name: bis(2-Ethylhexyl)phthalate
Scan Number: 1607
Retention Time: 33.82 min.
Quant Ion: 149.0
Area: 78994
Concentration: 29.64 ng/uL
q-value: 98

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

LAB SAMPLE NO.
6859.3 3g

Lab Name: Environmental Profile Lab NJDEP Cert.# 15526

Matrix: Soil

Sample wt/vol: 3.0 (g/mL) g

Level: (Low/med) Low

Extraction: (Sepf/Cont/Sonc) Sonicator

GPC Cleanup: (Y/N) N

Lab Sample ID: 6859.3 3g

Lab File ID: >A2204

Date Received: 11-13-91

Date Extracted: 11-18-91

Date Analyzed: 11/21/91

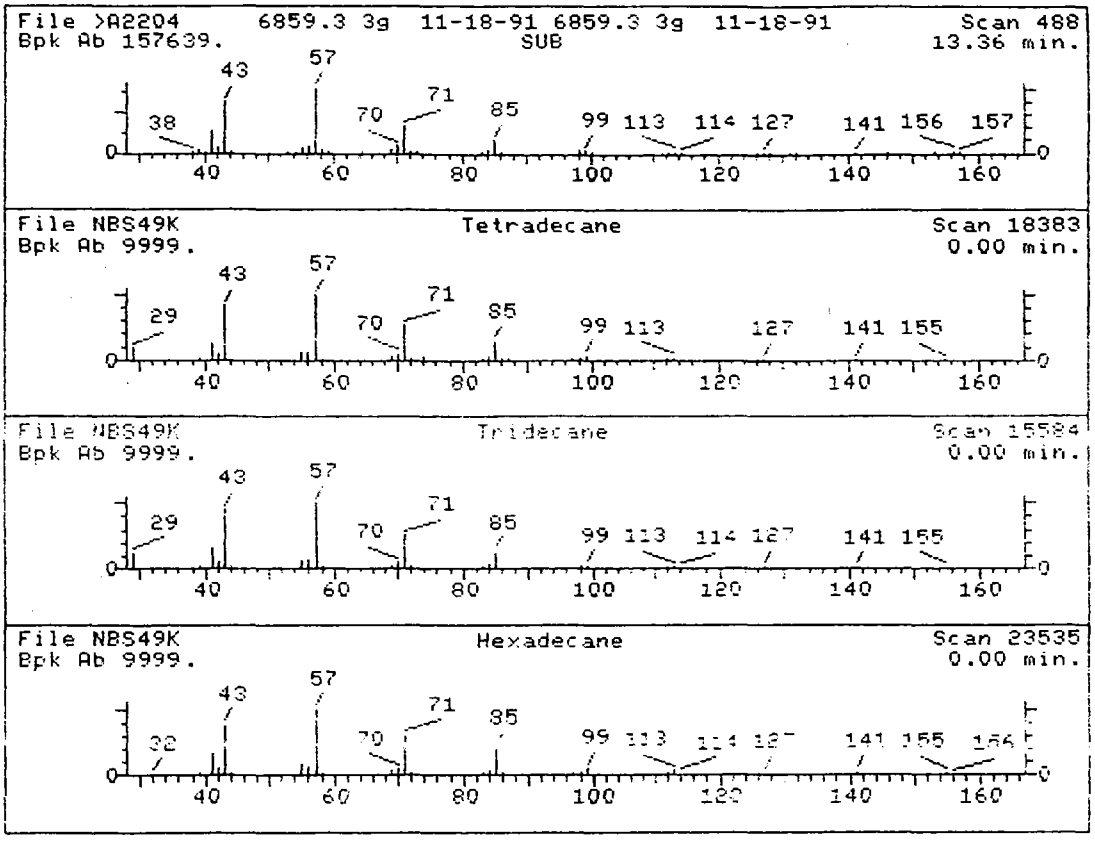
Dilution Factor: 300

Number of TICs found: 15

CONCENTRATION UNITS:
ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1	629594	Tetradecane	13.36	14700	83
2	6044719	Dodecane, 6-methyl-	15.66	10500	87
3	61141728	Dodecane, 4,6-dimethyl-	16.77	16500	70
4	629505	Tridecane	17.28	30000	93
5	629594	Tetradecane	19.05	12600	89
6	17312628	Decane, 5-propyl-	20.08	4200	79
7	55045108	Tridecane, 6-propyl-	22.27	8700	83
8	17312822	Undecane, 4,6-dimethyl-	22.99	8700	70
9	14905567	Tetradecane, 2,6,10-trimethyl	23.74	14700	78
10	31295564	Dodecane, 2,6,11-trimethyl-	23.83	8400	92
11	1189997	Heptane, 2,5,5-trimethyl-	25.26	5100	60
12		Hydrocarbon	26.45	11700	
13		Hydrocarbon	27.71	9600	
14		Hydrocarbon	28.92	7500	
15	544763	Hexadecane	30.06	54000	86

11

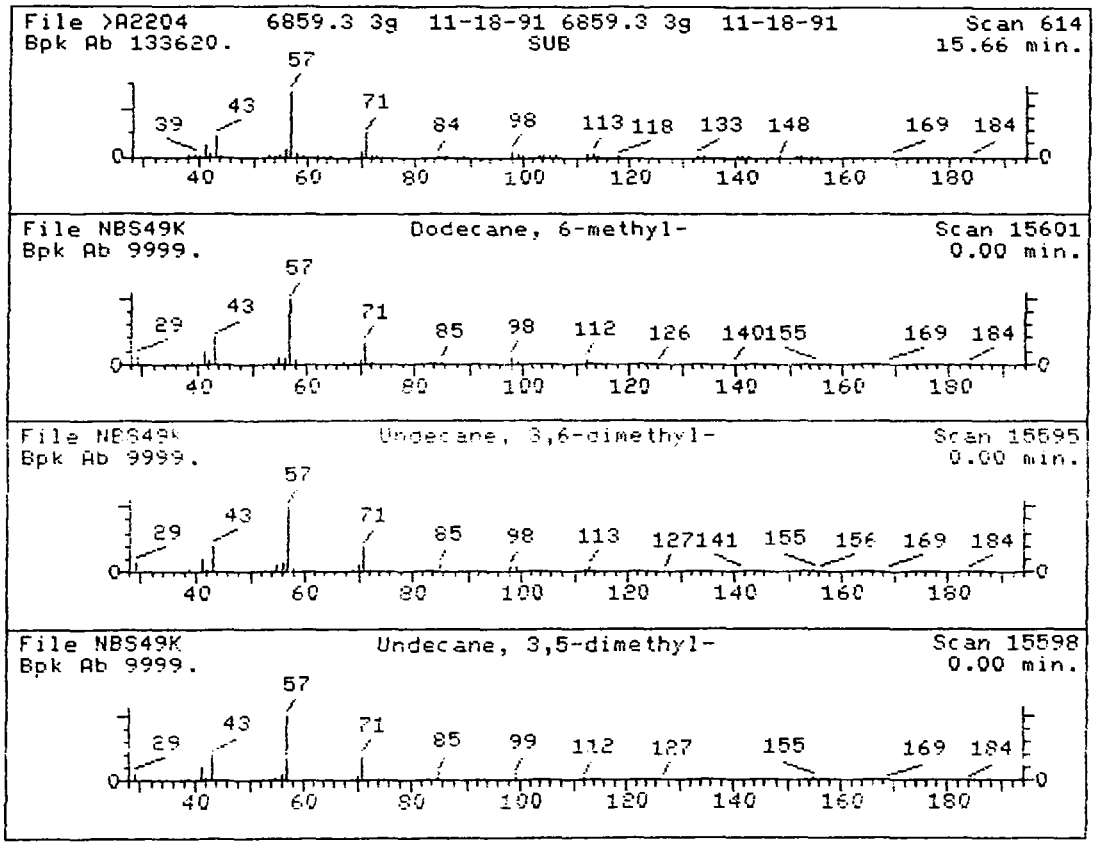


UNKNOWN #,1
AREA = 1760144. TENTATIVE CONCENTRATION IS 49.00

1.	Tetradecane	198 C14H30
2.	Tridecane	184 C13H28
3.	Hexadecane	226 C16H34
4.	Decane, 6-ethyl-2-methyl-	184 C13H28
5.	Dodecane, 2,7,10-trimethyl-	212 C15H32
6.	Undecane, 4,6-dimethyl-	184 C13H28

Sample file: >A2204 Spectrum #: 488
Search speed: 1 Tilting option: F No. of ion ranges searched: 43

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	83	629594	6804	NBS49K	81	27	2	3	82	1	57	23
2.	83	629505	6761	NBS49K	76	30	2	0	82	1	57	27
3.	78	544763	6835	NBS49K	80	40	2	4	75	4	55	14
4.	78	62108218	6767	NBS49K	58	41	2	0	79	5	55	17
5.	76	74645980	4422	NBS49K	78	31	1	4	70	8	45	29
6.	76	17312822	4387	NBS49K	64	34	2	0	70	8	45	23

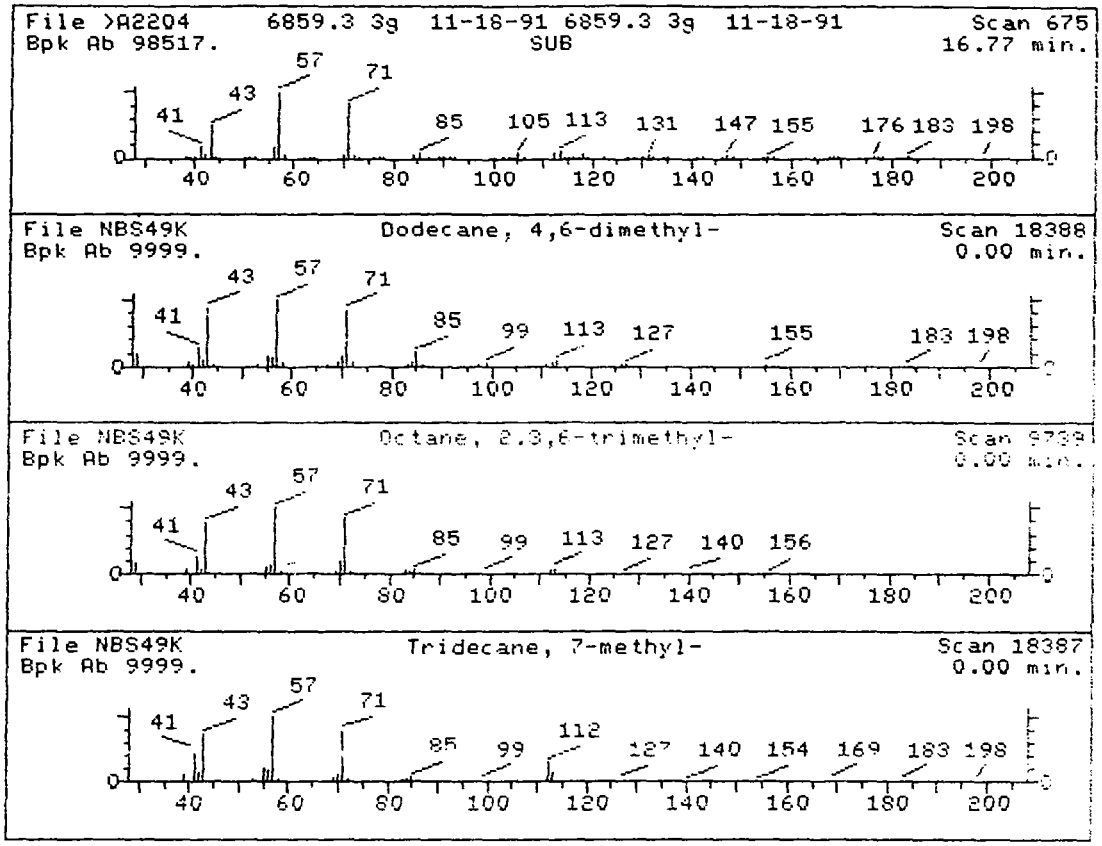


UNKNOWN #,2
AREA = 1272426. TENTATIVE CONCENTRATION IS 35.00

1.	Dodecane, 6-methyl-	184 C13H28
2.	Undecane, 3,6-dimethyl-	184 C13H28
3.	Undecane, 3,5-dimethyl-	184 C13H28
4.	Decane, 2,6,8-trimethyl-	184 C13H28
5.	Decane, 2,5,9-trimethyl-	184 C13H28
6.	Undecane, 4,6-dimethyl-	184 C13H28

Sample file: >A2204 Spectrum #: 614
Search speed: 1 Tilting option: F No. of ion ranges searched: 51

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IO
1.	87*	6044719	9562	NBS49K	64	33	2	0	80	5	63	44
2.	87*	17301289	4386	NBS49K	64	33	2	0	70	5	63	44
3.	70*	17312811	9853	NBS49K	41	57	2	0	83	7	42	17
4.	70*	62108263	4392	NBS49K	37	55	2	0	73	9	42	18
5.	60	62108229	4388	NBS49K	43	48	2	0	72	13	30	12
6.	60*	17312822	4387	NBS49K	45	53	2	3	82	11	30	17



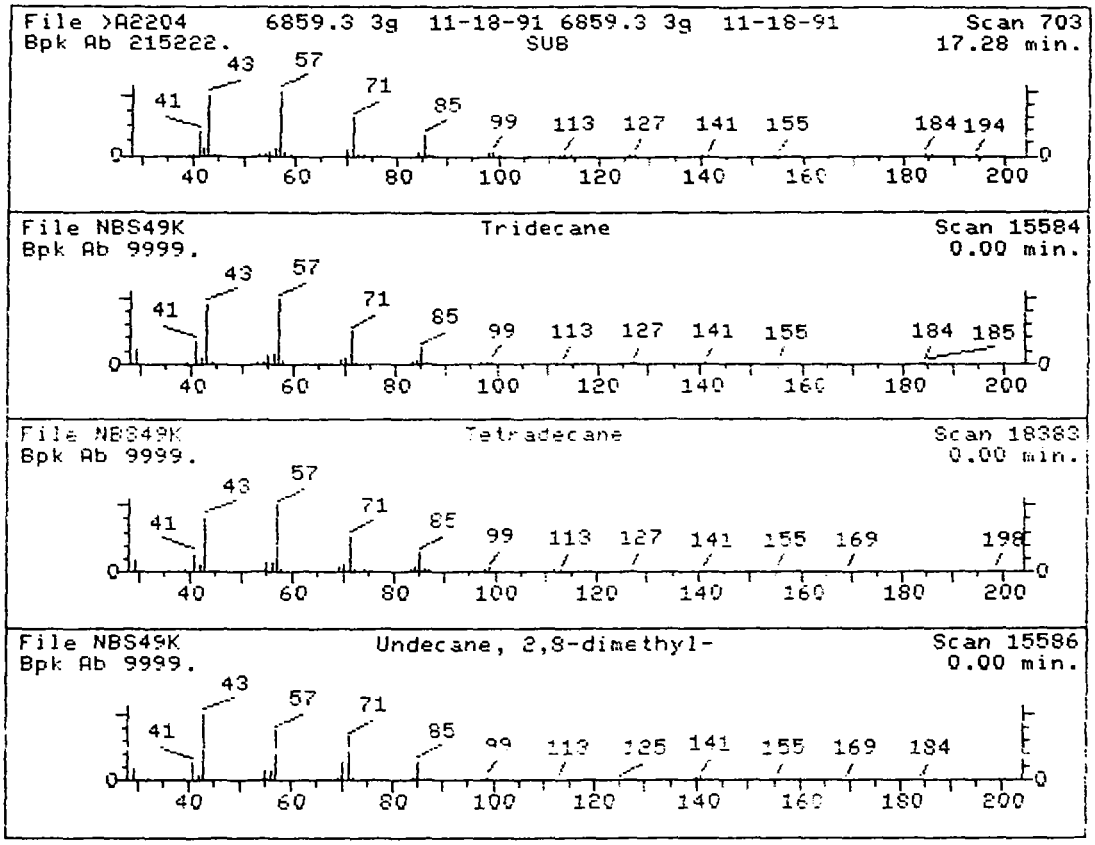
UNKNOWN #,3

AREA = 1974040. TENTATIVE CONCENTRATION IS 55.00

1.	Dodecane, 4,6-dimethyl-	198 C14H30
2.	Octane, 2,3,6-trimethyl-	156 C11H24
3.	Tridecane, 7-methyl-	198 C14H30
4.	Undecane, 6,6-dimethyl-	184 C13H28
5.	Octane, 3,6-dimethyl-	142 C10H22
6.	Heptane, 3,3,5-trimethyl-	142 C10H22

Sample file: >A2204 Spectrum #: 675
Search speed: 1 Tilting option: F No. of ion ranges searched: 42

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	70*	61141728	4410	NBS49K	38	72	3	0	96	7	42	13
2.	70	62016335	4356	NBS49K	56	36	3	0	96	8	42	14
3.	56*	26730143	12201	NBS49K	68	43	3	3	100	22	22	28
4.	52	17312764	12432	NBS49K	56	42	2	4	96	17	20	12
5.	34	15869940	12333	NBS49K	47	42	1	0	70	32	12	17
6.	29	7154805	4330	NBS49K	35	49	2	0	81	32	12	12



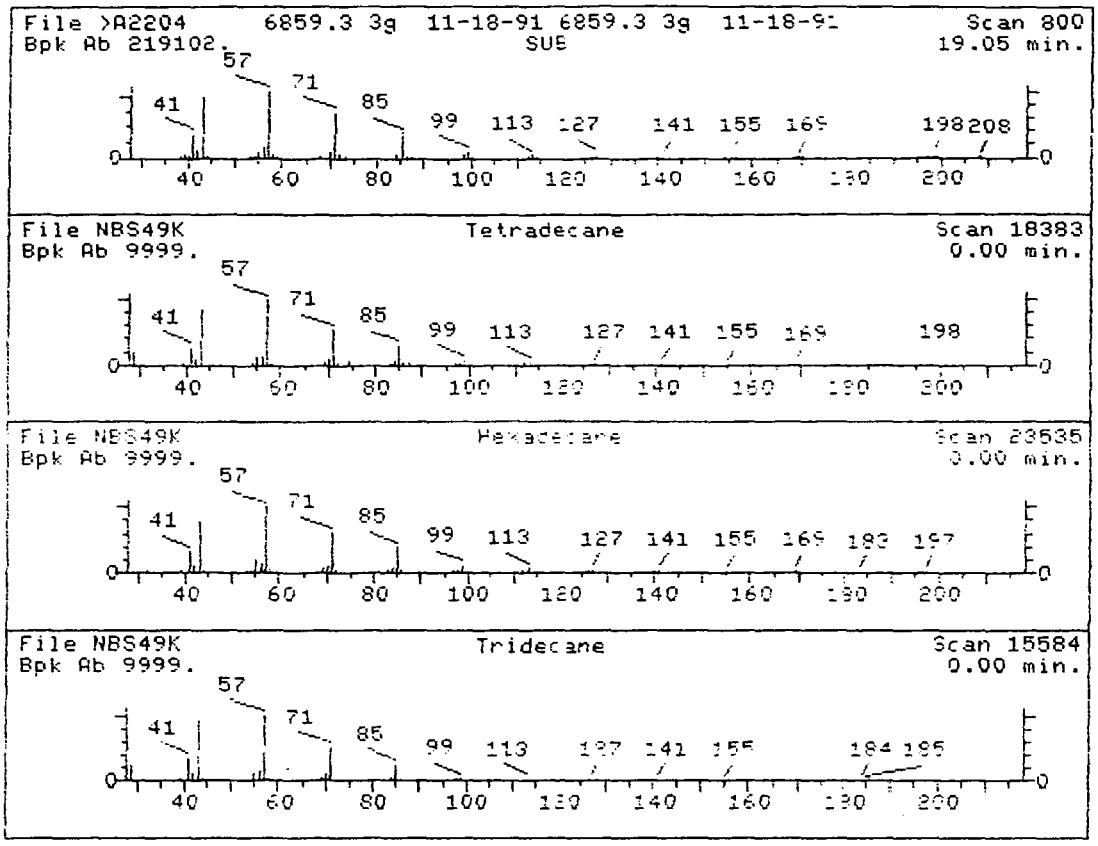
UNKNOWN #,4
AREA = 3754507. TENTATIVE CONCENTRATION IS 100.00

1.	Tridecane	184 C13H28
2.	Tetradecane	198 C14H30
3.	Undecane, 2,8-dimethyl-	184 C13H28
4.	Decane, 5-propyl-	184 C13H28
5.	Undecane, 4,7-dimethyl-	184 C13H28
6.	Nonane, 2-methyl-5-propyl-	184 C13H28

Sample file: >A2204 Spectrum #: 703
Search speed: 1 Tilting option: F No. of ion ranges searched: 42

	Prob.	CAS #	CON #	ROOT	%	DK	#FLG	TILT	%	CON	C_I	R_IX
1.	93*	629505	6761	NBS49K	83	23	1	0	86	1	68	8[illegible]
2.	83	629594	6804	NBS49K	79	29	2	2	99	1	57	23
3.	83	17301256	6763	NBS49K	68	36	2	0	89	4	57	23
4.	79*	17312628	4395	NBS49K	61	49	2	4	93	10	48	33
5.	78	17301325	6771	NBS49K	62	42	2	0	92	3	55	16
6.	78	31081171	4398	NBS49K	59	44	2	6	78	1	55	14

15

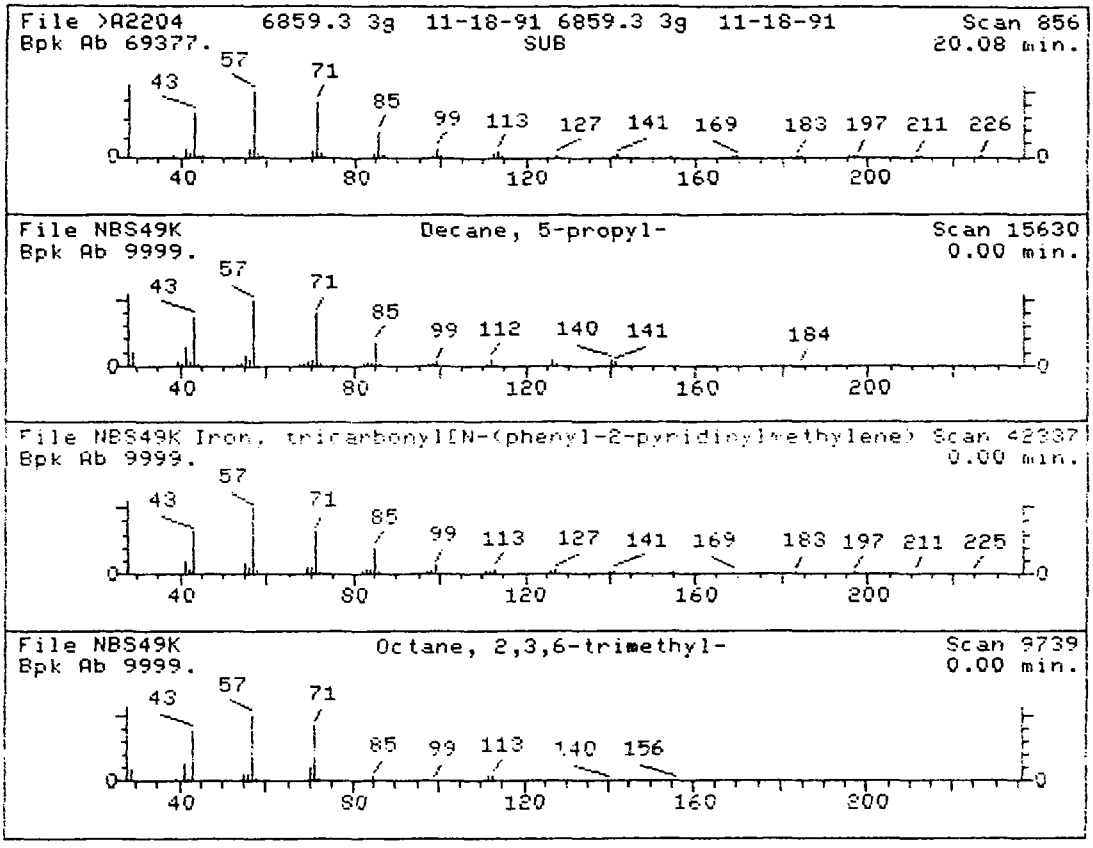


. UNKNOWN #,5
AREA = 4954722. TENTATIVE CONCENTRATION IS 42.00

1.	Tetradecane	198	C14H30
2.	Hexadecane	226	C16H34
3.	Tridecane	184	C13H28
4.	Eicosane	282	C20H42
5.	Pentadecane	212	C15H32
6.	Iron, tricarbonyl[N-(phenyl-2-pyridinylmethylene)benzenamine-N,N']-	398	C21H14FeN2O3

Sample file: >A2204 Spectrum #: 800
Search speed: 1 Tilting option: F No. of ion ranges searched: 44

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	89*	629594	6804	NBS49K	82	26	2	0	96	2	66	63
2.	83	544763	6835	NBS49K	88	32	2	3	93	4	57	23
3.	83	629505	6761	NBS49K	73	33	2	0	96	4	57	25
4.	78	112958	6871	NBS49K	100	39	3	4	82	5	55	16
5.	78	629629	6819	NBS49K	63	57	2	0	75	4	55	13
6.	76	74764117	6907	NBS49K	95	42	2	4	100	10	45	23

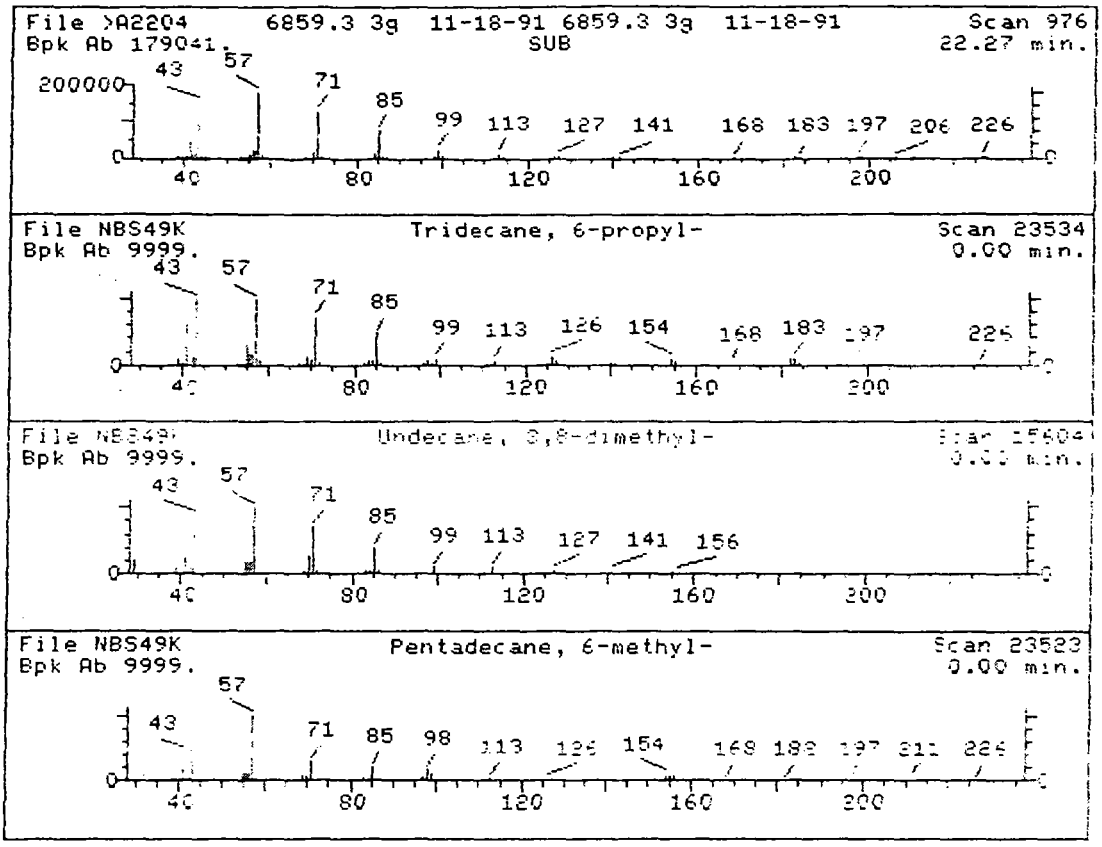


UNKNOWN #,6
AREA = 1693338. TENTATIVE CONCENTRATION IS 14.00

1.	Decane, 5-propyl-	184 C13H28
2.	Iron, tricarbonyl[N-(phenyl-2-pyridinylmethylene)benzenamine-N,N']-	398 C21H14FeN2O3
3.	Octane, 2,3,6-trimethyl-	156 C11H24
4.	Heptane, 3-ethyl-5-methyl-	142 C10H22
5.	Tridecane, 6-propyl-	226 C16H34
6.	Undecane, 4,6-dimethyl-	184 C13H28

Sample file: >A2204 Spectrum #: 856
Search speed: 1 Tilting option: F No. of ion ranges searched: 42

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IO
1.	79*	17312628	4395	NBS49K	60	51	2	1	86	7	48	31
2.	78	74764117	6907	NBS49K	63	74	2	0	92	2	55	13
3.	48	62016335	4356	NBS49K	57	35	2	0	86	22	17	19
4.	45	52896909	4332	NBS49K	52	42	2	0	75	23	17	16
5.	43*	55045108	6834	NBS49K	51	78	3	0	67	25	17	14
6.	40*	17312822	4387	NBS49K	49	49	2	0	100	34	16	23



UNKNOWN #,7

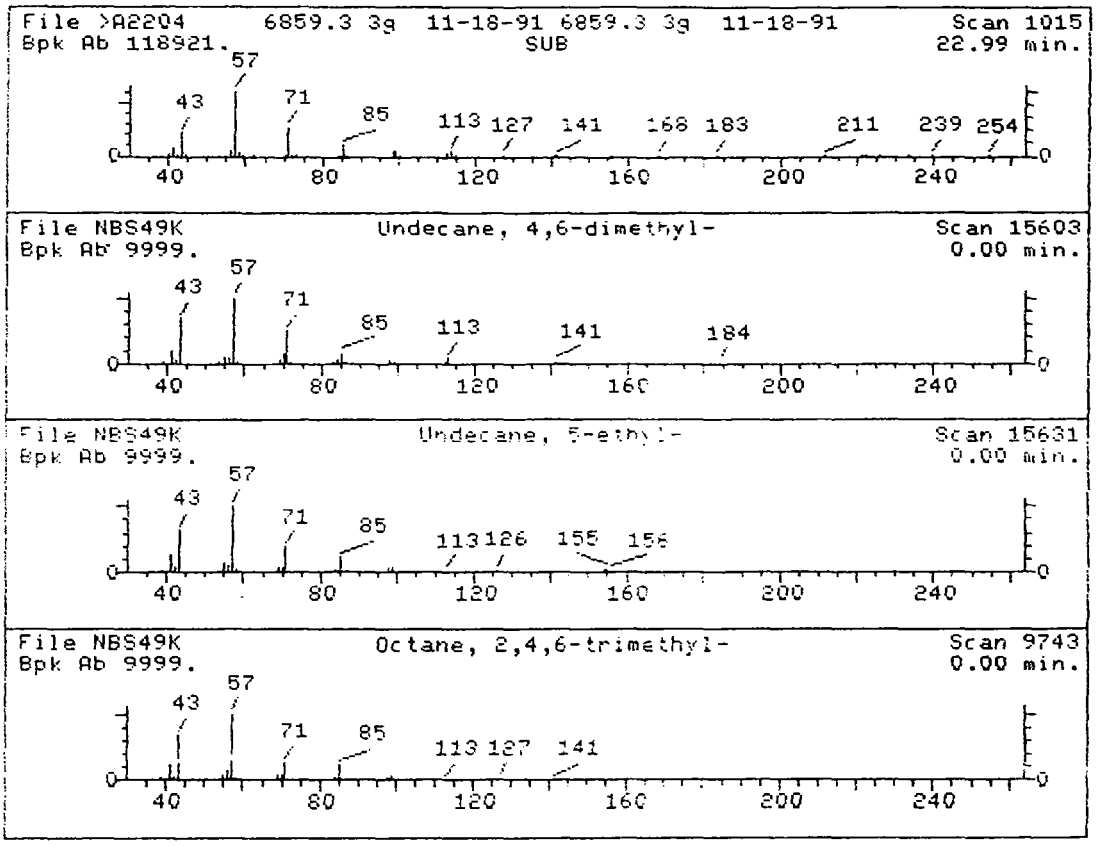
AREA = 3461130. TENTATIVE CONCENTRATION IS 29.00

1.	Tridecane, 6-propyl-	226	C16H34
2.	Undecane, 3,8-dimethyl-	184	C13H28
3.	Pentadecane, 6-methyl-	226	C16H34
4.	Octane, 2,3,6-trimethyl-	156	C11H24
5.	Tetradecane, 2,5-dimethyl-	226	C16H34
6.	Nonane, 2,6-dimethyl-	156	C11H24

Sample file: >A2204 Spectrum #: 976

Search speed: 1 Tilting option: F No. of ion ranges searched: 42

	Prob	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IO
1.	83*	55045108	6834	NBS49K	62	67	3	2	77	4	57	23
2.	78	17301303	6766	NBS49K	60	48	2	0	71	4	55	12
3.	43*	10105381	9905	NBS49K	40	74	2	0	100	24	17	14
4.	39	62016335	4356	NBS49K	50	42	2	0	84	30	14	16
5.	37*	56292694	9906	NBS49K	31	80	2	0	77	29	14	14
6.	37	17302282	4354	NBS49K	49	44	2	0	85	30	14	14



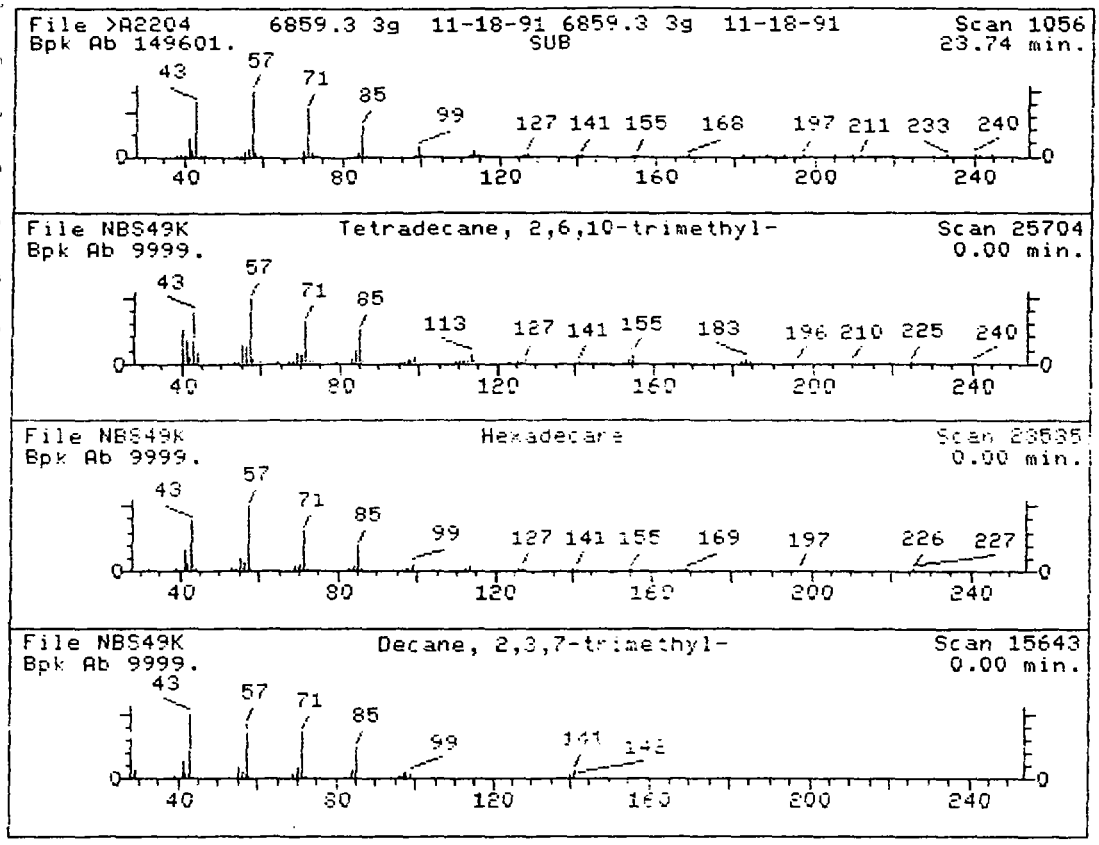
UNKNOWN #,8

AREA = 1924659. TENTATIVE CONCENTRATION IS 29.00

1.	Undecane, 4,6-dimethyl-	184 C13H28
2.	Undecane, 5-ethyl-	184 C13H28
3.	Octane, 2,4,6-trimethyl-	156 C11H24
4.	Dodecane, 4,6-dimethyl-	198 C14H30
5.	Octane, 2,3,6-trimethyl-	156 C11H24
6.	Undecane, 6,6-dimethyl-	184 C13H28

Sample file: >A2204 Spectrum #: 1015
Search speed: 1 Tilting option: F No. of ion ranges searched: 45

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	70	17312822	4387	NBS49K	57	41	2	0	89	10	42	17
2.	70	17453940	6776	NBS49K	50	48	2	0	80	9	42	12
3.	35	62016379	6679	NBS49K	37	48	2	0	73	29	14	12
4.	29	61141728	4410	NBS49K	43	49	2	0	41	34	12	12
5.	28	62016335	4356	NBS49K	40	37	2	0	46	40	10	14
6.	20	17312764	12432	NBS49K	60	38	2	4	61	54	5	14



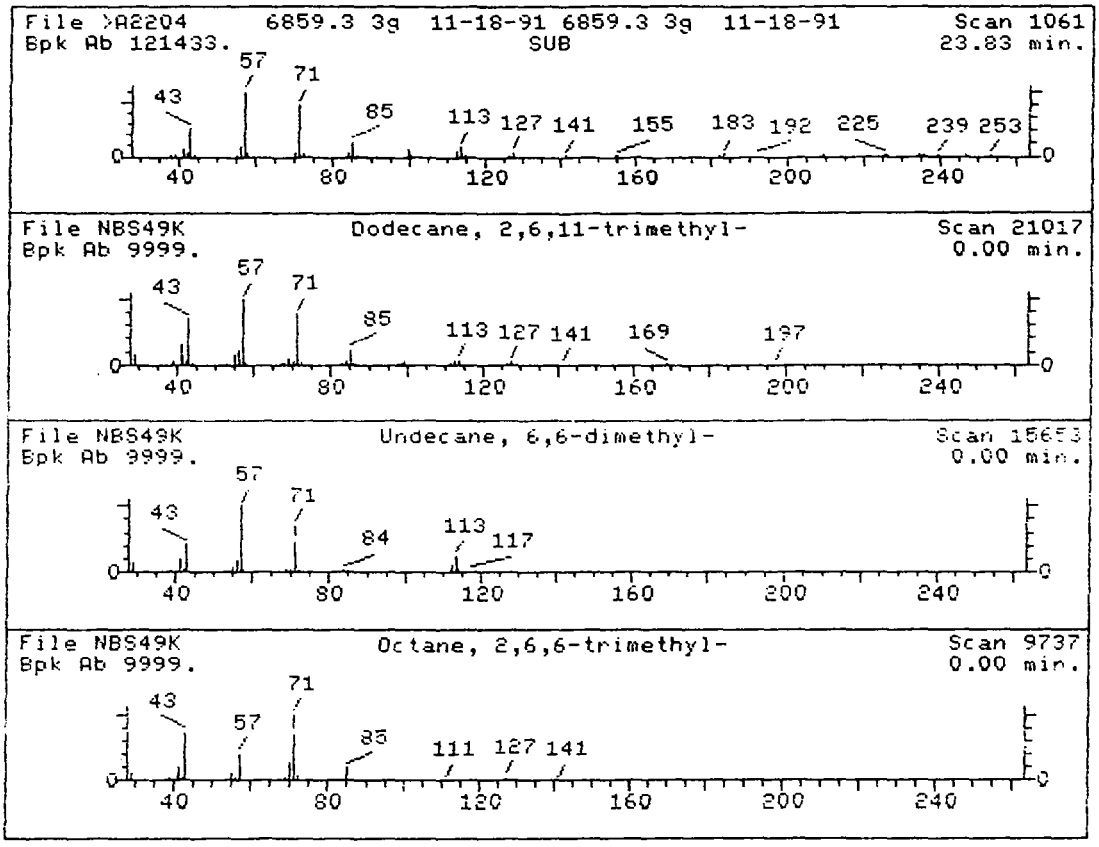
UNKNOWN #,9

AREA = 3286429. TENTATIVE CONCENTRATION IS 49.00

1.	Tetradecane, 2,6,10-trimethyl-	240 C17H36
2.	Hexadecane	226 C16H34
3.	Decane, 2,3,7-trimethyl-	184 C13H28
4.	Hexadecane, 7-methyl-	240 C17H36
5.	Octane, 3-ethyl-	142 C10H22
6.	Heptane, 3,3-dimethyl-	128 C9H20

Sample file: >A2204 Spectrum #: 1056
Search speed: 1 Tilting option: F No. of ion ranges searched: 42

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	78*	14905567	6847	NBS49K	37	95	3	0	92	3	55	13
2.	78	544763	6835	NBS49K	66	54	2	0	79	3	55	14
3.	70	62238135	6782	NBS49K	64	45	2	0	82	7	42	14
4.	60*	26730201	4433	NBS49K	28	96	3	0	98	14	30	13
5.	37	5881174	4326	NBS49K	49	44	2	0	82	30	14	14
6.	36	4032864	4311	NBS49K	45	46	2	0	97	27	14	13

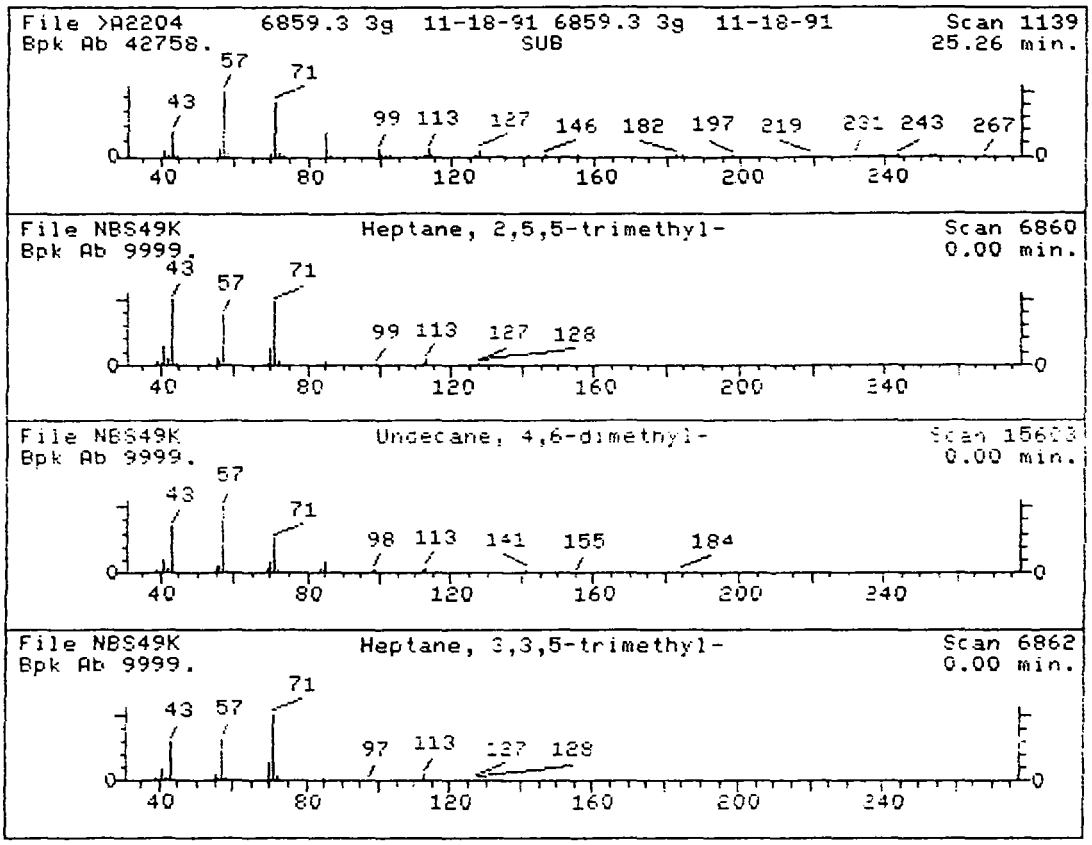


UNKNOWN #,10
AREA = 1906390. TENTATIVE CONCENTRATION IS 28.00

1.	Dodecane, 2,6,11-trimethyl-	212	C15H32
2.	Undecane, 6,6-dimethyl-	184	C13H28
3.	Octane, 2,6,6-trimethyl-	156	C11H24
4.	Methylamine, N-(1-methylhexylidene)-	127	C8H17N
5.	3-Buten-2-ol, 2-methyl-	86	C5H10O
6.	Nonane, 3,7-dimethyl-	156	C11H24

Sample file: >A2204 Spectrum #: 1061
Search speed: 1 Tilting option: F No. of ion ranges searched: 42

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IO
1.	52	31295564	4421	NBS49K	60	46	2	0	74	17	20	13
2.	40	17312764	12432	NBS49K	69	29	2	2	91	27	14	17
3.	36	54166324	4355	NBS49K	41	46	2	0	58	29	14	13
4.	30*	22058715	4298	NBS49K	28	60	3	0	78	34	12	13
5.	25*	115184	4258	NBS49K	34	55	3	0	61	41	8	13
6.	11	17302328	6677	NBS49K	46	41	2	0	54	63	2	15

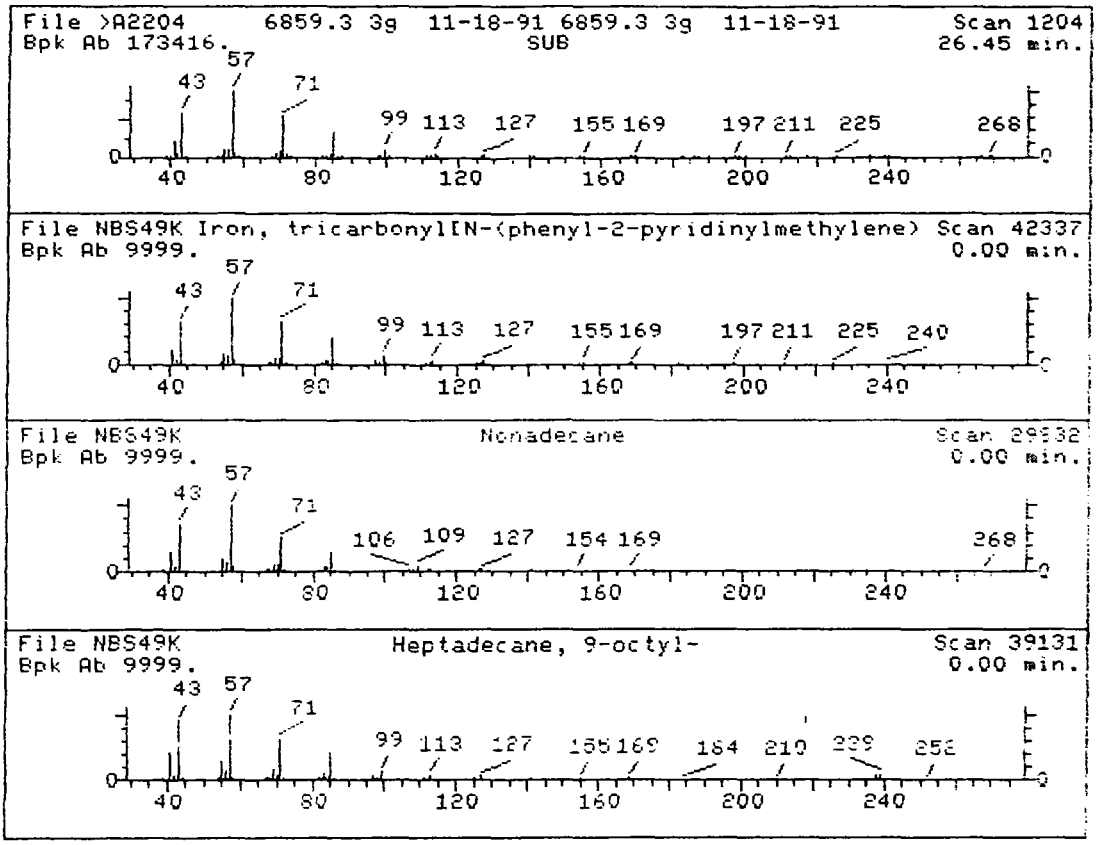


UNKNOWN #,11
AREA = 1135249. TENTATIVE CONCENTRATION IS 17.00

1.	Heptane, 2,5,5-trimethyl-	142 C10H22
2.	Undecane, 4,6-dimethyl-	184 C13H28
3.	Heptane, 3,3,5-trimethyl-	142 C10H22
4.	Decane, 5-propyl-	184 C13H28
5.	Borinic acid, diethyl-, methyl ester	100 C5H13BO

Sample file: >A2204 Spectrum #: 1139
Search speed: 1 Tilting option: F No. of ion ranges searched: 45

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	60	1189997	4328	NBS49K	41	49	2	0	88	14	30	12
2.	31*	17312822	4387	NBS49K	31	67	2	0	100	32	12	14
3.	29	7154805	4330	NBS49K	35	49	2	0	64	35	12	12
4.	20*	17312628	4395	NBS49K	27	84	2	0	51	51	5	14
5.	15*	7397468	4267	NBS49K	23	66	2	0	61	57	3	13

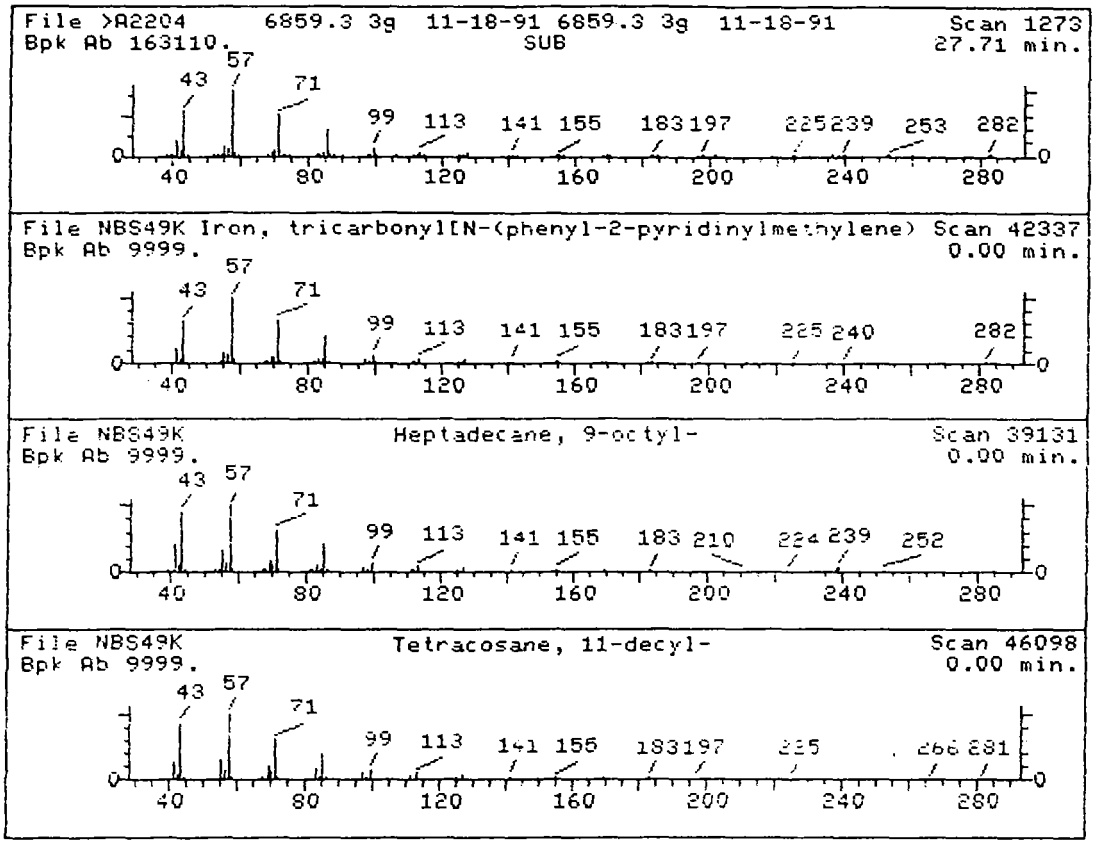


UNKNOWN #,12
AREA = 2638498. TENTATIVE CONCENTRATION IS 39.00

1.	Iron, tricarbonyl[N-(phenyl-2-pyridinylmethylene)benzenamine-N,N']-	398	C21H14FeN2O3
2.	Nonadecane	268	C19H40
3.	Heptadecane, 9-octyl-	352	C25H52
4.	Eicosane, 10-methyl-	296	C21H44
5.	Nonane, 3,7-dimethyl-	156	C11H24
6.	Hexadecane	226	C16H34

Sample file: >A2204 Spectrum #: 1204
Search speed: 1 Tilting option: F No. of ion ranges searched: 43

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IO
1.	89	74764117	6907	NBS49K	112	25	1	3	83	2	66	60
2.	79*	629925	6864	NBS49K	61	56	2	0	86	9	48	38
3.	78	7225641	6893	NBS49K	63	84	2	0	73	5	55	13
4.	70	54833237	6879	NBS49K	70	67	2	0	71	7	42	16
5.	60	17302328	6677	NBS49K	39	48	2	0	97	11	30	12
6.	60	544763	6835	NBS49K	82	38	2	2	75	14	30	17

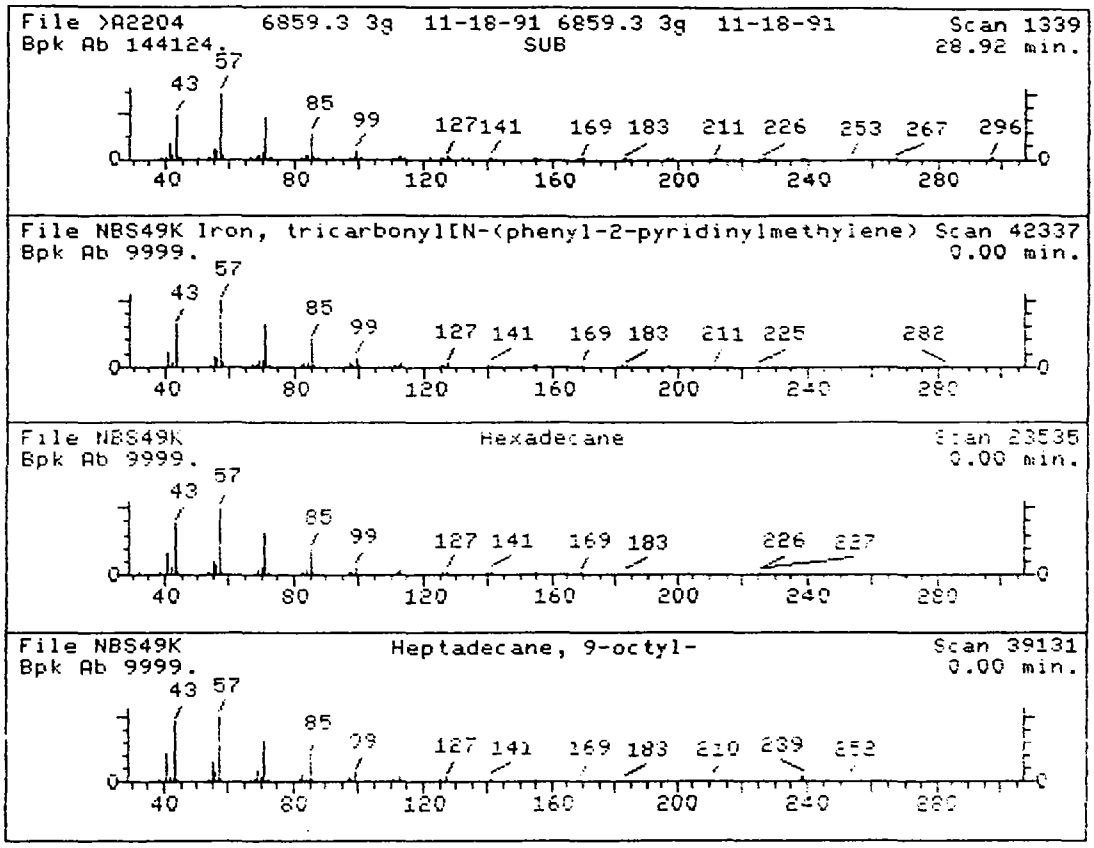


UNKNOWN #,13
AREA = 2172616. TENTATIVE CONCENTRATION IS 32.00

1.	Iron, tricarbonyl[N-(phenyl-2-pyridinylmethylene)benzenamine-N,N']-	398	C21H14FeN2O3
2.	Heptadecane, 9-octyl-	352	C25H52
3.	Tetracosane, 11-decyl-	478	C34H70
4.	Eicosane, 10-methyl-	296	C21H44
5.	Nonane, 2-methyl-5-propyl-	184	C13H28
6.	Hexadecane	226	C16H34

Sample file: >A2204 Spectrum #: 1273
Search speed: 1 Tilting option: F No. of ion ranges searched. 42

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	86	74764117	6907	NBS49K	103	28	2	3	99	2	60	39
2.	78	7225641	6893	NBS49K	63	84	2	0	75	5	55	13
3.	78	55429840	6913	NBS49K	64	94	2	0	74	3	55	14
4.	70	54833237	6879	NBS49K	75	62	2	0	74	7	42	19
5.	70	31081171	4398	NBS49K	54	49	2	0	77	10	42	12
6.	67	544763	6835	NBS49K	73	41	1	1	68	14	34	24



UNKNOWN #,14

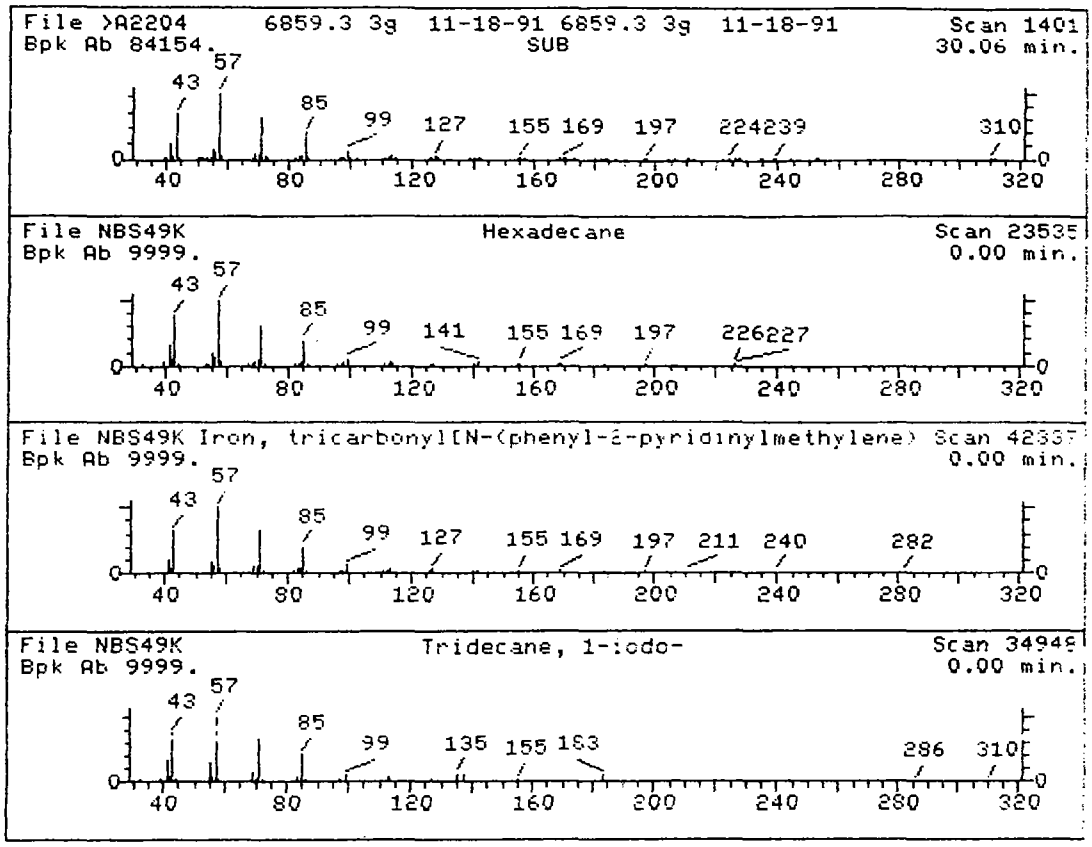
AREA = 1654147. TENTATIVE CONCENTRATION IS 25.00

1.	Iron, tricarbonyl[N-(phenyl-2-pyridinylmethylene)benzenamine-N,N']-	398	C21H14FeN2O3
2.	Hexadecane	226	C16H34
3.	Heptadecane, 9-octyl-	352	C25H52
4.	Tetracosane, 11-decyl-	478	C34H70
5.	Undecane, 3,8-dimethyl-	184	C13H28
6.	Pentadecane	212	C15H32

Sample file: >A2204 Spectrum #: 1339
Search speed: 1 Tilting option: F No. of ion ranges searched: 43

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	84	74764117	6907	NBS49K	113	24	1	4	99	10	55	60
2.	83*	544763	6835	NBS49K	92	28	1	2	78	14	51	74
3.	78	7225641	6893	NBS49K	63	84	2	0	72	5	55	13
4.	78	55429840	6913	NBS49K	64	94	2	0	75	3	55	14
5.	78	17301303	6766	NBS49K	70	38	2	0	67	5	55	19
6.	78	629629	6819	NBS49K	68	52	2	0	69	5	55	15

nh



UNKNOWN #,15
AREA = 1148778. TENTATIVE CONCENTRATION IS 180.00

1.	Hexadecane	226 C16H34
2.	Iron, tricarbonyl[N-(phenyl-2-pyridinylmethylene)benzenamine-N,N']-	398 C21H14FeN2O3
3.	Tridecane, 1-iodo-	310 C13H27I
4.	Heptadecane	240 C17H36
5.	Undecane, 3,8-dimethyl-	184 C13H28
6.	Heptadecane, 9-octyl-	352 C25H52

Sample file: >A2204 Spectrum #: 1401
Search speed: 1 Tilting option: F No. of ion ranges searched: 43

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	86	544763	6835	NBS49K	103	17	2	2	81	5	60	39
2.	86	74764117	6907	NBS49K	104	33	2	3	100	5	60	32
3.	86*	35599770	6884	NBS49K	71	69	3	2	83	3	60	30
4.	83	629787	6846	NBS49K	90	31	2	3	93	5	57	24
5.	83	17301303	6766	NBS49K	71	37	2	0	68	5	57	21
6.	78	7225641	6893	NBS49K	63	84	2	0	75	5	55	13

APPENDIX D

GROUNDWATER ANALYTICAL DATA PACKAGE

Bldg. 2018 MW Anal
11/27/95
001

EMSL ANALYTICAL, INC.

Asbestos - Lead - Environmental - Materials

New Jersey

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

3 Cooper Street
Westmont, NJ 08108
(609) 858-4800

1056 Stelton Road
Piscataway, NJ 08854
(908) 981-0550

New York

350 Fifth Avenue
Empire State Bldg.
Suite 1524
New York, NY 10118
(212) 290-0051

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

California

1720 S. Amphlett Blvd.
Suite 130
San Mateo, CA 94402
(415) 570-5401

Florida

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

Georgia

1600 Rosewell Street, SE
Suite One
Smyrna, GA 30080
(404) 333-6066

Michigan

212 S. Wagner Road
Ann Arbor, MI 48103
(313) 668-6810

North Carolina

620-G Guilford College Rd.
Greensboro, NC 27409
(910) 297-1487

Texas

2501 Central Parkway
Suite C-13
Houston, TX 77092
(713) 686-3635

ANALYTICAL DATA REPORT
FOR
E-SYSTEMS
P.O. Box 360
Fort Monmouth, NJ 07703

PROJECT : **Bldg. 2018, MW Sampling**

EMSL Project: # 95118846

Field Sample No. & Location	Laboratory Sample ID	Matrix	Date & Time of Collection	Date Received
1981.1, MW1	**95-54557**	**Aqueous**	**11/27/95 @ 1118**	**11/27/95**
1980.2, Trip Blank	**95-54553**	**Aqueous**	**11/27/95 @ 0645**	**11/27/95**
1980.3, Field Blank	**95-54554**	**Aqueous**	**11/27/95 @ 1415**	**11/27/95**

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	1-23-96

EMSL

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. Surrogate Recovery Form	
. Method Blank Data	
. Matrix Spike/Matrix Spike Duplicate Data	
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. Initial Calibration Data	
. Continuing Calibration DFTPP Tune	
. Continuing Calibration Data	
. Internal Standards Area Summary	
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SAMPLE DATA SUMMARY PACKAGE

Date of Report: 12/13/95
Project Number: 95118846
Lab ID: 95-0054557
Date Collected: 11/27/95 11:18
Collected By: Client
Date Received: 11/27/95 17:30

Attention: Barbara O'Toole
E-Systems
P.O. Box 360
Fort Monmouth NJ 07703

Client Project: MW Sampling Bldg.2018

Client Designation: MW1-2933763

	Conc.	Unit
ORGANIC		
Semi-Volatiles		
BN by 625 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
Xylenes	see attached	ug/l

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO. 005

1981-1
9554557B
2933763

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: Bldg 2018 Location: MW #1 Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 9554557B

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B9315.D

Level: (low/med) _____ Date Received: 11/27/95

% Moisture: 0 decanted: (Y/N): N Date Extracted: 12/4/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 12/8/95

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	4	
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

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
19315 007
9554557B
29337763

Lab Name: EMSL ANALYTICAL Contract: mw#1

Project No.: _____ Site: Bldg 2015 Location: mw#1 Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 9554557B

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: B9315.D

Level: (low/med) _____ Date Received: 11/27/95

% Moisture: 0 decanted: (Y/N) N Date Extracted: 12/4/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 12/8/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

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

Number TICs found: 8 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc	Q
1. 95-93-2	Benzene, 1,2,4,5-tetramethyl	10.61	2	J
2. 91-57-6	Naphthalene, 2-methyl-	13.40	9	J
3. 90-12-0	Naphthalene, 1-methyl-	13.65	8	J
4. 575-43-9	Naphthalene, 1,6-dimethyl-	15.33	3	J
5. 575-41-7	Naphthalene, 1,3-dimethyl-	15.54	5	J
6. 582-16-1	Naphthalene, 2,7-dimethyl-	15.60	3	J
7. 575-43-9	Naphthalene, 1,6-dimethyl-	15.87	2	J
8. 57-10-3	Hexadecanoic acid	23.55	8	J
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 1981.1 2933763

008

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: 2018 NJDEP MW#: 1

Matrix: (soil/water) WATER Lab Sample ID: 9554557V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0483.D

Level: (low/med) LOW Date Received: 11/27/95

% Moisture: not dec. NA Date Analyzed: 12/5/95

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	.50	U
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	25	
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# 19311 2933763 009

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: 2018 NJDEP MW#: 1

Matrix: (soil/water) WATER Lab Sample ID: 9554557V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0483.D

Level: (low/med) LOW Date Received: 11/27/95

% Moisture: not dec. NA Date Analyzed: 12/5/95

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	11	
87-61-6	1,2,3-Trichlorobenzene	.50	U
1634-04-4	Methy-tertiary butyl ether	.50	U
75-65-0	tertiary-Butyl alcohol	2.0	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FMETL# 1981.1 29337763 010

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No. FT. MONMOUTH NJ Bldg: 2018 NJDEP MW#: 1 Group:

Matrix: (soil/water) WATER Lab Sample ID: 9554557V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0483.D

Level: (low/med) LOW Date Received: 11/27/95

% Moisture: not dec. NA Date Analyzed: 12/5/95

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

CAS Number	Compound Name	RT	Est. Conc.	Q
1.	Column Bleed	10.18	1	J
2.	Column Bleed	19.72	1	J
3. 1074-17-5	Benzene, 1-methyl-2-propyl-	21.18	1	J
4.	Column Bleed	23.08	1	J
5.	Column Bleed	23.10	2	J
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Date of Report: 12/21/95
Project Number: 95118844
Lab ID: 95-0054553
Date Collected: 11/27/95 06:45
Collected By: Client
Date Received: 11/27/95 17:30

Attention: Barbara O'Toole
E-Systems
P.O. Box 360
Fort Monmouth NJ 07703

Client Project: MW Sampling,Bldg.482

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
Xylenes	see attached	ug/l

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 1980.2 Trip Blank 012

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: 482 NJDEP MW#: TB

Matrix: (soil/water) WATER Lab Sample ID: 9554553V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0475.D

Level: (low/med) LOW Date Received: 11/27/95

% Moisture: not dec. NA Date Analyzed: 12/5/95

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	.70	B
156-60-65	trans-1,2-Dichloroethene	.50	U
75-34-3	1,1-Dichloroethane	.50	U
594-20-7	2,2-Dichloropropane	.50	U
156-59-2	cis-1,2-Dichloroethene	.50	U
74-97-1	Bromochloromethane	.50	U
67-66-3	Chloroform	.50	U
71-55-6	1,1,1-Trichloroethane	.50	U
56-23-1	Carbon tetrachloride	.50	U
563-58-6	1,1-Dichloropropene	.50	U
71-43-2	Benzene	.50	U
107-06-2	1,2-Dichloroethane	.50	U
79-01-6	Trichloroethene	.50	U
78-87-1	1,2-Dichloropropane	.50	U
74-95-3	Dibromomethane	.50	U
75-27-4	Bromodichloromethane	.50	U
10061-01-1	cis-1,3-Dichloropropene	.50	U
108-88-3	Toluene	.50	U
10061-02-6	trans-1,3-Dichloropropene	.50	U
79-00-1	1,1,2-Trichloroethane	.50	U
127-18-4	Tetrachloroethene	.50	U
142-28-9	1,3-Dichloropropane	.50	U
124-48-1	Dibromochloromethane	.50	U
106-93-4	1,2-Dibromomethane	.50	U
108-90-7	Chlorobenzene	.50	U
630-20-6	1,1,1,2-Tetrachloroethane	.50	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 19963.2 Trip Blank

013

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: 482 NJDEP MW#: TB

Matrix: (soil/water) WATER Lab Sample ID: 9554553V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0475.D

Level: (low/med) LOW Date Received: 11/27/95

% Moisture: not dec. NA Date Analyzed: 12/5/95

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 1.0

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
100-41-4	Ethylbenzene	.50	U
1330-29-7	Xylene (total)	.50	U
100-42-1	Styrene	.50	U
75-25-2	Bromoform	.50	U
98-82-8	Isopropylbenzene	.50	U
108-86-1	Bromobenzene	.50	U
79-34-1	1,1,2,2-Tetrachloroethane	.50	U
96-18-4	1,2,3-Trichloropropane	.50	U
103-65-1	n-Propylbenzene	.50	U
95-49-8	2-Chlorotoluene	.50	U
106-43-4	4-Chlorotoluene	.50	U
108-67-8	1,3,5-Trimethylbenzene	.50	U
98-06-6	tert-Butylbenzene	.50	U
95-63-6	1,2,4-Trimethylbenzene	.50	U
135-98-8	sec-Butylbenzene	.50	U
541-73-1	1,3-Dichlorobenzene	.50	U
99-87-6	4-Isopropyltoluene	.50	U
106-46-7	1,4-Dichlorobenzene	.50	U
95-50-1	1,2-Dichlorobenzene	.50	U
104-51-8	n-Butylbenzene	.50	U
96-12-8	1,2-Dibromo-3-chloropropane	.50	U
120-82-1	1,2,4-Trichlorobenzene	.50	U
87-68-3	Hexachlorobutadiene	.50	U
91-20-3	Naphthalene	.50	U
87-61-6	1,2,3-Trichlorobenzene	.50	U
1634-04-4	Methy-tertiary butyl ether	.50	U
75-65-0	tertiary-Butyl alcohol	2.0	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FMETL# 1980.2 Trip Blank

014

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No. FT. MONMOUTH NJ Bldg: 482 NJDEP MW#: TB Group:

Matrix: (soil/water) WATER Lab Sample ID: 9554553V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0475.D

Level: (low/med) LOW Date Received: 11/27/95

% Moisture: not dec. NA Date Analyzed: 12/5/95

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. 109-99-9	Furan, tetrahydro-	10.74	3	J
2.	Column Bleed	23.11	1	J
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EMSL

Date of Report: 12/21/95
Project Number: 95118844
Lab ID: 95-0054554
Date Collected: 11/27/95 14:15
Collected By: Client
Date Received: 11/27/95 17:30

Attention: Barbara O'Toole
E-Systems
P.O. Box 360
Fort Monmouth NJ 07703

Client Project: MW Sampling,Bldg.482

Client Designation: Field Blank

	Conc.	Unit
ORGANIC		
Semi-Volatiles		
BN by 625 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
Xylenes	see attached	ug/l

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO. 016

1980.3
9554554B
Field Blank

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: Bldg 482 Location: FB Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 9554554B

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B9312.D

Level: (low/med) _____ Date Received: 11/27/95

% Moisture: 0 decanted: (Y/N): N Date Extracted: 12/4/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 12/8/95

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. 017

19960.3
9554554B
Field Blank

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: BH6482 Location: FB Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 9554554B

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B9312.D

Level: (low/med) _____ Date Received: 11/27/95

% Moisture: 0 decanted: (Y/N): N Date Extracted: 12/4/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 12/8/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

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

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
129-00-0	Pyrene	2	U
85-68-7	Butylbenzylphthalate	9	U
56-55-3	Benzo[a]anthracene	2	U
91-94-1	3,3'-Dichlorobenzidine	15	U
218-01-9	Chrysene	2	U
117-81-7	bis(2-Ethylhexyl)phthalate	4	U
117-84-0	Di-n-octylphthalate	2	U
205-99-2	Benzo[b]fluoranthene	1	U
207-08-9	Benzo[k]fluoranthene	2	U
50-32-8	Benzo[a]pyrene	2	U
193-39-5	Indeno[1,2,3-cd]pyrene	2	U
53-70-3	Dibenz[a,h]anthracene	3	U
191-24-2	Benzo[g,h,i]perylene	2	U

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO. 018
1980.3
9554554B
Field Blank

Lab Name: EMSL ANALYTICAL Contract:

Project No.: Site: Bldg 482 Location: FB Group:

Matrix: (soil/water) WATER Lab Sample ID: 9554554B

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: B9312.D

Level: (low/med) Date Received: 11/27/95

% Moisture: 0 decanted: (Y/N) N Date Extracted: 12/4/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 12/8/95

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 Hydrocarbon	8.14	5	J
2. 57-10-3	Hexadecanoic acid	23.52	2	J
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VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 1980.3 Field Blank 013

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: 482 NJDEP MW#: FB

Matrix: (soil/water) WATER Lab Sample ID: 9554554V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0476.D

Level: (low/med) LOW Date Received: 11/27/95

% Moisture: not dec. NA Date Analyzed: 12/5/95

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	.60	B
156-60-65	trans-1,2-Dichloroethene	.50	U
75-34-3	1,1-Dichloroethane	.50	U
594-20-7	2,2-Dichloropropane	.50	U
156-59-2	cis-1,2-Dichloroethene	.50	U
74-97-1	Bromochloromethane	.50	U
67-66-3	Chloroform	.50	U
71-55-6	1,1,1-Trichloroethane	.50	U
56-23-1	Carbon tetrachloride	.50	U
563-58-6	1,1-Dichloropropene	.50	U
71-43-2	Benzene	.50	U
107-06-2	1,2-Dichloroethane	.50	U
79-01-6	Trichloroethene	.50	U
78-87-1	1,2-Dichloropropane	.50	U
74-95-3	Dibromomethane	.50	U
75-27-4	Bromodichloromethane	.50	U
10061-01-1	cis-1,3-Dichloropropene	.50	U
108-88-3	Toluene	.50	U
10061-02-6	trans-1,3-Dichloropropene	.50	U
79-00-1	1,1,2-Trichloroethane	.50	U
127-18-4	Tetrachloroethene	.50	U
142-28-9	1,3-Dichloropropane	.50	U
124-48-1	Dibromochloromethane	.50	U
106-93-4	1,2-Dibromomethane	.50	U
108-90-7	Chlorobenzene	.50	U
630-20-6	1,1,1,2-Tetrachloroethane	.50	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 1980.3 Field Blank 020

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: 482 NJDEP MW#: FB

Matrix: (soil/water) WATER Lab Sample ID: 9554554V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0476.D

Level: (low/med) LOW Date Received: 11/27/95

% Moisture: not dec. NA Date Analyzed: 12/5/95

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
1634-04-4	Methy-tertiary butyl ether	.50	U
75-65-0	tertiary-Butyl alcohol	2.0	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FMETL# 021
1980.3
Field Blank

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No. FT. MONMOUTH NJ Bldg: 482 NJDEP MW#: FB Group:

Matrix: (soil/water) WATER Lab Sample ID: 9554554V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0476.D

Level: (low/med) LOW Date Received: 11/27/95

% Moisture: not dec. NA Date Analyzed: 12/5/95

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

CAS Number	Compound Name	RT	Est. Conc.	Q
1.	Column Bleed	10.19	1	J
2. 109-99-9	Furan, tetrahydro-	10.75	3	J
3.	Column Bleed	19.71	1	J
4.	Unknown Hydrocarbon	23.10	2	J
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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 USEPA CLP.	X
12	Non-Conformance Summary	X

Paul Farag

Laboratory Manager or Environmental Consultant's Signature

1-23-92

Date

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.
29-30	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.
31	11.	A list of all parameters (constituents and conditions) for which the analyses were performed.
3-21	12.	Sample results and corresponding units for each parameter.

CHAIN OF CUSTODY

EMSL ANALYTICAL INC.
3 Cooper Street
Westmont, New Jersey 08108
609-858-9573
609-858-4571 (Fax)

Chain of Custody / Analysis Request Form

EMSL Project # 951188646
PO # IJO#95-0091/SAI

Custody and Sample Information - Print ALL information. Put N/A in blanks not applicable. Press firmly.

1. Report to:	2. Bill to:	Project: Bldg 2018 MW SAMPLING
US ARMY FT.MONMOUTH Charles Appleby SELFM-PW-EV Env.Lab.Cert#13461		Tel #: 908-532-6224 FAX #:

3. Sampled by (Signature)	4. # of Samples in Shipment	5. Date of Sample Shipment	6. Date Results Needed
Baxter/Palilonis	ONE	11-27-95	

Item No.	Sample Number	Station Location / Sample ID	COMP	GRAB	Matrix: WATER	SOIL	AIR	SLUDGE	OTHER	Method Preserved: HCl	HNO_3	H_2SO_4	ICE	NONE	OTHER	Sampling: Date	Time	Number of Containers	Indicate Analysis Requested: VOA 524 + Library Search; Include Xylene, TBA, MTBE; BNAs 625 + 15	Laboratory Number
1	1981.1	MW1-2933763		X	X					X			X	X		11/27	1118	9	X	X	54557
2	1980.2	TRIP BLANK		X	X					X			X			11/27	0645	3	X		
3	↓ .3	Field Blank		X	X					X			X	X		11/27	1415	6	X	X	
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6																					
7																					
8																					
9																					

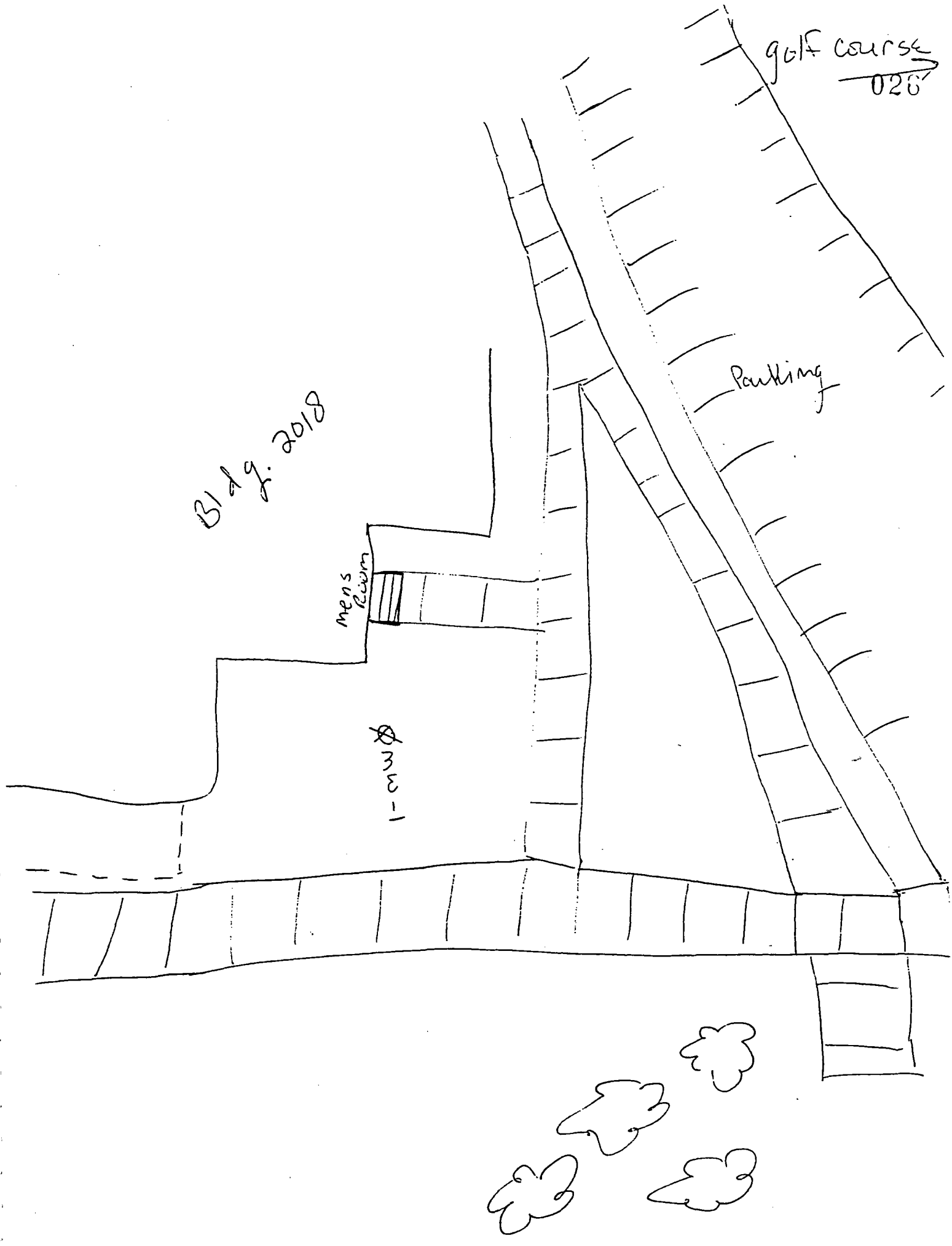
Released by (Signature)	Date/Time Released	Delivery Method	Received by (Signature)	Company/Agency Affiliation	Date/Time Received	Condition Noted
S. Hubbard	11/27/95 / 1575	Courier	Palilonis	EMSL	11/27/95	1515
	/			EMSL	11/28 / 17:30	
	/				/	

Please indicate turnaround time: standard 10D 5D 72HR 48HR 24HR (Must call for quick turn)

Comments: Page 1 of 1
* A drawing depicting sample location on reverse side.

Please indicate reporting requirements:
1) Results only 2) Results & QC 3) Reduced Deliverables

025


golf course
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Parking
Bldg. 2018
mens room

INTERNAL CHAIN OF CUSTODY(ORGANICS)

SAMPLE No(S).	ANALYSIS	DATE ANALYZED	NAME (PRINT)	NAME (SIGNATURE)
55592	TCLP BNA	12/10/95	S. VanEtten	
9555533-5	BNA SOIL	12/8/95	S. VanEtten	
9554749	VOA TCLP	12/04/95	M. CIAMPI	
9554731	VOA + QC	12/01/95	M. CIAMPI	
9554732	TCLP VOA + LCS + QC + SPECIAL	12/02/95	M. CIAMPI	
95 55592	GASOLINE	12/11/95	M. CIAMPI	
95 54733	BN+	12/1/95	S. VanEtten	
4551-8	BN+	12/8/95	S. VanEtten	
54779	BNA	12/8/95	S. VanEtten	
54985	BN+	12/8/95	S. VanEtten	
5478124,5	TCLP BNA+	12/11/95	S. VanEtten	
9554989192	VOA + LCS	12/05/95	M. CIAMPI	
9556167	VOA	12/13/95	M. CIAMPI	
54992	BNT	12/12/95	S. VanEtten	
9556244	524.2	12/11/95	S. K	
9554974-79	624	12/7/95	S K	
9555614	624	12/7/95	S. Kossler	
9554985	624	12/7/95	S Kossler	
9554779	624	12/6/95	S. Kossler	
9555117-23	624	12/7/95	S. Kossler	
9554891-98	624	12/6-12/7/95	S Kossler	
9555089-90	GASOLINE	12/13/95	M. CIAMPI	

EMSL ANALYTICAL, INC.

INTERNAL CHAIN OF CUSTODY

EMSL LAB ID NO. 54557 PROJECT NO. 95118846

SAMPLE/CONTAINERS

PARAMETERS

B/N, VOA

DATE	TIME	ANALYSIS	NAME (PRINT)	SIGNATURE
12/4/95		B/N extraction	Charles Bartolone	Charles Bartolone

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATASHEET

IJO#95-0091
BLDG.#: 2018 MW#: 1 NJDEPE WELL ID # 29337763
LABORATORY: EMSL Analytical Services, NJDEP CERT # 04653
SAMPLING CONTRACTOR: EMSL Analytical Services Inc.
SAMPLERS NAMES: Tom Baxter, Susan Palilonis 1012

DATE: 11-27-95
WEATHER CONDITIONS: Cool, some Sun.

ELEVATION OF CASING SURVEY MARK: ____.____FT
TOTAL DEPTH FROM TOP OF SURVEYORS MARK: 15.76 FT
DEPTH FROM SURVEYORS MARK TO SCREEN: ____.____FT
LENGTH OF SCREENED SECTION: ____.____FT
DEPTH TO H2O PRIOR TO PURGING AND SAMPLING: 7.27 FT
ELEVATION OF GW PRIOR TO PURGING: ____.____FT
THICKNESS OF LNAPL PRIOR TO PURGING: 0.0 FT

PID/Hnu READING IMMEDIATELY AFTER CAP REMOVAL: 21 PPM none detc.
DEPTH OF WELL: ____.____FT HEIGHT OF WATER: ____.____FT
GAL OF H2O TO BE EVACUATED (EST) 17 GAL
(8.49 X 0.65 X 3 = 16.55)
PURGE METHOD: (FLOW OF <0.5 GPM TO >5.0 GPM) Pump
PURGE RATE (0.5 GPM) : 2 GPM

PURGE START TIME: 1021
pH: 4.48 s.u. TEMP: 14.4 Deg.C
Dissolved Oxygen: 2.4 PPM Specific Conductivity: 570 us/cm

PURGE END TIME: 1110
pH: 4.40 s.u. TEMP: 15.8 Deg.C
Dissolved Oxygen: 2.1 PPM Specific Conductivity: 513 us/cm

DEPTH TO H2O AFTER PURGING AND BEFORE SAMPLING: 9.14 FT
SAMPLING METHOD: DEDICATED, DECONTAMINATED (IAW NJDEP FSPM 1992) TEFLON (R) BAILER
TOTAL VOLUME PURGED : 17 GAL. 1118
pH: 4.46 s.u. TEMP: 15.8 Deg.C
Dissolved Oxygen: 2.2 PPM Specific Conductivity: 499 us/cm

COMMENTS: inside casing filled w/ H2O.

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.

LABORATORY CHRONICLE

Lab ID: **95-54557, 95-54553, 95-54554** Client: **E-Systems**

	I DATE	II	Hold Time
Date Sampled	**11/27/95**		
Receipt/Refrigeration	**11/27/95**		
Extractions			
1. Semivolatile Organics	**12/4/95**		**7 days**
Analyses			
1. Volatile Organics	**12/5/95**		**14 days**
2. Semivolatile Organics	**12/8/95**		**40 days**

QC Supervisor
Review & Approval

(Signature) Peter B. Panton
(Printed Name) Peter B. Panton
(Date) 12/13/96

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 1.2 ppb.**		
	b. B/N Fraction **46360 MS/MSD: Di-n-butylphthalate 5 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		
	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 Travis Date: 1-23-96

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: C0274.D BFB Injection Date: 11/21/95

Instrument ID: 5972-INSTRUMENT 1 BFB Injection Time: 0930

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	18.1	
75	30.0 - 60.0% of mass 95	42.0	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.9	
173	Less than 2.0% of mass 174	0.0 (	0.0)1
174	Greater than 50.0% of mass 95	70.3	
175	5.0 - 9.0% of mass 174	4.9 (	6.9)1
176	95.0 - 101.0% of mass 174	69.0 (	98.1)1
177	5.0 - 9.0% of mass 176	4.8 (	7.0)2

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

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

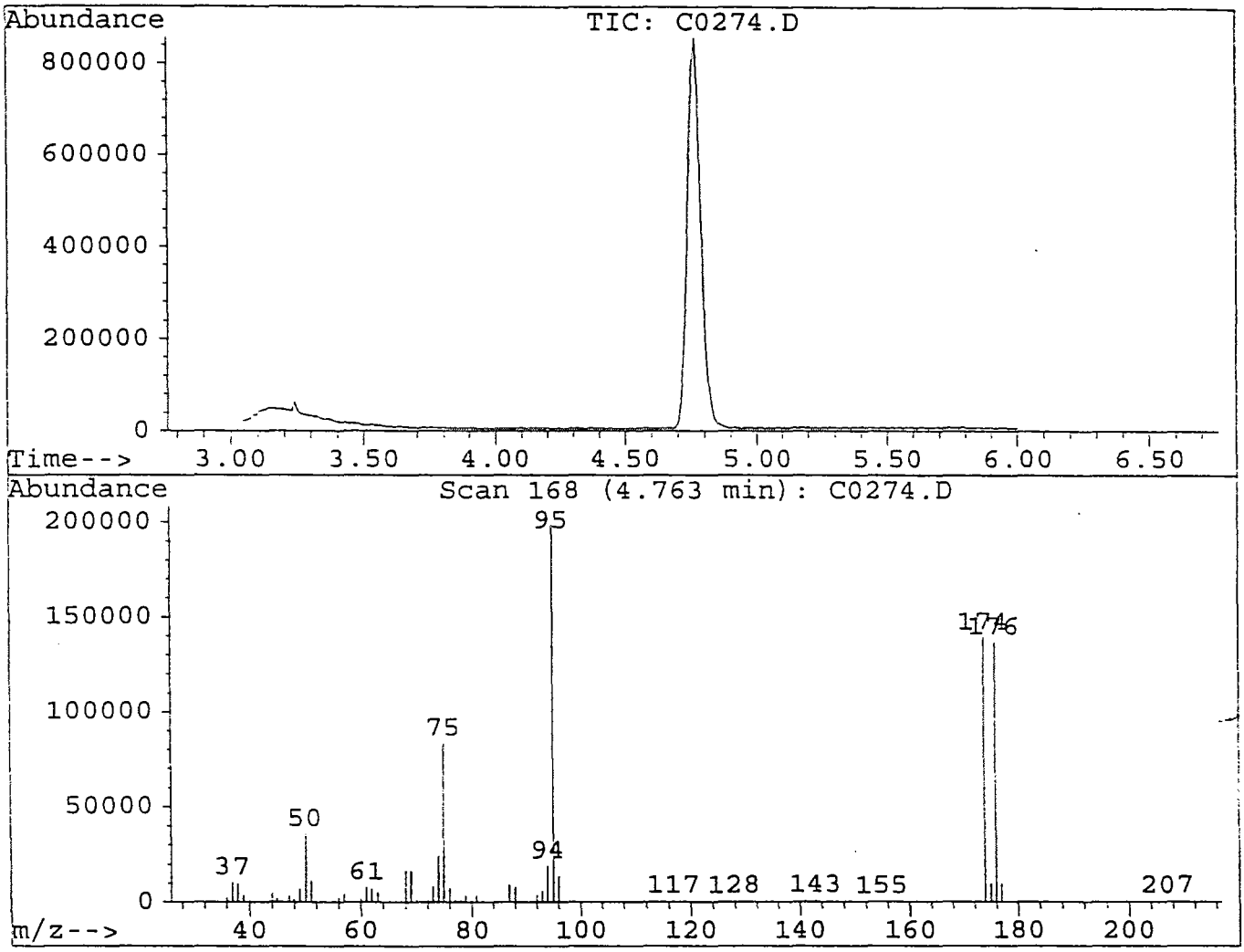
	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		0.5 PPB STANDARD	C0275.D	11/21/95	0943
02		10 PPB STANDARD	C0279.D	11/21/95	1202
03		20 PPB STANDARD	C0278.D	11/21/95	1128
04		30 PPB STANDARD	C0277.D	11/21/95	1052
05		40 PPB STANDARD	C0276.D	11/21/95	1018
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

CLPBFB

Data File : D:\HPCHEM\1\DATA\C0274.D
Acq On : 21 Nov 95 9:30 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: 168

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.1	35864	PASS
75	95	30	80	42.0	83456	PASS
95	95	100	100	100.0	198528	PASS
96	95	5	9	6.9	13614	PASS
173	174	0	2	0.0	0	PASS
174	95	50	100	70.3	139520	PASS
175	174	5	9	6.9	9663	PASS
176	174	95	101	98.1	136832	PASS
177	176	5	9	7.0	9524	PASS

Scan 168 (4.763 min): C0274.D
BFB TUNE

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	2277	50.05	35864	68.95	16840	80.90	3318
37.00	10480	51.05	11301	69.95	1438	81.90	791
38.00	9596	54.95	647	71.95	1154	86.90	8982
39.00	3619	56.00	2228	72.95	8548	87.95	8221
40.00	1027	57.00	4456	73.95	24384	90.95	535
42.90	511	60.00	1764	74.95	83456	91.95	3828
44.00	4623	61.00	7920	75.95	7334	92.95	5832
44.90	1739	62.00	7223	77.00	1369	93.95	18976
47.05	3487	63.00	5277	78.00	1252	94.95	198528
47.95	1465	67.05	583	78.90	3315	95.95	13614
48.95	7258	67.95	16648	79.90	878	96.95	630

Scan 168 (4.763 min): C0274.D
BFB TUNE

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
105.90	570	175.95	136832				
116.85	739	176.95	9524				
118.90	643	207.00	701				
127.90	866						
129.95	560						
134.85	621						
141.00	967						
142.90	1142						
154.85	600						
173.95	139520						
174.95	9663						

Response Factor Report 5972 - In

033

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Nov 21 13:46:36 1995
Response via : Initial Calibration

Calibration Files
0.5 =C0275.D 10 =C0279.D 20 =C0278.D
30 =C0277.D 40 =C0276.D

		Compound	0.5	10	20	30	40	Avg	%RSD
1)		Fluorobenzene	----------ISTD----------						
2)	M	Dichlorodifluorometha	0.287	0.266	0.261	0.265	0.273	0.271	3.80
3)	M	Chloromethane	0.232	0.207	0.195	0.196	0.198	0.206	7.64
4)	M	Vinyl chloride	0.231	0.229	0.223	0.226	0.235	0.229	1.94
5)	M	Bromomethane	0.205	0.165	0.144	0.144	0.136	0.159	17.51
6)	M	Chloroethane	0.143	0.138	0.128	0.117	0.109	0.127	11.04
7)	M	Trichlorofluoromethan	0.426	0.390	0.383	0.392	0.384	0.395	4.52
8)	M	1,1-Dichloroethene	0.255	0.233	0.231	0.230	0.234	0.237	4.48
9)	M	Methylene chloride		0.279	0.233	0.219	0.215	0.237	12.46
10)	M	trans-1,2-Dichloroeth	0.282	0.270	0.266	0.264	0.270	0.270	2.62
11)		Hexane						0.000#	-1.00
12)	M	1,1-Dichloroethane	0.532	0.513	0.498	0.494	0.503	0.508	2.94
13)	M	2,2-Dichloropropane	0.466	0.408	0.407	0.415	0.426	0.424	5.77
14)	M	cis-1,2-Dichloroethen	0.273	0.275	0.262	0.258	0.260	0.266	2.85
15)		2-Butanone						0.000#	-1.00
16)	M	Bromochloromethane	0.115	0.124	0.113	0.111	0.113	0.115	4.52
17)	M	Chloroform	0.487	0.479	0.459	0.457	0.464	0.469	2.85
18)	M	1,1,1-Trichloroethane	0.469	0.457	0.449	0.444	0.453	0.454	2.09
19)	M	Carbon tetrachloride	0.428	0.432	0.426	0.426	0.435	0.429	0.90
20)	M	1,1-Dichloropropene	0.445	0.423	0.418	0.413	0.419	0.424	2.93
21)	M	Benzene	0.992	0.878	0.833	0.817	0.829	0.870	8.27
22)	M	1,2-Dichloroethane	0.199	0.209	0.190	0.185	0.191	0.195	4.85
23)	M	Trichloroethene	0.377	0.365	0.354	0.350	0.358	0.361	2.90
24)	M	1,2-Dichloropropane	0.306	0.319	0.296	0.290	0.298	0.302	3.69
25)	M	Dibromomethane	0.128	0.145	0.131	0.127	0.131	0.132	5.52
26)	M	Bromodichloromethane	0.386	0.413	0.387	0.379	0.389	0.391	3.37
27)	M	cis-1,3-Dichloroprope	0.351	0.372	0.347	0.340	0.352	0.352	3.45
28)	M	Toluene		0.639	0.609	0.597	0.610	0.614	2.89
29)	M	trans-1,3-Dichloropro	0.237	0.263	0.239	0.234	0.243	0.243	4.73
30)	M	1,1,2-Trichloroethane	0.127	0.144	0.128	0.124	0.129	0.131	5.87
31)	M	Tetrachloroethene	0.458	0.436	0.429	0.425	0.429	0.435	3.03
32)	M	1,3-Dichloropropane	0.248	0.273	0.243	0.233	0.240	0.247	6.16
33)	M	Dibromochloromethane	0.241	0.284	0.260	0.253	0.262	0.260	6.03
34)	M	1,2-Dibromoethane	0.180	0.212	0.189	0.182	0.189	0.190	6.83
35)	M	Chlorobenzene	0.746	0.734	0.693	0.676	0.688	0.707	4.33
36)	M	1,1,1,2-Tetrachloroet	0.287	0.316	0.290	0.285	0.290	0.294	4.34
37)	M	Ethylbenzene	1.356	1.287	1.236	1.205	1.219	1.261	4.87
38)	M	Xylene (para & meta)	0.530	0.488	0.464	0.451	0.453	0.477	6.89
39)	M	Xylene (Ortho)	0.469	0.454	0.427	0.416	0.422	0.438	5.22
40)	M	Styrene	0.676	0.715	0.668	0.646	0.655	0.672	3.95
41)	M	Bromoform	0.121	0.161	0.145	0.141	0.144	0.142	10.19
42)	M	Isopropylbenzene	1.274	1.248	1.201	1.179	1.192	1.219	3.31
43)	S	4-Bromofluorobenzene	0.533	0.559	0.538	0.528	0.541	0.540	2.22

(#) = Out of Range

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Nov 21 13:46:36 1995
Response via : Initial Calibration

Calibration Files
0.5 =C0275.D 10 =C0279.D 20 =C0278.D
30 =C0277.D 40 =C0276.D

		Compound	0.5	10	20	30	40	Avg	%RSD
44)	M	Bromobenzene	0.310	0.343	0.314	0.304	0.307	0.316	4.90
45)	M	1,1,2,2-Tetrachloroet	0.145	0.183	0.161	0.153	0.158	0.160	8.85
46)	M	1,2,3-Trichloropropan	0.165	0.182	0.161	0.154	0.159	0.164	6.55
47)	M	n-Propylbenzene	1.751	1.699	1.650	1.605	1.613	1.664	3.68
48)	M	2-Chlorotoluene	1.051	0.971	0.921	0.960	0.960	0.973	4.91
49)	M	4-Chlorotoluene	1.145	1.127	1.065	1.036	1.045	1.084	4.57
50)	M	1,3,5-Trimethylbenzen	1.107	1.095	1.045	1.018	1.021	1.057	3.93
51)	M	tert-Butylbenzene	1.227	1.237	1.176	1.146	1.151	1.187	3.56
52)	M	1,2,4-Trimethylbenzen	1.151	1.093	1.030	1.001	1.006	1.056	6.08
53)	M	sec-Butylbenzene	1.690	1.667	1.602	1.555	1.547	1.612	3.99
54)	M	1,3-Dichlorobenzene	0.660	0.666	0.617	0.592	0.589	0.625	5.84
55)	M	4-Isopropyltoluene	1.355	1.354	1.290	1.245	1.236	1.296	4.41
56)	M	1,4-Dichlorobenzene	0.648	0.660	0.600	0.574	0.581	0.612	6.40
57)	S	1,2-Dichlorobenzene-d	0.336	0.368	0.338	0.325	0.324	0.338	5.29
58)	M	1,2-Dichlorobenzene	0.519	0.543	0.485	0.462	0.462	0.494	7.28
59)	M	n-Butylbenzene	1.377	1.370	1.307	1.265	1.257	1.315	4.31
60)	M	1,2-Dibromo-3-chlorop	0.035	0.037	0.033	0.031	0.032	0.034	7.58
61)	M	1,2,4-Trichlorobenzen	0.384	0.446	0.404	0.384	0.383	0.400	6.73
62)	M	Hexachlorobutadiene	0.355	0.365	0.350	0.339	0.329	0.348	4.00
63)	M	Naphthalene	0.407	0.444	0.383	0.353	0.347	0.387	10.34
64)	M	1,2,3-Trichlorobenzen	0.279	0.337	0.297	0.274	0.271	0.292	9.42
65)		Methyl-tert butyl eth		0.339	0.297	0.289	0.299	0.306	7.29
66)		tert-Butyl Alcohol		0.005	0.004	0.004	0.004	0.005	9.33

(#) = Out of Range

Quantitation Report

040

Data File : D:\HPCHEM\1\DATA\C0275.D
Acq On : 21 Nov 95 9:43 am
Sample : 0.5 PPB STANDARD
Misc : 25 ML
Quant Time: Nov 21 13:45 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 Nov 21 13:46:36 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	12.21	96	1820408	5.00	ug/L		0.42
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.44	95	969768	4.67	ug/L		93.41%
57) 1,2-Dichlorobenzene-d4	22.24	152	612531	4.91	ug/L		98.22%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.53	85	52316	0.39	ug/L		97
3) Chloromethane	3.98	50	42319	0.61	ug/L		98
4) Vinyl chloride	4.16	62	42117	0.51	ug/L		92
5) Bromomethane	4.90	94	37297	0.62	ug/L		97
6) Chloroethane	5.12	64	25997	0.54	ug/L		90
7) Trichlorofluoromethane	5.71	101	77594	0.41	ug/L		100
8) 1,1-Dichloroethene	6.81	96	46511	0.54	ug/L	#	71
9) Methylene chloride	7.81	84	319424	3.67	ug/L		97
10) trans-1,2-Dichloroethene	8.35	96	51408	0.53	ug/L		95
12) 1,1-Dichloroethane	9.14	63	96756	0.50	ug/L		100
13) 2,2-Dichloropropane	10.19	77	84847	0.44	ug/L		94
14) cis-1,2-Dichloroethene	10.21	96	49660	0.52	ug/L		97
16) Bromochloromethane	10.63	128	20891	0.50	ug/L		99
17) Chloroform	10.77	83	88666	0.45	ug/L		96
18) 1,1,1-Trichloroethane	11.09	97	85372	0.42	ug/L		93
19) Carbon tetrachloride	11.37	117	77995	0.41	ug/L		90
20) 1,1-Dichloropropene	11.37	75	81023	0.48	ug/L		94
21) Benzene	11.73	78	180526	0.59	ug/L		92
22) 1,2-Dichloroethane	11.76	62	36177	0.38	ug/L		83
23) Trichloroethene	12.83	95	68547	0.50	ug/L		97
24) 1,2-Dichloropropane	13.20	63	55699	0.54	ug/L		98
25) Dibromomethane	13.41	93	23381	0.45	ug/L		95
26) Bromodichloromethane	13.67	83	70253	0.42	ug/L		98
27) cis-1,3-Dichloropropene	14.41	75	63879	0.48	ug/L		92
28) Toluene	14.99	92	153622	0.69	ug/L	m	98
29) trans-1,3-Dichloropropene	15.35	75	43191	0.44	ug/L		89
30) 1,1,2-Trichloroethane	15.67	83	23162	0.49	ug/L		95
31) Tetrachloroethene	15.94	166	83338	0.52	ug/L		97
32) 1,3-Dichloropropane	15.96	76	45174	0.49	ug/L		95
33) Dibromochloromethane	16.36	129	43861	0.43	ug/L		99
34) 1,2-Dibromoethane	16.57	107	32720	0.46	ug/L	m	95
35) Chlorobenzene	17.41	112	135723	0.53	ug/L		97
36) 1,1,1,2-Tetrachloroethane	17.56	131	52286	0.47	ug/L		98
37) Ethylbenzene	17.60	91	246785	0.52	ug/L	m	67
38) Xylene (para & meta)	17.80	106	192842	1.13	ug/L		90
39) Xylene (Ortho)	18.51	106	85435	0.54	ug/L	m	93
40) Styrene	18.53	104	123015	0.51	ug/L		90

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

Quantitation Report

Data File : D:\HPCHEM\1\DATA\C0275.D
Acq On : 21 Nov 95 9:43 am
Sample : 0.5 PPB STANDARD
Misc : 25 ML
Quant Time: Nov 21 13:45 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 Nov 21 13:46:36 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.88	173	21972	0.40	ug/L		93
42)	Isopropylbenzene	19.16	105	231861	0.50	ug/L		96
44)	Bromobenzene	19.72	156	56512	0.49	ug/L		97
45)	1,1,2,2-Tetrachloroethane	19.69	83	26461	0.46	ug/L		96
46)	1,2,3-Trichloropropane	19.75	75	29999	0.47	ug/L	m	1
47)	n-Propylbenzene	19.90	91	318712	0.50	ug/L	m	58
48)	2-Chlorotoluene	20.07	91	191301	0.52	ug/L	m	98
49)	4-Chlorotoluene	20.26	91	208453	0.49	ug/L		96
50)	1,3,5-Trimethylbenzene	20.21	105	201508	0.49	ug/L		97
51)	tert-Butylbenzene	20.81	119	223381	0.50	ug/L		96
52)	1,2,4-Trimethylbenzene	20.90	105	209498	0.50	ug/L		97
53)	sec-Butylbenzene	21.21	105	307562	0.49	ug/L	m	57
54)	1,3-Dichlorobenzene	21.43	146	120084	0.52	ug/L	m	95
55)	4-Isopropyltoluene	21.47	119	246629	0.50	ug/L		98
56)	1,4-Dichlorobenzene	21.59	146	117975	0.52	ug/L	m	96
58)	1,2-Dichlorobenzene	22.28	146	94399	0.52	ug/L	m	0
59)	n-Butylbenzene	22.22	91	250733	0.49	ug/L		97
60)	1,2-Dibromo-3-chloropropan	23.70	75	6427	0.45	ug/L	m	0
61)	1,2,4-Trichlorobenzene	25.25	180	69932	0.47	ug/L		93
62)	Hexachlorobutadiene	25.57	225	64588	0.48	ug/L		99
63)	Naphthalene	25.71	128	74092	0.53	ug/L	m	0
64)	1,2,3-Trichlorobenzene	26.22	180	50786	0.47	ug/L	m	0
65)	Methyl-tert butyl ether	8.40	73	84870	0.70	ug/L	m	0

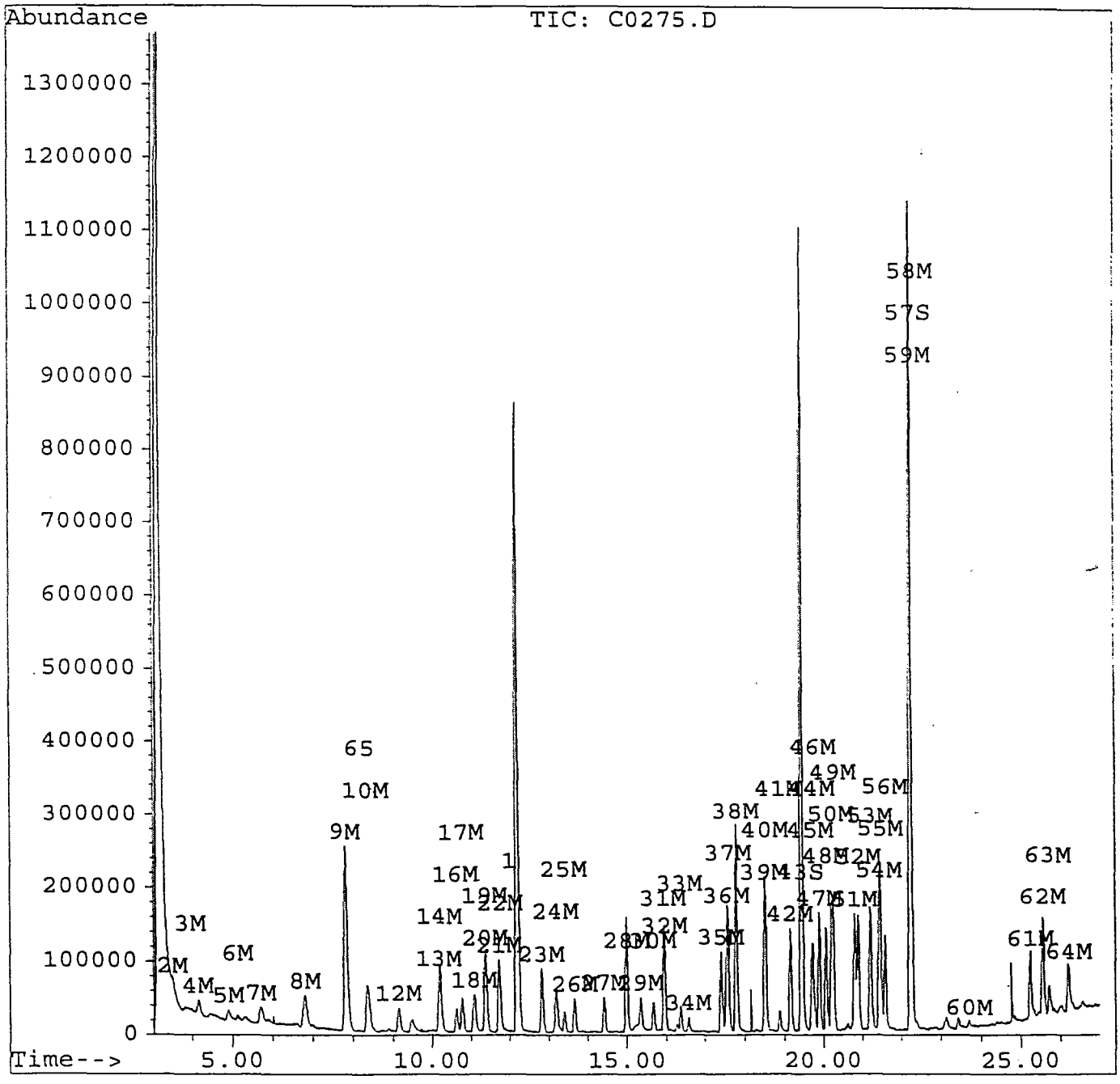
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\C0275.D
Acq On : 21 Nov 95 9:43 am
Sample : 0.5 PPB STANDARD
Misc : 25 ML
Quant Time: Nov 21 13:45 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 Nov 21 13:46:36 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : d:\hpchem\1\data\c0279.d
Acq On : 21 Nov 95 12:02 pm
Sample : 10 PPB STANDARD
Misc : 25 ML
Quant Time: Nov 21 13:10 1995

Vial: 6
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Nov 21 13:46:36 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	12.21	96	1609009	5.00	ug/L		0.00
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.46	95	899980	4.90	ug/L		98.08%
57) 1,2-Dichlorobenzene-d4	22.25	152	592880	5.38	ug/L		107.56%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.54	85	856472	7.28	ug/L		99
3) Chloromethane	3.99	50	666017	10.89	ug/L		99
4) Vinyl chloride	4.18	62	735860	10.01	ug/L		98
5) Bromomethane	4.88	94	531114	9.97	ug/L		94
6) Chloroethane	5.12	64	444951	10.52	ug/L		99
7) Trichlorofluoromethane	5.71	101	1256624	7.50	ug/L		96
8) 1,1-Dichloroethene	6.83	96	750318	9.77	ug/L	#	78
9) Methylene chloride	7.83	84	899322	11.70	ug/L		99
10) trans-1,2-Dichloroethene	8.36	96	867754	10.09	ug/L		92
12) 1,1-Dichloroethane	9.16	63	1649567	9.64	ug/L		98
13) 2,2-Dichloropropane	10.21	77	1314116	7.70	ug/L		87
14) cis-1,2-Dichloroethene	10.22	96	884860	10.51	ug/L	#	89
16) Bromochloromethane	10.64	128	399435	10.81	ug/L		97
17) Chloroform	10.79	83	1542720	8.81	ug/L		99
18) 1,1,1-Trichloroethane	11.10	97	1469392	8.16	ug/L		97
19) Carbon tetrachloride	11.38	117	1389681	8.31	ug/L		99
20) 1,1-Dichloropropene	11.38	75	1360544	9.04	ug/L		97
21) Benzene	11.73	78	2826008	10.49	ug/L		98
22) 1,2-Dichloroethane	11.77	62	673923	8.03	ug/L		90
23) Trichloroethene	12.84	95	1175434	9.62	ug/L		99
24) 1,2-Dichloropropane	13.21	63	1027243	11.25	ug/L		100
25) Dibromomethane	13.42	93	467301	10.25	ug/L		96
26) Bromodichloromethane	13.67	83	1330545	9.02	ug/L		100
27) cis-1,3-Dichloropropene	14.43	75	1198677	10.14	ug/L		96
28) Toluene	15.00	92	2055048	10.48	ug/L		97
29) trans-1,3-Dichloropropene	15.36	75	846524	9.69	ug/L		92
30) 1,1,2-Trichloroethane	15.67	83	463270	11.00	ug/L		97
31) Tetrachloroethene	15.95	166	1403167	9.97	ug/L		99
32) 1,3-Dichloropropane	15.97	76	877213	10.66	ug/L		99
33) Dibromochloromethane	16.37	129	913271	10.23	ug/L		98
34) 1,2-Dibromoethane	16.58	107	683447	10.96	ug/L		98
35) Chlorobenzene	17.43	112	2362576	10.50	ug/L		97
36) 1,1,1,2-Tetrachloroethane	17.57	131	1018157	10.30	ug/L		97
37) Ethylbenzene	17.61	91	4142973	9.94	ug/L		96
38) Xylene (para & meta)	17.82	106	3139022	20.79	ug/L		93
39) Xylene (Ortho)	18.52	106	1462030	10.52	ug/L		93
40) Styrene	18.54	104	2300383	10.69	ug/L		89

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

Quantitation Report

Data File : d:\hpchem\1\data\c0279.d
Acq On : 21 Nov 95 12:02 pm
Sample : 10 PPB STANDARD
Misc : 25 ML
Quant Time: Nov 21 13:10 1995

Vial: 6
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Nov 21 13:46:36 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.89	173	519312	10.60	ug/L		98
42)	Isopropylbenzene	19.17	105	4015738	9.78	ug/L	m	0
44)	Bromobenzene	19.74	156	1102438	10.77	ug/L		99
45)	1,1,2,2-Tetrachloroethane	19.69	83	588802	11.59	ug/L		98
46)	1,2,3-Trichloropropane	19.78	75	586144	10.31	ug/L	#	28
47)	n-Propylbenzene	19.91	91	5467496	9.79	ug/L		98
48)	2-Chlorotoluene	20.08	91	3124523	9.65	ug/L		97
49)	4-Chlorotoluene	20.27	91	3628061	9.64	ug/L		96
50)	1,3,5-Trimethylbenzene	20.22	105	3523555	9.67	ug/L		95
51)	tert-Butylbenzene	20.82	119	3979719	10.01	ug/L		96
52)	1,2,4-Trimethylbenzene	20.91	105	3517466	9.42	ug/L		95
53)	sec-Butylbenzene	21.22	105	5364130	9.72	ug/L		99
54)	1,3-Dichlorobenzene	21.44	146	2143707	10.49	ug/L		98
55)	4-Isopropyltoluene	21.48	119	4355898	9.92	ug/L		97
56)	1,4-Dichlorobenzene	21.60	146	2122376	10.55	ug/L		99
58)	1,2-Dichlorobenzene	22.28	146	1748295	10.98	ug/L	m	0
59)	n-Butylbenzene	22.23	91	4410108	9.74	ug/L		97
60)	1,2-Dibromo-3-chloropropan	23.71	75	120610	9.58	ug/L	#	80
61)	1,2,4-Trichlorobenzene	25.25	180	1434366	10.89	ug/L		97
62)	Hexachlorobutadiene	25.58	225	1174339	9.84	ug/L		95
63)	Naphthalene	25.73	128	1427329	11.66	ug/L	m	0
64)	1,2,3-Trichlorobenzene	26.23	180	1085916	11.35	ug/L		99
65)	Methyl-tert butyl ether	8.40	73	1090548	10.21	ug/L		97
66)	tert-Butyl Alcohol	8.19	59	33044	21.67	ug/L		100

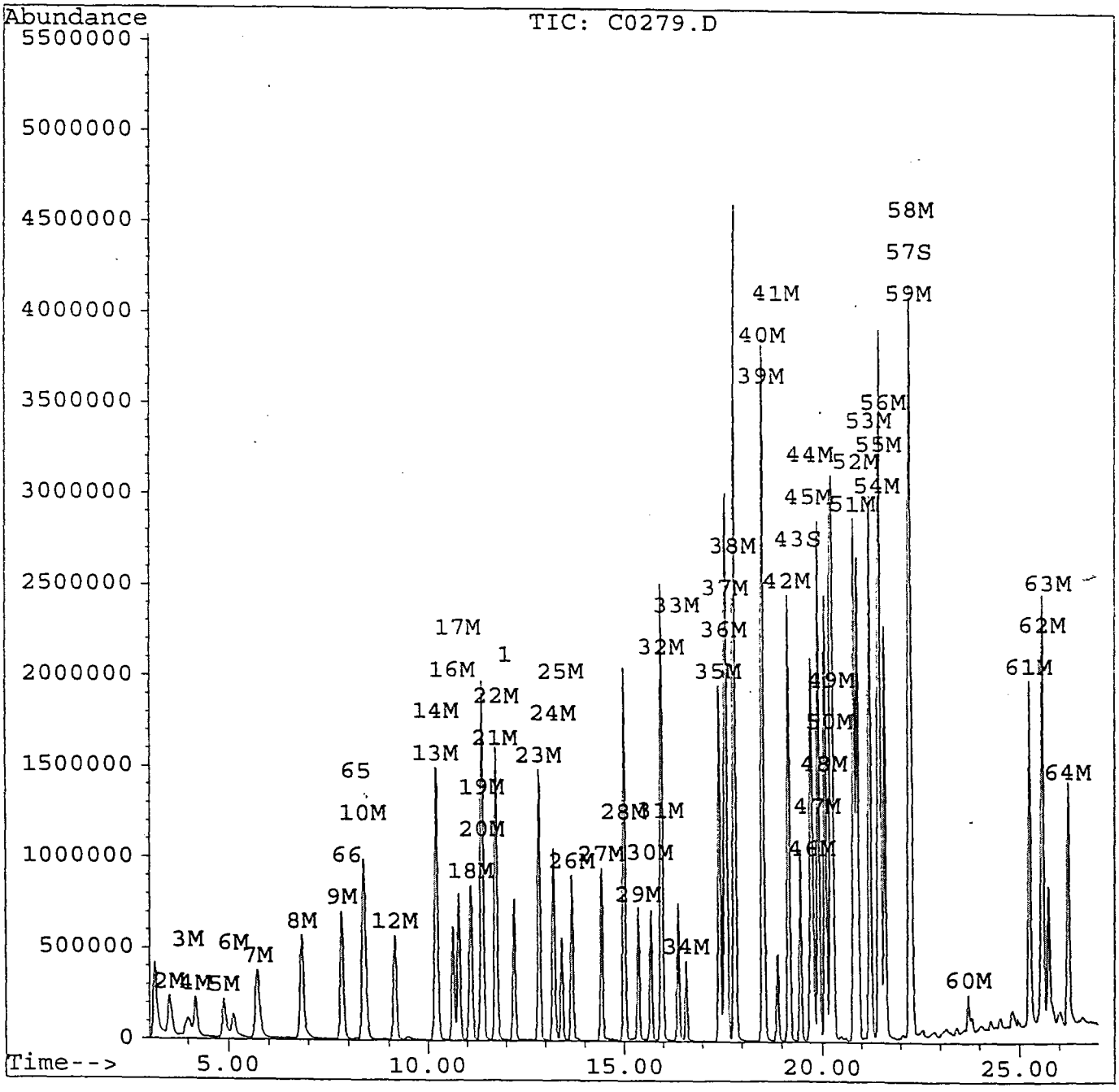
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c0279.d
Acq On : 21 Nov 95 12:02 pm
Sample : 10 PPB STANDARD
Misc : 25 ML
Quant Time: Nov 21 13:10 1995

Vial: 6
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Nov 21 13:46:36 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : d:\hpchem\1\data\c0278.d
Acq On : 21 Nov 95 11:28 am
Sample : 20 PPB STANDARD
Misc : 25 ML
Quant Time: Nov 21 13:07 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 : Tue Nov 21 13:42:15 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	12.21	96	1722488	5.00	ug/L		0.00
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.46	95	927311	4.72	ug/L		94.40%
57) 1,2-Dichlorobenzene-d4	22.25	152	582262	4.93	ug/L		98.68%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.54	85	1801450	14.31	ug/L		97
3) Chloromethane	3.97	50	1343518	20.52	ug/L		100
4) Vinyl chloride	4.17	62	1539511	19.56	ug/L		99
5) Bromomethane	4.86	94	994458	17.44	ug/L		94
6) Chloroethane	5.08	64	881354	19.47	ug/L		100
7) Trichlorofluoromethane	5.68	101	2638002	14.71	ug/L		98
8) 1,1-Dichloroethene	6.81	96	1593355	19.38	ug/L	#	79
9) Methylene chloride	7.82	84	1603537	19.49	ug/L		98
10) trans-1,2-Dichloroethene	8.36	96	1831930	19.90	ug/L	m	0
12) 1,1-Dichloroethane	9.16	63	3432597	18.74	ug/L		99
13) 2,2-Dichloropropane	10.20	77	2802037	15.33	ug/L		89
14) cis-1,2-Dichloroethene	10.22	96	1806300	20.03	ug/L	m	0
16) Bromochloromethane	10.64	128	780203	19.72	ug/L		98
17) Chloroform	10.79	83	3159991	16.85	ug/L		98
18) 1,1,1-Trichloroethane	11.10	97	3092727	16.05	ug/L		97
19) Carbon tetrachloride	11.39	117	2932708	16.38	ug/L		100
20) 1,1-Dichloropropene	11.38	75	2880851	17.89	ug/L		96
21) Benzene	11.73	78	5738442	19.90	ug/L		98
22) 1,2-Dichloroethane	11.77	62	1311439	14.60	ug/L		86
23) Trichloroethene	12.84	95	2437464	18.64	ug/L		98
24) 1,2-Dichloropropane	13.21	63	2041662	20.88	ug/L		100
25) Dibromomethane	13.42	93	900094	18.45	ug/L		96
26) Bromodichloromethane	13.67	83	2668736	16.90	ug/L		99
27) cis-1,3-Dichloropropene	14.43	75	2391296	18.90	ug/L		98
28) Toluene	15.00	92	4196821	19.99	ug/L		97
29) trans-1,3-Dichloropropene	15.36	75	1647489	17.62	ug/L		92
30) 1,1,2-Trichloroethane	15.68	83	884119	19.60	ug/L		98
31) Tetrachloroethene	15.95	166	2952465	19.59	ug/L		99
32) 1,3-Dichloropropane	15.97	76	1676229	19.03	ug/L		99
33) Dibromochloromethane	16.37	129	1793224	18.76	ug/L		99
34) 1,2-Dibromoethane	16.58	107	1299437	19.47	ug/L		98
35) Chlorobenzene	17.43	112	4775180	19.82	ug/L		97
36) 1,1,1,2-Tetrachloroethane	17.57	131	1998640	18.89	ug/L		97
37) Ethylbenzene	17.61	91	8519170	19.10	ug/L		97
38) Xylene (para & meta)	17.82	106	6392350	39.55	ug/L		92
39) Xylene (Ortho)	18.52	106	2944771	19.80	ug/L		90
40) Styrene	18.54	104	4602890	19.99	ug/L		89

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

Quantitation Report

047

Data File : d:\hpchem\1\data\c0278.d
Acq On : 21 Nov 95 11:28 am
Sample : 20 PPB STANDARD
Misc : 25 ML
Quant Time: Nov 21 13:07 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 : Tue Nov 21 13:42:15 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.89	173	1001404	19.09	ug/L		97
42)	Isopropylbenzene	19.17	105	8277271	18.83	ug/L	m	0
44)	Bromobenzene	19.74	156	2166384	19.76	ug/L		97
45)	1,1,2,2-Tetrachloroethane	19.69	83	1106145	20.34	ug/L		98
46)	1,2,3-Trichloropropane	19.78	75	1110952	18.25	ug/L	#	28
47)	n-Propylbenzene	19.91	91	11371671	19.02	ug/L		98
48)	2-Chlorotoluene	20.08	91	6343572	18.29	ug/L		96
49)	4-Chlorotoluene	20.27	91	7335851	18.21	ug/L		96
50)	1,3,5-Trimethylbenzene	20.22	105	7200036	18.46	ug/L		94
51)	tert-Butylbenzene	20.82	119	8099224	19.04	ug/L		95
52)	1,2,4-Trimethylbenzene	20.91	105	7100072	17.77	ug/L		95
53)	sec-Butylbenzene	21.22	105	11034278	18.68	ug/L		98
54)	1,3-Dichlorobenzene	21.44	146	4253419	19.44	ug/L		98
55)	4-Isopropyltoluene	21.48	119	8886497	18.90	ug/L		97
56)	1,4-Dichlorobenzene	21.60	146	4135214	19.21	ug/L		99
58)	1,2-Dichlorobenzene	22.28	146	3344031	19.61	ug/L		99
59)	n-Butylbenzene	22.23	91	9001935	18.57	ug/L		97
60)	1,2-Dibromo-3-chloropropan	23.71	75	224773	16.68	ug/L	#	76
61)	1,2,4-Trichlorobenzene	25.25	180	2785545	19.75	ug/L		98
62)	Hexachlorobutadiene	25.58	225	2413438	18.89	ug/L		96
63)	Naphthalene	25.73	128	2640403	20.14	ug/L	m	0
64)	1,2,3-Trichlorobenzene	26.22	180	2045433	19.96	ug/L		99
65)	Methyl-tert butyl ether	8.40	73	2048272	17.91	ug/L		97
66)	tert-Butyl Alcohol	8.22	59	60041	36.77	ug/L		100

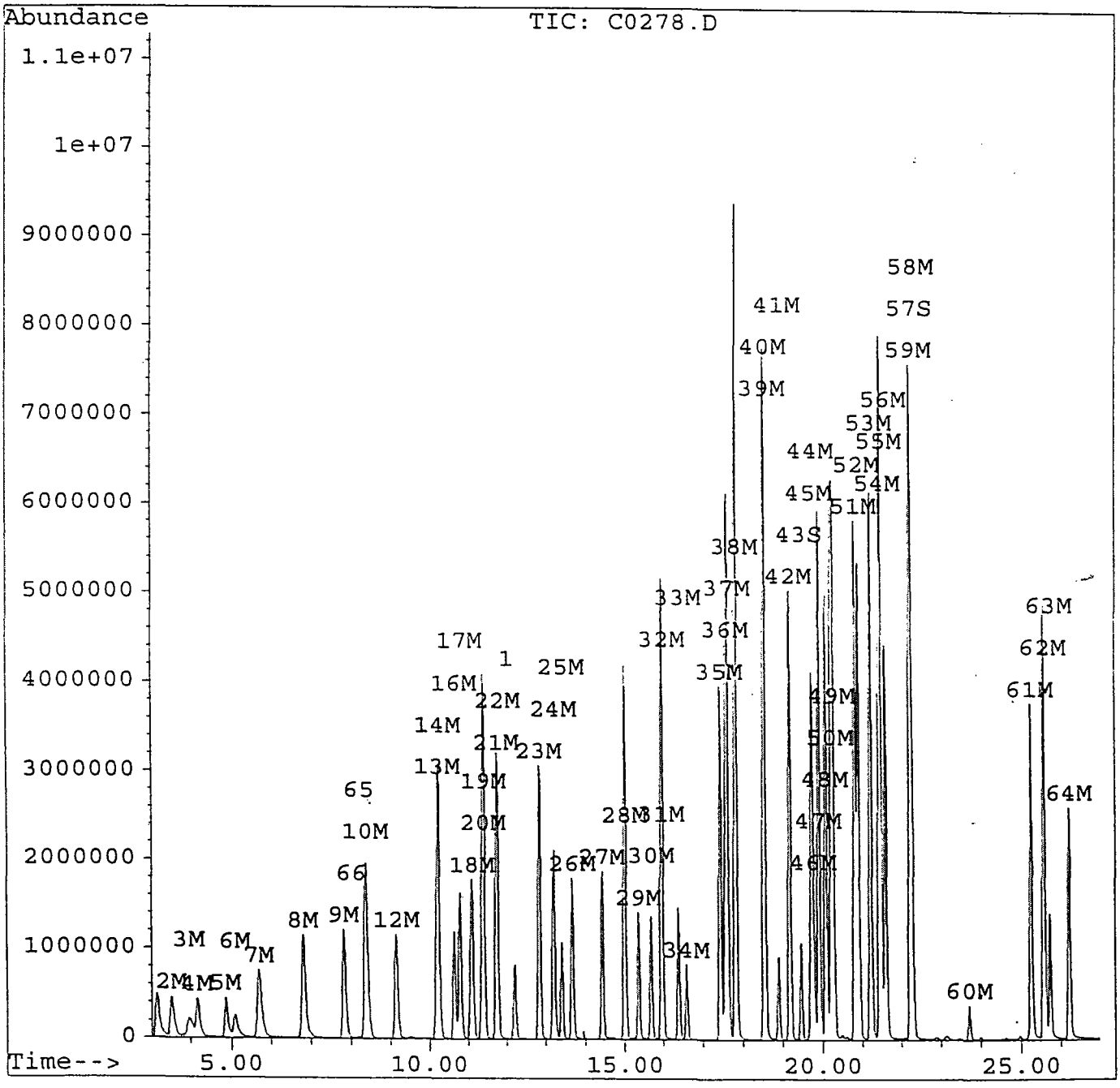
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c0278.d
Acq On : 21 Nov 95 11:28 am
Sample : 20 PPB STANDARD
Misc : 25 ML
Quant Time: Nov 21 13:07 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 : Tue Nov 21 13:42:15 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : d:\hpchem\1\data\c0277.d
Acq On : 21 Nov 95 10:52 am
Sample : 30 PPB STANDARD
Misc : 25 ML
Quant Time: Nov 21 13:04 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 Nov 21 13:42:15 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	12.22	96	1784794	5.00	ug/L		0.01
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.46	95	942277	4.63	ug/L		92.57%
57) 1,2-Dichlorobenzene-d4	22.25	152	579998	4.74	ug/L		94.86%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.54	85	2836497	21.75	ug/L		98
3) Chloromethane	3.99	50	2098923	30.94	ug/L		99
4) Vinyl chloride	4.18	62	2415650	29.63	ug/L		98
5) Bromomethane	4.86	94	1539157	26.06	ug/L	m	0
6) Chloroethane	5.06	64	1257519	26.81	ug/L		98
7) Trichlorofluoromethane	5.68	101	4199498	22.60	ug/L		97
8) 1,1-Dichloroethene	6.82	96	2462267	28.90	ug/L	#	79
9) Methylene chloride	7.83	84	2344560	27.50	ug/L		98
10) trans-1,2-Dichloroethene	8.36	96	2831636	29.69	ug/L		91
12) 1,1-Dichloroethane	9.16	63	5287314	27.85	ug/L		99
13) 2,2-Dichloropropane	10.21	77	4444886	23.47	ug/L		89
14) cis-1,2-Dichloroethene	10.22	96	2767927	29.62	ug/L	#	89
16) Bromochloromethane	10.64	128	1185004	28.91	ug/L		99
17) Chloroform	10.79	83	4893833	25.18	ug/L		97
18) 1,1,1-Trichloroethane	11.10	97	4753944	23.81	ug/L		97
19) Carbon tetrachloride	11.39	117	4564218	24.60	ug/L		100
20) 1,1-Dichloropropene	11.38	75	4427341	26.53	ug/L		97
21) Benzene	11.75	78	8752088	29.30	ug/L		98
22) 1,2-Dichloroethane	11.77	62	1984347	21.32	ug/L		88
23) Trichloroethene	12.84	95	3749920	27.68	ug/L		98
24) 1,2-Dichloropropane	13.21	63	3110146	30.70	ug/L		99
25) Dibromomethane	13.42	93	1360516	26.91	ug/L		97
26) Bromodichloromethane	13.67	83	4057411	24.80	ug/L		99
27) cis-1,3-Dichloropropene	14.43	75	3639910	27.76	ug/L		97
28) Toluene	15.00	92	6391124	29.38	ug/L		98
29) trans-1,3-Dichloropropene	15.36	75	2506952	25.87	ug/L		92
30) 1,1,2-Trichloroethane	15.68	83	1332952	28.52	ug/L		97
31) Tetrachloroethene	15.95	166	4549744	29.13	ug/L		99
32) 1,3-Dichloropropane	15.97	76	2491473	27.30	ug/L		100
33) Dibromochloromethane	16.37	129	2708999	27.35	ug/L		99
34) 1,2-Dibromoethane	16.58	107	1946729	28.14	ug/L		100
35) Chlorobenzene	17.43	112	7236418	28.98	ug/L	m	0
36) 1,1,1,2-Tetrachloroethane	17.57	131	3057070	27.88	ug/L		97
37) Ethylbenzene	17.61	91	12907921	27.92	ug/L		97
38) Xylene (para & meta)	17.82	106	9651078	57.62	ug/L		91
39) Xylene (Ortho)	18.52	106	4457409	28.92	ug/L		92
40) Styrene	18.54	104	6923206	29.02	ug/L		89

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

Quantitation Report

050

Data File : d:\hpchem\1\data\c0277.d
Acq On : 21 Nov 95 10:52 am
Sample : 30 PPB STANDARD
Misc : 25 ML
Quant Time: Nov 21 13:04 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 Nov 21 13:42:15 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.89	173	1511160	27.81	ug/L		96
42)	Isopropylbenzene	19.17	105	12622410	27.71	ug/L	m	0
44)	Bromobenzene	19.74	156	3255768	28.66	ug/L		97
45)	1,1,2,2-Tetrachloroethane	19.69	83	1633104	28.98	ug/L		98
46)	1,2,3-Trichloropropane	19.78	75	1648511	26.13	ug/L	#	25
47)	n-Propylbenzene	19.91	91	17183034	27.74	ug/L		97
48)	2-Chlorotoluene	20.08	91	10285555	28.63	ug/L		96
49)	4-Chlorotoluene	20.27	91	11091027	26.58	ug/L		96
50)	1,3,5-Trimethylbenzene	20.22	105	10903523	26.98	ug/L		95
51)	tert-Butylbenzene	20.82	119	12273662	27.84	ug/L		95
52)	1,2,4-Trimethylbenzene	20.91	105	10722862	25.90	ug/L		95
53)	sec-Butylbenzene	21.22	105	16654167	27.21	ug/L		98
54)	1,3-Dichlorobenzene	21.44	146	6339763	27.97	ug/L		99
55)	4-Isopropyltoluene	21.48	119	13330894	27.36	ug/L		98
56)	1,4-Dichlorobenzene	21.60	146	6141628	27.53	ug/L		99
58)	1,2-Dichlorobenzene	22.28	146	4942796	27.97	ug/L		98
59)	n-Butylbenzene	22.23	91	13546684	26.97	ug/L		96
60)	1,2-Dibromo-3-chloropropan	23.71	75	334490	23.96	ug/L		79
61)	1,2,4-Trichlorobenzene	25.25	180	4113150	28.14	ug/L		98
62)	Hexachlorobutadiene	25.58	225	3635507	27.46	ug/L	m	82
63)	Naphthalene	25.73	128	3782351	27.85	ug/L	m	0
64)	1,2,3-Trichlorobenzene	26.22	180	2931888	27.61	ug/L	m	0
65)	Methyl-tert butyl ether	8.41	73	3097117	26.13	ug/L	m	0
66)	tert-Butyl Alcohol	8.22	59	91328	53.98	ug/L	m	100

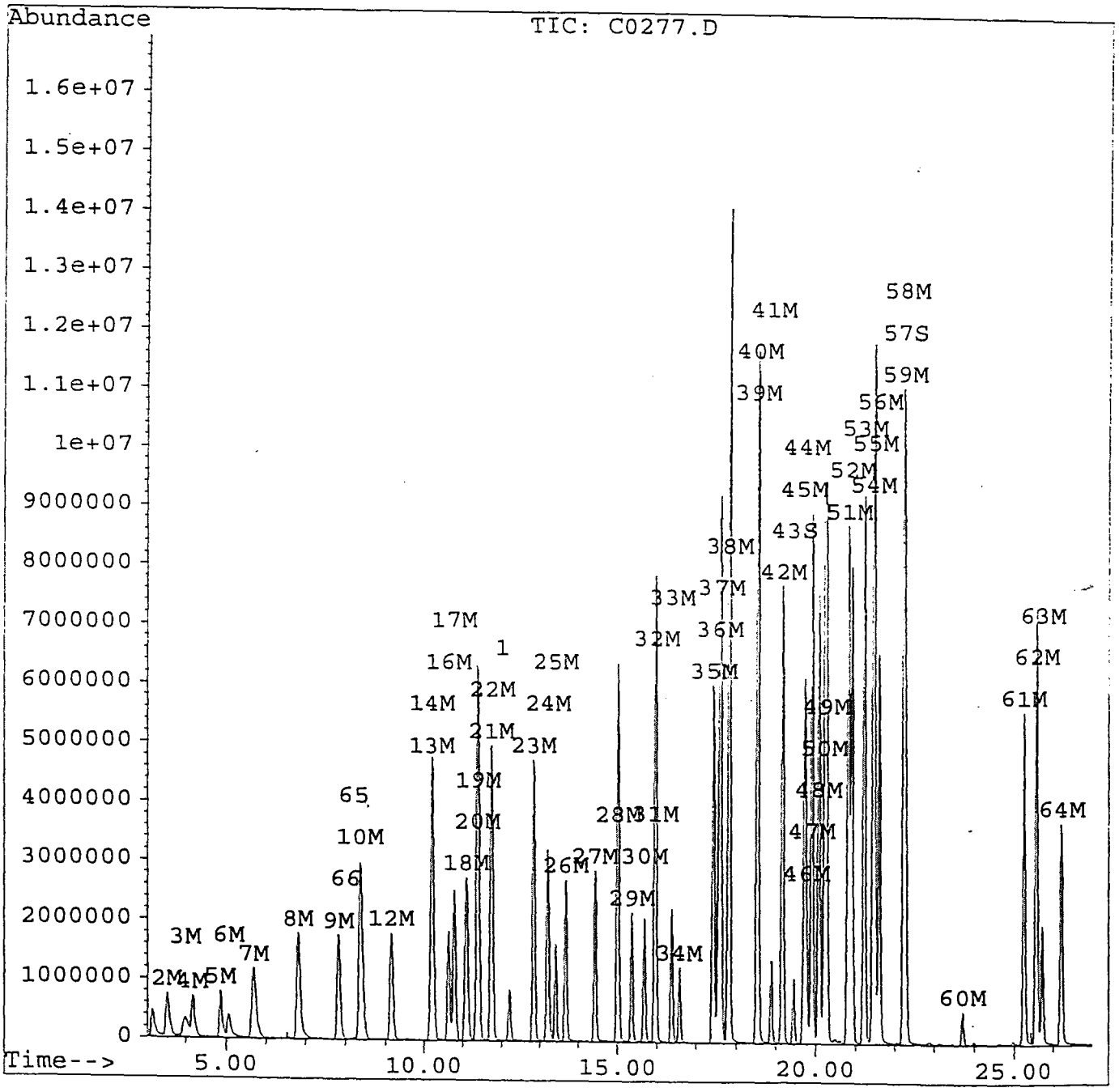
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c0277.d
Acq On : 21 Nov 95 10:52 am
Sample : 30 PPB STANDARD
Misc : 25 ML
Quant Time: Nov 21 13:04 1995

Vial: 4 051
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Nov 21 13:42:15 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : d:\hpchem\1\data\c0276.d
Acq On : 21 Nov 95 10:18 am
Sample : 40 PPB STANDARD
Misc : 25 ML
Quant Time: Nov 21 11:18 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 Nov 21 13:42:15 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	12.20	96	1759102	5.00	ug/L		0.00
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.45	95	951185	4.74	ug/L		94.81%
57) 1,2-Dichlorobenzene-d4	22.25	152	570741	4.74	ug/L		94.71%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.54	85	3842951	29.89	ug/L		98
3) Chloromethane	3.99	50	2785093	41.66	ug/L	m	0
4) Vinyl chloride	4.18	62	3300688	41.07	ug/L		98
5) Bromomethane	4.84	94	1920657	32.99	ug/L		95
6) Chloroethane	5.04	64	1536210	33.23	ug/L		99
7) Trichlorofluoromethane	5.65	101	5402420	29.50	ug/L		97
8) 1,1-Dichloroethene	6.80	96	3288045	39.15	ug/L	#	79
9) Methylene chloride	7.81	84	3032483	36.08	ug/L		100
10) trans-1,2-Dichloroethene	8.34	96	3794962	40.37	ug/L		91
12) 1,1-Dichloroethane	9.15	63	7085234	37.87	ug/L		98
13) 2,2-Dichloropropane	10.20	77	5990137	32.10	ug/L	m	0
14) cis-1,2-Dichloroethene	10.21	96	3663460	39.78	ug/L	m	0
16) Bromochloromethane	10.62	128	1592491	39.42	ug/L		97
17) Chloroform	10.78	83	6527086	34.08	ug/L		98
18) 1,1,1-Trichloroethane	11.09	97	6371834	32.38	ug/L		97
19) Carbon tetrachloride	11.37	117	6118402	33.46	ug/L		99
20) 1,1-Dichloropropene	11.37	75	5894994	35.84	ug/L		97
21) Benzene	11.73	78	11670569	39.63	ug/L		98
22) 1,2-Dichloroethane	11.76	62	2682220	29.24	ug/L		88
23) Trichloroethene	12.83	95	5035850	37.71	ug/L		99
24) 1,2-Dichloropropane	13.20	63	4191796	41.98	ug/L		99
25) Dibromomethane	13.41	93	1841134	36.94	ug/L		97
26) Bromodichloromethane	13.66	83	5475563	33.96	ug/L		99
27) cis-1,3-Dichloropropene	14.42	75	4948085	38.29	ug/L		97
28) Toluene	14.99	92	8579596	40.01	ug/L		97
29) trans-1,3-Dichloropropene	15.35	75	3412681	35.73	ug/L		93
30) 1,1,2-Trichloroethane	15.67	83	1814691	39.39	ug/L		98
31) Tetrachloroethene	15.94	166	6041995	39.25	ug/L		99
32) 1,3-Dichloropropane	15.96	76	3372769	37.49	ug/L		100
33) Dibromochloromethane	16.36	129	3681997	37.72	ug/L		100
34) 1,2-Dibromoethane	16.57	107	2661298	39.04	ug/L		100
35) Chlorobenzene	17.43	112	9681263	39.34	ug/L	m	0
36) 1,1,1,2-Tetrachloroethane	17.56	131	4081175	37.76	ug/L		97
37) Ethylbenzene	17.60	91	17160562	37.67	ug/L		97
38) Xylene (para & meta)	17.81	106	12756573	77.27	ug/L	m	99
39) Xylene (Ortho)	18.52	106	5937952	39.09	ug/L		91
40) Styrene	18.54	104	9213631	39.18	ug/L		88

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

Quantitation Report

053

Data File : d:\hpchem\1\data\c0276.d
Acq On : 21 Nov 95 10:18 am
Sample : 40 PPB STANDARD
Misc : 25 ML
Quant Time: Nov 21 11:18 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 Nov 21 13:42:15 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.88	173	2023918	37.79	ug/L		96
42)	Isopropylbenzene	19.17	105	16768168	37.34	ug/L	m	0
44)	Bromobenzene	19.74	156	4325694	38.64	ug/L	m	0
45)	1,1,2,2-Tetrachloroethane	19.70	83	2225957	40.08	ug/L		98
46)	1,2,3-Trichloropropane	19.78	75	2238025	35.99	ug/L	#	12
47)	n-Propylbenzene	19.91	91	22705937	37.19	ug/L		97
48)	2-Chlorotoluene	20.08	91	13504805	38.14	ug/L		95
49)	4-Chlorotoluene	20.27	91	14709970	35.76	ug/L		95
50)	1,3,5-Trimethylbenzene	20.22	105	14363384	36.06	ug/L		94
51)	tert-Butylbenzene	20.82	119	16201797	37.29	ug/L		95
52)	1,2,4-Trimethylbenzene	20.90	105	14158340	34.70	ug/L		95
53)	sec-Butylbenzene	21.22	105	21775294	36.10	ug/L		98
54)	1,3-Dichlorobenzene	21.44	146	8291350	37.11	ug/L		99
55)	4-Isopropyltoluene	21.48	119	17391875	36.21	ug/L		97
56)	1,4-Dichlorobenzene	21.60	146	8176260	37.19	ug/L		99
58)	1,2-Dichlorobenzene	22.28	146	6501610	37.33	ug/L		99
59)	n-Butylbenzene	22.23	91	17695059	35.75	ug/L		95
60)	1,2-Dibromo-3-chloropropan	23.71	75	453725	32.98	ug/L	#	78
61)	1,2,4-Trichlorobenzene	25.25	180	5391357	37.43	ug/L		98
62)	Hexachlorobutadiene	25.57	225	4629499	35.48	ug/L	m	82
63)	Naphthalene	25.73	128	4877034	36.43	ug/L	m	0
64)	1,2,3-Trichlorobenzene	26.22	180	3818605	36.49	ug/L		98
65)	Methyl-tert butyl ether	8.41	73	4202915	35.98	ug/L	m	0
66)	tert-Butyl Alcohol	8.22	59	120228	72.11	ug/L	m	100

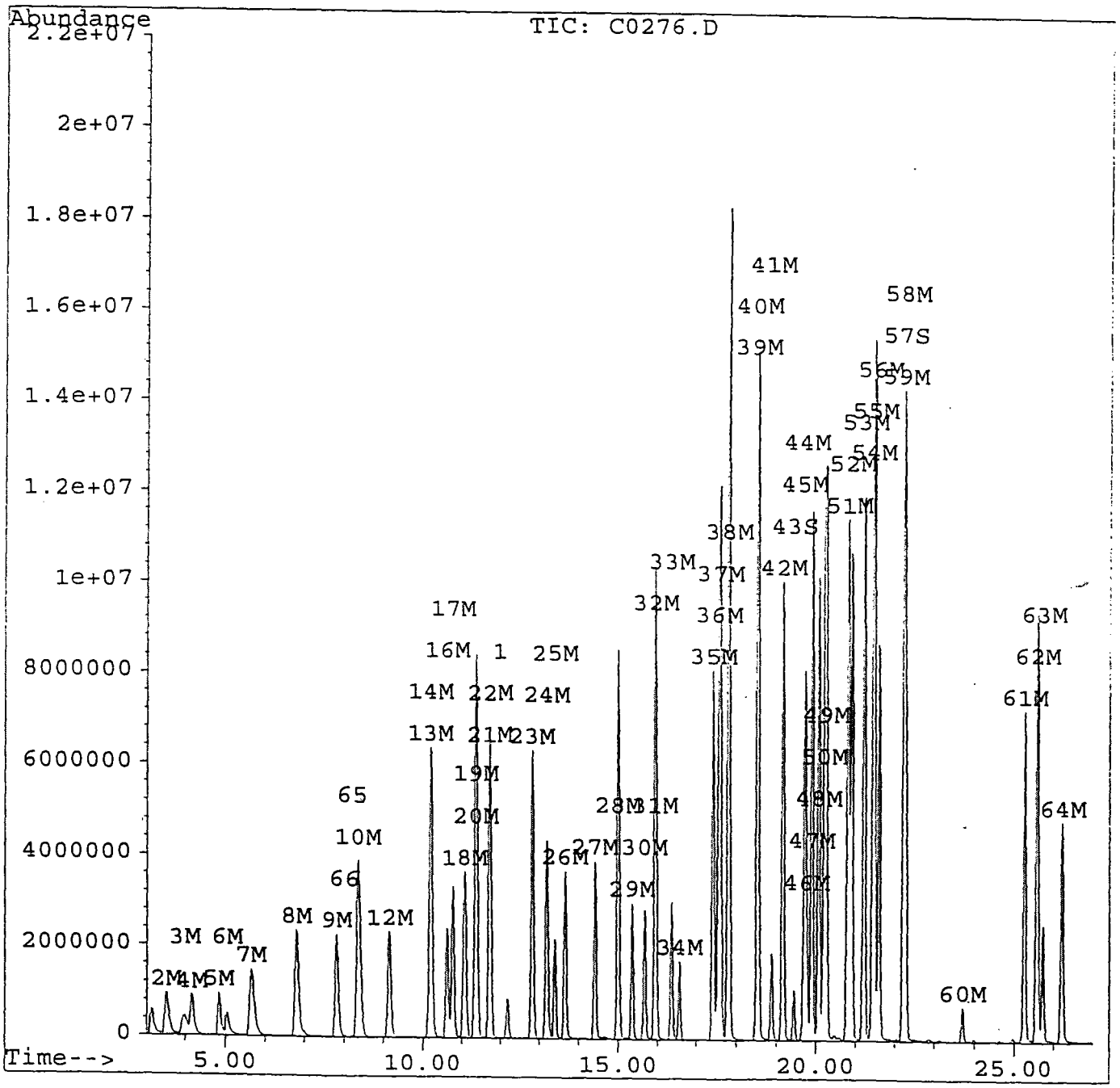
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c0276.d
Acq On : 21 Nov 95 10:18 am
Sample : 40 PPB STANDARD
Misc : 25 ML
Quant Time: Nov 21 11:18 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 Nov 21 13:42:15 1995
Response via : Multiple Level Calibration



5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

055

Lab Name : EMSL ANALYTICAL Contract: _____

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

Lab File ID: C0425.D BFB Injection Date: 12/2/95

Instrument ID: 5972-INSTRUMENT 1 BFB Injection Time: 1457

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	18.5
75	30.0 - 66.0% of mass 95	43.1
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	66.3
175	4.0 - 9.0% of mass 174	4.4 (6.7)1
176	93.0 - 101.0% of mass 174	65.0 (97.9)1
177	5.0 - 9.0% of mass 176	4.4 (6.8)2

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

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

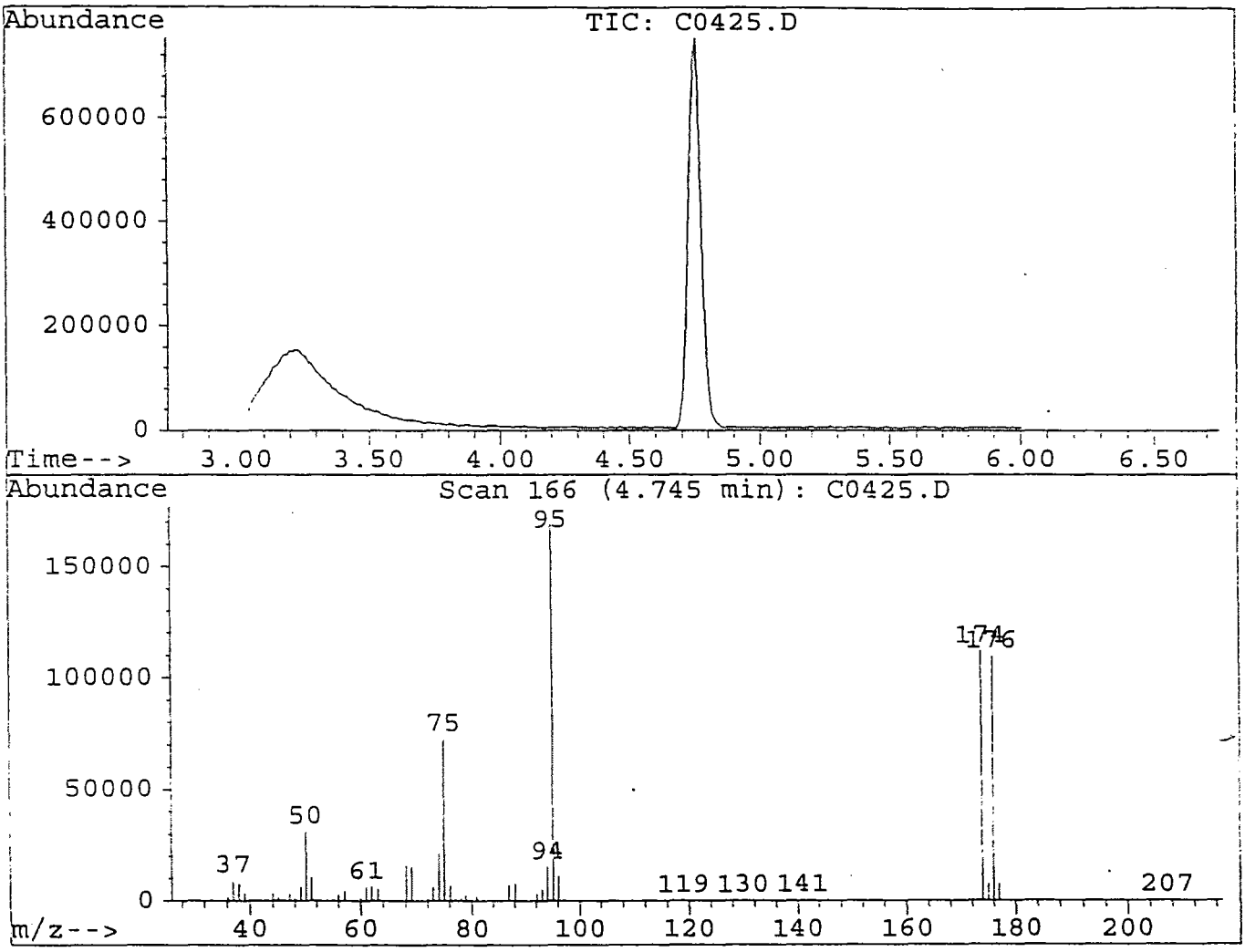
	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD010	10 STND	C0426.D	12/2/95	1510
02	10 QCS	10 QCS	C0427.D	12/2/95	1544
03	1 STND	1 STND	C0428.D	12/2/95	1618
04	VBLK01	M. BLANK	C0429.D	12/2/95	1652
05	9554060V	9554060V	C0430.D	12/2/95	1726
06	9554061V	9554061V	C0431.D	12/2/95	1800
07	9554062V	9554062V	C0432.D	12/2/95	1835
08	9554101V	9554101V	C0433.D	12/2/95	1909
09	9554102V	9554102V	C0434.D	12/2/95	1944
10	9554063V	9554063V	C0435.D	12/2/95	2017
11	9554060MS	54060MS	C0438.D	12/2/95	2159
12	9554060MSD	54060MSD	C0439.D	12/2/95	2233
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

CLPBFB

Data File : D:\HPCHEM\1\DATA\C0425.D
Acq On : 2 Dec 95 2:57 pm
Sample : BFB TUNE
Misc : 25 NG INJECTION

Vial: 1
Operator: MDC
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics



Peak Apex is scan: 166

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.5	31280	PASS
75	95	30	80	43.1	72880	PASS
95	95	100	100	100.0	168960	PASS
96	95	5	9	6.7	11258	PASS
173	174	0	2	0.0	0	PASS
174	95	50	100	66.3	112080	PASS
175	174	5	9	6.7	7513	PASS
176	174	95	101	97.9	109744	PASS
177	176	5	9	6.8	7409	PASS

C0425.D VOA524.M Tue Dec 05 11:43:57 1995 VOA

Scan 166 (4.745 min): C0425.D
BFB TUNE

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.10	1840	49.05	6223	68.05	16024	79.90	854
37.10	9334	50.05	31280	69.05	15535	81.00	2231
38.10	7583	51.05	10694	70.05	1159	82.00	554
39.10	3430	52.05	578	71.95	855	86.90	7424
40.00	784	54.95	929	72.95	6164	88.05	7573
41.10	512	56.00	2572	74.05	21272	91.05	699
43.00	593	57.10	4191	75.05	72880	92.05	3103
44.00	3356	60.00	1394	76.05	6616	93.05	5212
45.00	1518	61.00	6520	77.00	1207	94.05	15580
47.05	2903	62.00	6442	78.00	1346	95.05	168960
48.05	1147	63.00	5300	78.90	2768	96.05	11258

Scan 166 (4.745 min): C0425.D
BFB TUNE

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
96.95	503						
116.95	531						
119.00	566						
129.95	557						
140.90	787						
143.00	653						
173.95	112080						
174.95	7513						
175.95	109744						
176.95	7409						
207.10	543						

7A

VOLATILE CONTINUING CALIBRATION CHECK

058

Lab Name: EMSL ANALYTICAL Contract: _____

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

Instrument ID: 5972-INSTRUMENT 1 Calibration Date: 12/2/95 Time: 1510

Lab File ID: C0426.D Init. Calib. Date(s): 11/21/95 _____

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	0.271	0.251		7.4	30.0
Chloromethane	0.206	0.204		1.0	30.0
Vinyl chloride	0.229	0.234		-2.2	30.0
Bromomethane	0.159	0.161		-1.3	30.0
Chloroethane	0.127	0.104		18.1	30.0
Trichlorofluoromethane	0.395	0.306		22.5	30.0
1,1-Dichloroethene	0.237	0.227		4.2	30.0
Methylene chloride	0.237	0.231		2.5	30.0
trans-1,2-Dichloroethene	0.270	0.267		1.1	30.0
1,1-Dichloroethane	0.508	0.499		1.8	30.0
2,2-Dichloropropane	0.424	0.432		-1.9	30.0
cis-1,2-Dichloroethene	0.266	0.265		0.4	30.0
Bromochloromethane	0.115	0.107		7.0	30.0
Chloroform	0.469	0.459		2.1	30.0
1,1,1-Trichloroethane	0.454	0.455		-0.2	30.0
Carbon tetrachloride	0.429	0.431		-0.5	30.0
1,1-Dichloropropene	0.424	0.430		-1.4	30.0
Benzene	0.870	0.854		1.8	30.0
1,2-Dichloroethane	0.195	0.183		6.2	30.0
Trichloroethene	0.361	0.361		0.0	30.0
1,2-Dichloropropane	0.302	0.297		1.7	30.0
Dibromomethane	0.132	0.126		4.5	30.0
Bromodichloromethane	0.391	0.380		2.8	30.0
cis-1,3-Dichloropropene	0.352	0.343		2.6	30.0
Toluene	0.614	0.617		-0.5	30.0
trans-1,3-Dichloropropene	0.243	0.230		5.3	30.0
1,1,2-Trichloroethane	0.131	0.124		5.3	30.0
Tetrachloroethene	0.435	0.431		0.9	30.0
1,3-Dichloropropane	0.247	0.238		3.6	30.0
Dibromochloromethane	0.260	0.245		5.8	30.0
1,2-Dibromoethane	0.000	0.000			30.0
Chlorobenzene	0.707	0.699		1.1	30.0
1,1,1,2-Tetrachloroethane	0.294	0.291		1.0	30.0
Ethylbenzene	1.261	1.258		0.2	30.0
Xylene (para & meta)	0.477	0.480		-0.6	30.0
Xylene (Ortho)	0.438	0.434		0.9	30.0

7A

VOLATILE CONTINUING CALIBRATION CHECK

059

Lab Name: EMSL ANALYTICAL Contract: _____

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

Instrument ID: 5972-INSTRUMENT 1 Calibration Date: 12/2/95 Time: 1510

Lab File ID: C0426.D Init. Calib. Date(s): 11/21/95 _____

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	0.672	0.670		0.3	30.0
Bromoform	0.142	0.133		6.3	30.0
Isopropylbenzene	1.219	1.223		-0.3	30.0
Bromobenzene	0.316	0.310		1.9	30.0
1,1,2,2-Tetrachloroethane	0.160	0.150		6.3	30.0
1,2,3-Trichloropropane	0.164	0.155		5.5	30.0
n-Propylbenzene	1.664	1.701		-2.2	30.0
2-Chlorotoluene	0.973	0.936		3.8	30.0
4-Chlorotoluene	1.084	1.099		-1.4	30.0
1,3,5-Trimethylbenzene	1.057	1.056		0.1	30.0
tert-Butylbenzene	1.187	1.208		-1.8	30.0
1,2,4-Trimethylbenzene	1.056	1.036		1.9	30.0
sec-Butylbenzene	1.612	1.667		-3.4	30.0
1,3-Dichlorobenzene	0.625	0.613		1.9	30.0
4-Isopropyltoluene	1.296	1.344		-3.7	30.0
1,4-Dichlorobenzene	0.612	0.594		2.9	30.0
1,2-Dichlorobenzene	0.494	0.469		5.1	30.0
n-Butylbenzene	1.315	1.352		-2.8	30.0
1,2-Dibromo-3-chloropropane	0.034	0.029		14.7	30.0
1,2,4-Trichlorobenzene	0.400	0.363		9.3	30.0
Hexachlorobutadiene	0.348	0.330		5.2	30.0
Naphthalene	0.387	0.331		14.5	30.0
1,2,3-Trichlorobenzene	0.292	0.258		11.6	30.0
4-Bromofluorobenzene	0.540	0.533		1.3	30.0
1,2-Dichlorobenzene-d4	0.338	0.331		2.1	30.0

Evaluate Continuing Calibration Report

060

Data File : D:\HPCHEM\1\DATA\C0426.D
Acq On : 2 Dec 95 3:10 pm
Sample : 10 PPB CHK STANDARD
Misc :

Vial: 2
Operator: MDC
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Wed Nov 22 09:25:47 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	106	-0.05
2	M	Dichlorodifluoromethane	0.271	0.251	7.2	100	-0.02
3	M	Chloromethane	0.206	0.204	0.8	104	0.00
4	M	Vinyl chloride	0.229	0.234	-2.4	109	-0.04
5	M	Bromomethane	0.159	0.161	-1.6	104	-0.07
6	M	Chloroethane	0.127	0.104	18.5	79	-0.11
7	M	Trichlorofluoromethane	0.395	0.306	22.5	83	-0.20
8	M	1,1-Dichloroethene	0.237	0.227	4.0	103	-0.13
9	M	Methylene chloride	0.237	0.231	2.3	88	-0.08
10	M	trans-1,2-Dichloroethene	0.270	0.267	1.1	105	-0.07
11		Hexane	0.000	0.000#	0.0	0#	-0.50#
12	M	1,1-Dichloroethane	0.508	0.499	1.8	103	-0.06
13	M	2,2-Dichloropropane	0.424	0.432	-1.7	112	-0.06
14	M	cis-1,2-Dichloroethene	0.266	0.265	0.2	102	-0.05
15		2-Butanone	0.000	0.000#	0.0	0#	0.00
16	M	Bromochloromethane	0.115	0.107	6.7	92	-0.05
17	M	Chloroform	0.469	0.459	2.2	102	-0.05
18	M	1,1,1-Trichloroethane	0.454	0.455	-0.1	106	-0.05
19	M	Carbon tetrachloride	0.429	0.431	-0.3	106	-0.05
20	M	1,1-Dichloropropene	0.424	0.430	-1.6	108	-0.06
21	M	Benzene	0.870	0.854	1.9	103	-0.05
22	M	1,2-Dichloroethane	0.195	0.183	6.3	92	-0.05
23	M	Trichloroethene	0.361	0.361	0.0	105	-0.05
24	M	1,2-Dichloropropane	0.302	0.297	1.8	99	-0.04
25	M	Dibromomethane	0.132	0.126	4.8	92	-0.04
26	M	Bromodichloromethane	0.391	0.380	2.7	98	-0.04
27	M	cis-1,3-Dichloropropene	0.352	0.343	2.7	98	-0.04
28	M	Toluene	0.614	0.617	-0.6	102	-0.05
29	M	trans-1,3-Dichloropropene	0.243	0.230	5.6	93	-0.05
30	M	1,1,2-Trichloroethane	0.131	0.124	5.2	91	-0.04
31	M	Tetrachloroethene	0.435	0.431	1.0	105	-0.05
32	M	1,3-Dichloropropane	0.247	0.238	3.8	93	-0.05
33	M	Dibromochloromethane	0.260	0.245	5.6	92	-0.05
34	M	1,2-Dibromoethane	0.190	0.180	5.4	90	-0.05
35	M	Chlorobenzene	0.707	0.699	1.2	101	-0.04
36	M	1,1,1,2-Tetrachloroethane	0.294	0.291	0.9	98	-0.05
37	M	Ethylbenzene	1.261	1.258	0.3	104	-0.05
38	M	Xylene (para & meta)	0.477	0.480	-0.7	104	-0.05
39	M	Xylene (Ortho)	0.438	0.434	0.9	101	-0.05
40	M	Styrene	0.672	0.670	0.3	99	-0.05
41	M	Bromoform	0.142	0.133	6.9	87	-0.05
42	M	Isopropylbenzene	1.219	1.223	-0.4	104	-0.05

(#) = Out of Range

Evaluate Continuing Calibration Report

001

Data File : D:\HPCHEM\1\DATA\C0426.D
Acq On : 2 Dec 95 3:10 pm
Sample : 10 PPB CHK STANDARD
Misc :

Vial: 2
Operator: MDC
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Wed Nov 22 09:25:47 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	0.540	0.533	1.3	101	-0.04
44	M	Bromobenzene	0.316	0.310	1.9	96	-0.05
45	M	1,1,2,2-Tetrachloroethane	0.160	0.150	5.9	87	-0.05
6	M	1,2,3-Trichloropropane	0.164	0.155	5.5	90	-0.05
47	M	n-Propylbenzene	1.664	1.701	-2.3	106	-0.05
48	M	2-Chlorotoluene	0.973	0.936	3.8	102	-0.05
9	M	4-Chlorotoluene	1.084	1.099	-1.4	103	-0.05
0	M	1,3,5-Trimethylbenzene	1.057	1.056	0.1	102	-0.05
51	M	tert-Butylbenzene	1.187	1.208	-1.7	104	-0.05
2	M	1,2,4-Trimethylbenzene	1.056	1.036	2.0	100	-0.06
3	M	sec-Butylbenzene	1.612	1.667	-3.4	106	-0.05
54	M	1,3-Dichlorobenzene	0.625	0.613	2.0	97	-0.05
55	M	4-Isopropyltoluene	1.296	1.344	-3.7	105	-0.05
6	M	1,4-Dichlorobenzene	0.612	0.594	3.1	95	-0.06
7	S	1,2-Dichlorobenzene-d4	0.338	0.331	2.1	95	-0.06
58	M	1,2-Dichlorobenzene	0.494	0.469	5.1	92	-0.05
9	M	n-Butylbenzene	1.315	1.352	-2.8	105	-0.05
0	M	1,2-Dibromo-3-chloropropane	0.034	0.029	14.5	82	-0.05
61	M	1,2,4-Trichlorobenzene	0.400	0.363	9.2	86	-0.06
2	M	Hexachlorobutadiene	0.348	0.330	5.1	96	-0.07
3	M	Naphthalene	0.387	0.331	14.4	79	-0.06
64	M	1,2,3-Trichlorobenzene	0.292	0.258	11.6	81	-0.08
65		Methyl-tert butyl ether	0.306	0.271	11.4	85	-0.02
6		tert-Butyl Alcohol	0.005	0.005	-19.0	111	0.10

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

Quantitation Report

062

Data File : d:\hpchem\1\data\c0426.d
Acq On : 2 Dec 95 3:10 pm
Sample : 10 PPB CHK STANDARD
Misc :
Quant Time: Dec 5 11:48 1995

Vial: 2
Operator: MDC
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	12.16	96	1705729	5.00	ug/L		-0.05
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.41	95	908868	4.94	ug/L		98.71%
57) 1,2-Dichlorobenzene-d4	22.19	152	565010	4.89	ug/L		97.86%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.52	85	856970	9.28	ug/L		98
3) Chloromethane	3.99	50	695700	9.92	ug/L	m	0
4) Vinyl chloride	4.14	62	798674	10.24	ug/L		95
5) Bromomethane	4.81	94	550920	10.16	ug/L		95
6) Chloroethane	5.00	64	353364	8.15	ug/L		98
7) Trichlorofluoromethane	5.52	101	1044896	7.75	ug/L		99
8) 1,1-Dichloroethene	6.69	96	775304	9.60	ug/L		95
9) Methylene chloride	7.75	84	789018	9.77	ug/L		99
10) trans-1,2-Dichloroethene	8.29	96	912127	9.89	ug/L		98
12) 1,1-Dichloroethane	9.10	63	1700914	9.82	ug/L		98
13) 2,2-Dichloropropane	10.15	77	1472718	10.17	ug/L		97
14) cis-1,2-Dichloroethene	10.17	96	904597	9.98	ug/L		99
16) Bromochloromethane	10.59	128	366668	9.33	ug/L		98
17) Chloroform	10.74	83	1566049	9.78	ug/L		100
18) 1,1,1-Trichloroethane	11.04	97	1551232	10.01	ug/L		100
19) Carbon tetrachloride	11.33	117	1469879	10.03	ug/L		98
20) 1,1-Dichloropropene	11.32	75	1468216	10.16	ug/L		99
21) Benzene	11.68	78	2912377	9.81	ug/L		99
22) 1,2-Dichloroethane	11.71	62	623027	9.37	ug/L		97
23) Trichloroethene	12.79	95	1230366	10.00	ug/L		99
24) 1,2-Dichloropropane	13.17	63	1012080	9.82	ug/L		100
25) Dibromomethane	13.37	93	430260	9.52	ug/L		99
26) Bromodichloromethane	13.63	83	1297306	9.73	ug/L		97
27) cis-1,3-Dichloropropene	14.39	75	1170291	9.73	ug/L		98
28) Toluene	14.95	92	2105743	10.06	ug/L		99
29) trans-1,3-Dichloropropene	15.31	75	783292	9.44	ug/L		99
30) 1,1,2-Trichloroethane	15.63	83	422366	9.48	ug/L		97
31) Tetrachloroethene	15.90	166	1470134	9.90	ug/L		98
32) 1,3-Dichloropropane	15.92	76	811574	9.62	ug/L		99
33) Dibromochloromethane	16.32	129	837111	9.44	ug/L		99
34) 1,2-Dibromoethane	16.53	107	613992	9.46	ug/L		98
35) Chlorobenzene	17.39	112	2384763	9.88	ug/L		98
36) 1,1,1,2-Tetrachloroethane	17.52	131	992957	9.91	ug/L		100
37) Ethylbenzene	17.56	91	4290456	9.97	ug/L		100
38) Xylene (para & meta)	17.77	106	3276875	20.14	ug/L		98
39) Xylene (Ortho)	18.47	106	1479577	9.91	ug/L		99
40) Styrene	18.49	104	2286170	9.97	ug/L		100

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

Quantitation Report

063

Data File : d:\hpchem\1\data\c0426.d
Acq On : 2 Dec 95 3:10 pm
Sample : 10 PPB CHK STANDARD
Misc :
Quant Time: Dec 5 11:48 1995

Vial: 2
Operator: MDC
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.84	173	452299	9.31	ug/L		100
42)	Isopropylbenzene	19.12	105	4173599	10.04	ug/L	m	0
44)	Bromobenzene	19.68	156	1057253	9.81	ug/L		99
45)	1,1,2,2-Tetrachloroethane	19.64	83	513094	9.41	ug/L		99
46)	1,2,3-Trichloropropane	19.73	75	529285	9.45	ug/L		100
47)	n-Propylbenzene	19.86	91	5803596	10.23	ug/L		100
48)	2-Chlorotoluene	20.03	91	3191951	9.62	ug/L		100
49)	4-Chlorotoluene	20.22	91	3748606	10.14	ug/L		100
50)	1,3,5-Trimethylbenzene	20.17	105	3604101	9.99	ug/L		98
51)	tert-Butylbenzene	20.77	119	4120085	10.17	ug/L		98
52)	1,2,4-Trimethylbenzene	20.85	105	3533025	9.80	ug/L		100
53)	sec-Butylbenzene	21.17	105	5687670	10.34	ug/L		100
54)	1,3-Dichlorobenzene	21.39	146	2089699	9.80	ug/L		99
55)	4-Isopropyltoluene	21.43	119	4584134	10.37	ug/L		100
56)	1,4-Dichlorobenzene	21.54	146	2025135	9.69	ug/L		99
58)	1,2-Dichlorobenzene	22.23	146	1600104	9.49	ug/L		97
59)	n-Butylbenzene	22.18	91	4613919	10.28	ug/L		100
60)	1,2-Dibromo-3-chloropropan	23.65	75	98502	8.55	ug/L		98
61)	1,2,4-Trichlorobenzene	25.19	180	1239963	9.08	ug/L		100
62)	Hexachlorobutadiene	25.51	225	1125882	9.49	ug/L		99
63)	Naphthalene	25.66	128	1129436	8.56	ug/L	m	0
64)	1,2,3-Trichlorobenzene	26.15	180	879695	8.84	ug/L	m	0
65)	Methyl-tert butyl ether	8.38	73	924483	8.86	ug/L		99
66)	tert-Butyl Alcohol	8.29	59	36590	23.80	ug/L	m	100

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

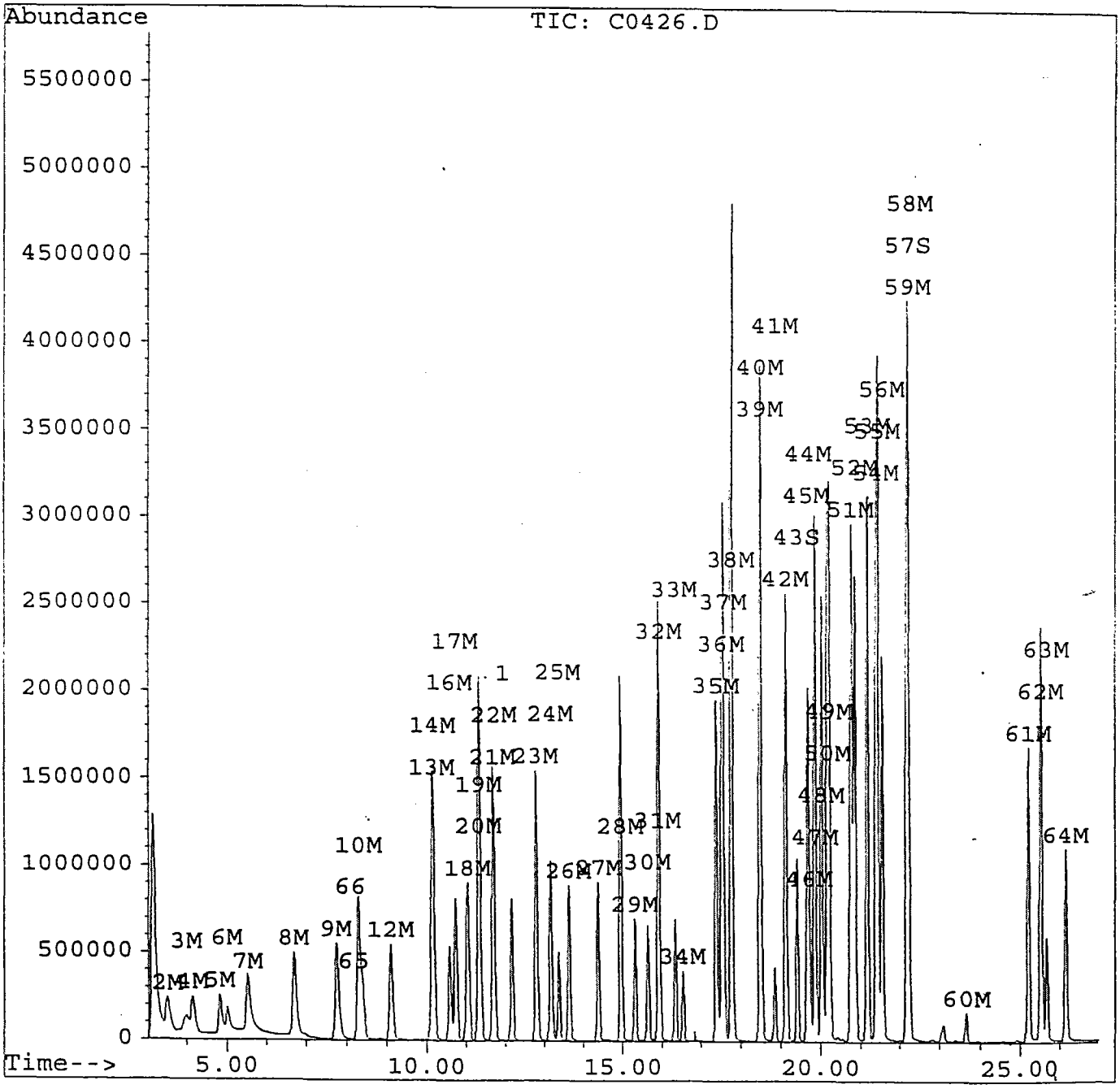
Quantitation Report

064

Data File : d:\hpchem\1\data\c0426.d
Acq On : 2 Dec 95 3:10 pm
Sample : 10 PPB CHK STANDARD
Misc :
Quant Time: Dec 5 11:48 1995

Vial: 2
Operator: MDC
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration



Quantitation Report

065

Data File : d:\hpchem\1\data\c0427.d
Acq On : 2 Dec 95 3:44 pm
Sample : 10 PPB QCS
Misc :
Quant Time: Dec 5 11:50 1995

Vial: 3
Operator: MDC
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	12.17	96	1696795	5.00	ug/L		-0.04
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.40	95	908806	4.96	ug/L		99.22%
57) 1,2-Dichlorobenzene-d4	22.20	152	567828	4.94	ug/L		98.87%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.52	85	931653	10.15	ug/L		99
3) Chloromethane	3.96	50	592833	8.49	ug/L		100
4) Vinyl chloride	4.16	62	766960	9.88	ug/L		100
5) Bromomethane	4.81	94	541440	10.04	ug/L		97
6) Chloroethane	5.02	64	331696	7.69	ug/L		98
7) Trichlorofluoromethane	5.62	101	1372203	10.23	ug/L		99
8) 1,1-Dichloroethene	6.76	96	875213	10.90	ug/L		99
9) Methylene chloride	7.77	84	821134	10.22	ug/L		99
10) trans-1,2-Dichloroethene	8.31	96	960433	10.47	ug/L		99
12) 1,1-Dichloroethane	9.11	63	1769981	10.27	ug/L		99
13) 2,2-Dichloropropane	10.17	77	1477588	10.26	ug/L		99
14) cis-1,2-Dichloroethene	10.18	96	933834	10.35	ug/L		99
16) Bromochloromethane	10.60	128	390056	9.98	ug/L		99
17) Chloroform	10.74	83	1605081	10.08	ug/L		100
18) 1,1,1-Trichloroethane	11.05	97	1569689	10.18	ug/L		100
19) Carbon tetrachloride	11.35	117	1504710	10.33	ug/L		98
20) 1,1-Dichloropropene	11.34	75	1562320	10.87	ug/L		99
21) Benzene	11.69	78	2829954	9.59	ug/L		100
22) 1,2-Dichloroethane	11.72	62	651192	9.85	ug/L		98
23) Trichloroethene	12.80	95	1268068	10.36	ug/L		99
24) 1,2-Dichloropropane	13.17	63	1044460	10.19	ug/L		100
25) Dibromomethane	13.37	93	454491	10.11	ug/L		94
26) Bromodichloromethane	13.63	83	1369980	10.33	ug/L		100
27) cis-1,3-Dichloropropene	14.38	75	1319370	11.03	ug/L		98
28) Toluene	14.96	92	2023813	9.72	ug/L		98
29) trans-1,3-Dichloropropene	15.31	75	861707	10.44	ug/L	m	50
30) 1,1,2-Trichloroethane	15.63	83	447902	10.11	ug/L		97
31) Tetrachloroethene	15.91	166	1482773	10.04	ug/L		99
32) 1,3-Dichloropropane	15.93	76	854527	10.18	ug/L		99
33) Dibromochloromethane	16.33	129	888175	10.07	ug/L		99
34) 1,2-Dibromoethane	16.53	107	648644	10.04	ug/L		99
35) Chlorobenzene	17.38	112	2385736	9.94	ug/L		99
36) 1,1,1,2-Tetrachloroethane	17.52	131	1022348	10.25	ug/L		99
37) Ethylbenzene	17.56	91	4178772	9.77	ug/L		99
38) Xylene (para & meta)	17.76	106	3211221	19.84	ug/L		99
39) Xylene (Ortho)	18.47	106	1489801	10.03	ug/L		96
40) Styrene	18.49	104	2305249	10.11	ug/L		99

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

Quantitation Report

066

Data File : d:\hpchem\1\data\c0427.d
Acq On : 2 Dec 95 3:44 pm
Sample : 10 PPB QCS
Misc :
Quant Time: Dec 5 11:50 1995

Vial: 3
Operator: MDC
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.84	173	482962	9.99	ug/L		100
42)	Isopropylbenzene	19.12	105	4455553	10.77	ug/L	m	0
44)	Bromobenzene	19.68	156	1039887	9.70	ug/L		98
45)	1,1,2,2-Tetrachloroethane	19.64	83	568803	10.48	ug/L		98
46)	1,2,3-Trichloropropane	19.72	75	558178	10.02	ug/L		93
47)	n-Propylbenzene	19.86	91	5738104	10.16	ug/L		100
48)	2-Chlorotoluene	20.03	91	3207929	9.72	ug/L		97
49)	4-Chlorotoluene	20.22	91	3708360	10.08	ug/L		99
50)	1,3,5-Trimethylbenzene	20.18	105	3458711	9.64	ug/L		98
51)	tert-Butylbenzene	20.77	119	4064034	10.09	ug/L		99
52)	1,2,4-Trimethylbenzene	20.86	105	3344978	9.33	ug/L		99
53)	sec-Butylbenzene	21.17	105	5625860	10.28	ug/L		100
54)	1,3-Dichlorobenzene	21.38	146	2111505	9.96	ug/L		99
55)	4-Isopropyltoluene	21.43	119	4447893	10.11	ug/L		100
56)	1,4-Dichlorobenzene	21.55	146	2081863	10.02	ug/L		99
58)	1,2-Dichlorobenzene	22.23	146	1641813	9.79	ug/L		98
59)	n-Butylbenzene	22.18	91	4450184	9.97	ug/L		100
60)	1,2-Dibromo-3-chloropropan	23.64	75	110917	9.68	ug/L		92
61)	1,2,4-Trichlorobenzene	25.20	180	1259570	9.27	ug/L		97
62)	Hexachlorobutadiene	25.52	225	1195848	10.13	ug/L		100
63)	Naphthalene	25.66	128	1156997	8.82	ug/L	m	0
64)	1,2,3-Trichlorobenzene	26.16	180	914790	9.24	ug/L		99

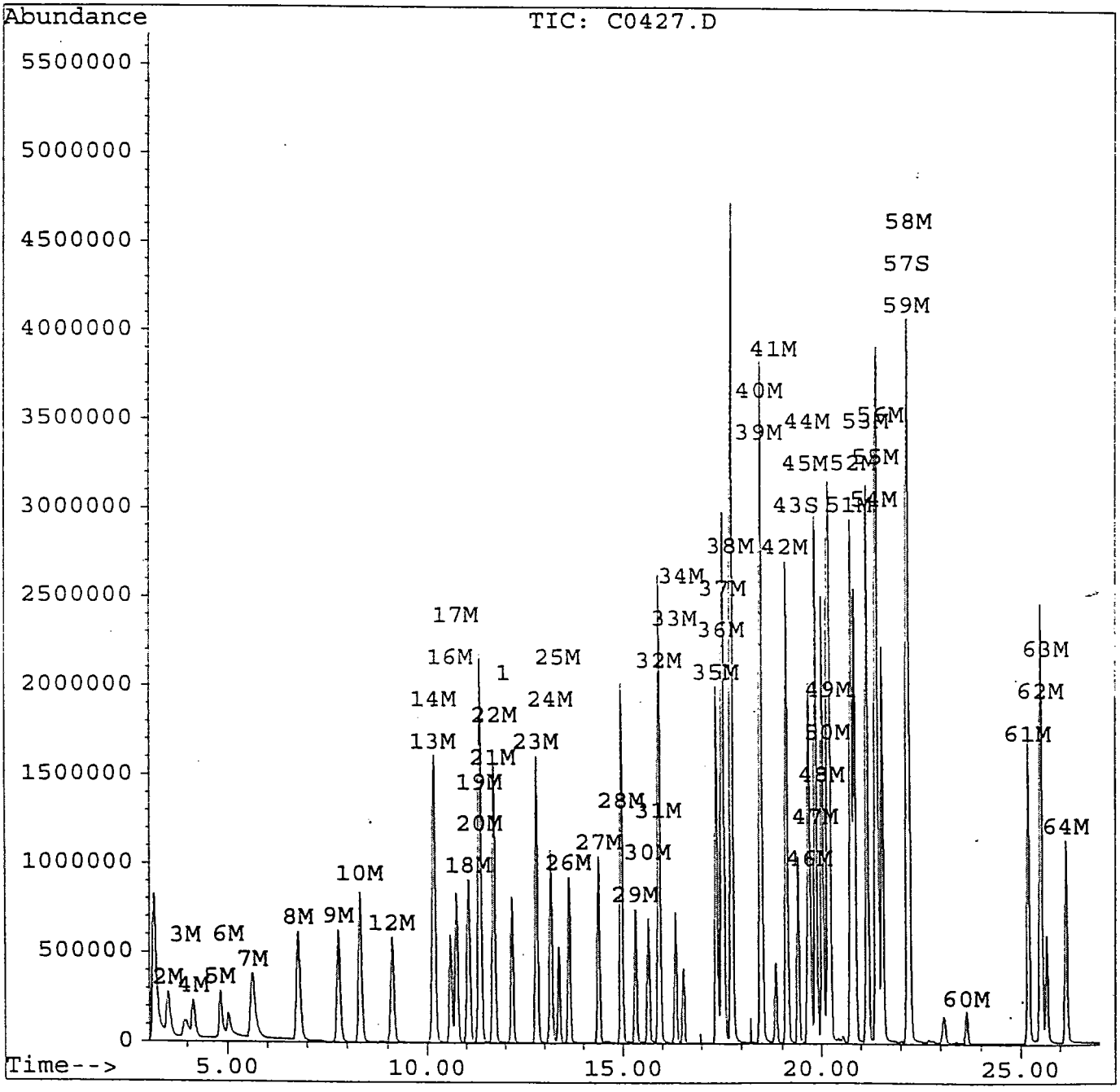
(#) = qualifier out of range (m) = manual integration

Library Quantitation Reportort

Data File : d:\hpchem\1\data\c0427.d
Acq On : 2 Dec 95 3:44 pm
Sample : 10 PPB QCS
Misc :
Quant Time: Dec 5 11:50 1995

Vial: 3 067
Operator: MDC
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : d:\hpchem\1\data\c0428.d
Acq On : 2 Dec 95 4:18 pm
Sample : 1 PPB STANDARD
Misc :
Quant Time: Dec 2 16:46 1995

Vial: 4
Operator: MDC
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	12.18	96	1696953	5.00	ug/L	-0.03
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.40	95	899221	4.91	ug/L	98.16%
57) 1,2-Dichlorobenzene-d4	22.20	152	568907	4.95	ug/L	99.05%
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.50	85	92435	1.01	ug/L	96
3) Chloromethane	3.96	50	80228	1.15	ug/L	98
4) Vinyl chloride	4.14	62	84536	1.09	ug/L	91
5) Bromomethane	4.82	94	86699	1.61	ug/L	92
6) Chloroethane	5.03	64	40842	0.95	ug/L	99
7) Trichlorofluoromethane	5.64	101	144066	1.07	ug/L	99
8) 1,1-Dichloroethene	6.76	96	90895	1.13	ug/L	99
9) Methylene chloride	7.79	84	208192	2.59	ug/L	96
10) trans-1,2-Dichloroethene	8.32	96	102057	1.11	ug/L	97
12) 1,1-Dichloroethane	9.11	63	187306	1.09	ug/L	99
13) 2,2-Dichloropropane	10.18	77	157362	1.09	ug/L	99
14) cis-1,2-Dichloroethene	10.19	96	99799	1.11	ug/L	98
16) Bromochloromethane	10.60	128	42395	1.08	ug/L	94
17) Chloroform	10.75	83	176794	1.11	ug/L	98
18) 1,1,1-Trichloroethane	11.06	97	167711	1.09	ug/L	100
19) Carbon tetrachloride	11.35	117	154353	1.06	ug/L	96
20) 1,1-Dichloropropene	11.34	75	160448	1.12	ug/L	98
21) Benzene	11.70	78	323363	1.10	ug/L	99
22) 1,2-Dichloroethane	11.72	62	70227	1.06	ug/L	98
23) Trichloroethene	12.79	95	132952	1.09	ug/L	95
24) 1,2-Dichloropropane	13.17	63	113651	1.11	ug/L	100
25) Dibromomethane	13.38	93	49937	1.11	ug/L	93
26) Bromodichloromethane	13.64	83	142251	1.07	ug/L	100
27) cis-1,3-Dichloropropene	14.38	75	128330	1.07	ug/L	97
28) Toluene	14.96	92	233796	1.12	ug/L	97
29) trans-1,3-Dichloropropene	15.32	75	89375	1.08	ug/L	96
30) 1,1,2-Trichloroethane	15.64	83	50139	1.13	ug/L	99
31) Tetrachloroethene	15.91	166	159032	1.08	ug/L	99
32) 1,3-Dichloropropane	15.93	76	95374	1.14	ug/L	97
33) Dibromochloromethane	16.32	129	93789	1.06	ug/L	92
34) 1,2-Dibromoethane	16.54	107	68958	1.07	ug/L	93
35) Chlorobenzene	17.38	112	271747	1.13	ug/L	98
36) 1,1,1,2-Tetrachloroethane	17.52	131	112753	1.13	ug/L	97
37) Ethylbenzene	17.56	91	480994	1.12	ug/L	99
38) Xylene (para & meta)	17.76	106	363580	2.25	ug/L	100
39) Xylene (Ortho)	18.46	106	166681	1.12	ug/L	98
40) Styrene	18.50	104	252084	1.11	ug/L	100

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

Quantitation Report

Data File : d:\hpchem\1\data\c0428.d
Acq On : 2 Dec 95 4:18 pm
Sample : 1 PPB STANDARD
Misc :
Quant Time: Dec 2 16:46 1995

Vial: 4
Operator: MDC
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
41) Bromoform	18.84	173	52408	1.08 ug/L	95
42) Isopropylbenzene	19.12	105	464873	1.12 ug/L	94
44) Bromobenzene	19.69	156	124444	1.16 ug/L	98
45) 1,1,2,2-Tetrachloroethane	19.64	83	66700	1.23 ug/L	99
46) 1,2,3-Trichloropropane	19.73	75	70802	1.27 ug/L #	61
47) n-Propylbenzene	19.86	91	643192	1.14 ug/L	99
48) 2-Chlorotoluene	20.03	91	369204	1.12 ug/L	100
49) 4-Chlorotoluene	20.22	91	430438	1.17 ug/L	98
50) 1,3,5-Trimethylbenzene	20.18	105	406396	1.13 ug/L	95
51) tert-Butylbenzene	20.76	119	464587	1.15 ug/L	97
52) 1,2,4-Trimethylbenzene	20.86	105	403432	1.13 ug/L	99
53) sec-Butylbenzene	21.17	105	637458	1.17 ug/L	99
54) 1,3-Dichlorobenzene	21.38	146	246447	1.16 ug/L	99
55) 4-Isopropyltoluene	21.42	119	502971	1.14 ug/L	99
56) 1,4-Dichlorobenzene	21.55	146	243225	1.17 ug/L	99
58) 1,2-Dichlorobenzene	22.24	146	199971	1.19 ug/L	98
59) n-Butylbenzene	22.18	91	523940	1.17 ug/L	98
60) 1,2-Dibromo-3-chloropropan	23.65	75	13979	1.22 ug/L	92
61) 1,2,4-Trichlorobenzene	25.20	180	160211	1.18 ug/L	98
62) Hexachlorobutadiene	25.52	225	131685	1.12 ug/L	99
63) Naphthalene	25.67	128	164967	1.26 ug/L	100
64) 1,2,3-Trichlorobenzene	26.16	180	120276	1.21 ug/L	97
65) Methyl-tert butyl ether	8.36	73	111745	1.08 ug/L	100
66) tert-Butyl Alcohol	8.20	59	1723	1.13 ug/L	100

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

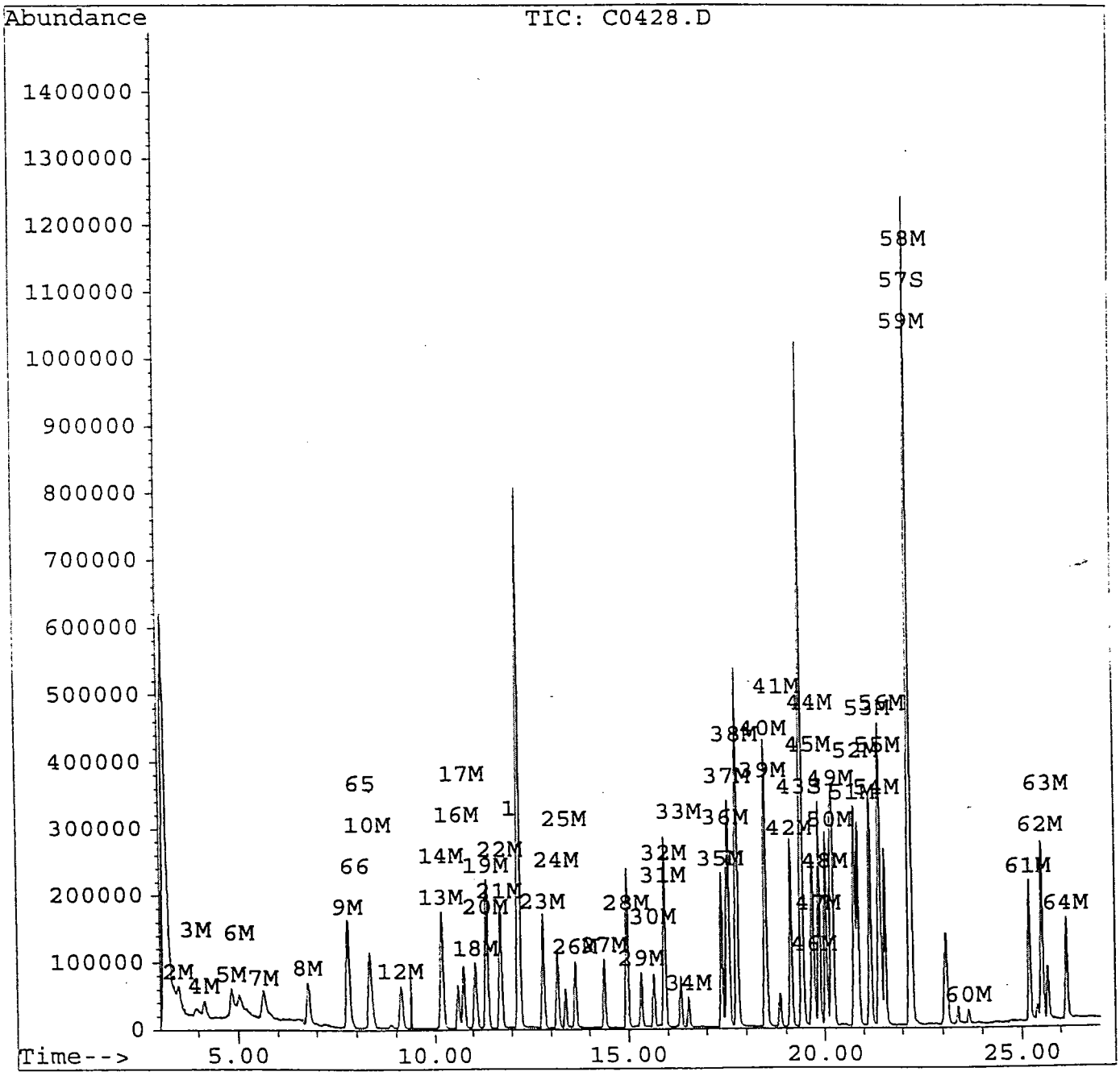
Quantitation Report

070

Data File : d:\hpchem\1\data\c0428.d
Acq On : 2 Dec 95 4:18 pm
Sample : 1 PPB STANDARD
Misc :
Quant Time: Dec 2 16:46 1995

Vial: 4
Operator: MDC
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration



5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

071

Lab Name : EMSL ANALYTICAL Contract: _____

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

Lab File ID: C0472.D BFB Injection Date: 12/5/95

Instrument ID: 5972-INSTRUMENT 1 BFB Injection Time: 1712

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	19.4
75	30.0 - 66.0% of mass 95	41.8
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	67.5
175	4.0 - 9.0% of mass 174	5.2 (7.7)1
176	93.0 - 101.0% of mass 174	66.0 (97.8)1
177	5.0 - 9.0% of mass 176	4.2 (6.4)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	C0473.D	12/5/95	1724
02	VBLK01	M. BLANK	C0474.D	12/5/95	1800
03	9554553V	9554553V	C0475.D	12/5/95	1833
04	9554554V	9554554V	C0476.D	12/5/95	1907
05	9554109V	9554109V	C0477.D	12/5/95	1942
06	9554110V	9554110V	C0478.D	12/5/95	2016
07	9554551V	9554551V	C0479.D	12/5/95	2051
08	9554552V	9554552V	C0480.D	12/5/95	2125
09	9554555V	9554555V	C0481.D	12/5/95	2200
10	9554557V	9554557V	C0483.D	12/5/95	2310
11	9554558V	9554558V	C0484.D	12/5/95	2344
12	9554552MS	54552MS	C0485.D	12/6/95	0019
13	9554552MSD	54552MSD	C0486.D	12/6/95	0054
14	10 QCS	10 QCS	C0487.D	12/6/95	0129
15	1 STND	1 STND	C0488.D	12/6/95	0204
16					
17					
18					
19					
20					
21					
22					

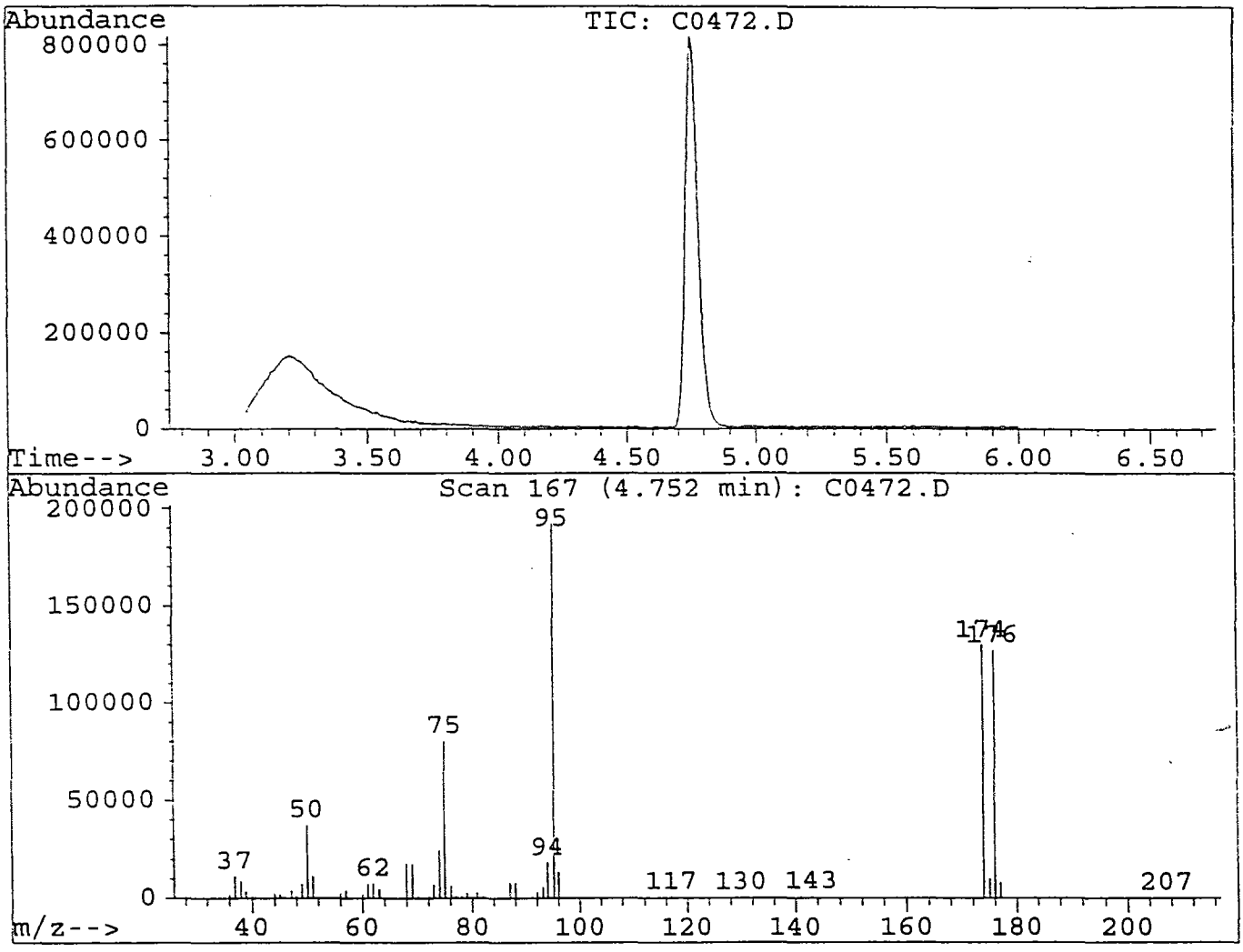
CLPBFB

072

Data File : D:\HPCHEM\1\DATA\C0472.D
Acq On : 5 Dec 95 5:12 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: 167

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.4	37352	PASS
75	95	30	80	41.8	80504	PASS
95	95	100	100	100.0	192576	PASS
96	95	5	9	6.8	13138	PASS
173	174	0	2	0.0	0	PASS
174	95	50	100	67.5	129976	PASS
175	174	5	9	7.7	9946	PASS
176	174	95	101	97.8	127072	PASS
177	176	5	9	6.4	8097	PASS

C0472.D VOA524.M Wed Dec 06 10:32:08 1995 VOA

Scan 167 (4.752 min): C0472.D
BFB TUNE

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	1700	51.05	11046	69.05	17472	80.90	2963
37.00	11369	52.05	627	70.05	1284	81.90	837
38.10	8611	54.95	741	72.05	1101	87.00	7792
39.00	3671	56.00	2630	72.95	6979	87.95	7828
40.00	853	57.00	4042	74.05	24616	90.95	743
44.00	2448	60.00	1890	75.05	80504	91.95	3451
45.00	2140	61.00	7271	76.05	6506	93.05	5882
47.05	3924	62.00	7706	77.00	1213	93.95	18328
47.95	1174	63.00	4861	78.00	1177	95.05	192576
49.05	7326	66.95	584	79.00	2853	95.95	13138
50.05	37352	68.05	17672	80.00	813	103.90	602

Scan 167 (4.752 min): C0472.D
BFB TUNE

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
116.95	824						
119.00	794						
129.95	565						
140.90	920						
142.90	1113						
173.95	129976						
174.95	9946						
175.95	127072						
176.95	8097						
207.00	517						

7A

VOLATILE CONTINUING CALIBRATION CHECK

074

Lab Name: EMSL ANALYTICAL Contract: _____

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

Instrument ID: 5972-INSTRUMENT 1 Calibration Date: 12/5/95 Time: 1724

Lab File ID: C0473.D Init. Calib. Date(s): 11/21/95 _____

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	0.271	0.264		2.6	30.0
Chloromethane	0.206	0.192		6.8	30.0
Vinyl chloride	0.229	0.221		3.5	30.0
Bromomethane	0.159	0.146		8.2	30.0
Chloroethane	0.127	0.135		-6.3	30.0
Trichlorofluoromethane	0.395	0.370		6.3	30.0
1,1-Dichloroethene	0.237	0.223		5.9	30.0
Methylene chloride	0.237	0.256		-8.0	30.0
trans-1,2-Dichloroethene	0.270	0.252		6.7	30.0
1,1-Dichloroethane	0.508	0.468		7.9	30.0
2,2-Dichloropropane	0.424	0.379		10.6	30.0
cis-1,2-Dichloroethene	0.266	0.249		6.4	30.0
Bromochloromethane	0.115	0.110		4.3	30.0
Chloroform	0.469	0.430		8.3	30.0
1,1,1-Trichloroethane	0.454	0.408		10.1	30.0
Carbon tetrachloride	0.429	0.390		9.1	30.0
1,1-Dichloropropene	0.424	0.391		7.8	30.0
Benzene	0.870	0.784		9.9	30.0
1,2-Dichloroethane	0.195	0.183		6.2	30.0
Trichloroethene	0.361	0.328		9.1	30.0
1,2-Dichloropropane	0.302	0.282		6.6	30.0
Dibromomethane	0.132	0.131		0.8	30.0
Bromodichloromethane	0.391	0.371		5.1	30.0
cis-1,3-Dichloropropene	0.352	0.336		4.5	30.0
Toluene	0.614	0.564		8.1	30.0
trans-1,3-Dichloropropene	0.243	0.233		4.1	30.0
1,1,2-Trichloroethane	0.131	0.129		1.5	30.0
Tetrachloroethene	0.435	0.385		11.5	30.0
1,3-Dichloropropane	0.247	0.244		1.2	30.0
Dibromochloromethane	0.260	0.252		3.1	30.0
1,2-Dibromoethane	0.000	0.000			30.0
Chlorobenzene	0.707	0.653		7.6	30.0
1,1,1,2-Tetrachloroethane	0.294	0.277		5.8	30.0
Ethylbenzene	1.261	1.140		9.6	30.0
Xylene (para & meta)	0.477	0.435		8.8	30.0
Xylene (Ortho)	0.438	0.402		8.2	30.0

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EMSL ANALYTICAL Contract: _____

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

Instrument ID: 5972-INSTRUMENT 1 Calibration Date: 12/5/95 Time: 1724

Lab File ID: C0473.D Init. Calib. Date(s): 11/21/95 _____

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	0.672	0.630		6.3	30.0
Bromoform	0.142	0.142		0.0	30.0
Isopropylbenzene	1.219	1.099		9.8	30.0
Bromobenzene	0.316	0.297		6.0	30.0
1,1,2,2-Tetrachloroethane	0.160	0.167		-4.4	30.0
1,2,3-Trichloropropane	0.164	0.160		2.4	30.0
n-Propylbenzene	1.664	1.513		9.1	30.0
2-Chlorotoluene	0.973	0.854		12.2	30.0
4-Chlorotoluene	1.084	1.000		7.7	30.0
1,3,5-Trimethylbenzene	1.057	0.946		10.5	30.0
tert-Butylbenzene	1.187	1.080		9.0	30.0
1,2,4-Trimethylbenzene	1.056	0.943		10.7	30.0
sec-Butylbenzene	1.612	1.478		8.3	30.0
1,3-Dichlorobenzene	0.625	0.573		8.3	30.0
4-Isopropyltoluene	1.296	1.195		7.8	30.0
1,4-Dichlorobenzene	0.612	0.571		6.7	30.0
1,2-Dichlorobenzene	0.494	0.461		6.7	30.0
n-Butylbenzene	1.315	1.211		7.9	30.0
1,2-Dibromo-3-chloropropane	0.034	0.032		5.9	30.0
1,2,4-Trichlorobenzene	0.400	0.372		7.0	30.0
Hexachlorobutadiene	0.348	0.302		13.2	30.0
Naphthalene	0.387	0.370		4.4	30.0
1,2,3-Trichlorobenzene	0.292	0.272		6.8	30.0
4-Bromofluorobenzene	0.540	0.542		-0.4	30.0
1,2-Dichlorobenzene-d4	0.338	0.351		-3.8	30.0

Evaluate Continuing Calibration Report

076

Data File : D:\HPCHEM\1\DATA\C0473.D
Acq On : 5 Dec 95 5:24 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 : Wed Nov 22 09:25:47 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	113	-0.02
2	M	Dichlorodifluoromethane	0.271	0.264	2.5	112	-0.02
3	M	Chloromethane	0.206	0.192	6.6	105	-0.04
4	M	Vinyl chloride	0.229	0.221	3.2	110	-0.02
5	M	Bromomethane	0.159	0.146	8.0	100	-0.03
6	M	Chloroethane	0.127	0.135	-6.1	111	-0.03
7	M	Trichlorofluoromethane	0.395	0.370	6.2	108	0.00
8	M	1,1-Dichloroethene	0.237	0.223	5.6	109	0.00
9	M	Methylene chloride	0.237	0.256	-8.0	104	-0.02
10	M	trans-1,2-Dichloroethene	0.270	0.252	6.8	106	-0.02
11		Hexane	0.000	0.000#	0.0	0#	-0.49#
12	M	1,1-Dichloroethane	0.508	0.468	7.9	103	0.00
13	M	2,2-Dichloropropane	0.424	0.379	10.7	105	-0.02
14	M	cis-1,2-Dichloroethene	0.266	0.249	6.4	103	-0.02
15		2-Butanone	0.000	0.000#	0.0	0#	-0.44#
16	M	Bromochloromethane	0.115	0.110	4.7	100	-0.02
17	M	Chloroform	0.469	0.430	8.3	102	-0.02
18	M	1,1,1-Trichloroethane	0.454	0.408	10.2	101	-0.02
19	M	Carbon tetrachloride	0.429	0.390	9.1	102	0.00
20	M	1,1-Dichloropropene	0.424	0.391	7.7	105	-0.02
21	M	Benzene	0.870	0.784	9.8	101	0.00
22	M	1,2-Dichloroethane	0.195	0.183	6.0	99	-0.02
23	M	Trichloroethene	0.361	0.328	9.1	102	-0.02
24	M	1,2-Dichloropropane	0.302	0.282	6.5	100	-0.02
25	M	Dibromomethane	0.132	0.131	0.9	103	-0.02
26	M	Bromodichloromethane	0.391	0.371	5.0	102	-0.02
27	M	cis-1,3-Dichloropropene	0.352	0.336	4.6	102	-0.02
28	M	Toluene	0.614	0.564	8.1	100	-0.03
29	M	trans-1,3-Dichloropropene	0.243	0.233	4.2	100	-0.03
30	M	1,1,2-Trichloroethane	0.131	0.129	1.4	101	-0.02
31	M	Tetrachloroethene	0.435	0.385	11.5	100	-0.03
32	M	1,3-Dichloropropane	0.247	0.244	1.4	101	-0.03
33	M	Dibromochloromethane	0.260	0.252	2.9	101	-0.03
34	M	1,2-Dibromoethane	0.190	0.189	0.5	101	-0.03
35	M	Chlorobenzene	0.707	0.653	7.6	101	-0.03
36	M	1,1,1,2-Tetrachloroethane	0.294	0.277	5.8	99	-0.04
37	M	Ethylbenzene	1.261	1.140	9.6	100	-0.04
38	M	Xylene (para & meta)	0.477	0.435	8.7	101	-0.04
39	M	Xylene (Ortho)	0.438	0.402	8.1	100	-0.04
40	M	Styrene	0.672	0.630	6.3	100	-0.03
41	M	Bromoform	0.142	0.142	0.1	100	-0.04
42	M	Isopropylbenzene	1.219	1.099	9.8	100	-0.04

(#) = Out of Range

Evaluate Continuing Calibration Report

077

Data File : D:\HPCHEM\1\DATA\C0473.D
Acq On : 5 Dec 95 5:24 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 : Wed Nov 22 09:25:47 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	0.540	0.542	-0.4	110	-0.03
44	M	Bromobenzene	0.316	0.297	5.8	98	-0.04
5	M	1,1,2,2-Tetrachloroethane	0.160	0.167	-4.6	104	-0.04
6	M	1,2,3-Trichloropropane	0.164	0.160	2.3	100	-0.04
47	M	n-Propylbenzene	1.664	1.513	9.1	101	-0.04
48	M	2-Chlorotoluene	0.973	0.854	12.2	100	-0.03
9	M	4-Chlorotoluene	1.084	1.000	7.7	101	-0.04
50	M	1,3,5-Trimethylbenzene	1.057	0.946	10.5	98	-0.04
51	M	tert-Butylbenzene	1.187	1.080	9.0	99	-0.04
2	M	1,2,4-Trimethylbenzene	1.056	0.943	10.8	98	-0.04
3	M	sec-Butylbenzene	1.612	1.478	8.3	101	-0.04
54	M	1,3-Dichlorobenzene	0.625	0.573	8.4	97	-0.04
5	M	4-Isopropyltoluene	1.296	1.195	7.8	100	-0.04
6	M	1,4-Dichlorobenzene	0.612	0.571	6.8	98	-0.04
57	S	1,2-Dichlorobenzene-d4	0.338	0.351	-3.6	108	-0.05
58	M	1,2-Dichlorobenzene	0.494	0.461	6.7	96	-0.04
9	M	n-Butylbenzene	1.315	1.211	7.9	100	-0.04
60	M	1,2-Dibromo-3-chloropropane	0.034	0.032	5.4	97	-0.04
61	M	1,2,4-Trichlorobenzene	0.400	0.372	7.2	95	-0.05
2	M	Hexachlorobutadiene	0.348	0.302	13.1	94	-0.05
3	M	Naphthalene	0.387	0.370	4.3	95	-0.05
64	M	1,2,3-Trichlorobenzene	0.292	0.272	6.7	91	-0.06
5		Methyl-tert butyl ether	0.306	0.295	3.7	99	-0.02
6		tert-Butyl Alcohol	0.005	0.005	-6.5	106	-0.03

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

Quantitation Report

078

Data File : d:\hpchem\1\data\c0473.d
Acq On : 5 Dec 95 5:24 pm
Sample : 10 PPB CHK STANDARD
Misc :
Quant Time: Dec 6 10:33 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 : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	12.19	96	1824708	5.00	ug/L	-0.02
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.42	95	989206	5.02	ug/L	100.43%
57) 1,2-Dichlorobenzene-d4	22.20	152	640170	5.18	ug/L	103.65%
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.52	85	963149	9.75	ug/L	99
3) Chloromethane	3.95	50	701156	9.34	ug/L	99
4) Vinyl chloride	4.16	62	807910	9.68	ug/L	98
5) Bromomethane	4.85	94	533519	9.20	ug/L	98
6) Chloroethane	5.09	64	492313	10.61	ug/L	98
7) Trichlorofluoromethane	5.70	101	1351922	9.38	ug/L	99
8) 1,1-Dichloroethene	6.82	96	815162	9.44	ug/L	99
9) Methylene chloride	7.81	84	932937	10.80	ug/L	99
10) trans-1,2-Dichloroethene	8.34	96	919623	9.32	ug/L	97
12) 1,1-Dichloroethane	9.15	63	1707293	9.21	ug/L	100
13) 2,2-Dichloropropane	10.19	77	1382701	8.93	ug/L	98
14) cis-1,2-Dichloroethene	10.20	96	907385	9.36	ug/L	99
16) Bromochloromethane	10.62	128	400814	9.53	ug/L	94
17) Chloroform	10.77	83	1570839	9.17	ug/L	99
18) 1,1,1-Trichloroethane	11.08	97	1488349	8.98	ug/L	97
19) Carbon tetrachloride	11.37	117	1423796	9.09	ug/L	99
20) 1,1-Dichloropropene	11.36	75	1427388	9.23	ug/L	100
21) Benzene	11.73	78	2862182	9.02	ug/L	99
22) 1,2-Dichloroethane	11.75	62	668834	9.40	ug/L	96
23) Trichloroethene	12.82	95	1196162	9.09	ug/L	99
24) 1,2-Dichloropropane	13.19	63	1030528	9.35	ug/L	100
25) Dibromomethane	13.40	93	478997	9.91	ug/L	96
26) Bromodichloromethane	13.65	83	1354654	9.50	ug/L	98
27) cis-1,3-Dichloropropene	14.41	75	1226779	9.54	ug/L	98
28) Toluene	14.97	92	2058509	9.19	ug/L	100
29) trans-1,3-Dichloropropene	15.33	75	850643	9.58	ug/L	100
30) 1,1,2-Trichloroethane	15.65	83	470003	9.86	ug/L	94
31) Tetrachloroethene	15.92	166	1406253	8.85	ug/L	98
32) 1,3-Dichloropropane	15.94	76	889546	9.86	ug/L	100
33) Dibromochloromethane	16.34	129	921120	9.71	ug/L	99
34) 1,2-Dibromoethane	16.55	107	690914	9.95	ug/L	99
35) Chlorobenzene	17.40	112	2384893	9.24	ug/L	99
36) 1,1,1,2-Tetrachloroethane	17.53	131	1009655	9.42	ug/L	98
37) Ethylbenzene	17.57	91	4159500	9.04	ug/L	99
38) Xylene (para & meta)	17.78	106	3178531	18.26	ug/L	98
39) Xylene (Ortho)	18.48	106	1467827	9.19	ug/L	98
40) Styrene	18.51	104	2297795	9.37	ug/L	97

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

Quantitation Report

Data File : d:\hpchem\1\data\c0473.d
Acq On : 5 Dec 95 5:24 pm
Sample : 10 PPB CHK STANDARD
Misc :
Quant Time: Dec 6 10:33 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 : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.85	173	519591	9.99	ug/L		97
42)	Isopropylbenzene	19.13	105	4011236	9.02	ug/L	m	0
44)	Bromobenzene	19.69	156	1085281	9.42	ug/L		98
45)	1,1,2,2-Tetrachloroethane	19.65	83	610316	10.46	ug/L		97
46)	1,2,3-Trichloropropane	19.74	75	585670	9.77	ug/L		98
47)	n-Propylbenzene	19.87	91	5519869	9.09	ug/L		99
48)	2-Chlorotoluene	20.05	91	3115955	8.78	ug/L		98
49)	4-Chlorotoluene	20.23	91	3649523	9.23	ug/L		100
50)	1,3,5-Trimethylbenzene	20.18	105	3451696	8.95	ug/L		98
51)	tert-Butylbenzene	20.78	119	3942690	9.10	ug/L		98
52)	1,2,4-Trimethylbenzene	20.87	105	3440435	8.92	ug/L		98
53)	sec-Butylbenzene	21.18	105	5395306	9.17	ug/L		99
54)	1,3-Dichlorobenzene	21.40	146	2089321	9.16	ug/L		100
55)	4-Isopropyltoluene	21.44	119	4361514	9.22	ug/L		100
56)	1,4-Dichlorobenzene	21.56	146	2082256	9.32	ug/L		100
58)	1,2-Dichlorobenzene	22.24	146	1683212	9.33	ug/L		98
59)	n-Butylbenzene	22.19	91	4420683	9.21	ug/L		99
60)	1,2-Dibromo-3-chloropropan	23.66	75	116567	9.46	ug/L		97
61)	1,2,4-Trichlorobenzene	25.20	180	1356227	9.28	ug/L		99
62)	Hexachlorobutadiene	25.53	225	1102647	8.69	ug/L		99
63)	Naphthalene	25.68	128	1351269	9.57	ug/L		100
64)	1,2,3-Trichlorobenzene	26.17	180	992846	9.33	ug/L		98
65)	Methyl-tert butyl ether	8.38	73	1075392	9.63	ug/L		99
66)	tert-Butyl Alcohol	8.16	59	35046	21.31	ug/L		100

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

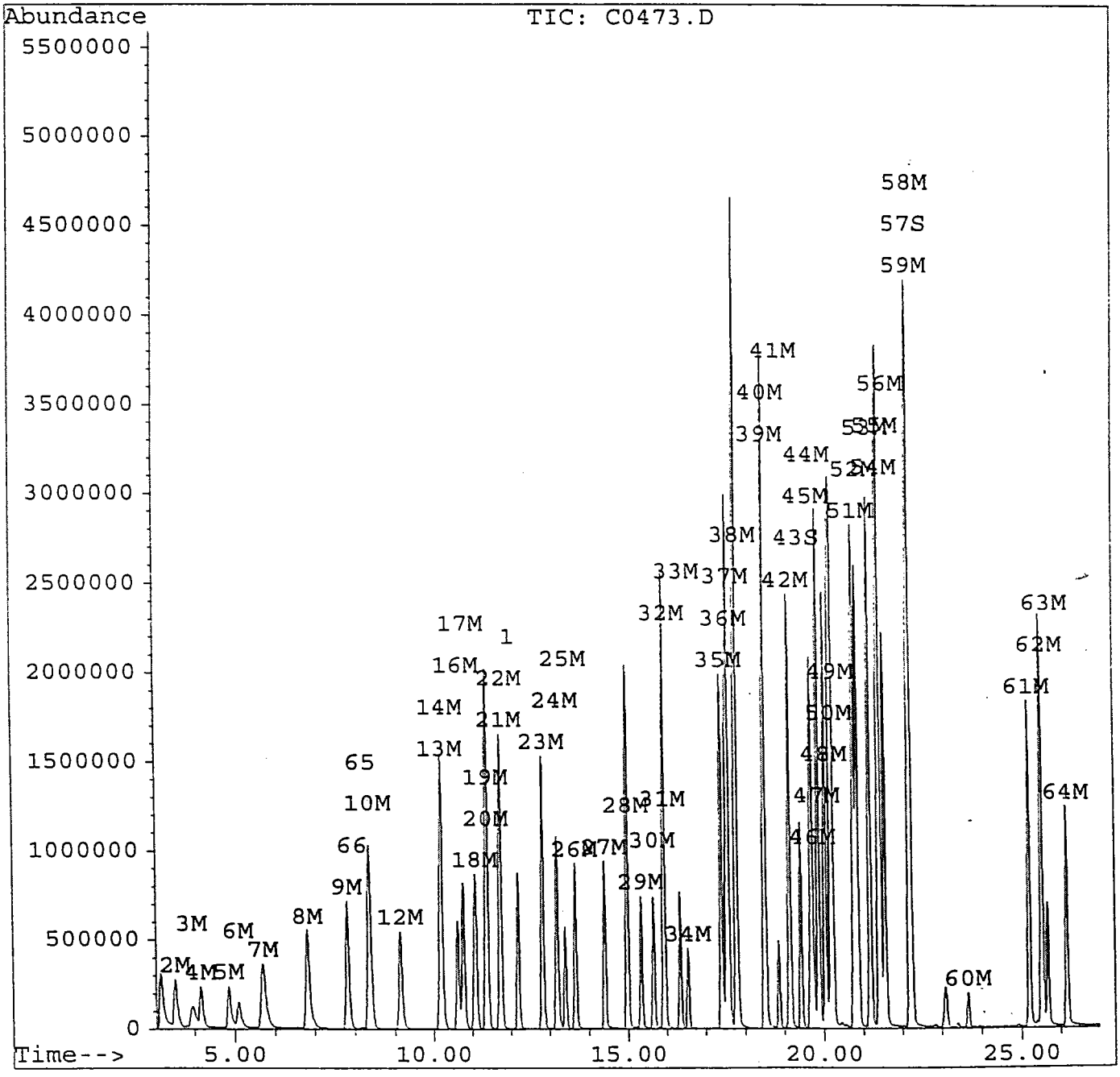
Quantitation Report

080

Data File : d:\hpchem\1\data\c0473.d
Acq On : 5 Dec 95 5:24 pm
Sample : 10 PPB CHK STANDARD
Misc :
Quant Time: Dec 6 10:33 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 : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration



Quantitation Report

081

Data File : d:\hpchem\1\data\c0487.d
Acq On : 6 Dec 95 1:29 am
Sample : 10 PPB QCS
Misc : 25 ML
Quant Time: Dec 6 10:53 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 : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	12.21	96	1516340	5.00	ug/L	0.00
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.43	95	804351	4.91	ug/L	98.27%
57) 1,2-Dichlorobenzene-d4	22.22	152	512829	5.00	ug/L	99.92%
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.52	85	867610	10.57	ug/L	98
3) Chloromethane	3.95	50	531868	8.53	ug/L	100
4) Vinyl chloride	4.17	62	677967	9.77	ug/L	100
5) Bromomethane	4.86	94	450743	9.35	ug/L	99
6) Chloroethane	5.10	64	395672	10.26	ug/L	100
7) Trichlorofluoromethane	5.69	101	1259591	10.51	ug/L	98
8) 1,1-Dichloroethene	6.82	96	783143	10.91	ug/L	98
9) Methylene chloride	7.82	84	827251	11.53	ug/L	98
10) trans-1,2-Dichloroethene	8.36	96	848409	10.35	ug/L	97
12) 1,1-Dichloroethane	9.16	63	1554549	10.09	ug/L	99
13) 2,2-Dichloropropane	10.20	77	1080819	8.40	ug/L	100
14) cis-1,2-Dichloroethene	10.22	96	829501	10.29	ug/L	95
16) Bromochloromethane	10.64	128	350117	10.02	ug/L	96
17) Chloroform	10.79	83	1419360	9.98	ug/L	99
18) 1,1,1-Trichloroethane	11.10	97	1387083	10.07	ug/L	97
19) Carbon tetrachloride	11.38	117	1306108	10.03	ug/L	98
20) 1,1-Dichloropropene	11.38	75	1357386	10.56	ug/L	99
21) Benzene	11.73	78	2485237	9.42	ug/L	99
22) 1,2-Dichloroethane	11.76	62	578805	9.79	ug/L	96
23) Trichloroethene	12.83	95	1110688	10.15	ug/L	99
24) 1,2-Dichloropropane	13.20	63	921138	10.06	ug/L	99
25) Dibromomethane	13.41	93	405939	10.11	ug/L	94
26) Bromodichloromethane	13.66	83	1204032	10.16	ug/L	98
27) cis-1,3-Dichloropropene	14.42	75	1121941	10.50	ug/L	100
28) Toluene	14.99	92	1769051	9.51	ug/L	100
29) trans-1,3-Dichloropropene	15.34	75	726415	9.85	ug/L	99
30) 1,1,2-Trichloroethane	15.66	83	398112	10.05	ug/L	97
31) Tetrachloroethene	15.94	166	1300976	9.85	ug/L	98
32) 1,3-Dichloropropane	15.95	76	753799	10.05	ug/L	100
33) Dibromochloromethane	16.35	129	793302	10.06	ug/L	100
34) 1,2-Dibromoethane	16.56	107	582895	10.10	ug/L	97
35) Chlorobenzene	17.41	112	2091393	9.75	ug/L	100
37) Ethylbenzene	17.58	91	3603145	9.42	ug/L	99
38) Xylene (para & meta)	17.79	106	2791038	19.29	ug/L	98
39) Xylene (Ortho)	18.50	106	1300469	9.79	ug/L	98
40) Styrene	18.52	104	2001856	9.82	ug/L	98
41) Bromoform	18.86	173	431887	10.00	ug/L	98

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

Quantitation Report

Data File : d:\hpchem\1\data\c0487.d
Acq On : 6 Dec 95 1:29 am
Sample : 10 PPB QCS
Misc : 25 ML
Quant Time: Dec 6 10:53 1995

Vial: 16 082
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
42)	Isopropylbenzene	19.14	105	3867892	10.47	ug/L	m	0
44)	Bromobenzene	19.70	156	911419	9.52	ug/L		99
45)	1,1,2,2-Tetrachloroethane	19.66	83	520620	10.74	ug/L		100
46)	1,2,3-Trichloropropane	19.75	75	472673	9.49	ug/L		90
47)	n-Propylbenzene	19.88	91	4934911	9.78	ug/L		99
48)	2-Chlorotoluene	20.06	91	2804675	9.51	ug/L		99
49)	4-Chlorotoluene	20.24	91	3210805	9.77	ug/L		100
50)	1,3,5-Trimethylbenzene	20.19	105	2971318	9.27	ug/L		100
51)	tert-Butylbenzene	20.79	119	3518602	9.77	ug/L		98
52)	1,2,4-Trimethylbenzene	20.88	105	2892431	9.03	ug/L		99
53)	sec-Butylbenzene	21.19	105	4865255	9.95	ug/L		99
54)	1,3-Dichlorobenzene	21.41	146	1840570	9.71	ug/L		100
55)	4-Isopropyltoluene	21.45	119	3822454	9.73	ug/L		100
56)	1,4-Dichlorobenzene	21.57	146	1796116	9.67	ug/L		100
58)	1,2-Dichlorobenzene	22.25	146	1450528	9.68	ug/L		96
59)	n-Butylbenzene	22.20	91	3817746	9.57	ug/L		100
60)	1,2-Dibromo-3-chloropropan	23.66	75	100186	9.78	ug/L		96
61)	1,2,4-Trichlorobenzene	25.21	180	1134439	9.35	ug/L		97
62)	Hexachlorobutadiene	25.54	225	1034757	9.81	ug/L		100
63)	Naphthalene	25.68	128	1120702	9.56	ug/L		100
64)	1,2,3-Trichlorobenzene	26.18	180	854149	9.66	ug/L		97
66)	tert-Butyl Alcohol	8.35	59	31661	23.16	ug/L		100

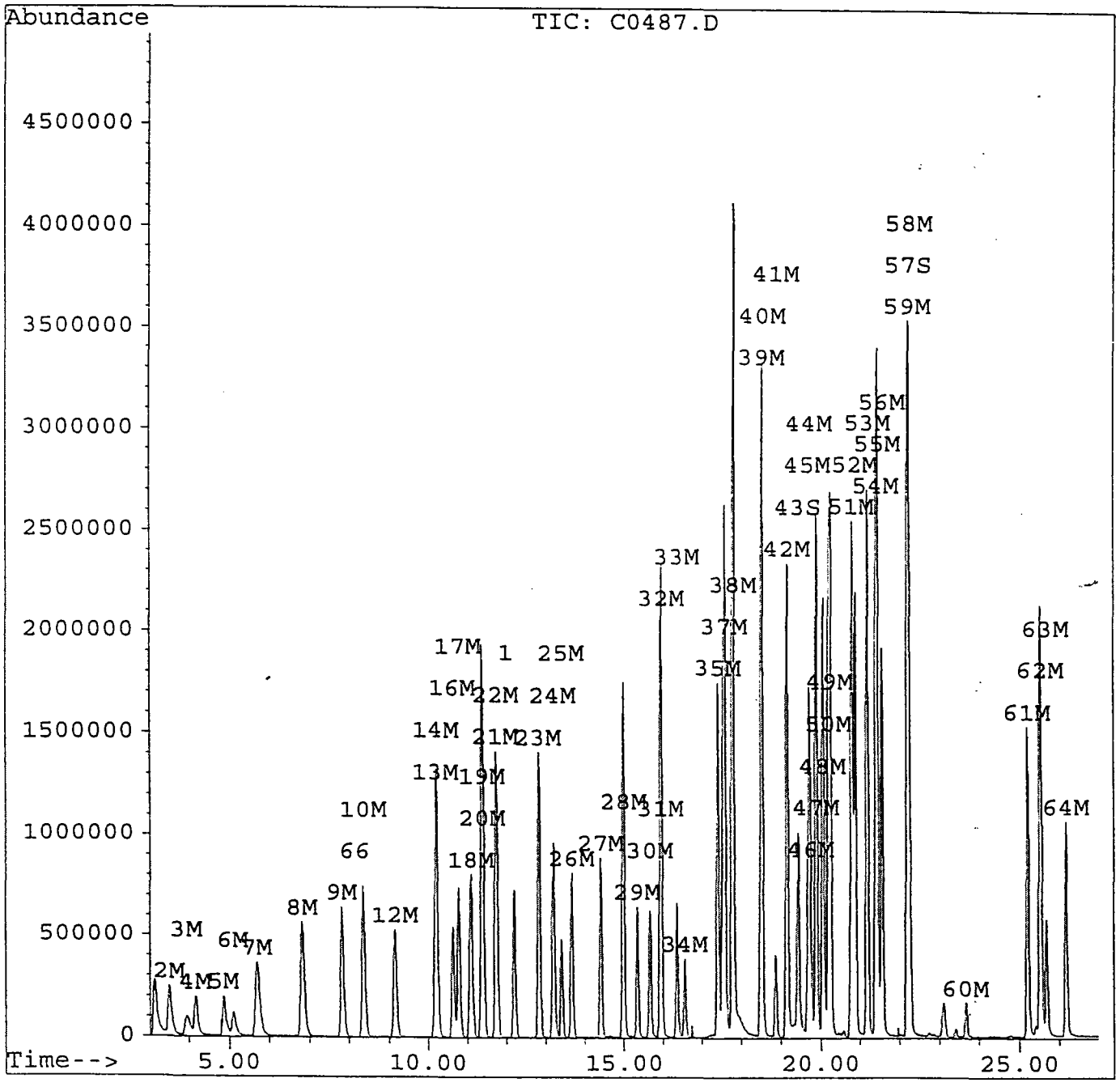
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c0487.d
Acq On : 6 Dec 95 1:29 am
Sample : 10 PPB QCS
Misc : 25 ML
Quant Time: Dec 6 10:53 1995

Vial: 16 083
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : d:\hpchem\1\data\c0488.d
Acq On : 6 Dec 95 2:04 am
Sample : 1 STANDARD
Misc : 25 ML
Quant Time: Dec 6 2:31 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 : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	12.21	96	1495748	5.00	ug/L	0.00
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.43	95	795125	4.92	ug/L	98.48%
57) 1,2-Dichlorobenzene-d4	22.22	152	509830	5.04	ug/L	100.70%
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.52	85	93640	1.16	ug/L	96
3) Chloromethane	3.95	50	66428	1.08	ug/L	92
4) Vinyl chloride	4.16	62	74051	1.08	ug/L	99
5) Bromomethane	4.88	94	54917	1.16	ug/L	100
6) Chloroethane	5.11	64	46540	1.22	ug/L	95
7) Trichlorofluoromethane	5.69	101	128110	1.08	ug/L	96
8) 1,1-Dichloroethene	6.80	96	79925	1.13	ug/L	90
9) Methylene chloride	7.82	84	287691	4.06	ug/L	100
10) trans-1,2-Dichloroethene	8.36	96	88565	1.09	ug/L	96
12) 1,1-Dichloroethane	9.15	63	166419	1.10	ug/L	99
13) 2,2-Dichloropropane	10.21	77	111099	0.88	ug/L	94
14) cis-1,2-Dichloroethene	10.21	96	88678	1.12	ug/L	89
16) Bromochloromethane	10.64	128	38675	1.12	ug/L	95
17) Chloroform	10.79	83	153394	1.09	ug/L	98
18) 1,1,1-Trichloroethane	11.10	97	143033	1.05	ug/L	97
19) Carbon tetrachloride	11.38	117	133995	1.04	ug/L	97
20) 1,1-Dichloropropene	11.37	75	137827	1.09	ug/L	98
21) Benzene	11.74	78	287877	1.11	ug/L	100
22) 1,2-Dichloroethane	11.76	62	67024	1.15	ug/L	99
23) Trichloroethene	12.83	95	118292	1.10	ug/L	98
24) 1,2-Dichloropropane	13.20	63	103547	1.15	ug/L	99
25) Dibromomethane	13.41	93	46440	1.17	ug/L	96
26) Bromodichloromethane	13.67	83	127858	1.09	ug/L	98
27) cis-1,3-Dichloropropene	14.42	75	113825	1.08	ug/L	99
28) Toluene	14.99	92	232344	1.27	ug/L	98
29) trans-1,3-Dichloropropene	15.34	75	80559	1.11	ug/L	98
30) 1,1,2-Trichloroethane	15.66	83	50406	1.29	ug/L	97
31) Tetrachloroethene	15.93	166	137365	1.05	ug/L	95
32) 1,3-Dichloropropane	15.95	76	94663	1.28	ug/L	99
33) Dibromochloromethane	16.35	129	88779	1.14	ug/L	99
34) 1,2-Dibromoethane	16.56	107	70338	1.24	ug/L	100
35) Chlorobenzene	17.42	112	248085	1.17	ug/L	98
36) 1,1,1,2-Tetrachloroethane	17.54	131	106148	1.21	ug/L	95
37) Ethylbenzene	17.59	91	438748	1.16	ug/L	99
38) Xylene (para & meta)	17.80	106	344561	2.41	ug/L	96
39) Xylene (Ortho)	18.50	106	157828	1.20	ug/L	97
40) Styrene	18.52	104	236316	1.18	ug/L	97

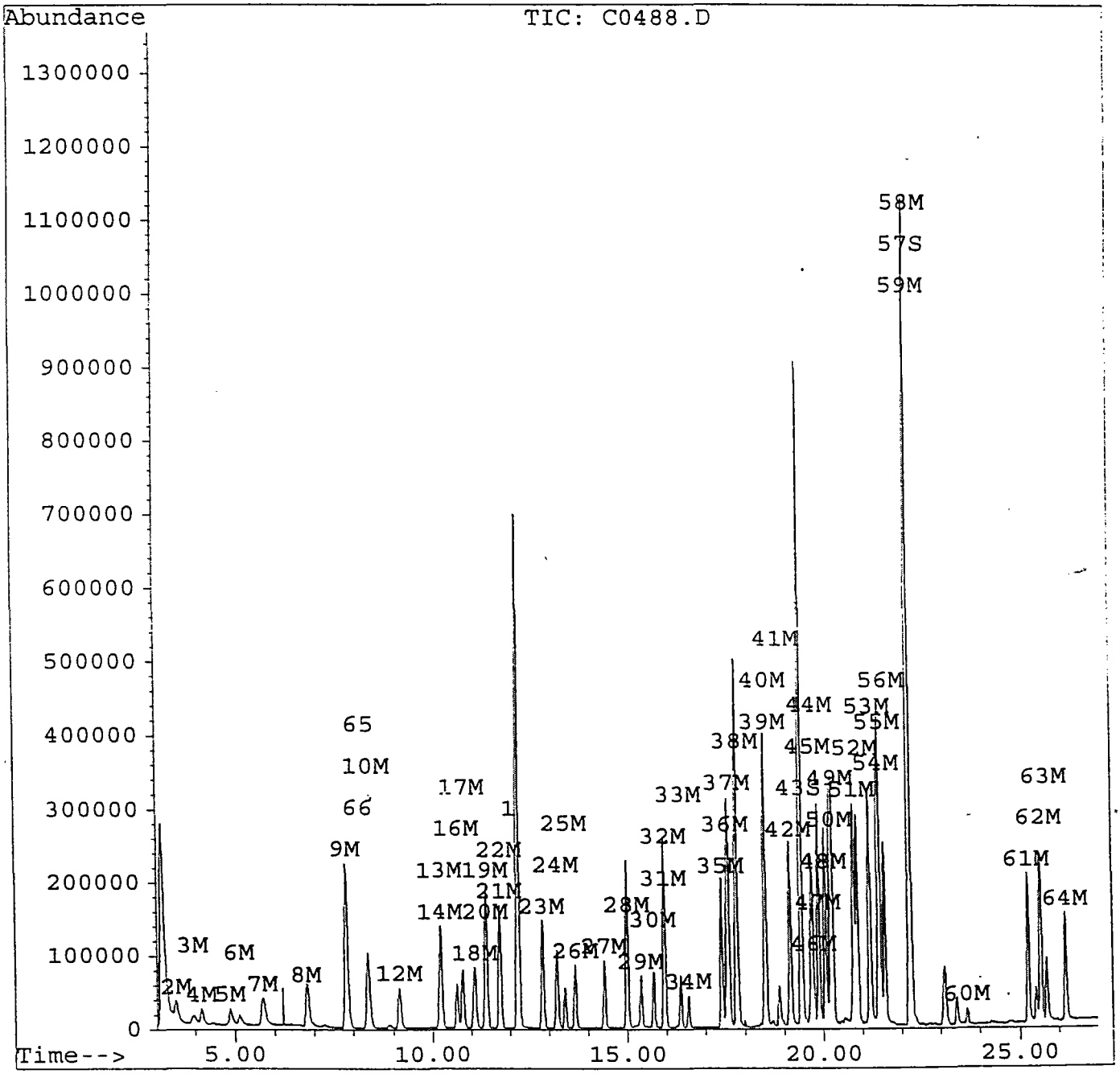
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c0488.d
Acq On : 6 Dec 95 2:04 am
Sample : 1 STANDARD
Misc : 25 ML
Quant Time: Dec 6 2:31 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 : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration



8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

087

Lab Name: EMSL ANALYTICAL Contract: _____

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

Lab File ID (Standard): C0426.D Date Analyzed: 12/2/95

Instrument ID: 5972-INSTRUMENT 1 Time Analyzed: 1510

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	1705729	12.16				
	UPPER LIMIT	3411458	12.66				
	LOWER LIMIT	852865	11.66				
	SAMPLE NO.						
01	10 QCS	1696795	12.17				
02	1 STND	1696953	12.18				
03	VBLK01	1681347	12.18				
04	9554060V	1653394	12.18				
05	9554061V	1699146	12.18				
06	9554062V	1709216	12.18				
07	9554101V	1741817	12.18				
08	9554102V	1664338	12.18				
09	9554063V	1656749	12.18				
10	9554060MS	1703293	12.18				
11	9554060MSD	1698292	12.18				
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

083

Lab Name: EMSL ANALYTICAL Contract: _____

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

Lab File ID (Standard): C0473.D Date Analyzed: 12/5/95

Instrument ID: 5972-INSTRUMENT 1 Time Analyzed: 1724

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	1824708	12.19				
	UPPER LIMIT	2372120	12.69				
	LOWER LIMIT	1277296	11.69				
	SAMPLE NO.						
01	VBLK01	1696123	12.03				
02	9554553V	1687824	12.20				
03	9554554V	1699615	12.21				
04	9554109V	1657783	12.20				
05	9554110V	1623919	12.21				
06	9554551V	1650134	12.20				
07	9554552V	1594528	12.21				
08	9554555V	1562330	12.21				
09	9554557V	1493739	12.20				
10	9554558V	1563969	12.21				
11	9554552MS	1549748	12.21				
12	9554552MSD	1512739	12.21				
13	10 QCS	1516340	12.21				
14	1 STND	1495748	12.21				
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

FMETL# 089

Trip Blank

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: 482 NJDEP MW#: TB

Matrix: (soil/water) WATER Lab Sample ID: 9554553V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0475.D

Level: (low/med) LOW Date Received: 11/27/95

% Moisture: not dec. NA Date Analyzed: 12/5/95

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	.70	B
156-60-65	trans-1,2-Dichloroethene	.50	U
75-34-3	1,1-Dichloroethane	.50	U
594-20-7	2,2-Dichloropropane	.50	U
156-59-2	cis-1,2-Dichloroethene	.50	U
74-97-1	Bromochloromethane	.50	U
67-66-3	Chloroform	.50	U
71-55-6	1,1,1-Trichloroethane	.50	U
56-23-1	Carbon tetrachloride	.50	U
563-58-6	1,1-Dichloropropene	.50	U
71-43-2	Benzene	.50	U
107-06-2	1,2-Dichloroethane	.50	U
79-01-6	Trichloroethene	.50	U
78-87-1	1,2-Dichloropropane	.50	U
74-95-3	Dibromomethane	.50	U
75-27-4	Bromodichloromethane	.50	U
10061-01-1	cis-1,3-Dichloropropene	.50	U
108-88-3	Toluene	.50	U
10061-02-6	trans-1,3-Dichloropropene	.50	U
79-00-1	1,1,2-Trichloroethane	.50	U
127-18-4	Tetrachloroethene	.50	U
142-28-9	1,3-Dichloropropane	.50	U
124-48-1	Dibromochloromethane	.50	U
106-93-4	1,2-Dibromomethane	.50	U
108-90-7	Chlorobenzene	.50	U
630-20-6	1,1,1,2-Tetrachloroethane	.50	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 090

Trip Blank

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: 482 NJDEP MW#: TB

Matrix: (soil/water) WATER Lab Sample ID: 9554553V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0475.D

Level: (low/med) LOW Date Received: 11/27/95

% Moisture: not dec. NA Date Analyzed: 12/5/95

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 1.0

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
100-41-4	Ethylbenzene	.50	U
1330-29-7	Xylene (total)	.50	U
100-42-1	Styrene	.50	U
75-25-2	Bromoform	.50	U
98-82-8	Isopropylbenzene	.50	U
108-86-1	Bromobenzene	.50	U
79-34-1	1,1,2,2-Tetrachloroethane	.50	U
96-18-4	1,2,3-Trichloropropane	.50	U
103-65-1	n-Propylbenzene	.50	U
95-49-8	2-Chlorotoluene	.50	U
106-43-4	4-Chlorotoluene	.50	U
108-67-8	1,3,5-Trimethylbenzene	.50	U
98-06-6	tert-Butylbenzene	.50	U
95-63-6	1,2,4-Trimethylbenzene	.50	U
135-98-8	sec-Butylbenzene	.50	U
541-73-1	1,3-Dichlorobenzene	.50	U
99-87-6	4-Isopropyltoluene	.50	U
106-46-7	1,4-Dichlorobenzene	.50	U
95-50-1	1,2-Dichlorobenzene	.50	U
104-51-8	n-Butylbenzene	.50	U
96-12-8	1,2-Dibromo-3-chloropropane	.50	U
120-82-1	1,2,4-Trichlorobenzene	.50	U
87-68-3	Hexachlorobutadiene	.50	U
91-20-3	Naphthalene	.50	U
87-61-6	1,2,3-Trichlorobenzene	.50	U
1634-04-4	Methy-tertiary butyl ether	.50	U
75-65-0	tertiary-Butyl alcohol	2.0	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FMETL# 091

Trip Blank

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No. FT. MONMOUTH NJ Bldg: 482 NJDEP MW#: TB Group:

Matrix: (soil/water) WATER Lab Sample ID: 9554553V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0475.D

Level: (low/med) LOW Date Received: 11/27/95

% Moisture: not dec. NA Date Analyzed: 12/5/95

GC Column: DB-624 X 75M ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Concentration Units:

Number TICs found: 2 (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1. 109-99-9	Furan, tetrahydro-	10.74	3	J
2.	Column Bleed	23.11	1	J
3.				
4.				
5.				
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8.				
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Quantitation Report

092

Data File : d:\hpchem\1\data\c0475.d
Acq On : 5 Dec 95 6:33 pm
Sample : 9554553 BLDG 482 TB
Misc : 25 ML
Quant Time: Dec 6 10:35 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 : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	12.20	96	1687824	5.00	ug/L	-0.01
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.43	95	900563	4.94	ug/L	98.84%
57) 1,2-Dichlorobenzene-d4	22.22	152	575548	5.04	ug/L	100.74%
Target Compounds						Qvalue
9) Methylene chloride	7.81	84	54437	0.68	ug/L	92

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

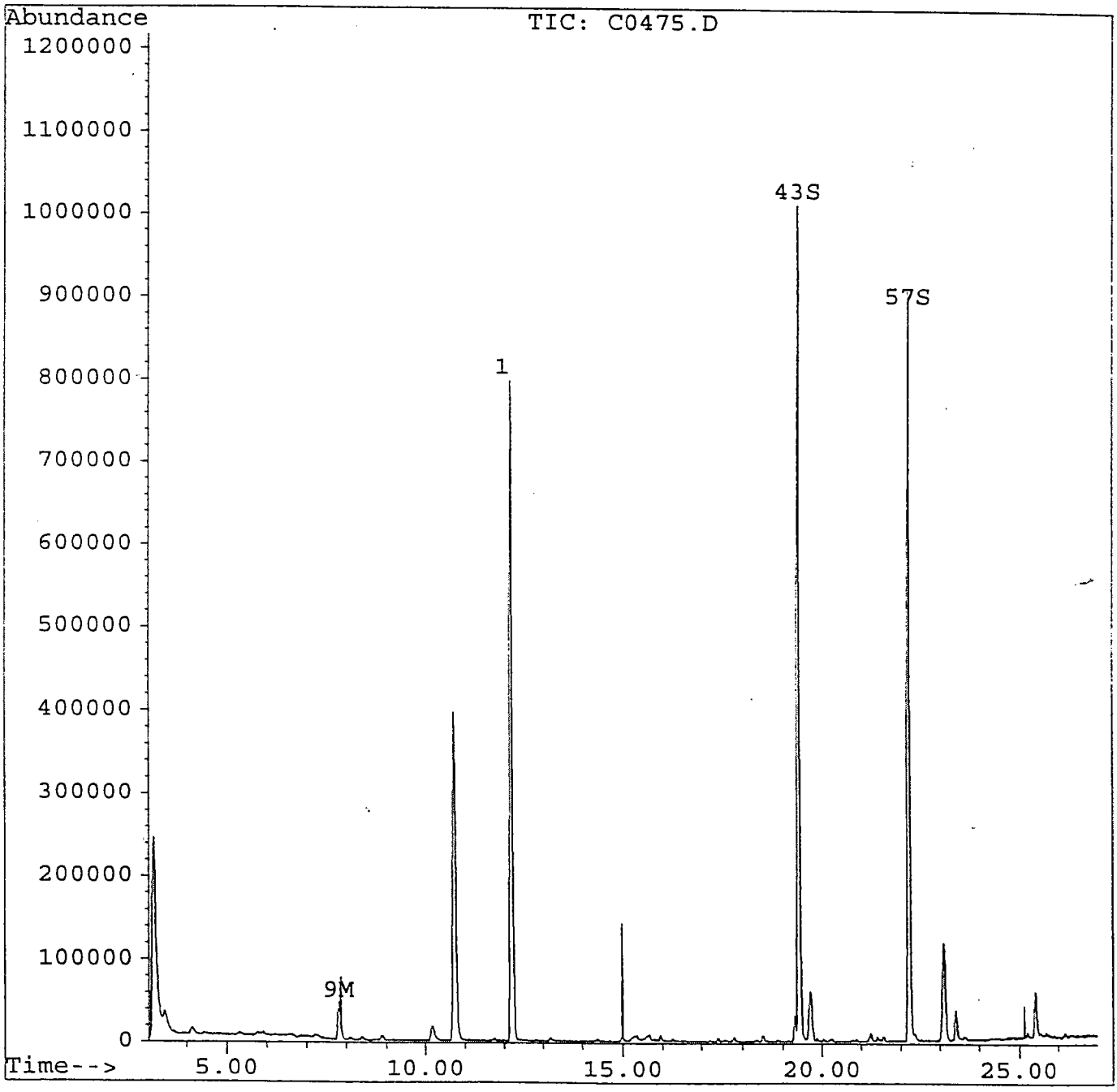
Quantitation Report

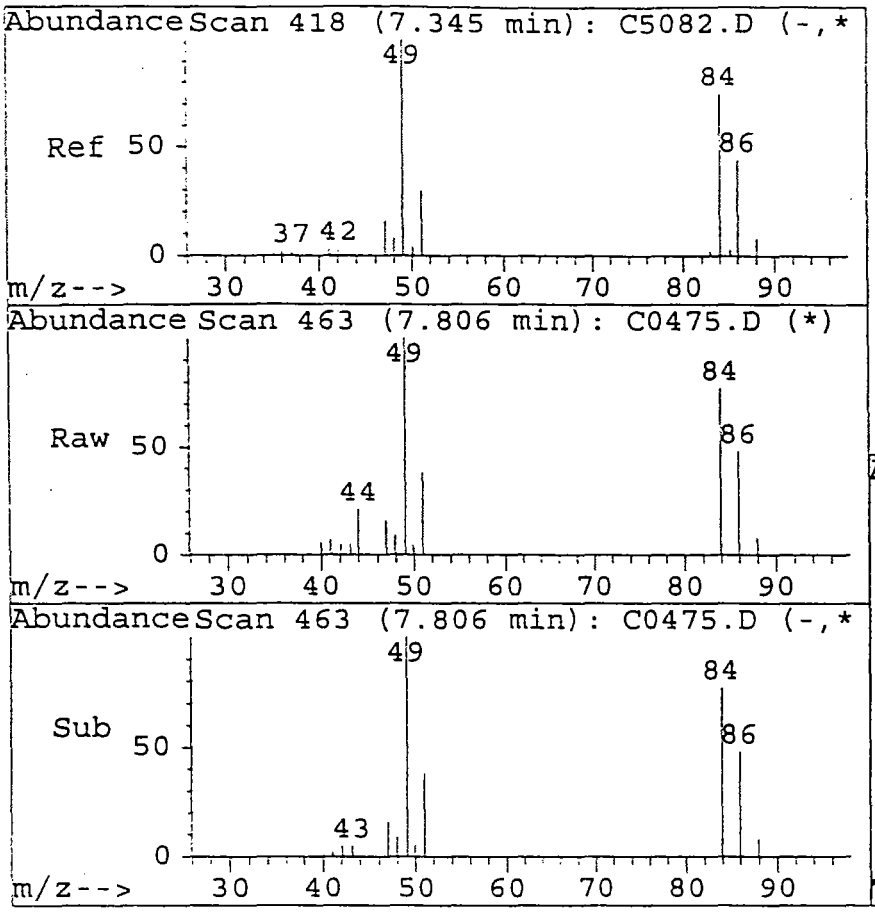
093

Data File : d:\hpchem\1\data\c0475.d
Acq On : 5 Dec 95 6:33 pm
Sample : 9554553 BLDG 482 TB
Misc : 25 ML
Quant Time: Dec 6 10:35 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 : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration



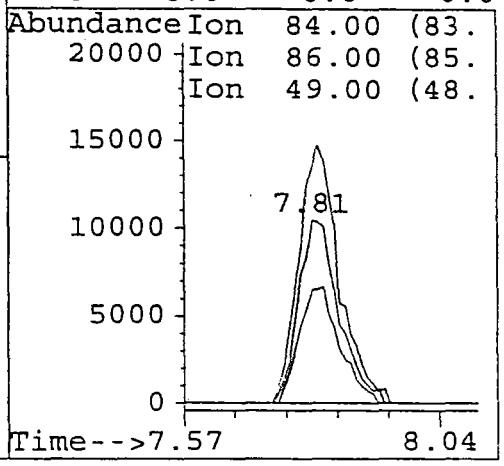


#9
Methylene chloride
Concen: 0.68 ug/L
RT: 7.81 min Scan# 463
Delta R.T. -0.02 min
Lab File: c0475.d
Acq: 5 Dec 95 6:33 pm

094

Tgt Ion:84 Resp: 54437

Ion	Ratio	Lower	Upper
84	100		
86	62.1	45.2	85.2
49	129.6	121.1	161.1
0	0.0	0.0	0.0



Library Search Compound Report

095

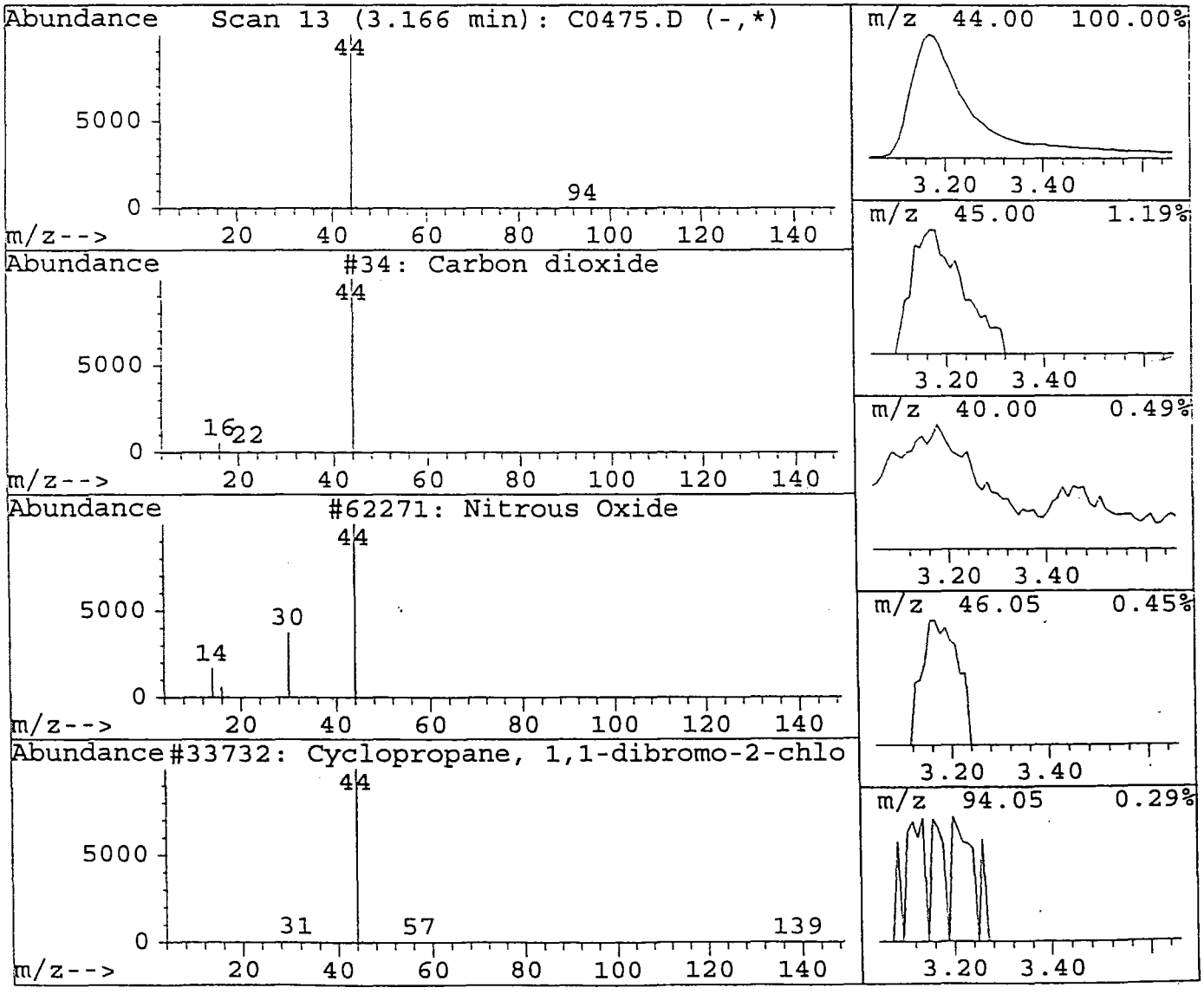
Data File : d:\hpchem\1\data\c0475.d
Acq On : 5 Dec 95 6:33 pm
Sample : 9554553 BLDG 482 TB
Misc : 25 ML

Vial: 4
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Library : C:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
3.17	2.55 ug/L	1800959	Fluorobenzene	12.20

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Carbon dioxide	34	000124-38-9	4
2	Nitrous Oxide	62271	010024-97-2	3
3	Cyclopropane, 1,1-dibromo-2-chloro-	33732	024071-57-6	2
4	Carbamic acid, monoammonium salt	391	001111-78-0	2
5	Acetaldehyde	62264	000075-07-0	2



Library Search Compound Report

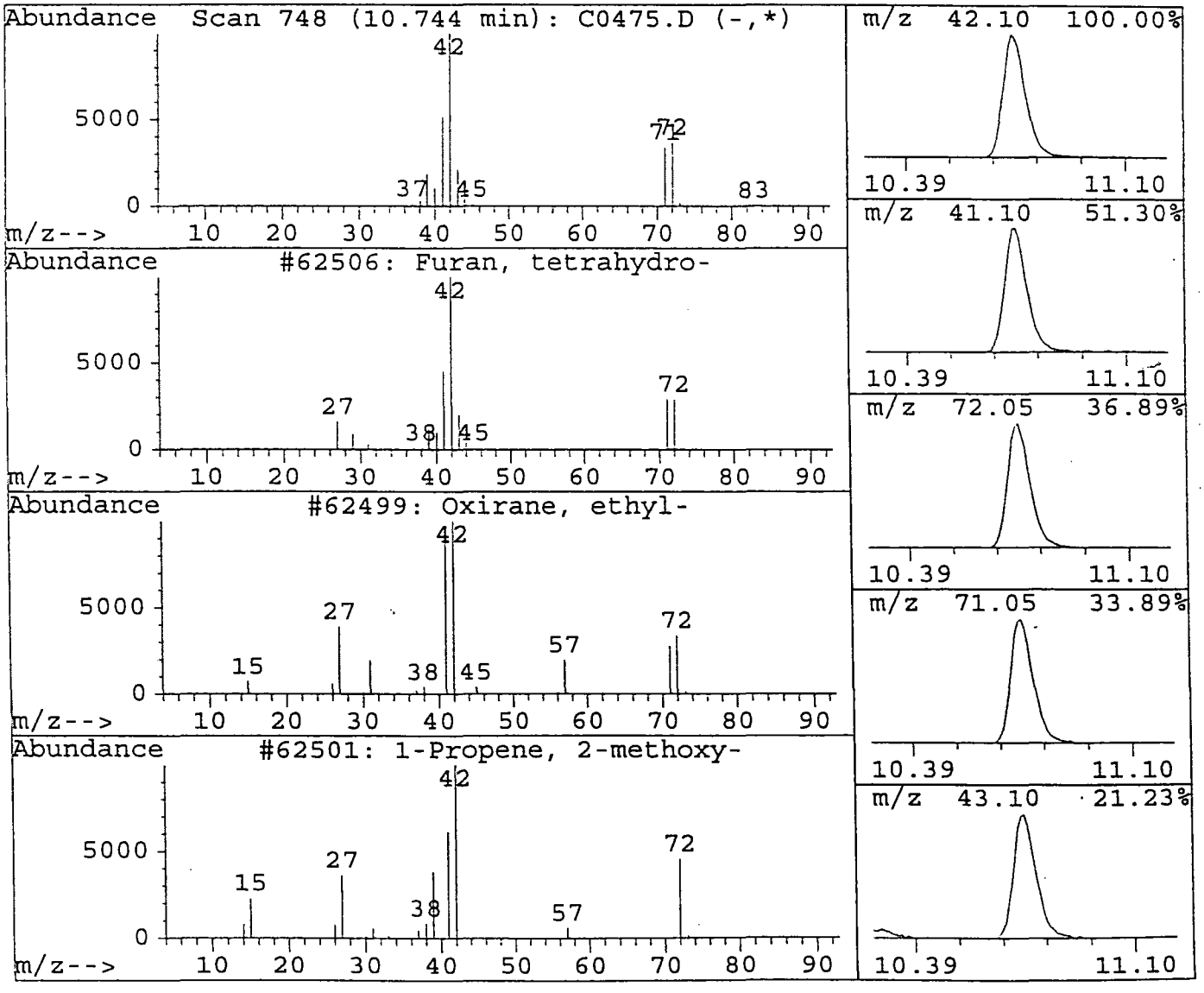
Data File : d:\hpchem\1\data\c0475.d
Acq On : 5 Dec 95 6:33 pm
Sample : 9554553 BLDG 482 TB
Misc : 25 ML

Vial: 4
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Library : C:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
10.74	2.84 ug/L	2005011	Fluorobenzene	12.20

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Furan, tetrahydro-	62506	000109-99-9	90
2	Oxirane, ethyl-	62499	000106-88-7	39
3	1-Propene, 2-methoxy-	62501	000116-11-0	38
4	3-Buten-1-ol	264	000627-27-0	4
5	Oxirane, 2,2-dimethyl-	62511	000558-30-5	46



Library Search Compound Report

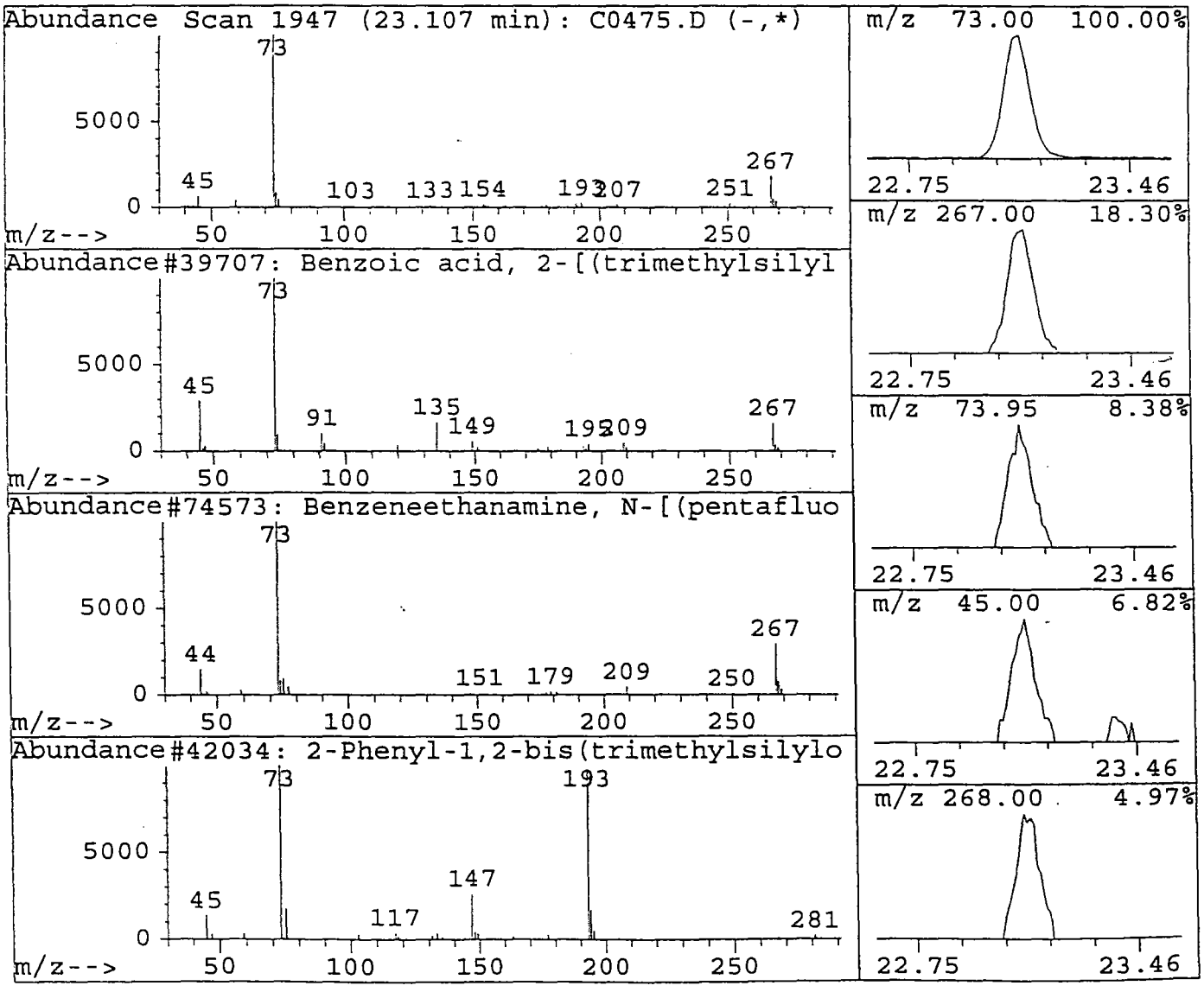
Data File : d:\hpchem\1\data\c0475.d
Acq On : 5 Dec 95 6:33 pm
Sample : 9554553 BLDG 482 TB
Misc : 25 ML

Vial: 4
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Library : C:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
23.11	0.81 ug/L	573643	Fluorobenzene	12.20

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzoic acid, 2-[(trimethylsilyl)ox	39707	003789-85-3	9
2	Benzeneethanamine, N-[(pentafluorop	74573	055429-85-1	9
3	2-Phenyl-1,2-bis(trimethylsilyloxy)	42034	000000-00-0	2
4	N-Ethylformamide	292	000627-45-2	3
5	Silane, 9H-fluoren-9-yltrimethyl-	31629	007385-10-6	4



1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 098

Field Blank

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: 482 NJDEP MW#: FB

Matrix: (soil/water) WATER Lab Sample ID: 9554554V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0476.D

Level: (low/med) LOW Date Received: 11/27/95

% Moisture: not dec. NA Date Analyzed: 12/5/95

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	.60	B
156-60-65	trans-1,2-Dichloroethene	.50	U
75-34-3	1,1-Dichloroethane	.50	U
594-20-7	2,2-Dichloropropane	.50	U
156-59-2	cis-1,2-Dichloroethene	.50	U
74-97-1	Bromochloromethane	.50	U
67-66-3	Chloroform	.50	U
71-55-6	1,1,1-Trichloroethane	.50	U
56-23-1	Carbon tetrachloride	.50	U
563-58-6	1,1-Dichloropropene	.50	U
71-43-2	Benzene	.50	U
107-06-2	1,2-Dichloroethane	.50	U
79-01-6	Trichloroethene	.50	U
78-87-1	1,2-Dichloropropane	.50	U
74-95-3	Dibromomethane	.50	U
75-27-4	Bromodichloromethane	.50	U
10061-01-1	cis-1,3-Dichloropropene	.50	U
108-88-3	Toluene	.50	U
10061-02-6	trans-1,3-Dichloropropene	.50	U
79-00-1	1,1,2-Trichloroethane	.50	U
127-18-4	Tetrachloroethene	.50	U
142-28-9	1,3-Dichloropropane	.50	U
124-48-1	Dibromochloromethane	.50	U
106-93-4	1,2-Dibromomethane	.50	U
108-90-7	Chlorobenzene	.50	U
630-20-6	1,1,1,2-Tetrachloroethane	.50	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 093

Field Blank

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: 482 NJDEP MW#: FB

Matrix: (soil/water) WATER Lab Sample ID: 9554554V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0476.D

Level: (low/med) LOW Date Received: 11/27/95

% Moisture: not dec. NA Date Analyzed: 12/5/95

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 1.0

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
100-41-4	Ethylbenzene	.50	U
1330-29-7	Xylene (total)	.50	U
100-42-1	Styrene	.50	U
75-25-2	Bromoform	.50	U
98-82-8	Isopropylbenzene	.50	U
108-86-1	Bromobenzene	.50	U
79-34-1	1,1,2,2-Tetrachloroethane	.50	U
96-18-4	1,2,3-Trichloropropane	.50	U
103-65-1	n-Propylbenzene	.50	U
95-49-8	2-Chlorotoluene	.50	U
106-43-4	4-Chlorotoluene	.50	U
108-67-8	1,3,5-Trimethylbenzene	.50	U
98-06-6	tert-Butylbenzene	.50	U
95-63-6	1,2,4-Trimethylbenzene	.50	U
135-98-8	sec-Butylbenzene	.50	U
541-73-1	1,3-Dichlorobenzene	.50	U
99-87-6	4-Isopropyltoluene	.50	U
106-46-7	1,4-Dichlorobenzene	.50	U
95-50-1	1,2-Dichlorobenzene	.50	U
104-51-8	n-Butylbenzene	.50	U
96-12-8	1,2-Dibromo-3-chloropropane	.50	U
120-82-1	1,2,4-Trichlorobenzene	.50	U
87-68-3	Hexachlorobutadiene	.50	U
91-20-3	Naphthalene	.50	U
87-61-6	1,2,3-Trichlorobenzene	.50	U
1634-04-4	Methy-tertiary butyl ether	.50	U
75-65-0	tertiary-Butyl alcohol	2.0	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FMETL# 100

Field Blank

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No. FT. MONMOUTH NJ Bldg: 482 NJDEP MW#: FB Group:

Matrix: (soil/water) WATER Lab Sample ID: 9554554V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0476.D

Level: (low/med) LOW Date Received: 11/27/95

% Moisture: not dec. NA Date Analyzed: 12/5/95

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

CAS Number	Compound Name	RT	Est. Conc.	Q
1.	Column Bleed	10.19	1	J
2. 109-99-9	Furan, tetrahydro-	10.75	3	J
3.	Column Bleed	19.71	1	J
4.	Unknown Hydrocarbon	23.10	2	J
5.				
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Quantitation Report

101

Data File : d:\hpchem\1\data\c0476.d
Acq On : 5 Dec 95 7:07 pm
Sample : 9554554 BLDG 482 FB
Misc : 25 ML
Quant Time: Dec 6 10:36 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 : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	12.21	96	1699615	5.00	ug/L	0.00
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.42	95	898069	4.89	ug/L	97.88%
57) 1,2-Dichlorobenzene-d4	22.22	152	575033	5.00	ug/L	99.96%
Target Compounds						Qvalue
9) Methylene chloride	7.83	84	44990	0.56	ug/L	91

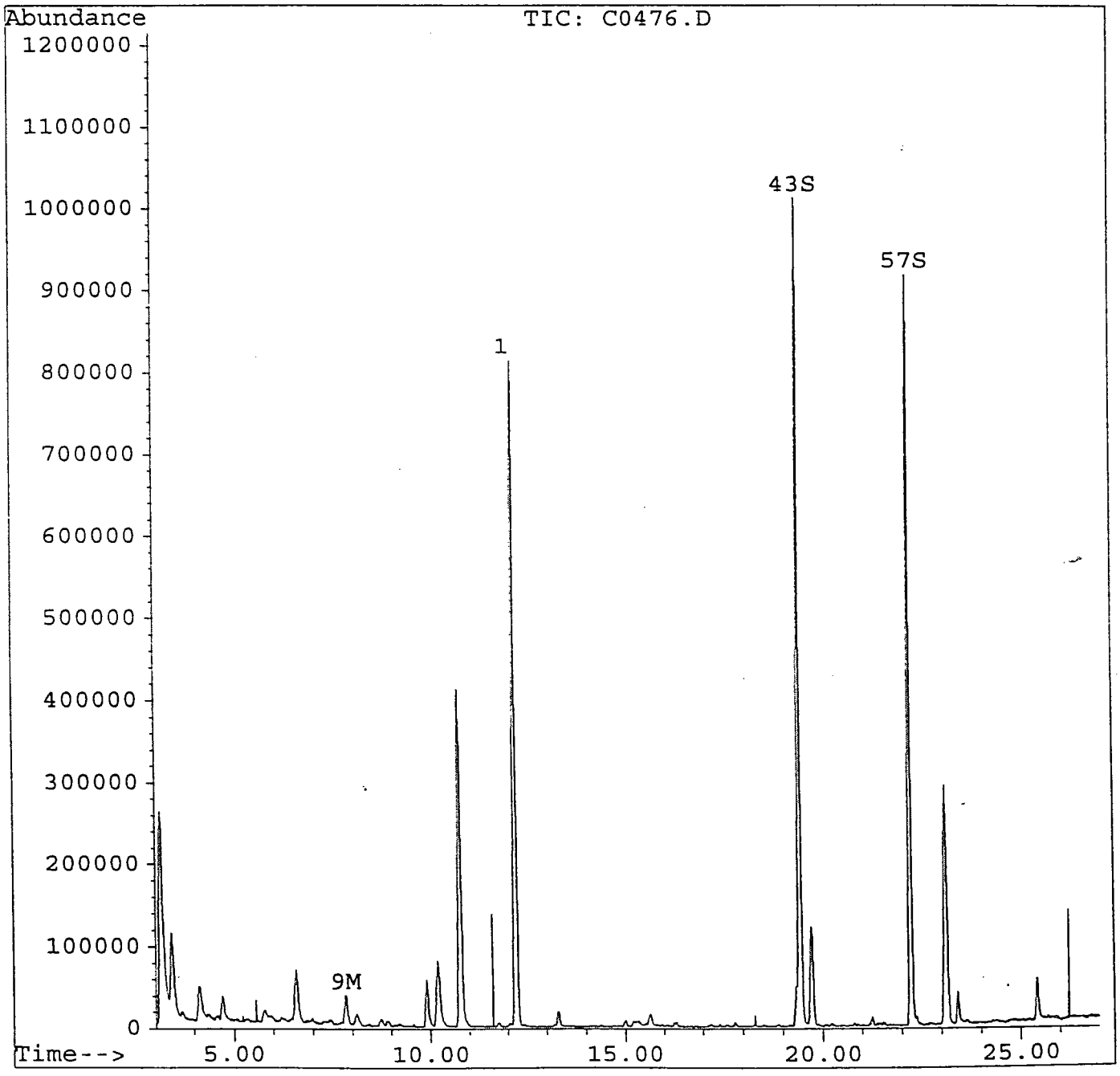
(#) = qualifier out of range (m) = manual integration

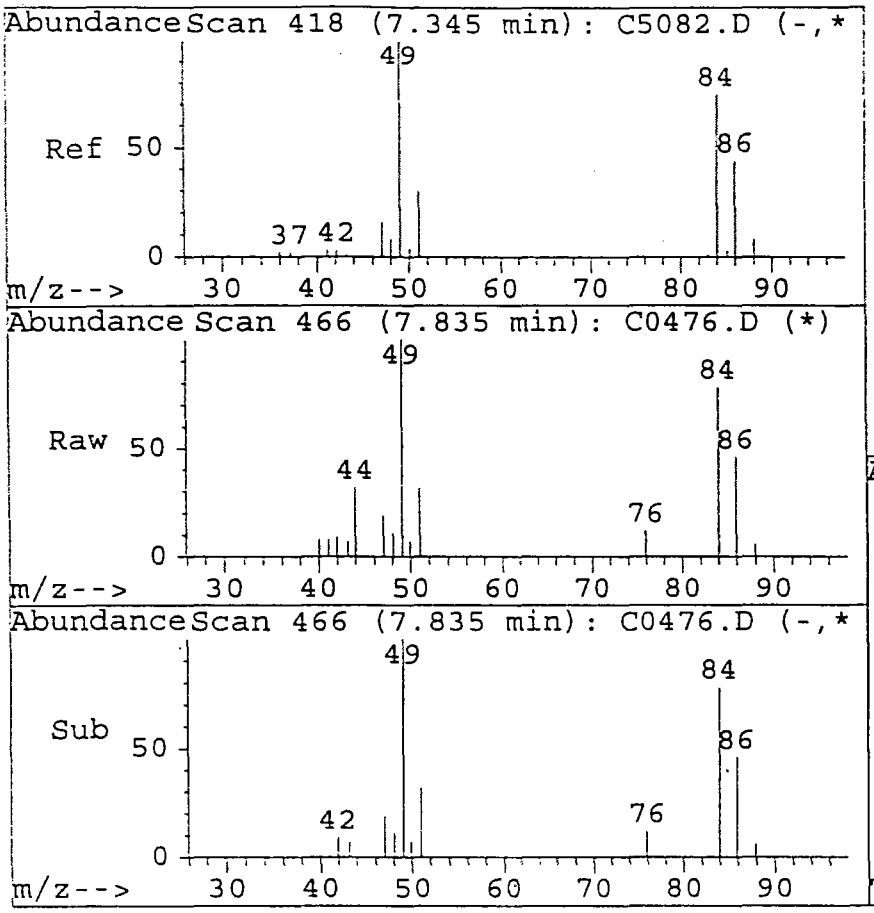
Quantitation Report

Data File : d:\hpchem\1\data\c0476.d
Acq On : 5 Dec 95 7:07 pm
Sample : 9554554 BLDG 482 FB
Misc : 25 ML
Quant Time: Dec 6 10:36 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 : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration

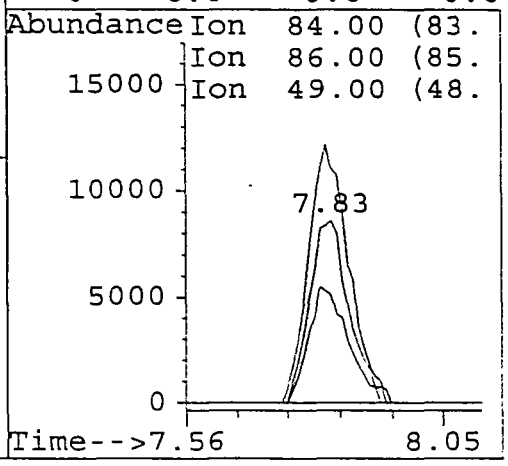




#9
Methylene chloride
Concen: 0.56 ug/L
RT: 7.83 min Scan# 466
Delta R.T. 0.01 min
Lab File: c0476.d
Acq: 5 Dec 95 7:07 pm

Tgt Ion:84 Resp: 44990

Ion	Ratio	Lower	Upper
84	100		
86	59.6	45.2	85.2
49	128.5	121.1	161.1
0	0.0	0.0	0.0



Library Search Compound Report

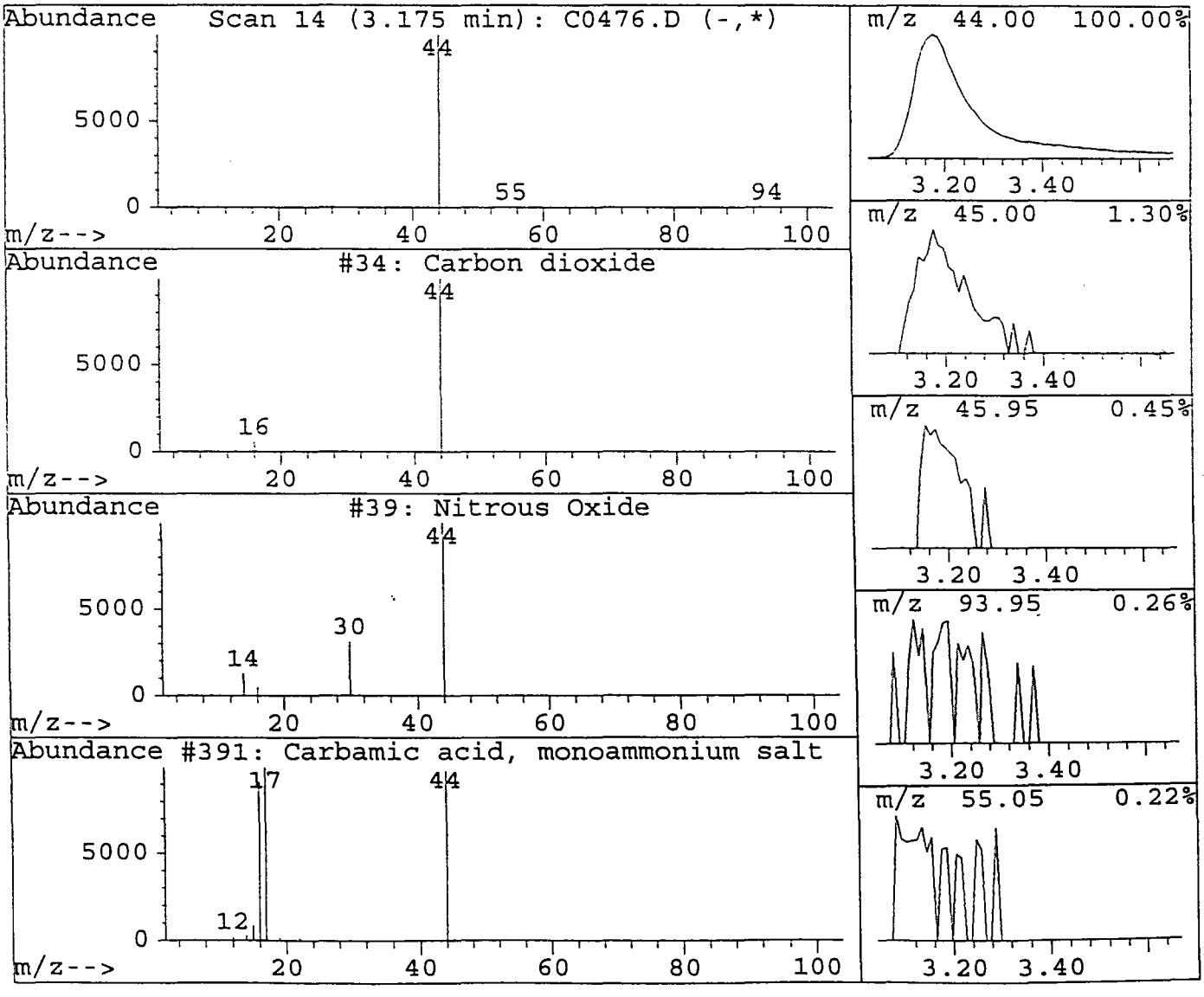
Data File : d:\hpchem\1\data\c0476.d
Acq On : 5 Dec 95 7:07 pm
Sample : 9554554 BLDG 482 FB
Misc : 25 ML

Vial: 5
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.
3.17	2.70 ug/L	1923726	Fluorobenzene	12.21

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Carbon dioxide	34	000124-38-9	4
2	Nitrous Oxide	39	010024-97-2	3
3	Carbamic acid, monoammonium salt	391	001111-78-0	2
4	Cyclopropane, 1,1-dibromo-2-chloro-	33732	024071-57-6	2
5	Acetaldehyde	62264	000075-07-0	2



Library Search Compound Report

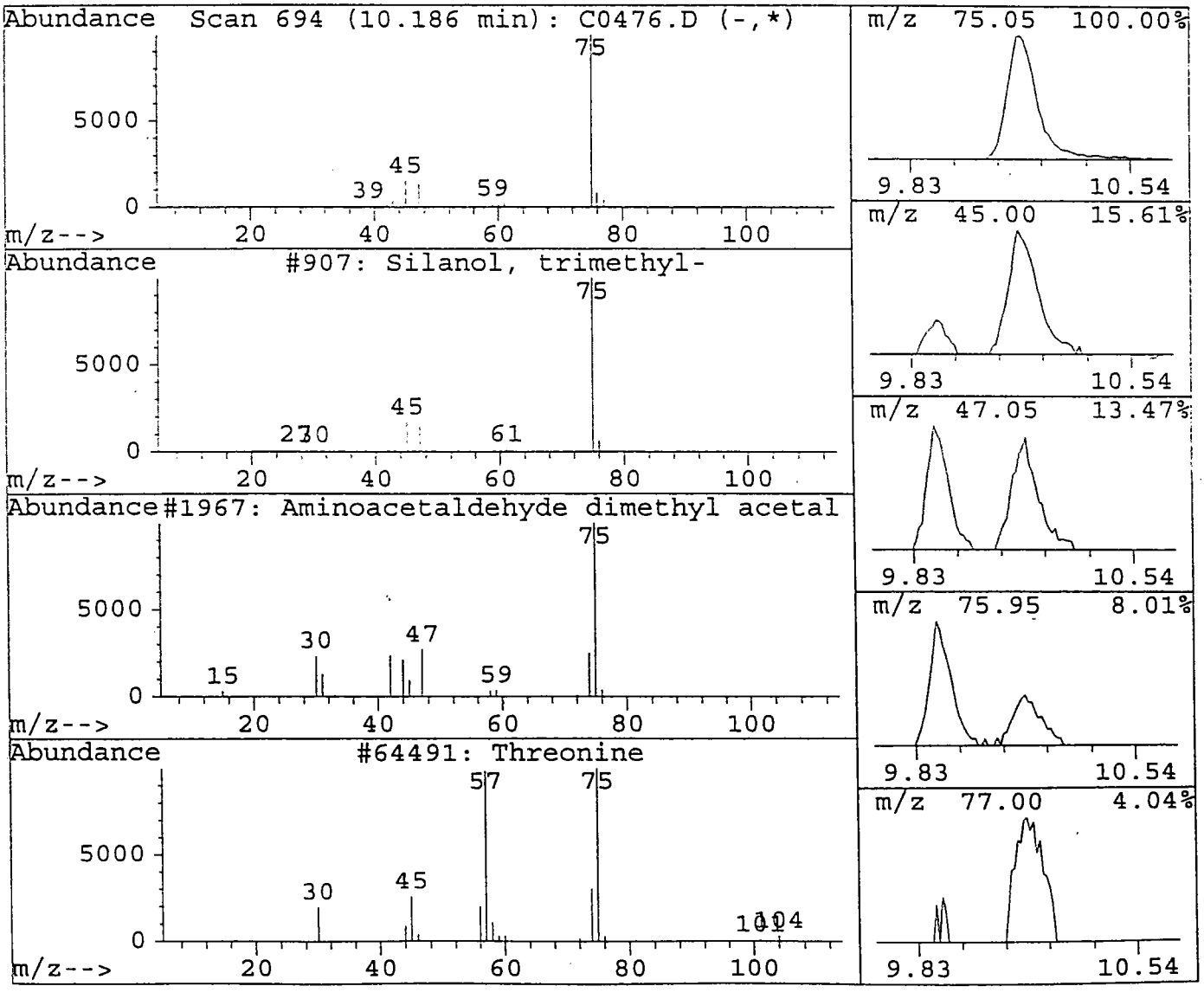
Data File : d:\hpchem\1\data\c0476.d
Acq On : 5 Dec 95 7:07 pm
Sample : 9554554 BLDG 482 FB
Misc : 25 ML

Vial: 5
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.
10.19	0.65 ug/L	462371	Fluorobenzene	12.21

Hit# of 19	Tentative ID	Ref#	CAS#	Qual
1	Silanol, trimethyl-	907	001066-40-6	64
2	Aminoacetaldehyde dimethyl acetal	1967	022483-09-6	1
3	Threonine	64491	000072-19-5	1
4	Penicillamine	9413	000052-67-5	1
5	Propanoic acid, heptyl ester	68350	002216-81-1	1



Library Search Compound Report

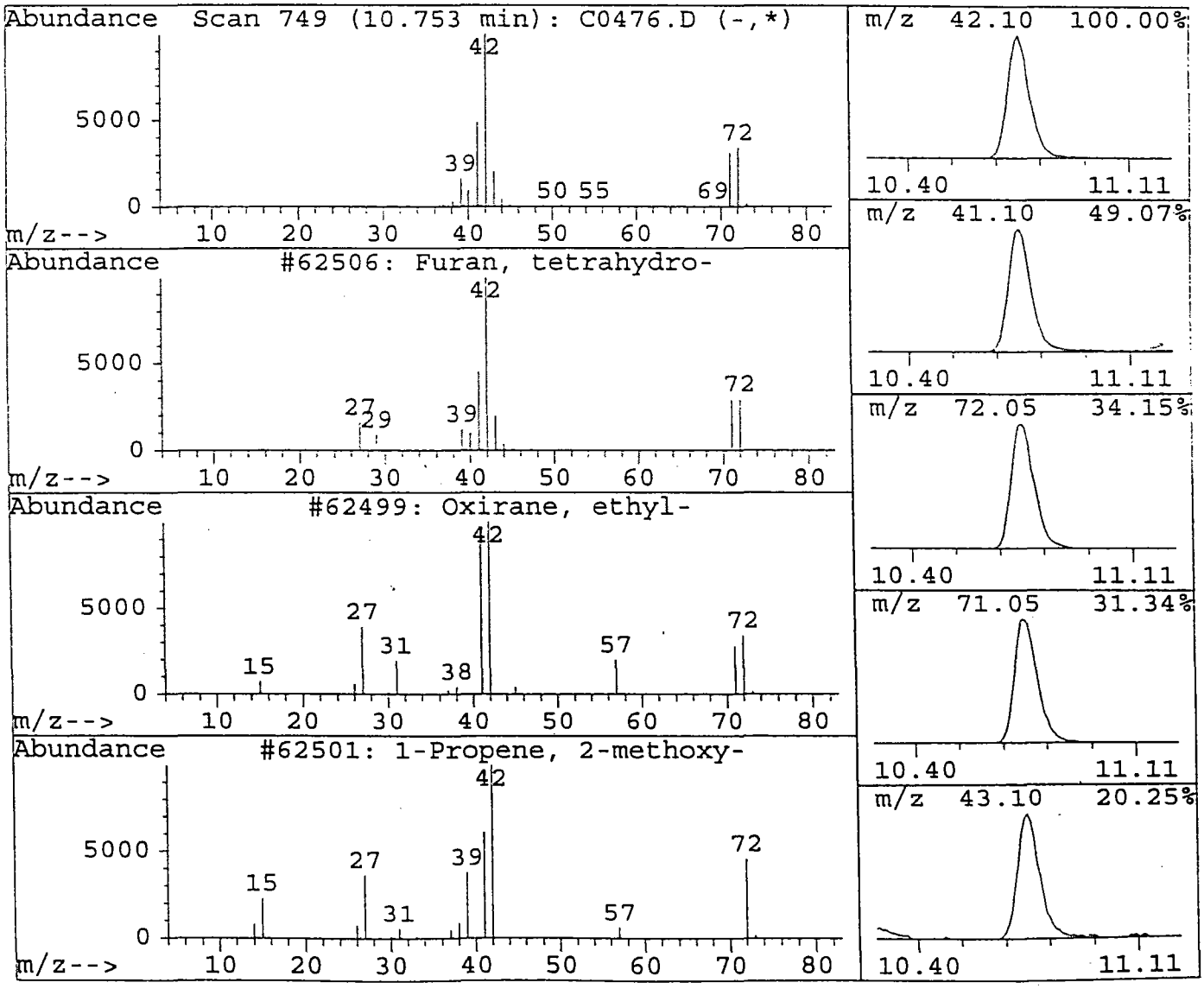
Data File : d:\hpchem\1\data\c0476.d
Acq On : 5 Dec 95 7:07 pm
Sample : 9554554 BLDG 482 FB
Misc : 25 ML

Vial: 5
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.
10.75	2.92 ug/L	2080661	Fluorobenzene	12.21

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Furan, tetrahydro-	62506	000109-99-9	91
2	Oxirane, ethyl-	62499	000106-88-7	39
3	1-Propene, 2-methoxy-	62501	000116-11-0	38
4	3-Buten-1-ol	264	000627-27-0	4
5	Ethenone	29	000463-51-4	3



Library Search Compound Report

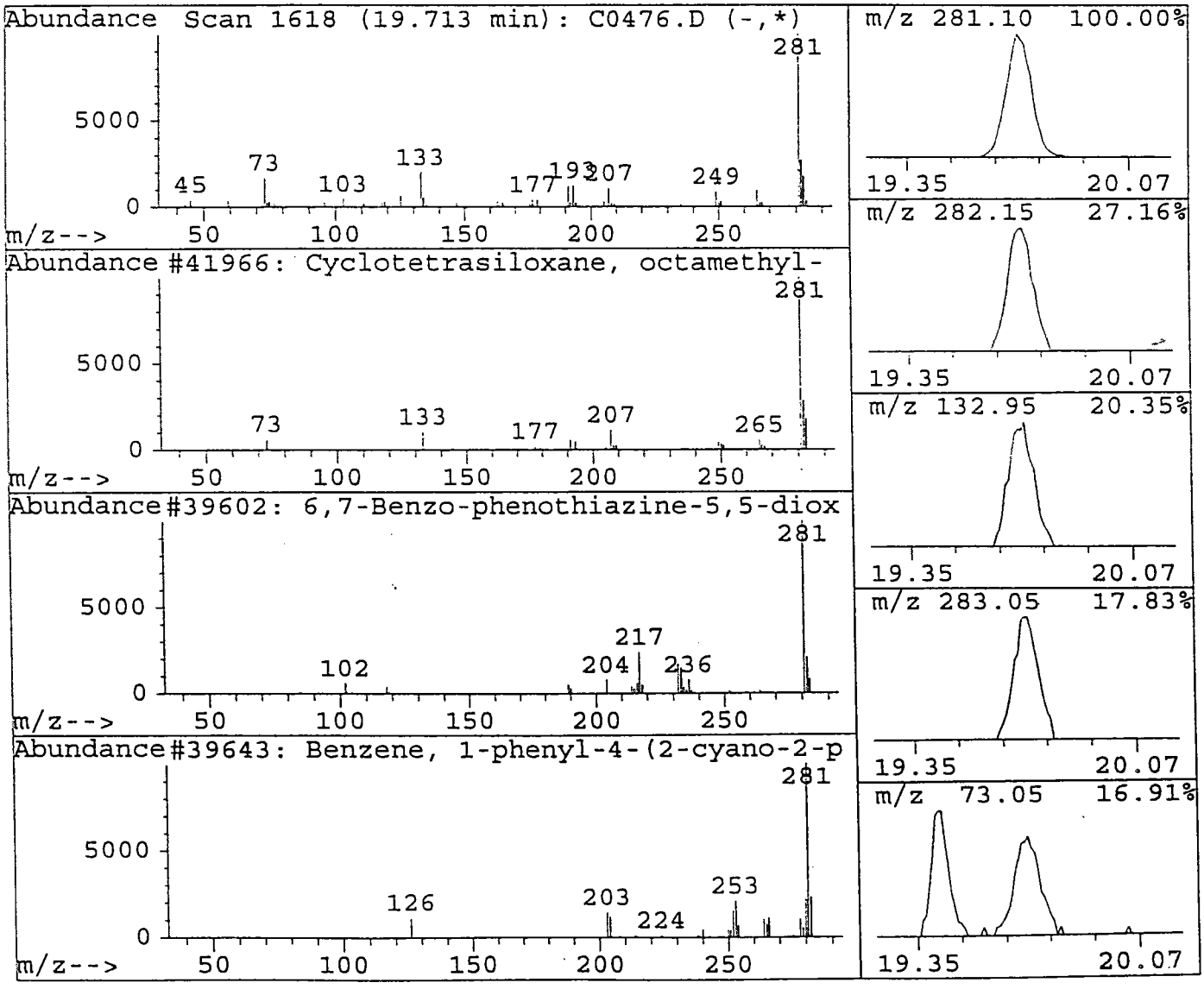
Data File : d:\hpchem\1\data\c0476.d
Acq On : 5 Dec 95 7:07 pm
Sample : 9554554 BLDG 482 FB
Misc : 25 ML

Vial: 5
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.
19.71	0.71 ug/L	504520	Fluorobenzene	12.21

Hit# of 17	Tentative ID	Ref#	CAS#	Qual
1	Cyclotetrasiloxane, octamethyl-	41966	000556-67-2	43
2	6,7-Benzo-phenothiazine-5,5-dioxide	39602	000000-00-0	9
3	Benzene, 1-phenyl-4-(2-cyano-2-phen	39643	027869-56-3	50
4	4-(1-Benzimidazyl)-7-nitro-2,1,3-ox	39560	091485-32-4	5
5	3,6-Bis(N-dimethylamino)-9-ethylcar	39624	057103-04-5	7



Library Search Compound Report

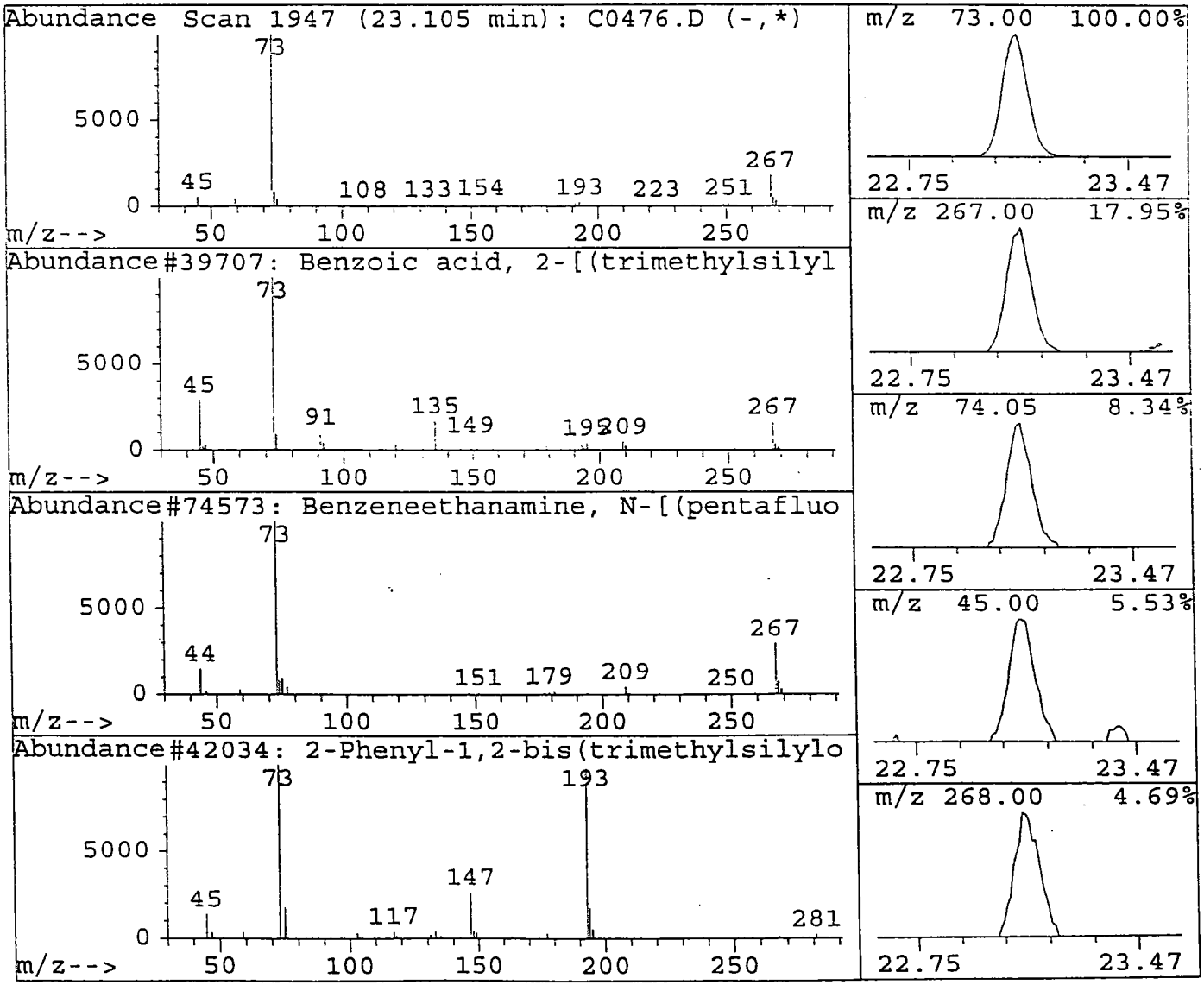
Data File : d:\hpchem\1\data\c0476.d
Acq On : 5 Dec 95 7:07 pm
Sample : 9554554 BLDG 482 FB
Misc : 25 ML

Vial: 5
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.
23.10	1.92 ug/L	1369048	Fluorobenzene	12.21

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzoic acid, 2-[(trimethylsilyl)ox	39707	003789-85-3	33
2	Benzeneethanamine, N-[(pentafluorop	74573	055429-85-1	38
3	2-Phenyl-1,2-bis(trimethylsilyloxy)	42034	000000-00-0	2
4	N-Ethylformamide	292	000627-45-2	3
5	Benzeneacetic acid, trimethylsilyl	70090	002078-18-4	3



1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 1981.1 2933763

109

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: 2018 NJDEP MW#: 1

Matrix: (soil/water) WATER Lab Sample ID: 9554557V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0483.D

Level: (low/med) LOW Date Received: 11/27/95

% Moisture: not dec. NA Date Analyzed: 12/5/95

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	.50	U
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	25	
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# 1981.1 2933763

110

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: 2018 NJDEP MW#: 1

Matrix: (soil/water) WATER Lab Sample ID: 9554557V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0483.D

Level: (low/med) LOW Date Received: 11/27/95

% Moisture: not dec. NA Date Analyzed: 12/5/95

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	11	
87-61-6	1,2,3-Trichlorobenzene	.50	U
1634-04-4	Methy-tertiary butyl ether	.50	U
75-65-0	tertiary-Butyl alcohol	2.0	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FMETL# 1981.1 29337763

111

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No. FT. MONMOUTH NJ Bldg: 2018 NJDEP MW#: 1 Group:

Matrix: (soil/water) WATER Lab Sample ID: 9554557V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0483.D

Level: (low/med) LOW Date Received: 11/27/95

% Moisture: not dec. NA Date Analyzed: 12/5/95

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

CAS Number	Compound Name	RT	Est. Conc.	Q
1.	Column Bleed	10.18	1	J
2.	Column Bleed	19.72	1	J
3. 1074-17-5	Benzene, 1-methyl-2-propyl-	21.18	1	J
4.	Column Bleed	23.08	1	J
5.	Column Bleed	23.10	2	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

112

Data File : d:\hpchem\1\data\c0483.d
Acq On : 5 Dec 95 11:10 pm
Sample : 9554557 BLDG 2018 MW-1
Misc : 25 ML
Quant Time: Dec 6 10:47 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 : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	12.20	96	1493739	5.00	ug/L	-0.01
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.43	95	827536	5.13	ug/L	102.63%
57) 1,2-Dichlorobenzene-d4	22.22	152	527889	5.22	ug/L	104.41%
Target Compounds						Qvalue
17) Chloroform	10.78	83	3513975	25.07	ug/L	99
63) Naphthalene	25.68	128	1219888	10.56	ug/L	100

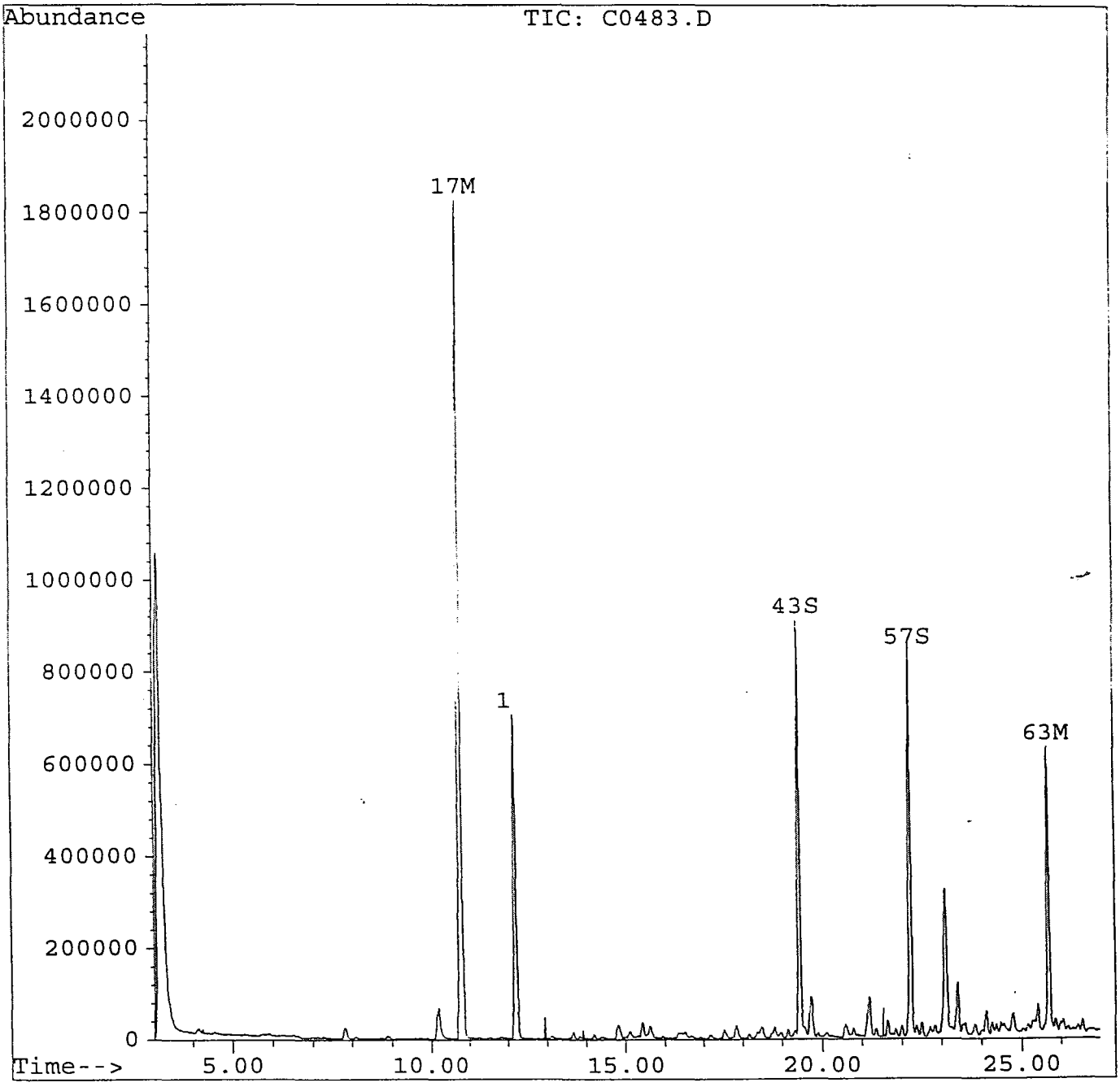
(#) = qualifier out of range (m) = manual integration

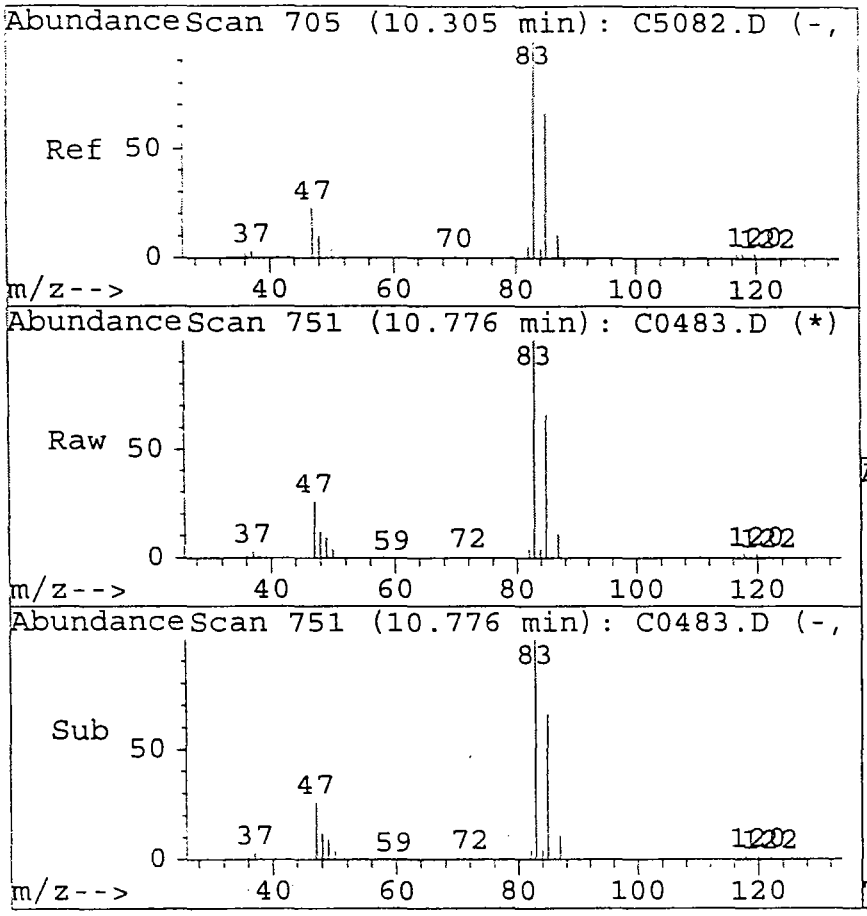
Quantitation Report

Data File : d:\hpchem\1\data\c0483.d
Acq On : 5 Dec 95 11:10 pm
Sample : 9554557 BLDG 2018 MW-1
Misc : 25 ML
Quant Time: Dec 6 10:47 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 : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration

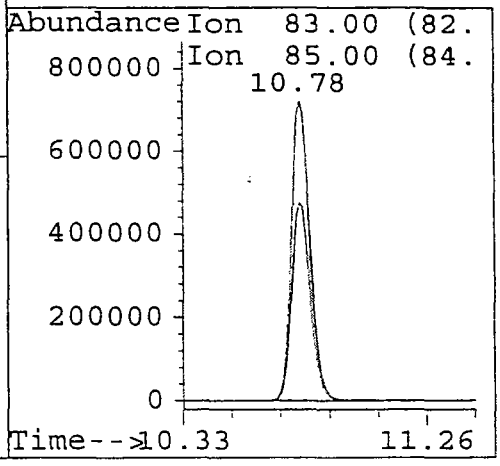


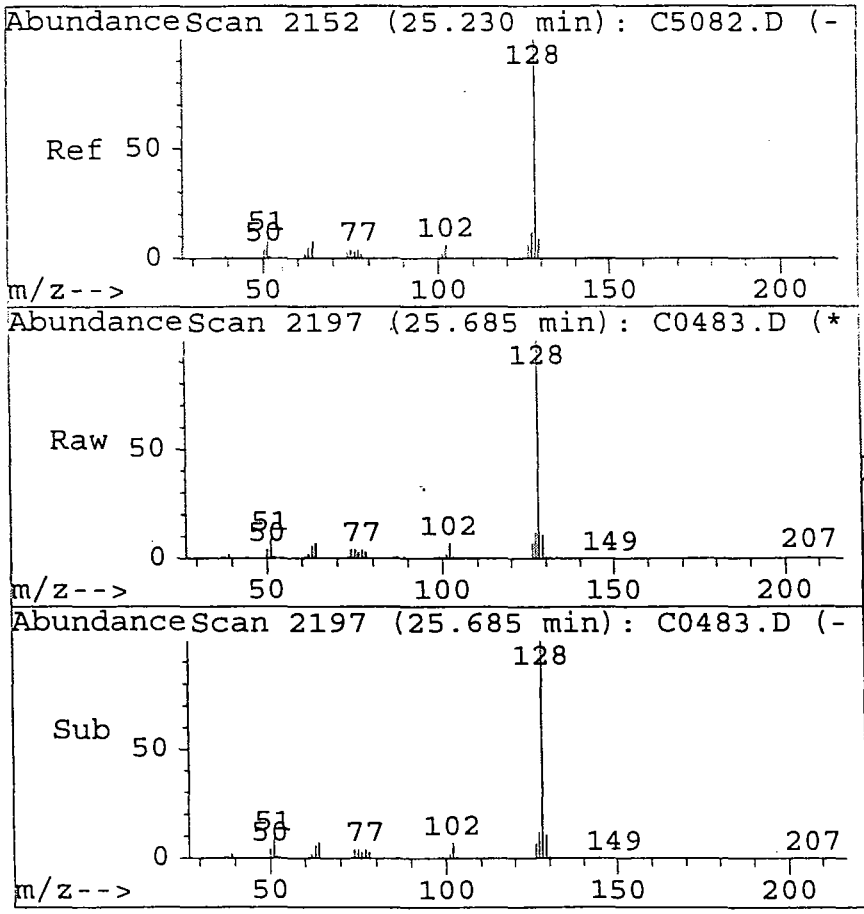


#17
Chloroform
Concen: 25.07 ug/L
RT: 10.78 min Scan# 751
Delta R.T. -0.01 min
Lab File: c0483.d
Acq: 5 Dec 95 11:10 pm

Tgt Ion:83 Resp: 3513975

Ion	Ratio	Lower	Upper
83	100		
85	65.9	45.5	85.5
0	0.0	0.0	0.0
0	0.0	0.0	0.0

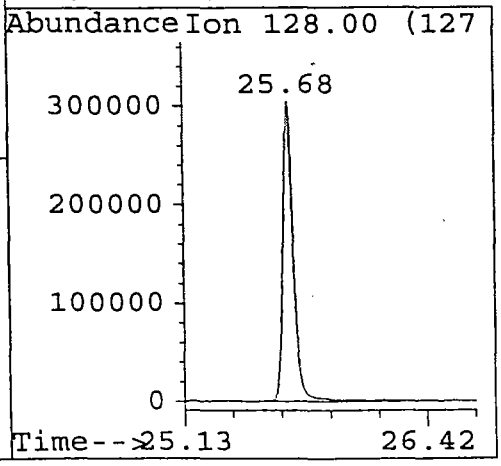




#63
Naphthalene
Concen: 10.56 ug/L
RT: 25.68 min Scan# 2197
Delta R.T. -0.04 min
Lab File: c0483.d
Acq: 5 Dec 95 11:10 pm

Tgt Ion:128 Resp: 1219888

Ion	Ratio	Lower	Upper
128	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

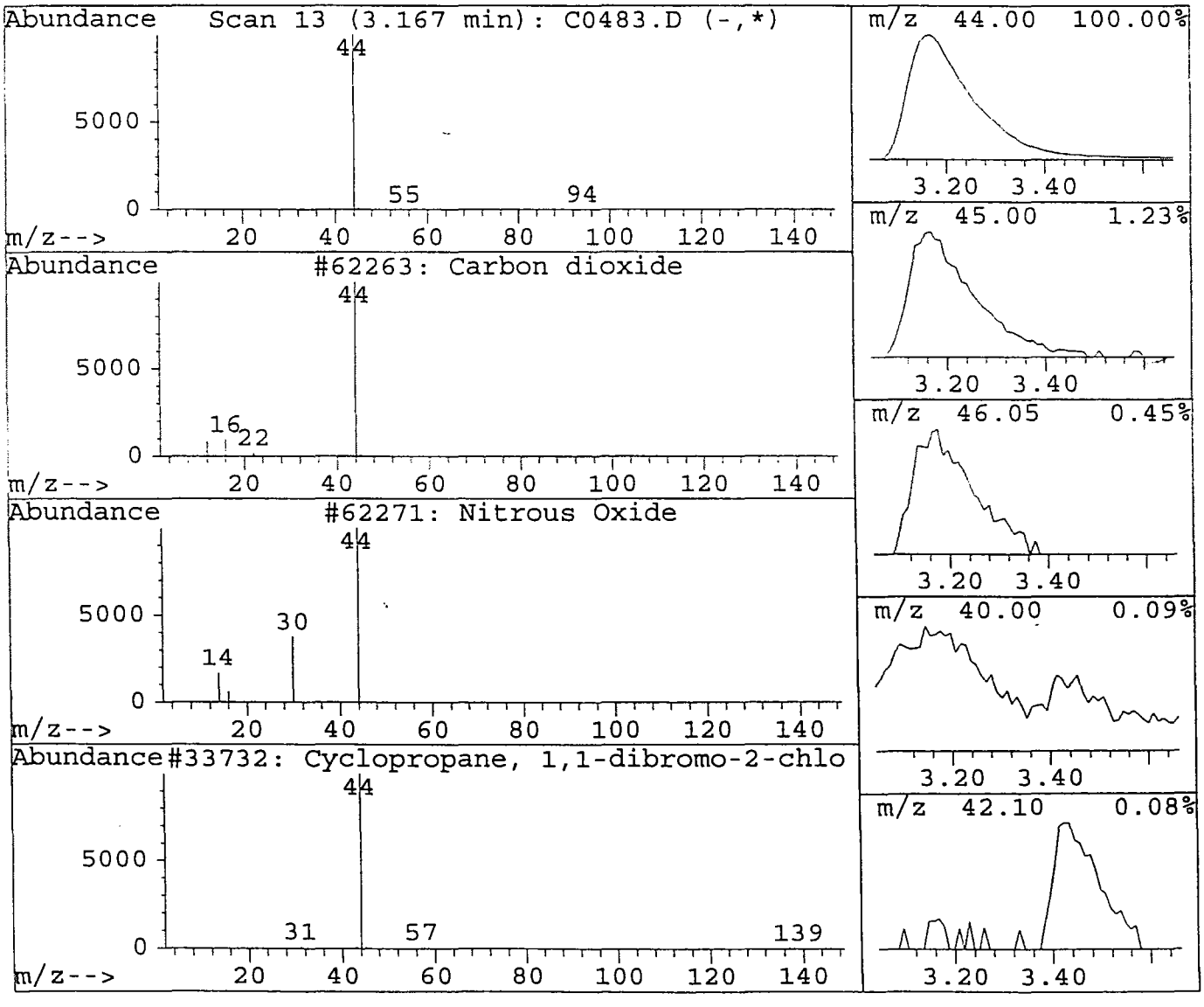
Data File : d:\hpchem\1\data\c0483.d
Acq On : 5 Dec 95 11:10 pm
Sample : 9554557 BLDG 2018 MW-1
Misc : 25 ML

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.
3.17	15.83 ug/L	9788922	Fluorobenzene	12.20

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Carbon dioxide	62263	000124-38-9	4
2	Nitrous Oxide	62271	010024-97-2	3
3	Cyclopropane, 1,1-dibromo-2-chloro-	33732	024071-57-6	2
4	Carbamic acid, monoammonium salt	391	001111-78-0	2
5	2,5-Dimethoxy-4-(methylsulfonyl)amp	38244	000000-00-0	1



Library Search Compound Report

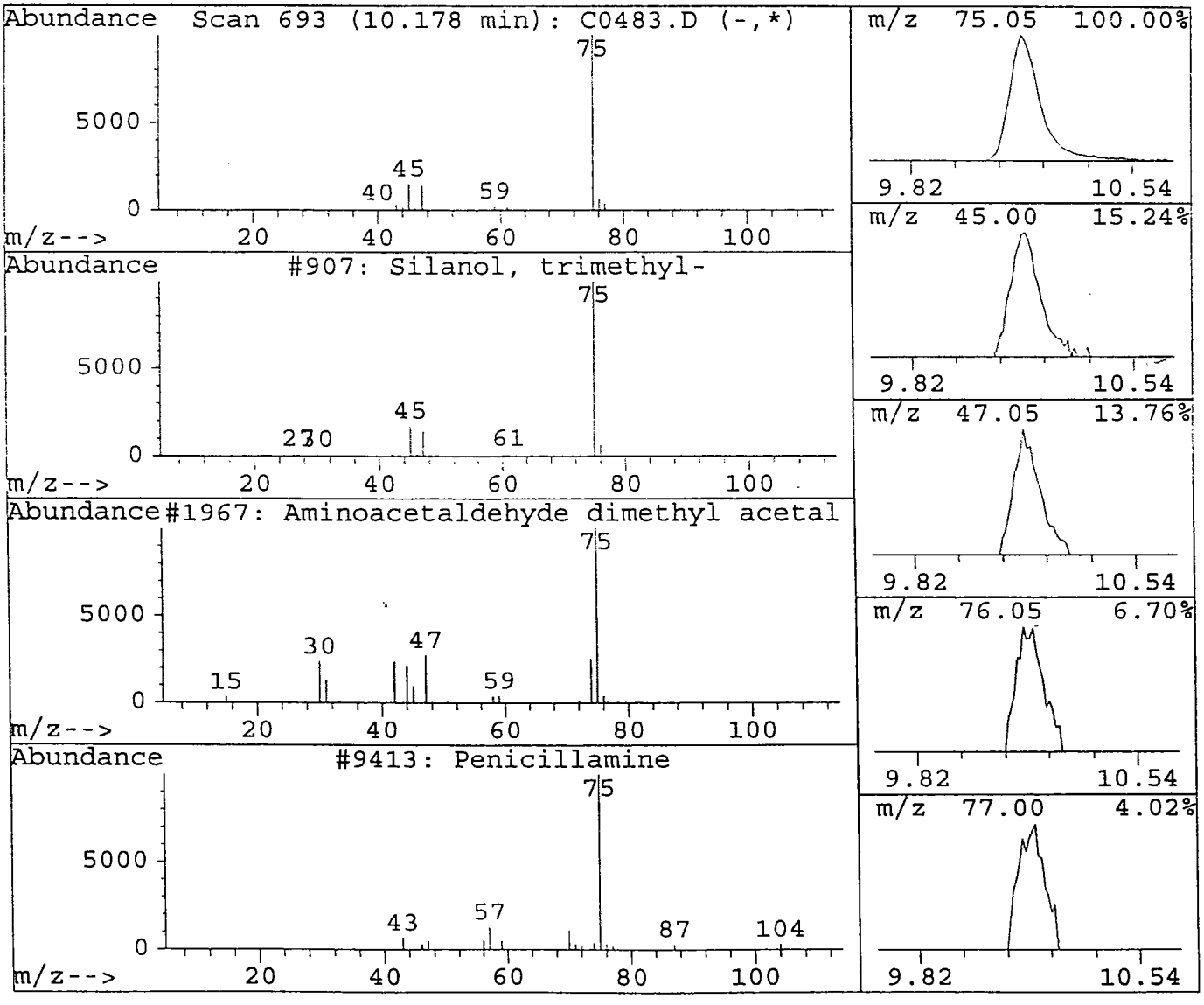
Data File : d:\hpchem\1\data\c0483.d
Acq On : 5 Dec 95 11:10 pm
Sample : 9554557 BLDG 2018 MW-1
Misc : 25 ML

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.
10.18	0.65 ug/L	403329	Fluorobenzene	12.20

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Silanol, trimethyl-	907	001066-40-6	83
2	Aminoacetaldehyde dimethyl acetal	1967	022483-09-6	1
3	Penicillamine	9413	000052-67-5	1
4	Threonine	64491	000072-19-5	1
5	Methane, trimethoxy-	1996	000149-73-5	2



Library Search Compound Report

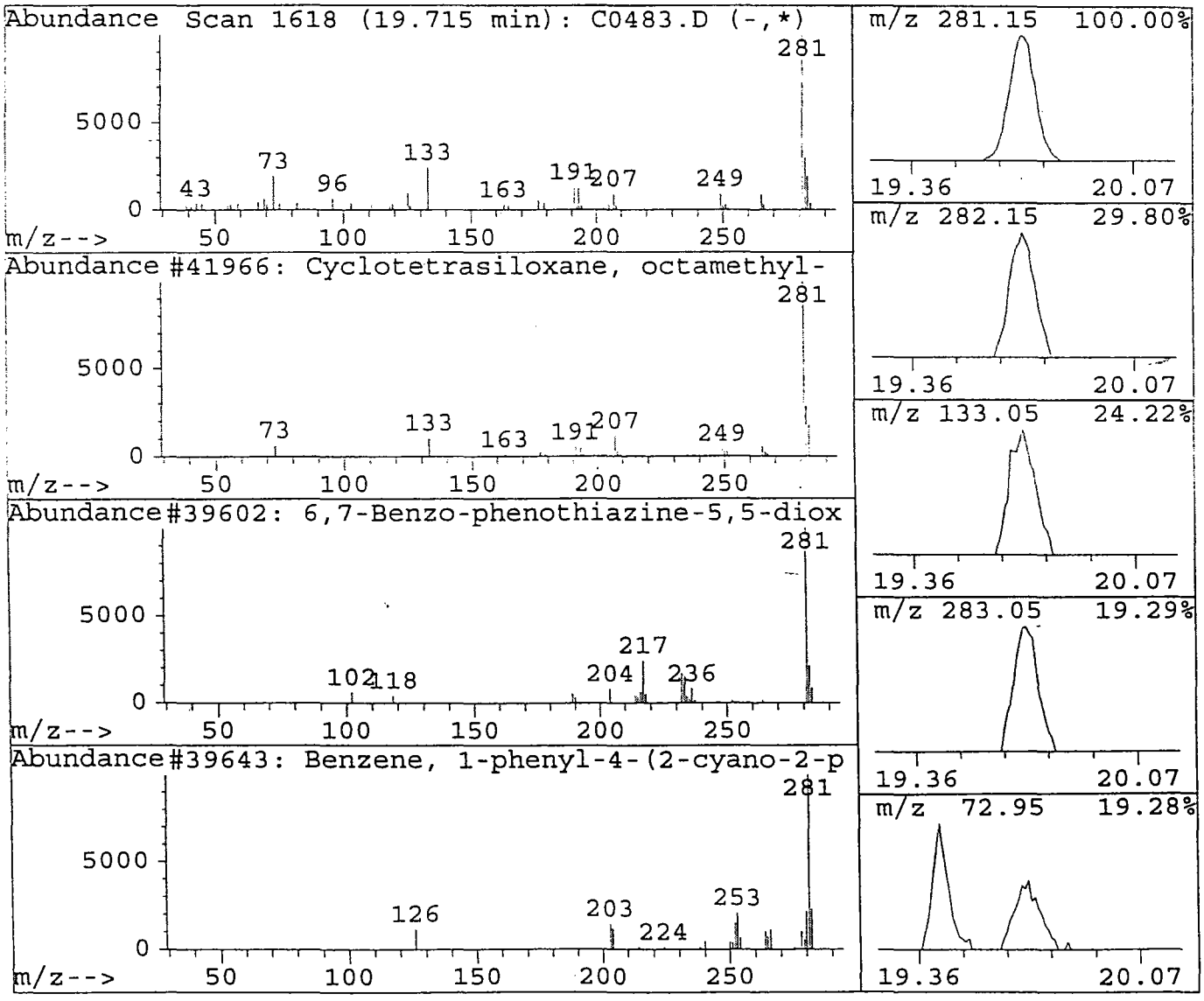
Data File : d:\hpchem\1\data\c0483.d
Acq On : 5 Dec 95 11:10 pm
Sample : 9554557 BLDG 2018 MW-1
Misc : 25 ML

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.
19.72	0.70 ug/L	431158	Fluorobenzene	12.20

Hit# of 17	Tentative ID	Ref#	CAS#	Qual
1	Cyclotetrasiloxane, octamethyl-	41966	000556-67-2	59
2	6,7-Benzo-phenothiazine-5,5-dioxide	39602	000000-00-0	5
3	Benzene, 1-phenyl-4-(2-cyano-2-phen	39643	027869-56-3	9
4	4-(1-Benzimidazyl)-7-nitro-2,1,3-ox	39560	091485-32-4	5
5	3,6-Bis(N-dimethylamino)-9-ethylcar	39624	057103-04-5	9



Library Search Compound Report

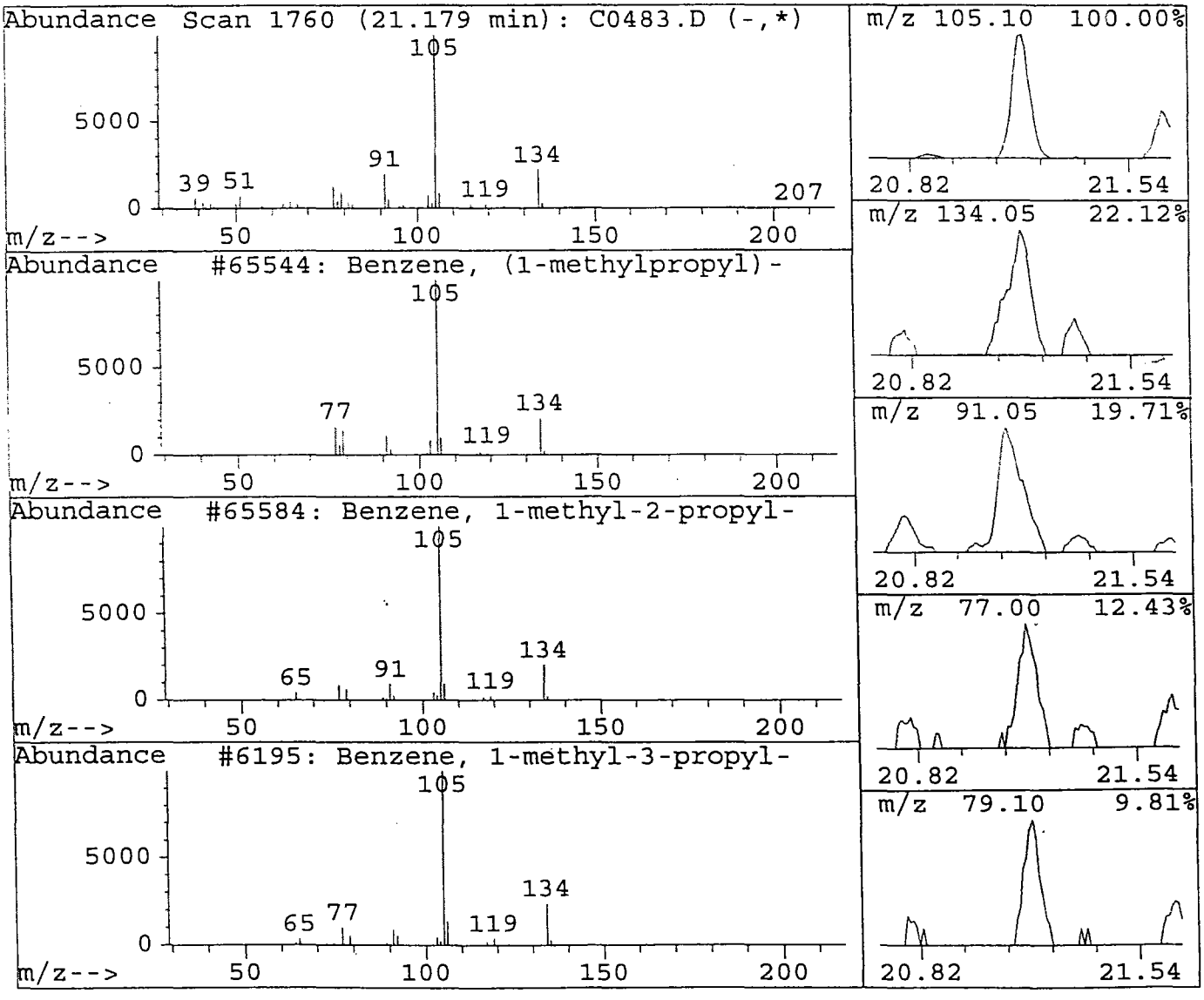
Data File : d:\hpchem\1\data\c0483.d
Acq On : 5 Dec 95 11:10 pm
Sample : 9554557 BLDG 2018 MW-1
Misc : 25 ML

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.
21.18	0.58 ug/L	357275	Fluorobenzene	12.20

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzene, (1-methylpropyl)-	65544	000135-98-8	56
2	Benzene, 1-methyl-2-propyl-	65584	001074-17-5	91
3	Benzene, 1-methyl-3-propyl-	6195	001074-43-7	80
4	Benzene, 1-methyl-4-propyl-	6216	001074-55-1	80
5	Benzene, 1,1'-(1-methyl-1,2-ethaned	21991	005814-85-7	47



Library Search Compound Report

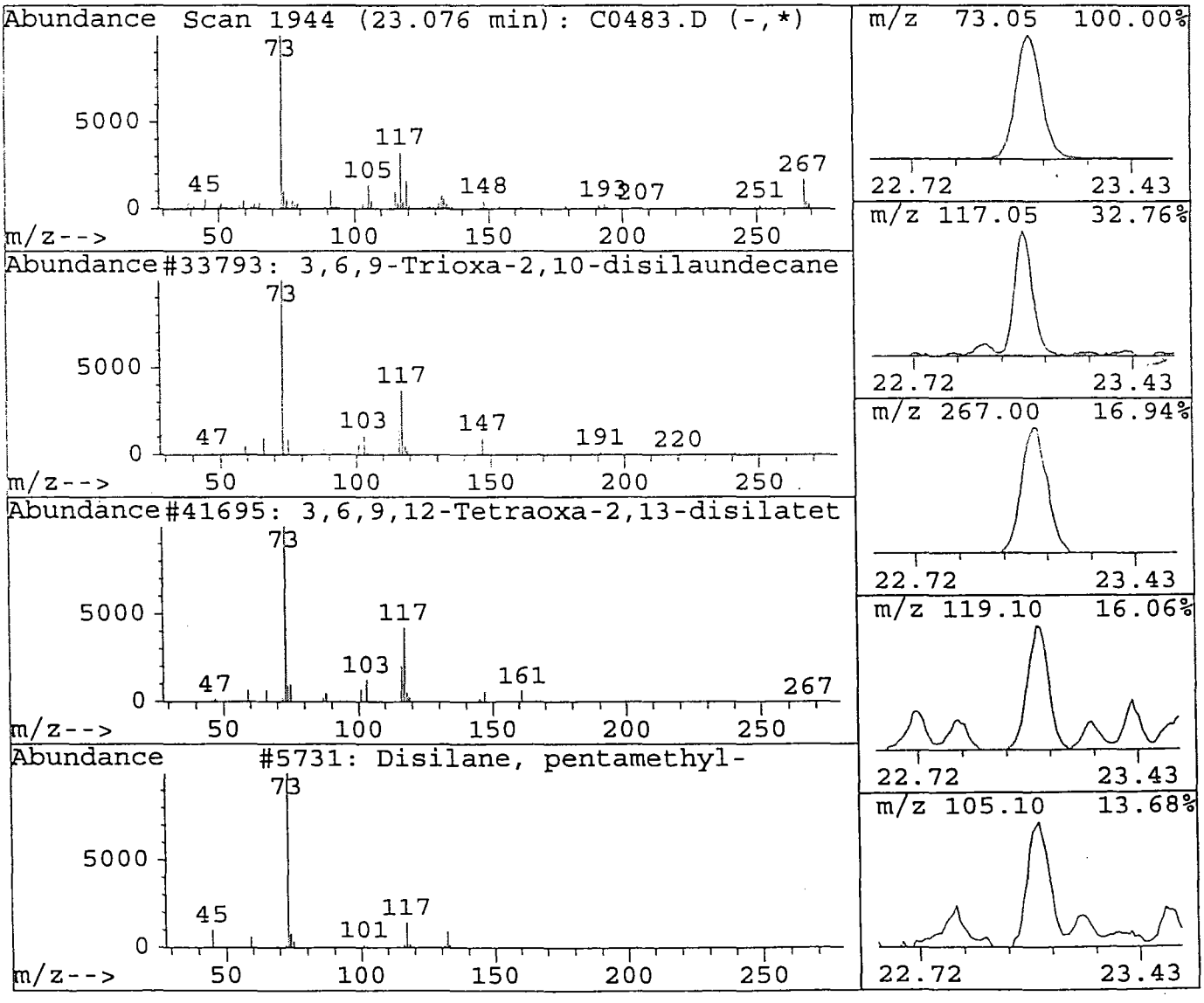
Data File : d:\hpchem\1\data\c0483.d
Acq On : 5 Dec 95 11:10 pm
Sample : 9554557 BLDG 2018 MW-1
Misc : 25 ML

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.
23.08	0.58 ug/L	358035	Fluorobenzene	12.20

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3,6,9-Trioxa-2,10-disilaundecane, 2	33793	016654-74-3	23
2	3,6,9,12-Tetraoxa-2,13-disilatetrad	41695	062185-58-4	23
3	Disilane, pentamethyl-	5731	000812-15-7	9
4	2-Butanol, 3-(1-methyl-2-phenyletho	24917	074810-46-1	10
5	2-Phenyl-1,2-bis(trimethylsilyloxy)	42034	000000-00-0	12



Library Search Compound Report

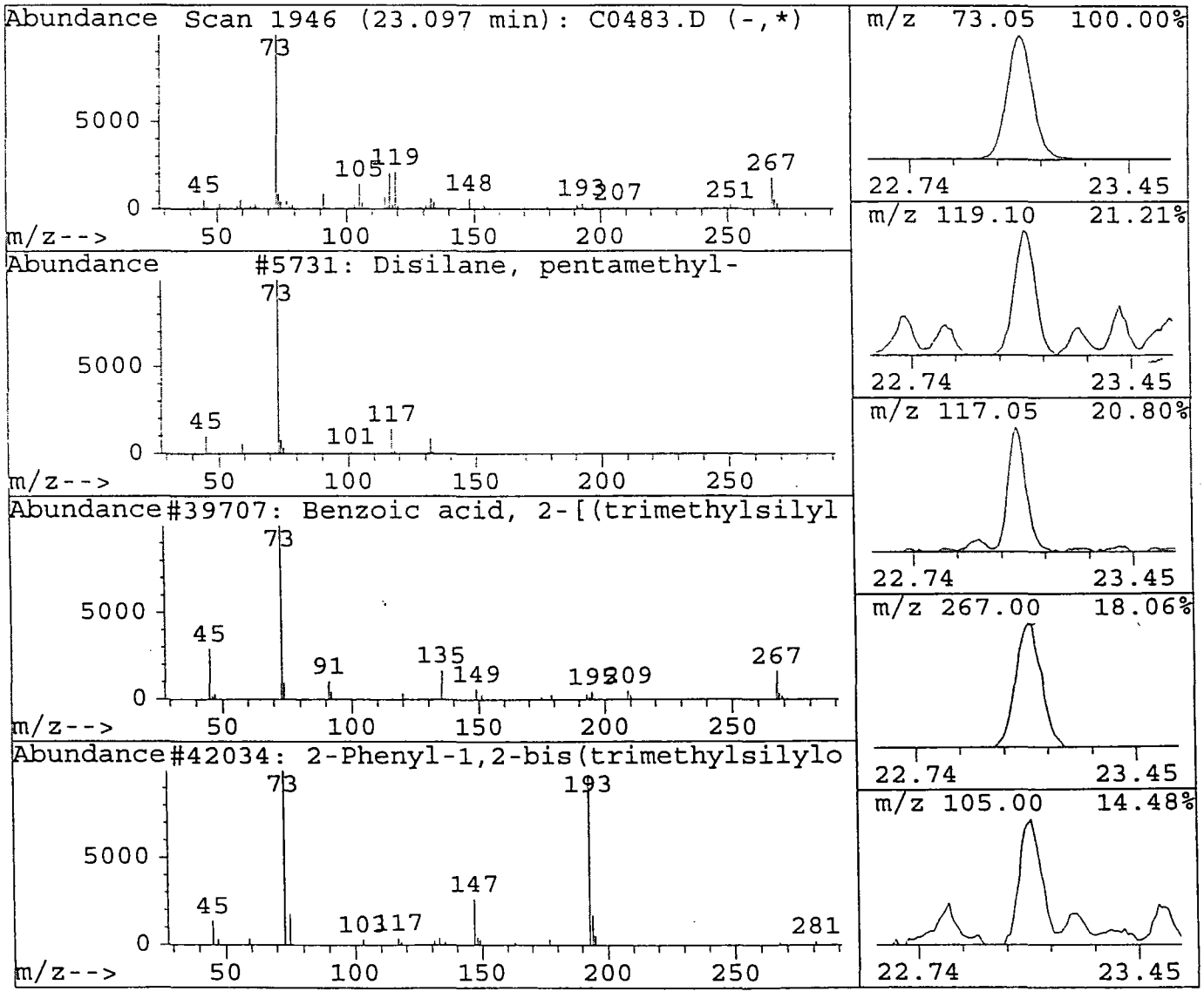
Data File : d:\hpchem\1\data\c0483.d
Acq On : 5 Dec 95 11:10 pm
Sample : 9554557 BLDG 2018 MW-1
Misc : 25 ML

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.
23.10	1.88 ug/L	1162426	Fluorobenzene	12.20

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Disilane, pentamethyl-	5731	000812-15-7	17
2	Benzoic acid, 2-[(trimethylsilyl)ox	39707	003789-85-3	9
3	2-Phenyl-1,2-bis(trimethylsilyloxy)	42034	000000-00-0	10
4	3,6,9-Trioxa-2,10-disilaundecane, 2	71425	016654-74-3	4
5	Benzeneethanamine, N-[(pentafluorop	74573	055429-85-1	7



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	10 QCS	99	99			
02	1 STND	98	99			
03	VBLK01	99	101			
04	9554060V	101	103			
05	9554061V	99	102			
06	9554062V	97	101			
07	9554101V	104	101			
08	9554102V	99	101			
09	9554063V	98	99			
10	9554060MS	98	96			
11	9554060MSD	96	97			
12						
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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	VBLK01	89	89			
02	9554553V	99	101			
03	9554554V	98	100			
04	9554109V	103	103			
05	9554110V	100	101			
06	9554551V	110	101			
07	9554552V	111	103			
08	9554555V	109	103			
09	9554557V	103	104			
10	9554558V	104	102			
11	9554552MS	106	103			
12	9554552MSD	105	103			
13	10 QCS	98	100			
14	1 STND	98	101			
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	QC LIMITS
SMC1 (BFB) = 4-Bromofluorobenzene	(80-120)
SMC2 (DCB) = 1,2-Dichlorobenzene-d4	(80-120)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

4A

VOLATILE METHOD BLANK SUMMARY

SAMPLE NO.: VBLK01

Lab Name: EMSL ANALYTICAL Contract: _____

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

Lab File ID: C0429.D Lab Sample ID: M. BLANK

Date Analyzed: 12/2/95 Time Analyzed: 1652

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	10 QCS	10 QCS	C0427.D	1544
02	1 STND	1 STND	C0428.D	1618
03	9554060V	9554060V	C0430.D	1726
04	9554061V	9554061V	C0431.D	1800
05	9554062V	9554062V	C0432.D	1835
06	9554101V	9554101V	C0433.D	1909
07	9554102V	9554102V	C0434.D	1944
08	9554063V	9554063V	C0435.D	2017
09	9554060MS	54060MS	C0438.D	2159
10	9554060MSD	54060MSD	C0439.D	2233
11				
12				
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COMMENTS:

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: C0429.D

Level: (low/med) LOW Date Received: NA

% Moisture: not dec. NA Date Analyzed: 12/2/95

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS No.	Compound		Q
75-71-8	Dichlorodifluoromethane	.50	U
74-87-3	Chloromethane	.50	U
75-01-4	Vinyl chloride	.50	U
74-83-9	Bromomethane	.50	U
75-00-3	Chloroethane	.50	U
75-69-4	Trichlorofluoromethane	.50	U
75-35-4	1,1-Dichloroethene	.50	U
75-09-2	Methylene chloride	.50	
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: C0429.D

Level: (low/med) LOW Date Received: NA

% Moisture: not dec. NA Date Analyzed: 12/2/95

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 1.0

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
100-41-4	Ethylbenzene	.50	U
1330-29-7	Xylene (total)	.50	U
100-42-1	Styrene	.50	U
75-25-2	Bromoform	.50	U
98-82-8	Isopropylbenzene	.50	U
108-86-1	Bromobenzene	.50	U
79-34-1	1,1,2,2-Tetrachloroethane	.50	U
96-18-4	1,2,3-Trichloropropane	.50	U
103-65-1	n-Propylbenzene	.50	U
95-49-8	2-Chlorotoluene	.50	U
106-43-4	4-Chlorotoluene	.50	U
108-67-8	1,3,5-Trimethylbenzene	.50	U
98-06-6	tert-Butylbenzene	.50	U
95-63-6	1,2,4-Trimethylbenzene	.50	U
135-98-8	sec-Butylbenzene	.50	U
541-73-1	1,3-Dichlorobenzene	.50	U
99-87-6	4-Isopropyltoluene	.50	U
106-46-7	1,4-Dichlorobenzene	.50	U
95-50-1	1,2-Dichlorobenzene	.50	U
104-51-8	n-Butylbenzene	.50	U
96-12-8	1,2-Dibromo-3-chloropropane	.50	U
120-82-1	1,2,4-Trichlorobenzene	.50	U
87-68-3	Hexachlorobutadiene	.50	U
91-20-3	Naphthalene	.50	U
87-61-6	1,2,3-Trichlorobenzene	.50	U
1634-04-4	Methy-tertiary butyl ether	.50	U
75-65-0	tertiary-Butyl alcohol	2.0	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO. VBLK01

126

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: C0429.D

Level: (low/med) LOW Date Received: NA

% Moisture: not dec. NA Date Analyzed: 12/2/95

GC Column: DB-624 X 75M ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Number TICs found: 0 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1.	NONE FOUND			
2.				
3.				
4.				
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Quantitation Report

Data File : D:\HPCHEM\1\DATA\C0429.D
Acq On : 2 Dec 95 4:52 pm
Sample : METHOD BLANK
Misc :
Quant Time: Dec 5 11:51 1995

Vial: 5
Operator: MDC
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	12.18	96	1681347	5.00	ug/L	-0.03
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.40	95	900410	4.96	ug/L	99.21%
57) 1,2-Dichlorobenzene-d4	22.20	152	577627	5.07	ug/L	101.50%
Target Compounds						Qvalue
9) Methylene chloride	7.79	84	36677	0.46	ug/L	98

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

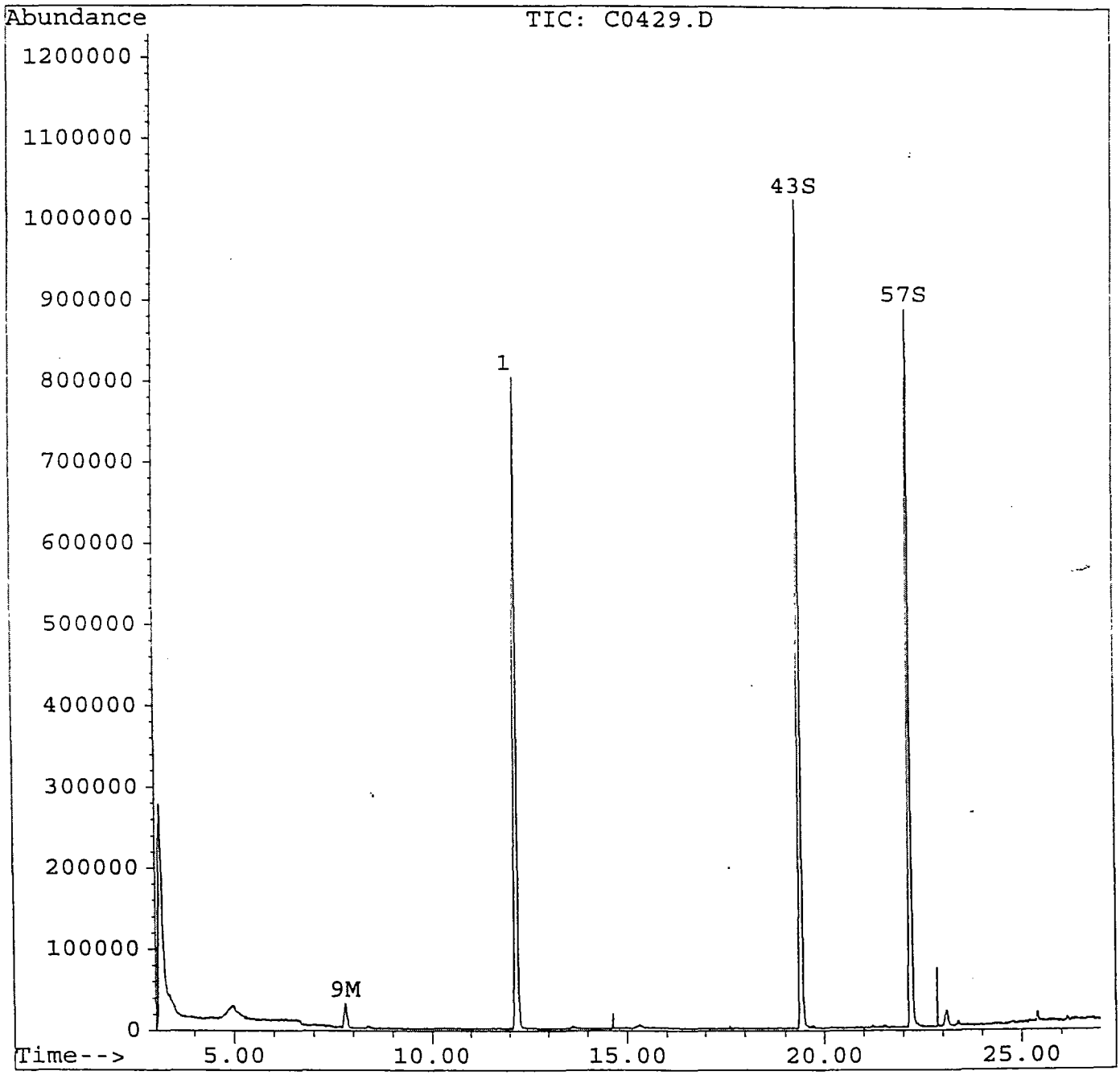
Quantitation Report

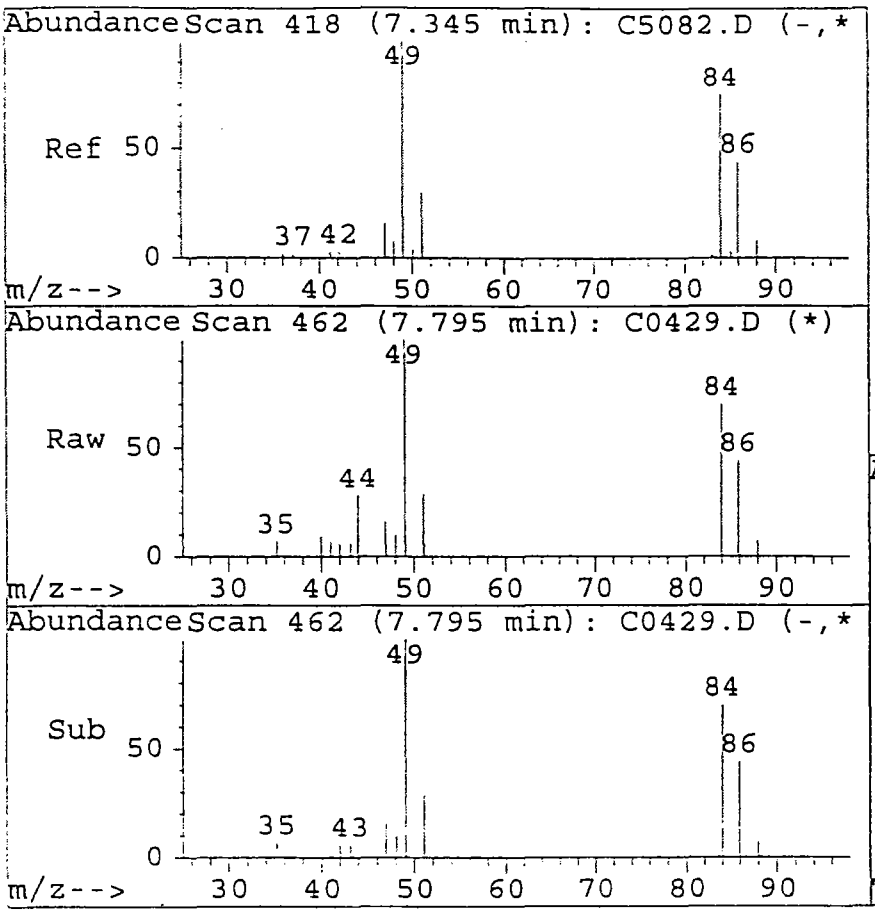
128

Data File : D:\HPCHEM\1\DATA\C0429.D
Acq On : 2 Dec 95 4:52 pm
Sample : METHOD BLANK
Misc :
Quant Time: Dec 5 11:51 1995

Vial: 5
Operator: MDC
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration

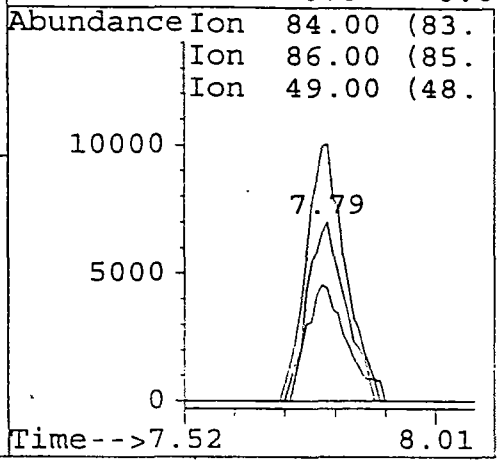




#9
Methylene chloride
Concen: 0.46 ug/L
RT: 7.79 min Scan# 462
Delta R.T. -0.03 min
Lab File: C0429.D
Acq: 2 Dec 95 4:52 pm

Tgt Ion:84 Resp: 36677

Ion	Ratio	Lower	Upper
84	100		
86	62.9	45.2	85.2
49	143.5	121.1	161.1
0	0.0	0.0	0.0



Library Search Compound Report

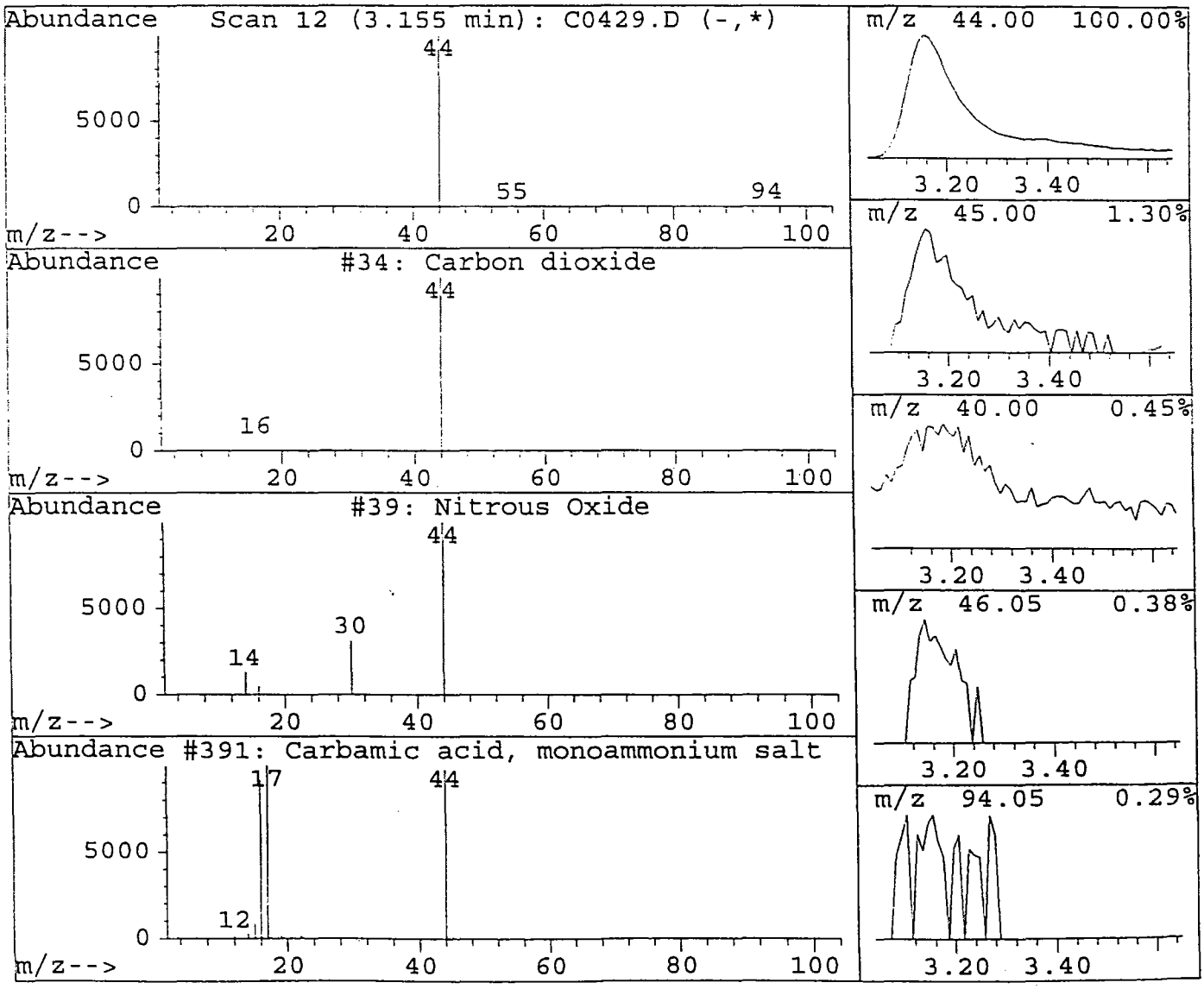
Data File : D:\HPCHEM\1\DATA\C0429.D
Acq On : 2 Dec 95 4:52 pm
Sample : METHOD BLANK
Misc :

Vial: 5
Operator: MDC
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.
3.15	3.00 ug/L	2109797	Fluorobenzene	12.18

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Carbon dioxide	34	000124-38-9	4
2	Nitrous Oxide	39	010024-97-2	3
3	Carbamic acid, monoammonium salt	391	001111-78-0	2
4	Cyclopropane, 1,1-dibromo-2-chloro-	33732	024071-57-6	2
5	Acetaldehyde	62264	000075-07-0	2



4A

VOLATILE METHOD BLANK SUMMARY

SAMPLE NO. VBLK01

Lab Name: EMSL ANALYTICAL Contract: _____

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

Lab File ID: C0474.D Lab Sample ID: M. BLANK

Date Analyzed: 12/5/95 Time Analyzed: 1800

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	9554553V	9554553V	C0475.D	1833
02	9554554V	9554554V	C0476.D	1907
03	9554109V	9554109V	C0477.D	1942
04	9554110V	9554110V	C0478.D	2016
05	9554551V	9554551V	C0479.D	2051
06	9554552V	9554552V	C0480.D	2125
07	9554555V	9554555V	C0481.D	2200
08	9554557V	9554557V	C0483.D	2310
09	9554558V	9554558V	C0484.D	2344
10	9554552MS	54552MS	C0485.D	0019
11	9554552MSD	54552MSD	C0486.D	0054
12	10 QCS	10 QCS	C0487.D	0129
13	1 STND	1 STND	C0488.D	0204
14				
15				
16				
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COMMENTS:

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

132

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: C0474.D

Level: (low/med) LOW Date Received: NA

% Moisture: not dec. NA Date Analyzed: 12/5/95

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	1.2	
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-Dibromoethane	.50	U
108-90-7	Chlorobenzene	.50	U
630-20-6	1,1,1,2-Tetrachloroethane	.50	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO. 133

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: C0474.D

Level: (low/med) LOW Date Received: NA

% Moisture: not dec. NA Date Analyzed: 12/5/95

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 1.0

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
100-41-4	Ethylbenzene	.50	U
1330-29-7	Xylene (total)	.50	U
100-42-1	Styrene	.50	U
75-25-2	Bromoform	.50	U
98-82-8	Isopropylbenzene	.50	U
108-86-1	Bromobenzene	.50	U
79-34-1	1,1,2,2-Tetrachloroethane	.50	U
96-18-4	1,2,3-Trichloropropane	.50	U
103-65-1	n-Propylbenzene	.50	U
95-49-8	2-Chlorotoluene	.50	U
106-43-4	4-Chlorotoluene	.50	U
108-67-8	1,3,5-Trimethylbenzene	.50	U
98-06-6	tert-Butylbenzene	.50	U
95-63-6	1,2,4-Trimethylbenzene	.50	U
135-98-8	sec-Butylbenzene	.50	U
541-73-1	1,3-Dichlorobenzene	.50	U
99-87-6	4-Isopropyltoluene	.50	U
106-46-7	1,4-Dichlorobenzene	.50	U
95-50-1	1,2-Dichlorobenzene	.50	U
104-51-8	n-Butylbenzene	.50	U
96-12-8	1,2-Dibromo-3-chloropropane	.50	U
120-82-1	1,2,4-Trichlorobenzene	.50	U
87-68-3	Hexachlorobutadiene	.50	U
91-20-3	Naphthalene	.50	U
87-61-6	1,2,3-Trichlorobenzene	.50	U
1634-04-4	Methy-tertiary butyl ether	.50	U
75-65-0	tertiary-Butyl alcohol	2.0	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO. 134
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: C0474.D

Level: (low/med) LOW Date Received: NA

% Moisture: not dec. NA Date Analyzed: 12/5/95

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.				
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9.				
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21.				
22.				
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24.				
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30.				

Quantitation Report

Data File : d:\hpchem\1\data\c0474.d
Acq On : 5 Dec 95 6:00 pm
Sample : METHOD BLANK
Misc : 25 ML
Quant Time: Dec 5 18:43 1995

Vial: 1
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	12.03	96	1696123	5.00	ug/L	-0.17
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.28	95	817441	4.46	ug/L	89.28%
57) 1,2-Dichlorobenzene-d4	22.09	152	508158	4.43	ug/L	88.51%
Target Compounds						Qvalue
9) Methylene chloride	7.63	84	98742	1.23	ug/L	96

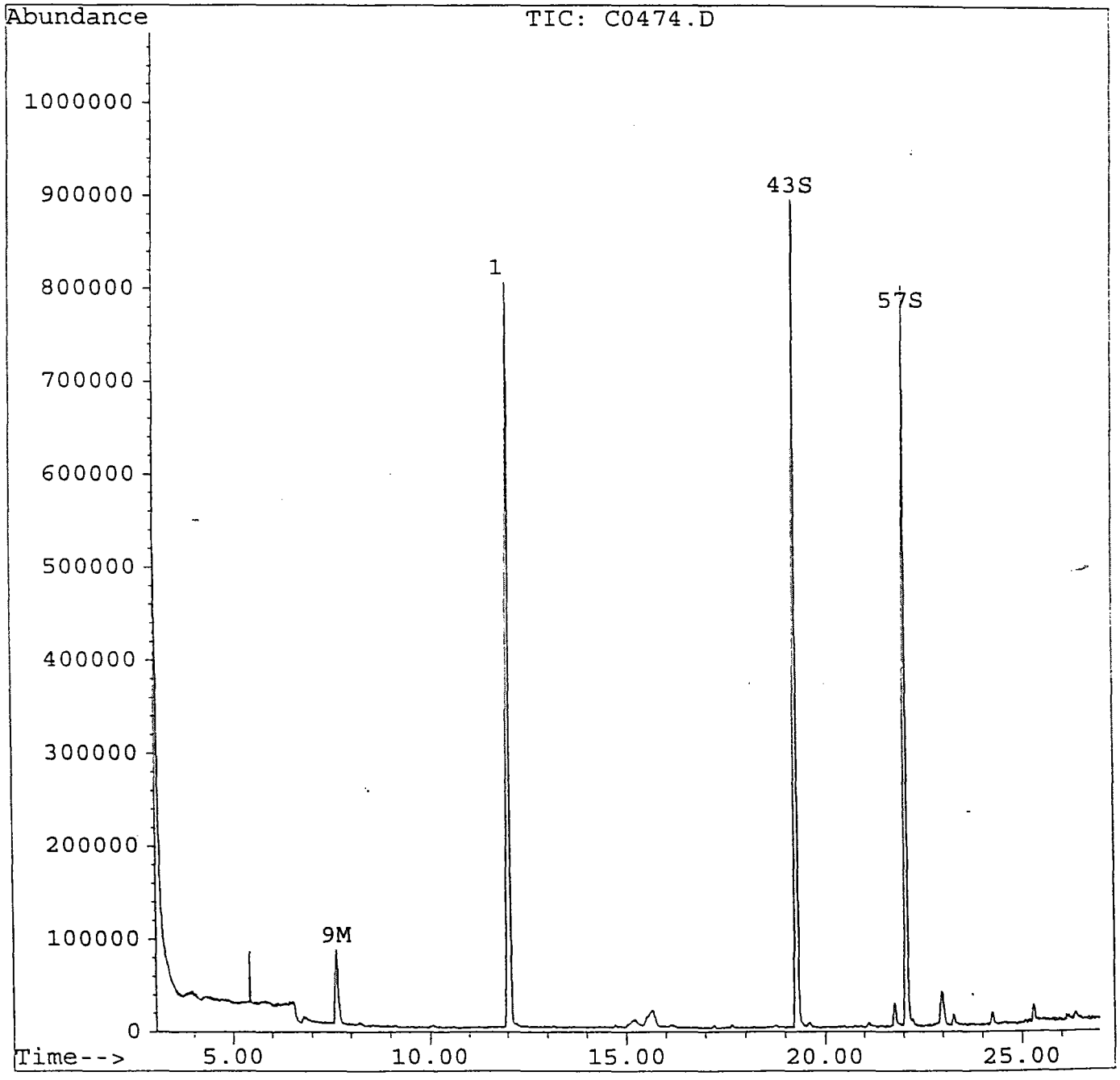
(#) = qualifier out of range (m) = manual integration

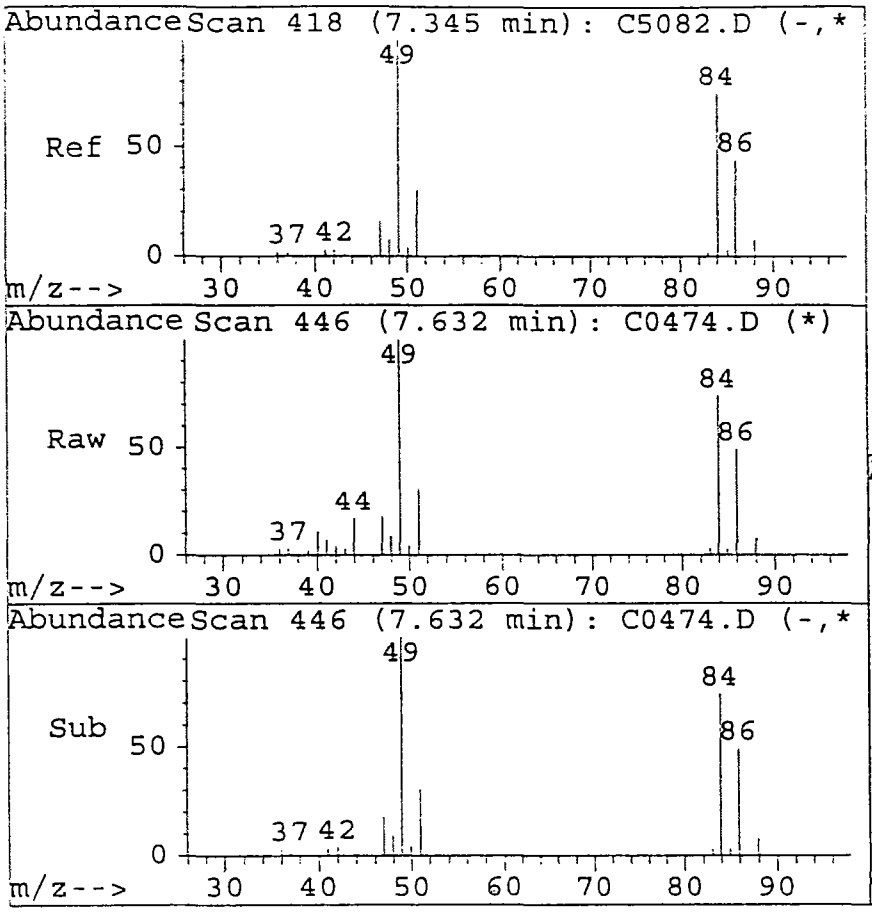
Quantitation Report

Data File : d:\hpchem\1\data\c0474.d
Acq On : 5 Dec 95 6:00 pm
Sample : METHOD BLANK
Misc : 25 ML
Quant Time: Dec 5 18:43 1995

Vial: 1
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration

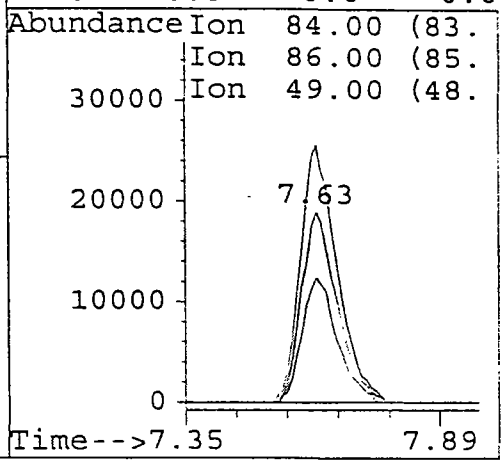




#9
Methylene chloride
Concen: 1.23 ug/L
RT: 7.63 min Scan# 446
Delta R.T. -0.19 min
Lab File: c0474.d
Acq: 5 Dec 95 6:00 pm

Tgt Ion:84 Resp: 98742

Ion	Ratio	Lower	Upper
84	100		
86	65.9	45.2	85.2
49	134.9	121.1	161.1
0	0.0	0.0	0.0



Library Search Compound Report

Data File : d:\hpchem\1\data\c0474.d
Acq On : 5 Dec 95 6:00 pm
Sample : METHOD BLANK
Misc : 25 ML

Vial: 1
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 : Wed Nov 22 09:25:47 1995
Response via : Initial Calibration

Non-Spiked Sample: C0430.D

	Spike Sample	Spike Duplicate Sample
File ID :	C0438.D	C0439.D
Sample :	9554060 MS BLDG 108 MW-3	9554060 MSD BLDG 108 MW-3
Acq Time:	2 Dec 95 9:59 pm	2 Dec 95 10:33 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	9	9	89	89	1	25	80-120
Chloromethane	0.0	10	10	10	100	97	2	25	80-120
Vinyl chloride	0.0	10	10	10	102	99	4	25	80-120
Bromomethane	0.0	10	10	10	96	97	1	25	80-120
Chloroethane	0.0	10	12	12	117	116	1	25	80-120
Trichlorofluorometha	0.0	10	10	10	102	100	2	25	80-120
1,1-Dichloroethene	0.0	10	10	10	102	101	1	25	80-120
Methylene chloride	0.7	10	9	9	86	86	0	25	80-120
trans-1,2-Dichloroet	0.0	10	10	10	101	101	0	25	80-120
1,1-Dichloroethane	0.0	10	10	10	102	102	0	25	80-120
2,2-Dichloropropane	0.1	10	9	9	88	87	1	25	80-120
cis-1,2-Dichloroethe	0.0	10	10	10	101	101	0	25	80-120
Bromochloromethane	0.0	10	10	10	96	97	0	25	80-120
Chloroform	0.0	10	10	10	99	99	0	25	80-120
1,1,1-Trichloroethan	0.0	10	10	10	100	100	0	25	80-120
Carbon tetrachloride	0.0	10	10	10	99	99	0	25	80-120
1,1-Dichloropropene	0.0	10	10	10	101	100	1	25	80-120
Benzene	0.0	10	10	10	99	98	0	25	80-120
1,2-Dichloroethane	0.0	10	10	9	96	95	1	25	80-120
Trichloroethene	0.0	10	10	10	100	98	1	25	80-120
1,2-Dichloropropane	0.0	10	10	10	102	103	1	25	80-120
Dibromomethane	0.0	10	10	10	98	98	1	25	80-120
Bromodichloromethane	0.0	10	10	10	97	96	1	25	80-120
cis-1,3-Dichloroprop	0.0	10	10	9	96	94	2	25	80-120
Toluene	0.0	10	10	10	100	99	1	25	80-120
trans-1,3-Dichloropr	0.0	10	9	9	94	91	3	25	80-120
1,1,2-Trichloroethan	0.0	10	10	10	97	97	0	25	80-120
Tetrachloroethene	0.0	10	10	10	97	97	1	25	80-120
1,3-Dichloropropane	0.0	10	10	10	98	97	1	25	80-120
Dibromochloromethane	0.0	10	10	9	95	93	3	25	80-120
1,2-Dibromoethane	0.0	10	10	10	96	96	0	25	80-120
Chlorobenzene	0.0	10	10	10	98	98	1	25	80-120
1,1,1,2-Tetrachloroe	0.0	10	10	10	98	97	1	25	80-120
Ethylbenzene	0.0	10	10	10	98	97	1	25	80-120
Xylene (para & meta)	0.0	20	19	19	97	96	1	25	80-120
Xylene (Ortho)	0.0	10	10	10	97	96	1	25	80-120
Styrene	0.0	10	9	9	90	90	0	25	80-120
Bromoform	0.0	10	9	9	93	91	2	25	80-120
Isopropylbenzene	0.0	10	10	10	99	97	1	25	80-120
Bromobenzene	0.0	10	10	10	98	96	1	25	80-120
1,1,2,2-Tetrachloroe	0.0	10	10	10	103	101	1	25	80-120
1,2,3-Trichloropropa	0.0	10	10	9	95	94	1	25	80-120

2-Chlorotoluene	0.0	10	9	9	95	94	0	25	80-120
4-Chlorotoluene	0.0	10	10	10	99	98	1	25	80-120
1,3,5-Trimethylbenze	0.0	10	9	9	92	90	2	25	80-120
tert-Butylbenzene	0.0	10	10	10	99	98	1	25	80-120
1,2,4-Trimethylbenze	0.0	10	9	9	92	91	2	25	80-120
sec-Butylbenzene	0.0	10	10	10	100	99	1	25	80-120
1,3-Dichlorobenzene	0.0	10	10	10	96	95	2	25	80-120
4-Isopropyltoluene	0.0	10	10	10	98	97	1	25	80-120
1,4-Dichlorobenzene	0.0	10	10	10	97	95	3	25	80-120
1,2-Dichlorobenzene	0.0	10	10	9	96	94	2	25	80-120
n-Butylbenzene	0.0	10	10	10	99	99	1	25	80-120
1,2-Dibromo-3-chloro	0.0	10	9	9	90	88	2	25	80-120
1,2,4-Trichlorobenze	0.0	10	9	9	91	92	2	25	80-120
Hexachlorobutadiene	0.0	10	9	9	93	95	3	25	80-120
Naphthalene	0.0	10	9	9	93	92	1	25	80-120
1,2,3-Trichlorobenze	0.0	10	9	9	89	91	3	25	80-120

Quantitation Report

Data File : d:\hpchem\1\data\c0438.d
Acq On : 2 Dec 95 9:59 pm
Sample : 9554060 MS BLDG 108 MW-3
Misc : 25 ML
Quant Time: Dec 5 12:10 1995

Vial: 14
Operator: MDC
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	12.18	96	1703293	5.00	ug/L		-0.03
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.40	95	897430	4.88	ug/L		97.60%
57) 1,2-Dichlorobenzene-d4	22.20	152	553194	4.80	ug/L		95.95%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.51	85	820685	8.90	ug/L		99
3) Chloromethane	3.94	50	698309	9.97	ug/L		96
4) Vinyl chloride	4.15	62	797767	10.24	ug/L		99
5) Bromomethane	4.85	94	526929	9.73	ug/L		99
6) Chloroethane	5.08	64	506891	11.71	ug/L		99
7) Trichlorofluoromethane	5.68	101	1376902	10.23	ug/L		98
8) 1,1-Dichloroethene	6.80	96	823573	10.21	ug/L		99
9) Methylene chloride	7.79	84	753291	9.34	ug/L		97
10) trans-1,2-Dichloroethene	8.33	96	927299	10.07	ug/L		98
12) 1,1-Dichloroethane	9.13	63	1767798	10.22	ug/L		99
13) 2,2-Dichloropropane	10.17	77	1278341	8.84	ug/L		99
14) cis-1,2-Dichloroethene	10.18	96	911322	10.07	ug/L		98
16) Bromochloromethane	10.60	128	377895	9.63	ug/L	#	91
17) Chloroform	10.75	83	1582880	9.90	ug/L		98
18) 1,1,1-Trichloroethane	11.05	97	1542519	9.97	ug/L		98
19) Carbon tetrachloride	11.35	117	1450672	9.92	ug/L		99
20) 1,1-Dichloropropene	11.34	75	1459229	10.11	ug/L		99
21) Benzene	11.70	78	2943226	9.93	ug/L		99
22) 1,2-Dichloroethane	11.72	62	634752	9.56	ug/L		97
23) Trichloroethene	12.80	95	1223246	9.95	ug/L		98
24) 1,2-Dichloropropane	13.17	63	1047852	10.19	ug/L		99
25) Dibromomethane	13.37	93	443065	9.82	ug/L		94
26) Bromodichloromethane	13.63	83	1298055	9.75	ug/L		100
27) cis-1,3-Dichloropropene	14.38	75	1152102	9.60	ug/L		99
28) Toluene	14.96	92	2090210	10.00	ug/L		99
29) trans-1,3-Dichloropropene	15.31	75	776000	9.37	ug/L		99
30) 1,1,2-Trichloroethane	15.63	83	430739	9.68	ug/L		99
31) Tetrachloroethene	15.91	166	1443936	9.74	ug/L		98
32) 1,3-Dichloropropane	15.92	76	824220	9.78	ug/L		99
33) Dibromochloromethane	16.32	129	845187	9.55	ug/L		98
34) 1,2-Dibromoethane	16.53	107	624674	9.63	ug/L		98
35) Chlorobenzene	17.38	112	2371559	9.84	ug/L		99
36) 1,1,1,2-Tetrachloroethane	17.52	131	980852	9.80	ug/L		98
37) Ethylbenzene	17.56	91	4220466	9.83	ug/L		99
38) Xylene (para & meta)	17.77	106	3161312	19.45	ug/L		97
39) Xylene (Ortho)	18.47	106	1446932	9.70	ug/L		98
40) Styrene	18.49	104	2056886	8.99	ug/L		100

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

Quantitation Report

Data File : d:\hpchem\1\data\c0438.d
Acq On : 2 Dec 95 9:59 pm
Sample : 9554060 MS BLDG 108 MW-3
Misc : 25 ML
Quant Time: Dec 5 12:10 1995

Vial: 14
Operator: MDC
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.84	173	451295	9.30	ug/L		99
42)	Isopropylbenzene	19.12	105	4095957	9.87	ug/L	m	0
44)	Bromobenzene	19.68	156	1052449	9.78	ug/L		98
45)	1,1,2,2-Tetrachloroethane	19.64	83	558844	10.26	ug/L		100
46)	1,2,3-Trichloropropane	19.72	75	538462	9.62	ug/L		94
47)	n-Propylbenzene	19.86	91	5613614	9.91	ug/L		100
48)	2-Chlorotoluene	20.02	91	3138751	9.47	ug/L		100
49)	4-Chlorotoluene	20.22	91	3658824	9.91	ug/L		99
50)	1,3,5-Trimethylbenzene	20.17	105	3331590	9.25	ug/L		98
51)	tert-Butylbenzene	20.77	119	4019878	9.94	ug/L		98
52)	1,2,4-Trimethylbenzene	20.85	105	3330253	9.25	ug/L		99
53)	sec-Butylbenzene	21.17	105	5518689	10.05	ug/L		100
54)	1,3-Dichlorobenzene	21.38	146	2069849	9.72	ug/L		99
55)	4-Isopropyltoluene	21.43	119	4337269	9.83	ug/L		100
56)	1,4-Dichlorobenzene	21.54	146	2046903	9.81	ug/L		99
58)	1,2-Dichlorobenzene	22.23	146	1620495	9.63	ug/L		98
59)	n-Butylbenzene	22.17	91	4466334	9.97	ug/L		98
60)	1,2-Dibromo-3-chloropropan	23.64	75	103985	9.04	ug/L		93
61)	1,2,4-Trichlorobenzene	25.19	180	1236512	9.07	ug/L		100
62)	Hexachlorobutadiene	25.51	225	1096197	9.25	ug/L		99
63)	Naphthalene	25.66	128	1229866	9.34	ug/L	m	0
64)	1,2,3-Trichlorobenzene	26.15	180	884388	8.90	ug/L		99
65)	Methyl-tert butyl ether	8.37	73	1022390	9.81	ug/L		99
66)	tert-Butyl Alcohol	8.15	59	34747	22.63	ug/L		100

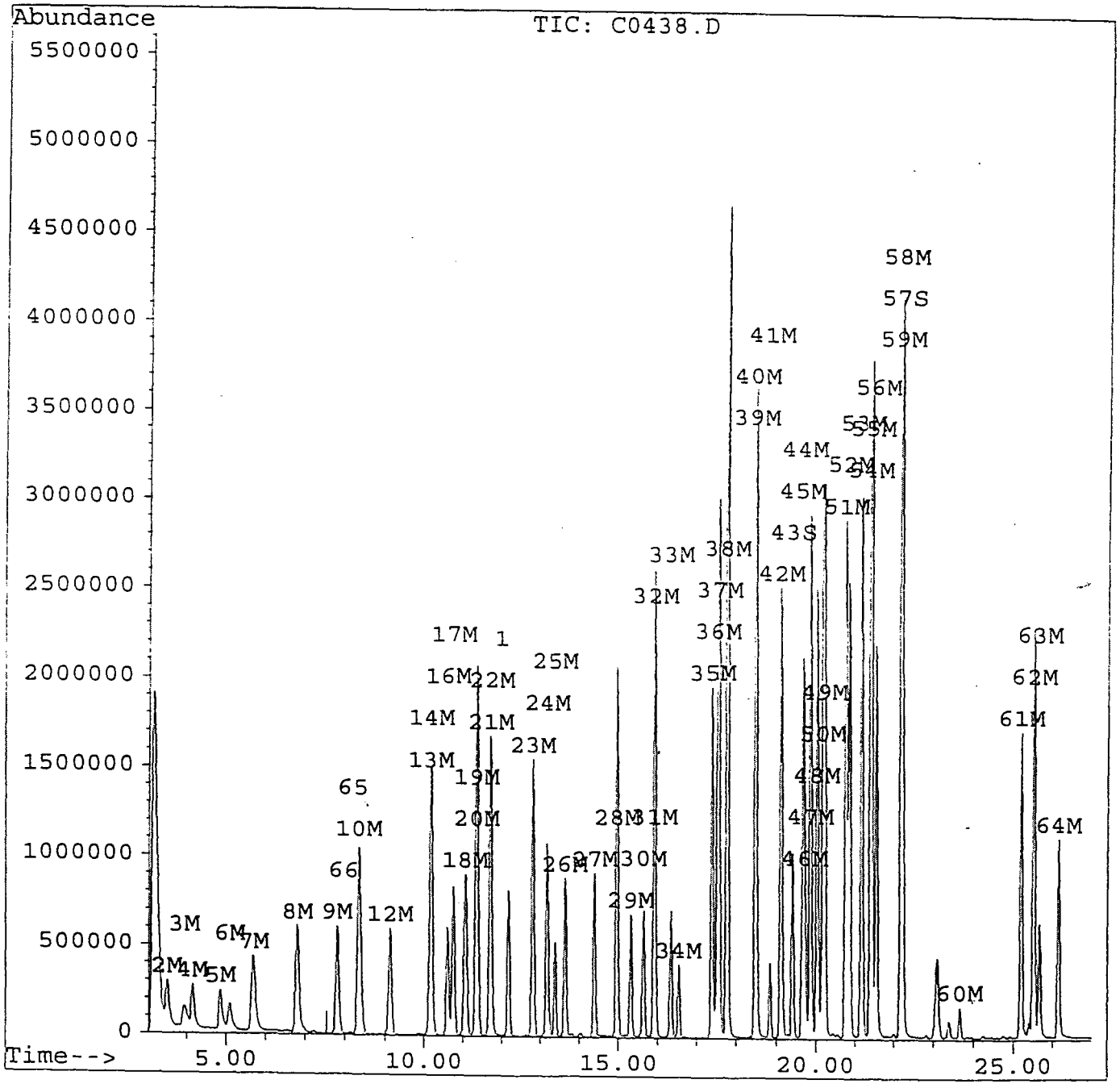
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c0438.d
Acq On : 2 Dec 95 9:59 pm
Sample : 9554060 MS BLDG 108 MW-3
Misc : 25 ML
Quant Time: Dec 5 12:10 1995

Vial: 14 143
Operator: MDC
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : d:\hpchem\1\data\c0439.d
Acq On : 2 Dec 95 10:33 pm
Sample : 9554060 MSD BLDG 108 MW-3
Misc : 25 ML
Quant Time: Dec 5 12:11 1995

Vial: 15
Operator: MDC
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	12.18	96	1698292	5.00	ug/L	-0.03
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.40	95	883203	4.82	ug/L	96.34%
57) 1,2-Dichlorobenzene-d4	22.20	152	555400	4.83	ug/L	96.62%
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.50	85	813406	8.85	ug/L	97
3) Chloromethane	3.94	50	679127	9.72	ug/L	100
4) Vinyl chloride	4.14	62	766232	9.86	ug/L	98
5) Bromomethane	4.83	94	531136	9.84	ug/L	97
6) Chloroethane	5.09	64	499315	11.56	ug/L	97
7) Trichlorofluoromethane	5.68	101	1352386	10.08	ug/L	99
8) 1,1-Dichloroethene	6.79	96	814526	10.13	ug/L	99
9) Methylene chloride	7.79	84	748911	9.32	ug/L	99
10) trans-1,2-Dichloroethene	8.33	96	927475	10.10	ug/L	99
12) 1,1-Dichloroethane	9.12	63	1756085	10.18	ug/L	99
13) 2,2-Dichloropropane	10.16	77	1263265	8.76	ug/L	100
14) cis-1,2-Dichloroethene	10.18	96	911494	10.10	ug/L	98
16) Bromochloromethane	10.60	128	378121	9.66	ug/L	93
17) Chloroform	10.75	83	1578477	9.91	ug/L	99
18) 1,1,1-Trichloroethane	11.06	97	1542978	10.00	ug/L	100
19) Carbon tetrachloride	11.35	117	1441710	9.89	ug/L	98
20) 1,1-Dichloropropene	11.35	75	1440937	10.01	ug/L	99
21) Benzene	11.70	78	2920025	9.88	ug/L	100
22) 1,2-Dichloroethane	11.72	62	627677	9.48	ug/L	98
23) Trichloroethene	12.80	95	1204168	9.83	ug/L	98
24) 1,2-Dichloropropane	13.17	63	1053165	10.27	ug/L	99
25) Dibromomethane	13.37	93	439241	9.76	ug/L	96
26) Bromodichloromethane	13.64	83	1282014	9.65	ug/L	97
27) cis-1,3-Dichloropropene	14.38	75	1126773	9.41	ug/L	98
28) Toluene	14.96	92	2067420	9.92	ug/L	99
29) trans-1,3-Dichloropropene	15.32	75	749502	9.07	ug/L	99
30) 1,1,2-Trichloroethane	15.64	83	430766	9.71	ug/L	98
31) Tetrachloroethene	15.91	166	1430996	9.68	ug/L	99
32) 1,3-Dichloropropane	15.93	76	813068	9.68	ug/L	99
33) Dibromochloromethane	16.33	129	820032	9.29	ug/L	100
34) 1,2-Dibromoethane	16.54	107	620011	9.59	ug/L	98
35) Chlorobenzene	17.38	112	2351583	9.79	ug/L	100
36) 1,1,1,2-Tetrachloroethane	17.52	131	966332	9.68	ug/L	99
37) Ethylbenzene	17.56	91	4161259	9.72	ug/L	100
38) Xylene (para & meta)	17.76	106	3116953	19.24	ug/L	99
39) Xylene (Ortho)	18.48	106	1433164	9.64	ug/L	97
40) Styrene	18.50	104	2048262	8.97	ug/L	97

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

Quantitation Report

Data File : d:\hpchem\1\data\c0439.d
Acq On : 2 Dec 95 10:33 pm
Sample : 9554060 MSD BLDG 108 MW-3
Misc : 25 ML
Quant Time: Dec 5 12:11 1995

Vial: 15
Operator: MDC
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.84	173	440898	9.11	ug/L		98
42)	Isopropylbenzene	19.12	105	4039408	9.76	ug/L	m	0
44)	Bromobenzene	19.69	156	1034795	9.65	ug/L		99
45)	1,1,2,2-Tetrachloroethane	19.65	83	550664	10.14	ug/L		96
46)	1,2,3-Trichloropropane	19.72	75	529868	9.50	ug/L	#	74
47)	n-Propylbenzene	19.86	91	5528055	9.78	ug/L		100
48)	2-Chlorotoluene	20.03	91	3115655	9.43	ug/L		99
49)	4-Chlorotoluene	20.22	91	3597275	9.77	ug/L		98
50)	1,3,5-Trimethylbenzene	20.18	105	3256240	9.07	ug/L		98
51)	tert-Butylbenzene	20.76	119	3975738	9.86	ug/L		97
52)	1,2,4-Trimethylbenzene	20.86	105	3267491	9.11	ug/L		99
53)	sec-Butylbenzene	21.17	105	5446678	9.95	ug/L		99
54)	1,3-Dichlorobenzene	21.38	146	2031549	9.57	ug/L		99
55)	4-Isopropyltoluene	21.42	119	4299083	9.77	ug/L		99
56)	1,4-Dichlorobenzene	21.55	146	1988592	9.56	ug/L		100
58)	1,2-Dichlorobenzene	22.23	146	1588483	9.46	ug/L		97
59)	n-Butylbenzene	22.18	91	4430414	9.92	ug/L		99
60)	1,2-Dibromo-3-chloropropan	23.65	75	101512	8.85	ug/L		98
61)	1,2,4-Trichlorobenzene	25.20	180	1253282	9.22	ug/L		100
62)	Hexachlorobutadiene	25.52	225	1120719	9.49	ug/L		99
63)	Naphthalene	25.66	128	1212182	9.23	ug/L	m	0
64)	1,2,3-Trichlorobenzene	26.16	180	905706	9.14	ug/L		96
65)	Methyl-tert butyl ether	8.37	73	1003755	9.66	ug/L		99
66)	tert-Butyl Alcohol	8.11	59	74140	48.43	ug/L		100

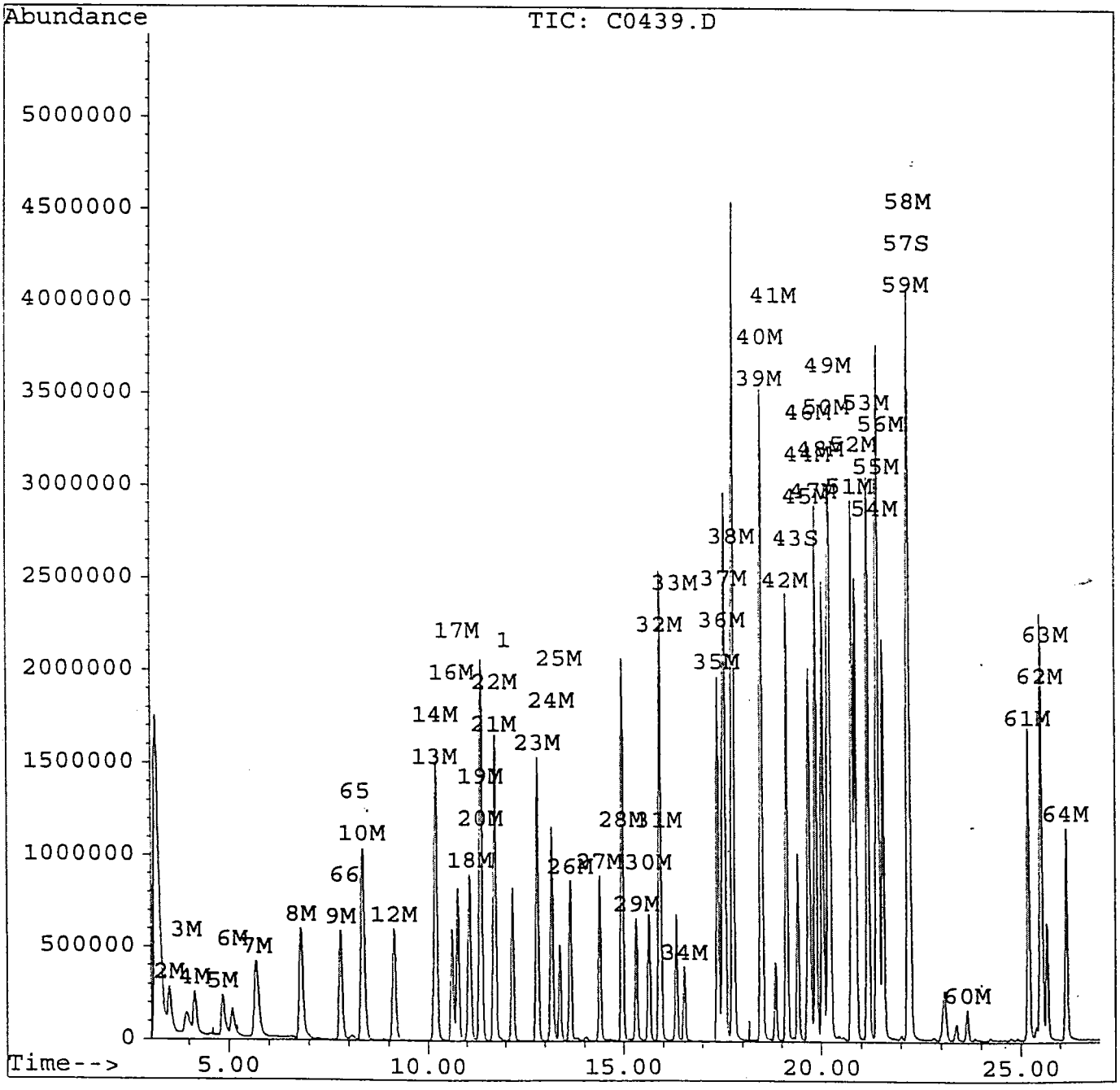
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c0439.d
Acq On : 2 Dec 95 10:33 pm
Sample : 9554060 MSD BLDG 108 MW-3
Misc : 25 ML
Quant Time: Dec 5 12:11 1995

Vial: 15 146
Operator: MDC
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Wed Nov 22 09:25:47 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: B8951.D DFTPP Injection Date: 10/22/95

Instrument ID: ABNA DFTPP Injection Time: 1620

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE		
51	30.0 - 80.0% of mass 198	58.1		
68	Less than 2.0% of mass 69	0.0	0.0	)1
69	Mass 69 relative abundance	82.8		
70	Less than 2.0% of mass 69	0.2	0.3	)1
127	25.0 - 75.0% of mass 198	44.6		
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	6.7		
275	10.0 - 30.0% of mass 198	20.2		
365	Greater than 0.75% of mass 198	2.5		
441	Present, but less than mass 443	10.3		
442	40.0 - 110.0% of mass 198	72.0		
443	15.0 - 24.0% of mass 442	13.9	19.2	)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	B8952.D	10/22/95	1658
#		50 STANDARD	B8953.D	10/22/95	1749
#		80 STANDARD	B8954.D	10/22/95	1842
#		120 STANDARD	B8955.D	10/22/95	1933
#		160 STANDARD	B8956.D	10/22/95	2024
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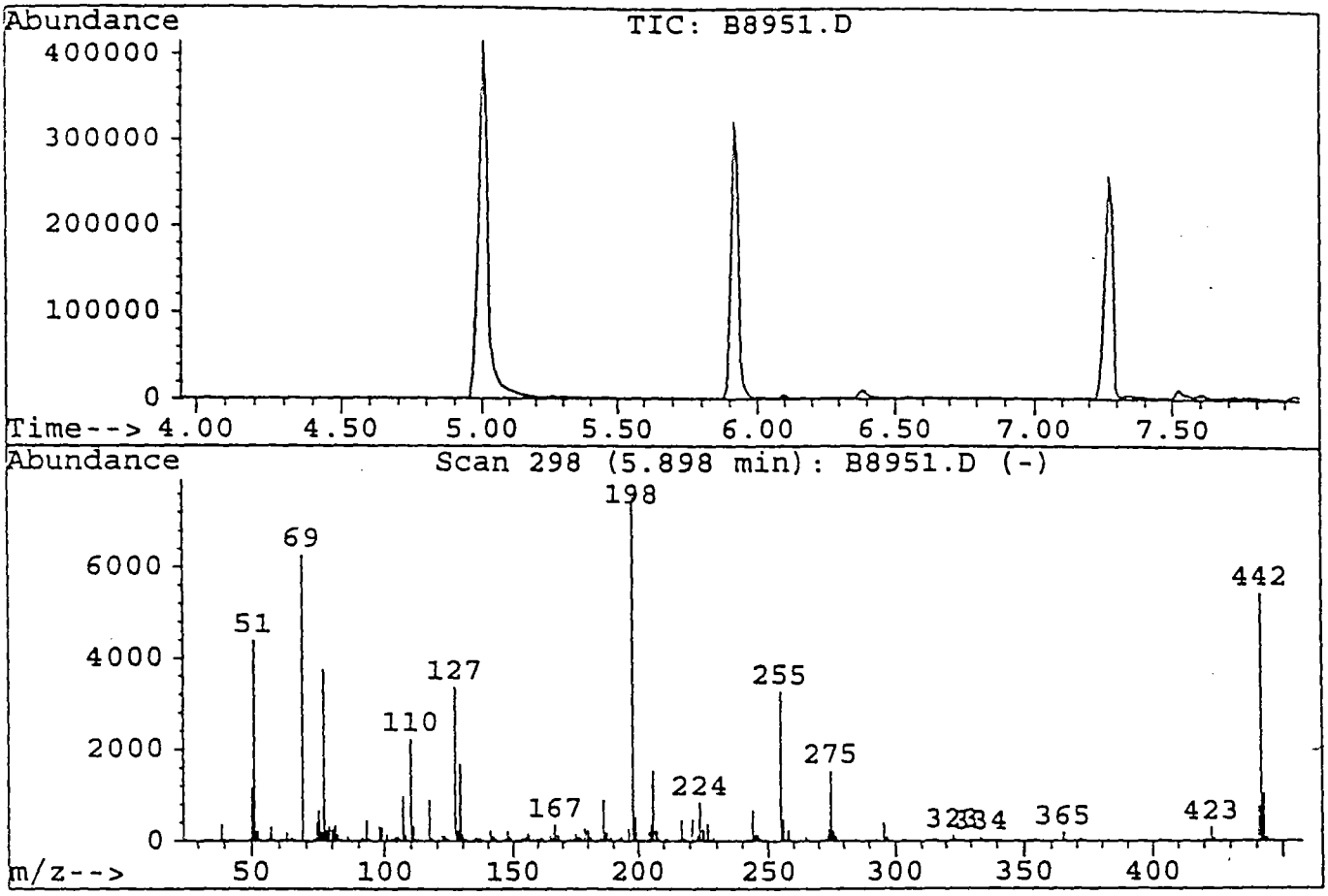
DFTPP

Data File : C:\HPCHEM\1\DATA2\B8951.D
Acq On : 22 Oct 95 4:20 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: 303

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	58.1	4393	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	82.8	6258	PASS
70	69	0	2	0.3	17	PASS
127	198	40	60	44.6	3367	PASS
197	198	0	1	0.0	0	PASS
198	198	100	100	100.0	7557	PASS
199	198	5	9	6.7	509	PASS
275	198	10	30	20.2	1529	PASS
365	198	1	100	2.5	192	PASS
441	443	0	100	74.6	781	PASS
442	198	40	100	72.0	5439	PASS
443	442	17	23	19.2	1047	PASS

Scan 298 (5.898 min): B8951.D

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
38.10	48	53.20	32	66.25	16	81.05	330
39.10	377	55.15	21	69.05	6258	82.05	125
40.05	27	56.05	141	70.00	17	83.10	43
41.10	10	57.15	307	73.05	24	85.15	33
44.05	7	58.05	32	74.10	427	86.05	107
46.60	11	59.95	22	75.05	682	87.05	21
47.80	16	61.05	55	76.05	197	91.15	87
49.10	37	61.95	44	77.05	3745	92.00	60
50.10	1180	63.05	185	78.10	240	93.00	454
51.10	4393	64.15	16	79.05	321	94.00	50
52.15	214	65.10	64	80.15	246	97.10	3

Scan 298 (5.898 min): B8951.D

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
98.00	325	110.00	2222	122.95	109	137.05	74
99.00	281	111.00	317	124.10	52	140.95	229
100.10	5	112.00	46	125.05	31	141.95	94
100.95	139	113.10	20	127.00	3367	142.95	55
102.10	18	115.90	71	128.00	243	145.95	27
102.90	73	117.00	896	129.00	1693	147.00	82
104.00	105	117.90	36	129.90	141	148.00	203
105.00	92	118.10	58	130.95	51	148.95	66
105.90	39	119.00	20	134.00	53	151.05	39
107.00	988	120.00	31	134.95	101	151.85	31
108.00	125	122.00	109	136.05	69	152.05	32

Scan 298 (5.898 min): B8951.D

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
152.95	60	165.05	106	176.90	82	187.90	28
154.05	51	166.05	68	177.80	28	188.85	72
154.95	105	166.90	354	178.10	24	191.10	44
156.05	158	167.95	121	178.90	282	192.00	61
156.85	36	169.10	30	180.00	203	193.00	102
157.95	40	170.10	16	181.00	77	194.00	21
158.95	24	171.90	35	183.10	15	195.10	31
159.25	25	173.00	24	183.90	27	195.95	283
159.95	67	173.95	67	184.90	108	197.90	7557
160.95	104	175.00	148	186.00	914	198.90	509
161.75	45	175.90	65	186.95	185	200.00	46

Scan 298 (5.898 min): B8951.D

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
201.60	61	215.95	46	231.05	30	246.80	43
202.90	37	216.80	458	233.85	24	248.80	25
203.95	217	217.95	63	234.85	34	254.85	3269
204.95	357	220.95	493	236.95	39	255.90	462
205.95	1535	222.90	129	238.85	14	256.90	41
206.95	222	223.90	845	240.80	39	257.90	257
207.85	61	224.95	251	242.00	53	258.90	35
210.00	28	226.05	23	243.00	42	264.80	100
210.65	74	226.90	375	243.90	676	265.60	2
211.15	58	227.85	48	244.90	125	271.10	17
214.95	32	228.85	86	245.90	118	272.90	118

Scan 293 (5.898 min): B8951.D

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
273.95	258	303.05	54	340.80	21	382.75	22
274.90	1529	314.00	18	351.85	43	389.90	20
275.90	208	314.80	56	352.85	33	401.90	34
276.80	117	315.80	36	353.85	41	402.80	36
277.65	28	321.00	19	354.65	19	420.80	38
284.25	14	322.85	124	364.75	192	421.80	40
284.55	12	323.80	30	365.65	20	422.75	303
285.05	41	326.80	31	370.75	21	423.85	52
292.75	37	332.00	18	371.85	86	440.80	781
295.80	403	333.80	79	372.75	20	441.85	5439
296.85	79	334.90	23	372.95	20	442.85	1047

Scan 298 (5.898 min): B8951.D

Modified:subtracted

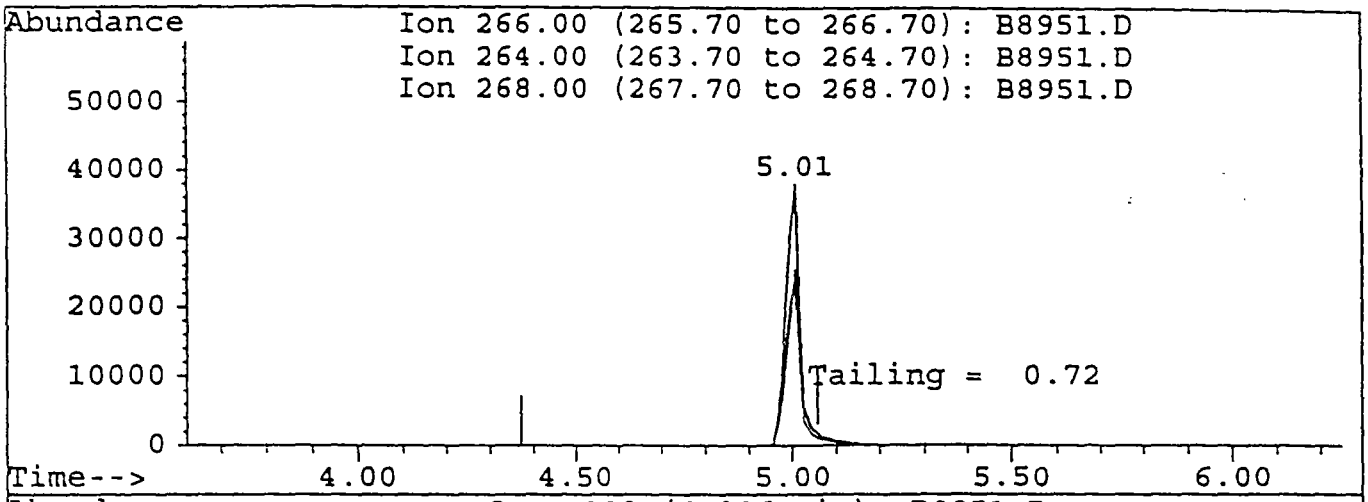
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
443.85	86						

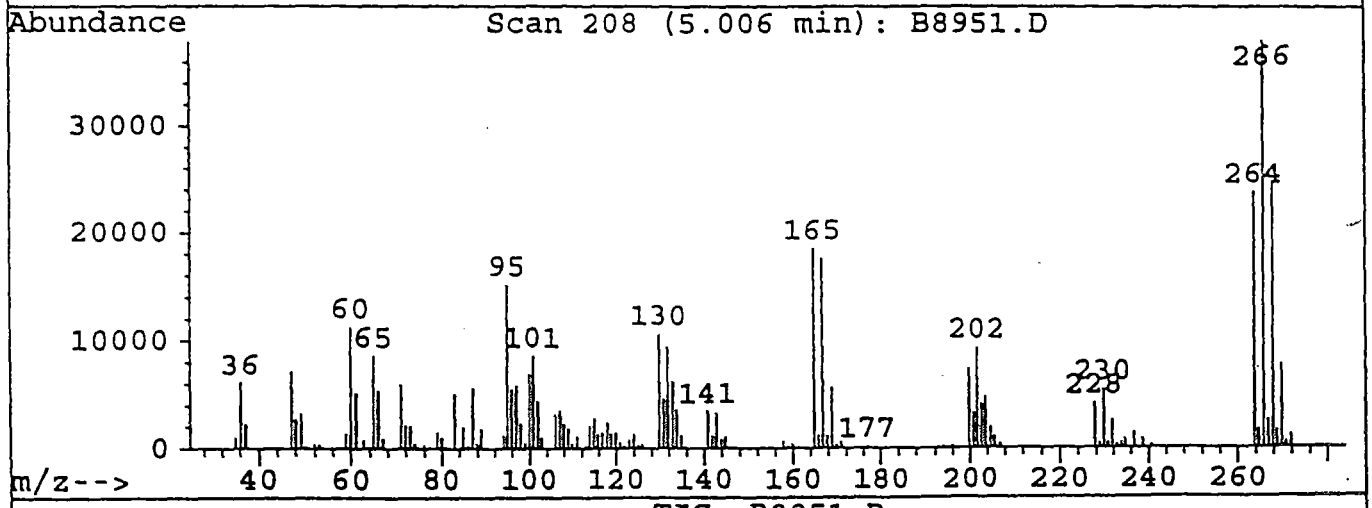
Quantitation Report

Data File : C:\HPCHEM\1\DATA2\B8951.D
Acq On : 22 Oct 95 4:20 pm
Sample : DFTPP ..... Converted from RTE d
Misc :
Quant Time: Oct 23 14:06 1995

Vial: 1
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Sep 21 12:47:27 1995
Response via : Multiple Level Calibration





TIC: B8951.D

(1) Pentachlorophenol (CM)

5.01min 266.46ug/mL

response 88011

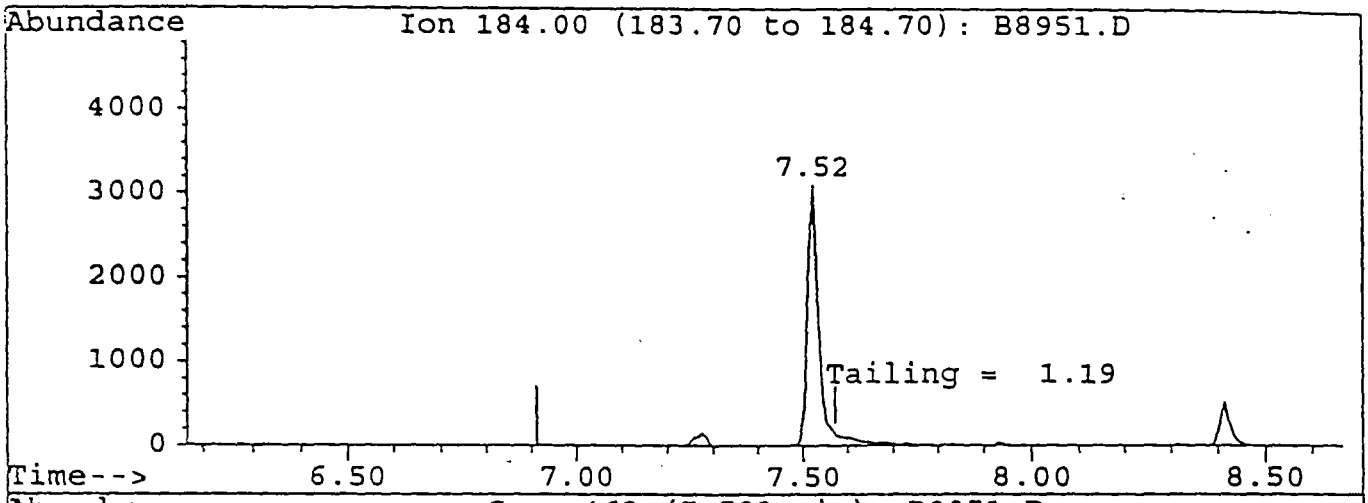
Ion	Exp%	Act%
266.00	100	100
264.00	64.30	67.02
268.00	64.70	64.58
0.00	0.00	0.00

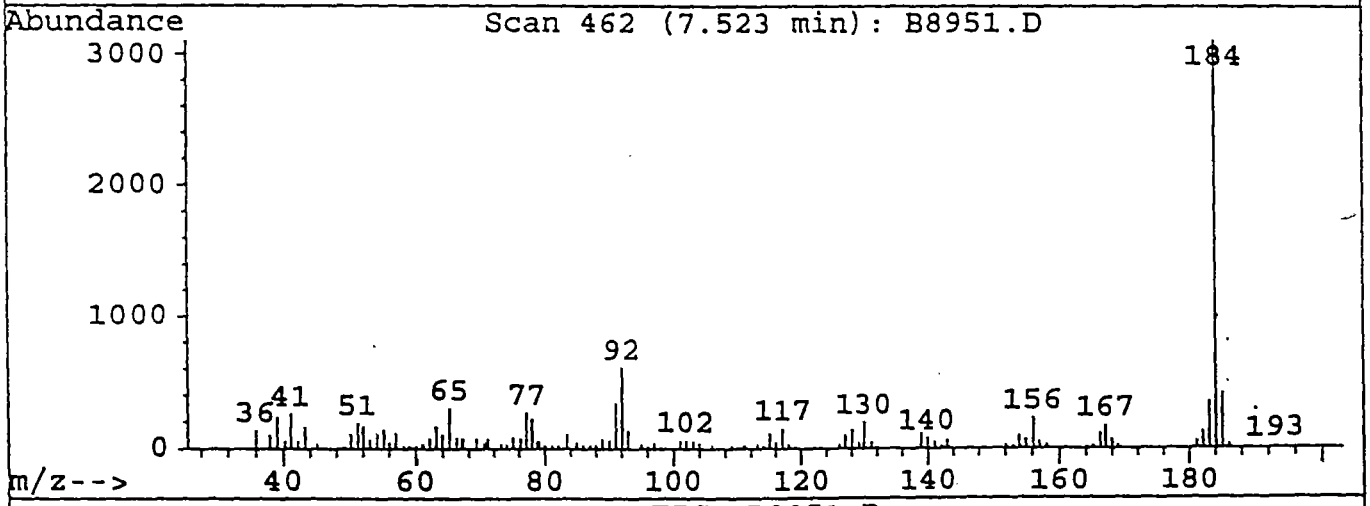
Quantitation Report

Data File : C:\HPCHEM\1\DATA2\B8951.D
Acq On : 22 Oct 95 4:20 pm
Sample : DFTPP ..... Converted from RTE d
Misc :
Quant Time: Oct 23 14:06 1995

Vial: 1
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Sep 21 12:47:27 1995
Response via : Multiple Level Calibration





TIC: B8951.D

(2) Benzidine
7.52min 18.09ug/ml
response 5556

Ion	Exp%	Act%
184.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Response Factor Report ABNA

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed Oct 25 10:15:01 1995
Response via : Initial Calibration

Calibration Files
160 =B8956.D 120 =B8955.D 80 =B8954.D
50 =B8953.D 20 =B8952.D

		Compound	160	120	80	50	20	Avg	%RSD
1)	I	1,4-Dichlorobenzene-d	----------ISTD----------						
2)	S	2-Fluorophenol	1.298	1.281	1.315	1.267	1.215	1.275	2.98
3)	S	Phenol-d5	2.193	2.110	2.121	2.008	1.912	2.069	5.30
4)	M	N-nitrosodimethylamin	0.949	0.938	0.778	0.886		0.887	8.80
5)		Pyridine	0.977	0.898	0.594	0.908	0.596	0.795	23.24
6)	CM	Phenol	2.058	1.866	1.941	1.876	1.963	1.941	4.00
7)	MT	bis(2-Chloroethyl)eth	2.339	2.271	2.478	2.298	2.478	2.373	4.17
8)	M	2-Chlorophenol	1.340	1.326	1.370	1.335	1.293	1.333	2.08
9)	MT	1,3-Dichlorobenzene	1.333	1.349	1.417	1.396	1.341	1.367	2.72
10)	CM	1,4-Dichlorobenzene	1.341	1.339	1.435	1.444	1.359	1.383	3.74
11)	M	1,2-Dichlorobenzene	1.327	1.309	1.391	1.387	1.322	1.347	2.88
12)	T	2-Methylphenol	1.282	1.266	1.246	1.281	1.320	1.279	2.15
13)	M	bis(2-chloroisopropyl	3.117	2.080	2.102	1.860	2.012	2.234	22.50
14)	T	4-Methylphenol	1.346	1.396	1.393	1.481	1.395	1.402	3.48
15)	PM	N-Nitroso-Di-n-propyl	1.635	1.504	1.491	1.495	1.515	1.528	3.97
16)	M	Hexachloroethane	0.866	0.842	0.908	0.877	0.847	0.868	3.04
17)	I	Naphthalene-d8	----------ISTD----------						
18)	S	Nitrobenzene-d5	0.536	0.548	0.540	0.529	0.557	0.542	2.00
19)	M	Nitrobenzene	0.665	0.462	0.486	0.489	0.494	0.519	15.90
20)	M	Isophorone	1.023	1.026	1.061	1.021	1.376	1.101	13.99
21)	MC	2-Nitrophenol	0.233	0.242	0.253	0.246	0.223	0.239	4.94
22)	M	2,4-Dimethylphenol	0.406	0.400	0.396	0.376	0.355	0.387	5.48
23)	M	bis(2-Chloroethoxy)me	0.594	0.586	0.623	0.583	0.629	0.603	3.57
24)	MC	2,4-Dichlorophenol	0.301	0.295	0.305	0.294	0.281	0.295	3.20
25)	M	1,2,4-Trichlorobenzen	0.299	0.303	0.314	0.309	0.297	0.304	2.24
26)	M	Naphthalene	0.999	1.022	0.994	1.016	0.985	1.003	1.53
27)	T	4-Chloroaniline	0.476	0.462	0.491	0.449	0.476	0.470	3.41
28)	MC	Hexachlorobutadiene	0.155	0.162	0.164	0.161	0.155	0.160	2.53
29)	MC	4-Chloro-3-methylphen	0.402	0.386	0.385	0.392	0.376	0.388	2.50
30)	M	2-Chloronaphthalene	0.643	0.619	0.649	0.634	0.627	0.634	1.88
31)	T	2-Methylnaphthalene	0.823	0.860	0.870	0.905	0.890	0.870	3.60
32)	I	Acenaphthene-d10	----------ISTD----------						
33)	P	Hexachlorocyclopentad	0.305	0.321	0.324	0.243	0.254	0.289	13.21
34)	MC	2,4,6-Trichlorophenol	0.491	0.481	0.415	0.404	0.339	0.426	14.61
35)	T	2,4,5-Trichlorophenol	0.271	0.293	0.373	0.403	0.396	0.347	17.62
36)	S	2-Fluorobiphenyl	1.238	1.248	1.189	1.241	1.184	1.220	2.53
37)	T	2-Nitroaniline	0.841	0.736	0.817	0.751	0.769	0.783	5.72
38)	M	Dimethylphthalate	1.333	1.293	1.362	1.377	1.474	1.368	4.92
39)	M	Acenaphthylene	1.777	1.826	1.858	1.846	1.697	1.801	3.66
40)	M	2,6-Dinitrotoluene	0.243	0.258	0.320	0.377	0.339	0.308	18.23
41)	T	3-Nitroaniline	0.298	0.316	0.358	0.366	0.372	0.342	9.62

(#) = Out of Ra

Response Factor Report ABNA

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed Oct 25 10:15:01 1995
Response via : Initial Calibration

Calibration Files
160 =B8956.D 120 =B8955.D 80 =B8954.D
50 =B8953.D 20 =B8952.D

		Compound	160	120	80	50	20	Avg	%RSD
42)	CM	Acenaphthene	0.987	1.017	1.050	1.041	1.005	1.020	2.52
43)	MP	2,4-Dinitrophenol	0.242	0.217	0.207	0.173		0.210	13.59
44)	PM	4-Nitrophenol	0.243	0.224	0.225	0.220		0.228	4.42
45)	T	Dibenzofuran	1.535	1.581	1.527	1.568	1.461	1.534	3.05
46)	M	2,4-Dinitrotoluene	0.350	0.503	0.509	0.467	0.434	0.452	14.36
47)	M	Diethylphthalate	1.464	1.545	1.538	1.580	1.653	1.556	4.40
48)	M	Fluorene	1.177	1.197	1.128	1.203	1.132	1.167	3.03
49)	M	4-Chlorophenyl-phenyl	0.476	0.512	0.504	0.514	0.538	0.509	4.32
50)		Phenanthrene-d10	----------ISTD----------						
51)	T	4-Nitroaniline	0.201	0.219	0.237	0.246	0.248	0.230	8.80
52)	MC	4,6-Dinitro-2-methylp	0.143	0.147	0.146	0.157		0.148	4.25
53)	T	n-Nitrosodiphenylamin	0.502	0.521	0.559	0.565	0.566	0.543	5.37
54)	S	2,4,6-Tribromophenol	0.137	0.130	0.130	0.122	0.114	0.127	6.88
55)		1,2-Diphenylhydrazine	1.727	1.765	1.839	1.876	1.714	1.784	3.97
56)	M	4-Bromophenyl-phenyle	0.170	0.189	0.192	0.186	0.198	0.187	5.57
57)	M	Hexachlorobenzene	0.234	0.240	0.250	0.239	0.223	0.237	4.16
58)	CM	Pentachlorophenol	0.176	0.169	0.159	0.146		0.163	7.89
59)	M	Phenanthrene	1.052	1.101	1.091	1.128	1.062	1.087	2.81
60)	M	Anthracene	1.028	1.059	1.084	1.099	1.067	1.068	2.50
61)		Carbazole	1.073	1.102	1.155	1.045	0.948	1.065	7.19
62)	M	Di-n-butylphthalate	1.934	2.050	1.972	2.064	2.036	2.011	2.76
63)	MC	Fluoranthene	1.064	1.116	1.124	1.122	1.034	1.092	3.74
64)	I	Chrysene-d12	----------ISTD----------						
65)		Benzidine	0.292	0.287	0.271	0.235	0.282	0.274	8.41
66)	M	Pyrene	1.738	1.691	1.628	1.557	1.388	1.600	8.56
67)	S	Terphenyl-d14	1.136	1.078	0.983	0.913	0.857	0.994	11.56
68)	M	Butylbenzylphthalate	1.325	1.272	1.223	1.223	1.183	1.245	4.39
69)	M	Benzo[a]anthracene	1.452	1.523	1.454	1.486	1.231	1.429	8.01
70)	M	3,3'-Dichlorobenzidin	0.363	0.382	0.412	0.399	0.375	0.386	5.04
71)	M	Chrysene	0.772	0.885	0.894	0.868	0.865	0.857	5.70
72)	M	bis(2-Ethylhexyl)phth	1.753	1.891	1.767	1.774	1.738	1.785	3.42
73)	I	Perylene-d12	----------ISTD----------						
74)	MC	Di-n-octylphthalate	5.446	5.792	5.574	5.955		5.692	3.97
75)	M	Benzo[b]fluoranthene	1.854	2.099	1.614	2.424	1.772	1.952	16.21
76)	m	Benzo[k]fluoranthene	1.092	1.112	1.104	1.200	1.303	1.162	7.73
77)	mc	Benzo[a]pyrene	1.053	1.059	1.082	1.079	1.132	1.081	2.85
78)	m	Indeno[1,2,3-cd]pyren	0.593	0.636	0.621	0.586	0.371	0.561	19.33
79)	m	Dibenz[a,h]anthracene	0.600	0.602	0.587	0.572	0.382	0.549	17.12
80)	M	Benzo[g,h,i]perylene	0.552	0.576	0.573	0.534	0.312	0.510	21.93
81)		1-Methyl naphthalene						0.000#	-1.00
82)		7,12-Dimethylbenz(a)a						0.000#	-1.00

(#) = Out of Range

Response Factor Report ABNA

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed Oct 25 10:15:01 1995
Response via : Initial Calibration

Calibration Files
160 =B8956.D 120 =B8955.D 80 =B8954.D
50 =B8953.D 20 =B8952.D

	Compound	160	120	80	50	20	Avg	%RSD
83)	Quinoline						0.000#	-1.00
84)	Thiophenol						0.000#	-1.00
85)	4-Methyl chrysene						0.000#	-1.00
86)	Dibenz(a,j)acridine						0.000#	-1.00
87)	Indene						0.000#	-1.00
88)	Benzyl alcohol						0.000#	-1.00
89)	Benzoic acid						0.000#	-1.00

Quantitation Report

Data File : c:\hpchem\1\data2\b8952.d
Acq On : 22 Oct 95 4:58 pm
Sample : 20 STD..... Converted from RTE d
Misc :
Quant Time: Oct 25 9:45 1995

Vial: 2
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Sep 21 12:47:27 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.69	152	29442	40.00	ug/mL	-0.33
17) Naphthalene-d8	12.41	136	115955	40.00	ug/mL	-0.35
32) Acenaphthene-d10	17.73	164	69183	40.00	ug/mL	-0.35
50) Phenanthrene-d10	22.20	188	103757	40.00	ug/ml	-0.38
64) Chrysene-d12	30.29	240	75851	40.00	ug/mL	-0.40
73) Perylene-d12	34.27	264	29259	40.00	ug/mL	-0.43
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.11	112	44724	46.49	ug/mL	46.49%
3) Phenol-d5	8.08	99	70383	45.87	ug/mL	45.87%
18) Nitrobenzene-d5	10.37	82	80764	52.70	ug/mL	52.70%
36) 2-Fluorobiphenyl	15.88	172	102384	48.24	ug/mL	48.24%
54) 2,4,6-Tribromophenol	20.14	330	14825	53.50	ug/mL	53.50%
67) Terphenyl-d14	27.36	244	81257	33.34	ug/mL	33.34%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	2.14	74	15448	25.20	ug/ml	100
6) Phenol	8.11	94	28900	20.59	ug/mL	100
7) bis(2-Chloroethyl)ether	12.10	93	36472	22.04	ug/mL	94
8) 2-Chlorophenol	8.09	128	19030	19.10	ug/mL#	81
9) 1,3-Dichlorobenzene	8.48	146	19737	19.33	ug/mL	96
10) 1,4-Dichlorobenzene	8.73	146	20003	19.12	ug/mL	96
11) 1,2-Dichlorobenzene	9.12	146	19457	19.34	ug/mL	97
12) 2-Methylphenol	9.81	108	19438	21.22	ug/mLm	100
13) bis(2-chloroisopropyl)ethe	9.79	45	29616	23.05	ug/mL#	40
14) 4-Methylphenol	10.31	108	20537	20.05	ug/mL	100
15) N-Nitroso-Di-n-propylamine	10.18	70	22300	21.23	ug/mL	94
16) Hexachloroethane	10.08	117	12474	20.33	ug/mL#	63
19) Nitrobenzene	10.43	77	28618	20.36	ug/mL	93
20) Isophorone	10.37	82	79753	25.72	ug/mL#	67
21) 2-Nitrophenol	11.37	139	12913	20.42	ug/mL#	86
22) 2,4-Dimethylphenol	11.83	107	20567	18.72	ug/mL#	100
23) bis(2-Chloroethoxy)methane	12.10	93	36472	21.56	ug/mL#	100
24) 2,4-Dichlorophenol	12.16	162	16269	19.83	ug/mL#	93
25) 1,2,4-Trichlorobenzene	12.32	180	17221	20.08	ug/mL	95
26) Naphthalene	12.47	128	57119	19.89	ug/mL	100
27) 4-Chloroaniline	12.84	127	27603	20.47	ug/mL	99
28) Hexachlorobutadiene	12.99	225	9013	20.60	ug/mL	95
29) 4-Chloro-3-methylphenol	14.57	107	21812	20.86	ug/mL	96
30) 2-Chloronaphthalene	16.05	162	36338	21.53	ug/ml#	100
31) 2-Methylnaphthalene	14.61	142	51624	30.41	ug/mL	95
33) Hexachlorocyclopentadiene	15.13	237	8772	19.27	ug/mL#	90
34) 2,4,6-Trichlorophenol	15.59	196	11710	15.31	ug/mL	96
35) 2,4,5-Trichlorophenol	15.69	196	13699	21.15	ug/mL	97

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

Quantitation Report

Data File : c:\hpchem\1\data2\b8952.d
Acq On : 22 Oct 95 4:58 pm
Sample : 20 STD..... Converted from RTE d
Misc :
Quant Time: Oct 25 9:45 1995

Vial: 2
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Sep 21 12:47:27 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37)	2-Nitroaniline	17.83	65	26617	23.54	ug/mL	72
38)	Dimethylphthalate	17.31	163	50983	22.95	ug/mL#	13
39)	Acenaphthylene	17.25	152	58691	19.03	ug/mL	98
40)	2,6-Dinitrotoluene	17.40	165	11726	19.95	ug/mL#	87
41)	3-Nitroaniline	19.68	138	12871	24.57	ug/mL#	87
42)	Acenaphthene	17.81	153	34778	18.65	ug/mL	99
43)	2,4-Dinitrophenol	18.15	184	4144	18.76	ug/mL#	66
44)	4-Nitrophenol	18.65	109	6336	21.77	ug/mL#	57
45)	Dibenzofuran	18.37	168	50539	19.77	ug/mL#	88
46)	2,4-Dinitrotoluene	18.56	165	15019	23.85	ug/mL#	1
47)	Diethylphthalate	19.54	149	57169	23.32	ug/mL	95
48)	Fluorene	19.39	166	39160	19.64	ug/mL	99
49)	4-Chlorophenyl-phenylether	19.60	204	18593	20.88	ug/mL	90
51)	4-Nitroaniline	19.68	138	12871	21.96	ug/mL	87
52)	4,6-Dinitro-2-methylphenol	19.77	198	6716	20.84	ug/mL	100
53)	n-Nitrosodiphenylamine	20.02	169	29360	21.36	ug/mL	95
55)	1,2-Diphenylhydrazine (as	20.08	77	88943	17.28	ug/ml	100
56)	4-Bromophenyl-phenylether	21.06	248	10252	18.11	ug/mL#	76
57)	Hexachlorobenzene	21.01	284	11578	18.19	ug/mL#	52
58)	Pentachlorophenol	21.74	266	5478	14.77	ug/mL	99
59)	Phenanthrene	22.28	178	55118	18.45	ug/mL	100
60)	Anthracene	22.41	178	55350	19.28	ug/mLm	100
61)	Carbazole	23.07	167	49203	17.84	ug/ml	97
62)	Di-n-butylphthalate	24.61	149	105600	19.26	ug/mL	99
63)	Fluoranthene	25.88	202	53632	19.37	ug/mL#	58
65)	Benzidine	26.57	184	10709	16.44	ug/ml	100
66)	Pyrene	26.50	202	52626	12.69	ug/mL#	75
68)	Butylbenzylphthalate	29.14	149	44863	17.91	ug/mL#	9
69)	Benzo[a]anthracene	30.26	228	46690	19.16	ug/mL	100
70)	3,3'-Dichlorobenzidine	30.43	252	14204	27.28	ug/mL#	88
71)	Chrysene	30.35	228	32814	17.31	ug/mLm	100
72)	bis(2-Ethylhexyl)phthalate	31.12	149	65904	18.81	ug/mL#	35
74)	Di-n-octylphthalate	33.03	149	94455	16.40	ug/mL#	100
75)	Benzo[b]fluoranthene	33.30	252	25924	16.54	ug/mL#	85
76)	Benzo[k]fluoranthene	33.38	252	19069	16.16	ug/mLm	85
77)	Benzo[a]pyrene	34.11	252	16555	19.26	ug/mLm	85
78)	Indeno[1,2,3-cd]pyrene	36.79	276	5424	14.32	ug/mL#	23
79)	Dibenz[a,h]anthracene	36.91	278	5588	18.32	ug/mL#	74
80)	Benzo[g,h,i]perylene	37.31	276	4565	14.10	ug/mLm	59

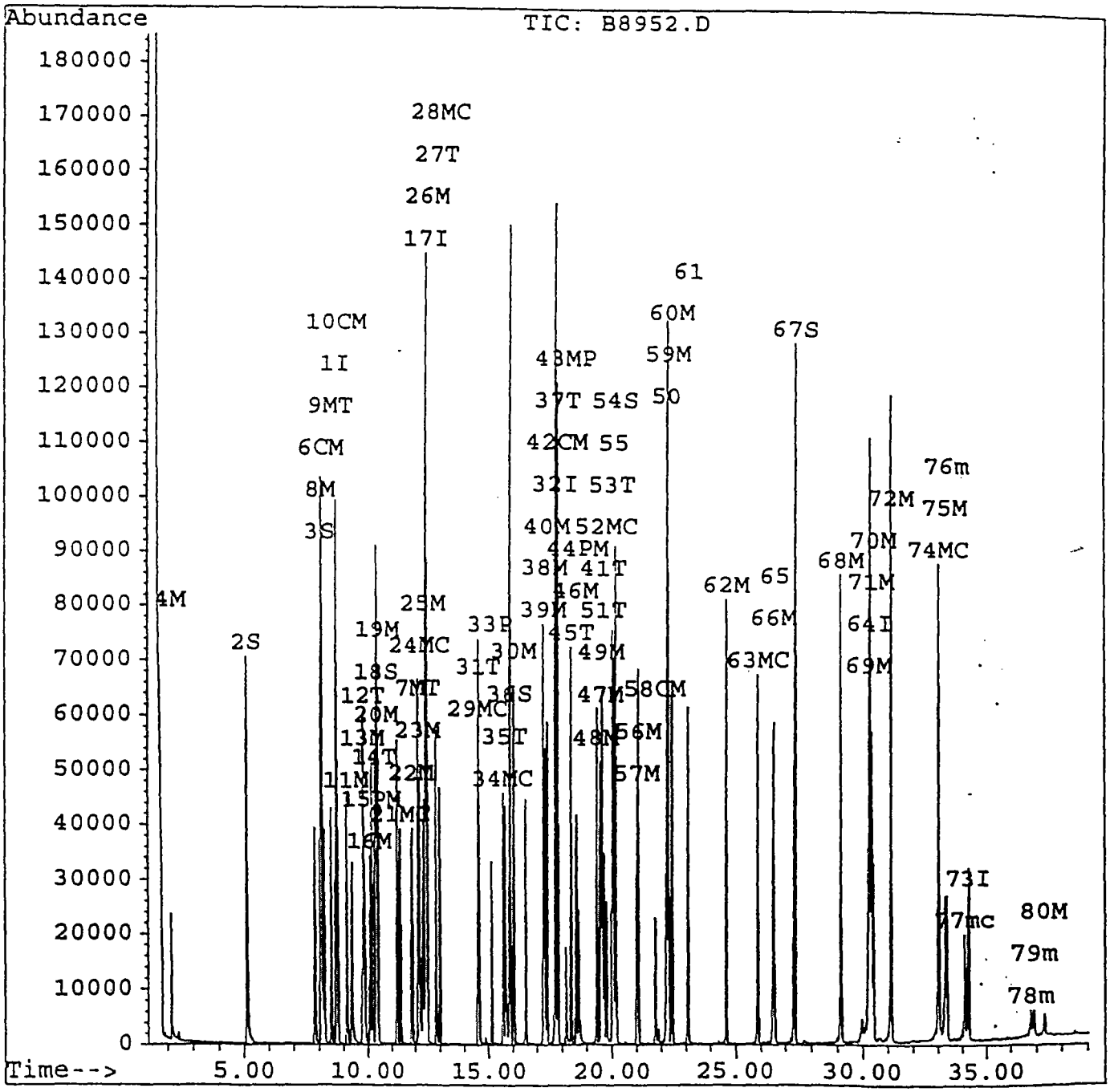
(#) = qualifier out of range (=)

Quantitation Report

Data File : c:\hpchem\1\data2\b8952.d
Acq On : 22 Oct 95 4:58 pm
Sample : 20 STD..... Converted from RTE d
Misc :
Quant Time: Oct 25 9:45 1995

Vial: 2
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Sep 21 12:47:27 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : c:\hpchem\1\data2\b8953.d
Acq On : 22 Oct 95 5:49 pm
Sample : 50 STD..... Converted from RTE d
Misc :
Quant Time: Oct 25 9:46 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 Sep 21 12:47:27 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.69	152	30029	40.00	ug/mL	-0.33
17) Naphthalene-d8	12.43	136	118447	40.00	ug/mL	-0.33
32) Acenaphthene-d10	17.73	164	66652	40.00	ug/mL	-0.35
50) Phenanthrene-d10	22.23	188	99018	40.00	ug/ml	-0.35
64) Chrysene-d12	30.29	240	71387	40.00	ug/mL	-0.41
73) Perylene-d12	34.24	264	29156	40.00	ug/mL	-0.45
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.11	112	47542	48.46	ug/mL	48.46%
3) Phenol-d5	8.09	99	75366	48.16	ug/mL	48.16%
18) Nitrobenzene-d5	10.39	82	78309	50.02	ug/mL	50.02%
36) 2-Fluorobiphenyl	15.90	172	103420	50.58	ug/mL	50.58%
54) 2,4,6-Tribromophenol	20.17	330	15101	57.11	ug/mL	57.11%
67) Terphenyl-d14	27.36	244	81512	35.53	ug/mL	35.53%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	2.14	74	33256	53.18	ug/ml	100
6) Phenol	8.13	94	70425	49.19	ug/mL	100
7) bis(2-Chloroethyl)ether	12.12	93	86266	51.11	ug/mL	97
8) 2-Chlorophenol	8.11	128	50107	49.31	ug/mL#	79
9) 1,3-Dichlorobenzene	8.48	146	52404	50.32	ug/mL	98
10) 1,4-Dichlorobenzene	8.75	146	54194	50.78	ug/mL	97
11) 1,2-Dichlorobenzene	9.14	146	52073	50.76	ug/mL	96
12) 2-Methylphenol	9.83	108	48095	51.48	ug/mLm	99
13) bis(2-chloroisopropyl)ethe	9.77	45	69800	53.26	ug/mL	98
14) 4-Methylphenol	10.35	108	55590	53.22	ug/mL	99
15) N-Nitroso-Di-n-propylamine	10.22	70	56128	52.39	ug/mL#	95
16) Hexachloroethane	10.08	117	32913	52.60	ug/mL#	72
19) Nitrobenzene	10.45	77	72432	50.46	ug/mL	88
20) Isophorone	11.28	82	151156	47.73	ug/mL	94
21) 2-Nitrophenol	11.39	139	36365	56.30	ug/mL#	87
22) 2,4-Dimethylphenol	11.87	107	55686	49.62	ug/mL#	100
23) bis(2-Chloroethoxy)methane	12.12	93	86266	49.92	ug/mL#	100
24) 2,4-Dichlorophenol	12.18	162	43494	51.90	ug/mL	93
25) 1,2,4-Trichlorobenzene	12.32	180	45688	52.14	ug/mL	95
26) Naphthalene	12.49	128	150500	51.30	ug/mL	98
27) 4-Chloroaniline	12.86	127	66405	48.20	ug/mL	99
28) Hexachlorobutadiene	12.99	225	23776	53.19	ug/mL	97
29) 4-Chloro-3-methylphenol	14.57	107	58006	54.32	ug/mL	87
30) 2-Chloronaphthalene	16.06	162	93821	54.43	ug/ml#	100
31) 2-Methylnaphthalene	14.63	142	133962	77.26	ug/mL	96
33) Hexachlorocyclopentadiene	15.13	237	20265	46.21	ug/mL	98
34) 2,4,6-Trichlorophenol	15.61	196	33685	45.73	ug/mL	96
35) 2,4,5-Trichlorophenol	15.69	196	33610	53.87	ug/mL	96

Quantitation Report

Data File : c:\hpchem\1\data2\b8953.d
Acq On : 22 Oct 95 5:49 pm
Sample : 50 STD..... Converted from RTE d
Misc :
Quant Time: Oct 25 9:46 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 Sep 21 12:47:27 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37)	2-Nitroaniline	17.85	65	62561	57.42	ug/mL	88
38)	Dimethylphthalate	17.35	163	114727	53.61	ug/mL#	12
39)	Acenaphthylene	17.27	152	153827	51.77	ug/mL	98
40)	2,6-Dinitrotoluene	17.43	165	31425	55.50	ug/mL#	99
41)	3-Nitroaniline	19.74	138	30489	60.41	ug/mL#	88
42)	Acenaphthene	17.83	153	86706	48.26	ug/mL	98
43)	2,4-Dinitrophenol	18.18	184	14425	67.78	ug/mL#	82
44)	4-Nitrophenol	18.66	109	18330	65.38	ug/mL#	60
45)	Dibenzofuran	18.39	168	130635	53.03	ug/mL#	88
46)	2,4-Dinitrotoluene	18.60	165	38874	64.08	ug/mL#	1
47)	Diethylphthalate	19.57	149	131625	55.73	ug/mL	94
48)	Fluorene	19.41	166	100228	52.18	ug/mL	98
49)	4-Chlorophenyl-phenylether	19.62	204	42840	49.93	ug/mL#	83
51)	4-Nitroaniline	19.74	138	30489	54.51	ug/mL	88
52)	4,6-Dinitro-2-methylphenol	19.82	198	19462	63.27	ug/mL	100
53)	n-Nitrosodiphenylamine	20.05	169	69895	53.29	ug/mL	94
55)	1,2-Diphenylhydrazine (as	20.09	77	232246	47.27	ug/ml	100
56)	4-Bromophenyl-phenylether	21.07	248	23079	42.71	ug/mL#	91
57)	Hexachlorobenzene	21.03	284	29529	48.61	ug/mL#	45
58)	Pentachlorophenol	21.77	266	18120	51.19	ug/mL	99
59)	Phenanthrene	22.29	178	139586	48.95	ug/mL	99
60)	Anthracene	22.44	178	136009	49.65	ug/mLm	99
61)	Carbazole	23.10	167	129337	49.15	ug/ml	97
62)	Di-n-butylphthalate	24.64	149	255450	48.81	ug/mL#	97
63)	Fluoranthene	26.53	202	138921	52.58	ug/mL#	56
65)	Benzidine	22.23	184	20957	34.19	ug/mlm	100
66)	Pyrene	26.53	202	138921	35.60	ug/mL#	69
68)	Butylbenzylphthalate	29.15	149	109116	46.28	ug/mL#	9
69)	Benzo[a]anthracene	30.27	228	132632	57.82	ug/mL	99
70)	3,3'-Dichlorobenzidine	30.42	252	35599	72.64	ug/mL#	92
71)	Chrysene	30.36	228	77428	43.39	ug/mLm	99
72)	bis(2-Ethylhexyl)phthalate	31.14	149	158269	47.99	ug/mL#	37
74)	Di-n-octylphthalate	33.04	149	217022	37.81	ug/mL#	100
75)	Benzo[b]fluoranthene	33.31	252	88341	56.55	ug/mLm	86
76)	Benzo[k]fluoranthene	33.39	252	43746	37.21	ug/mLm	86
77)	Benzo[a]pyrene	34.09	252	39340	45.93	ug/mLm	86
78)	Indeno[1,2,3-cd]pyrene	36.76	276	21346	56.57	ug/mL#	25
79)	Dibenz[a,h]anthracene	36.88	278	20854	68.60	ug/mL#	76
80)	Benzo[g,h,i]perylene	37.30	276	19464	60.33	ug/mLm	60

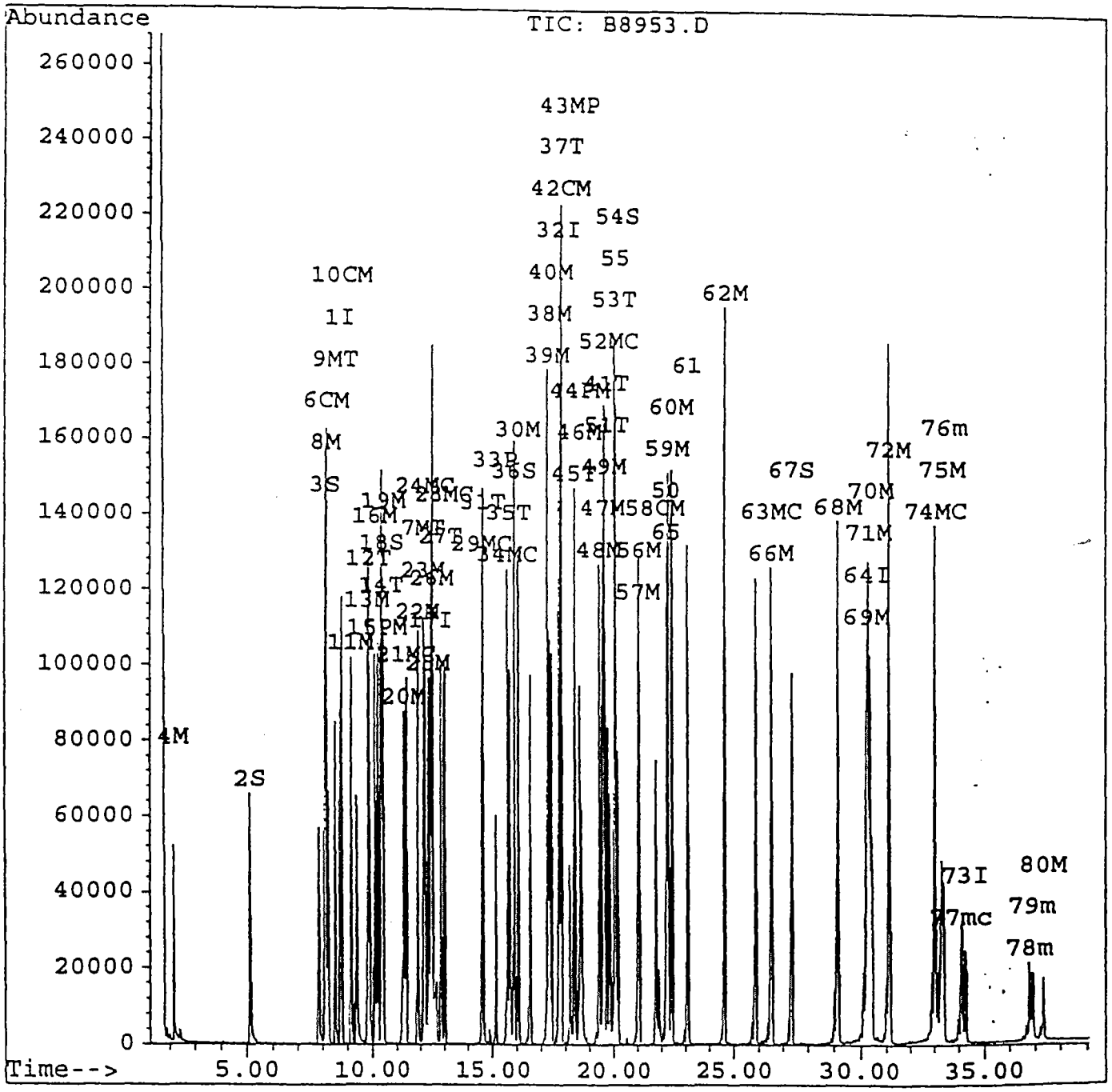
(#) = qualifier out of range (m)

Quantitation Report

Data File : c:\hpchem\1\data2\b8953.d
Acq On : 22 Oct 95 5:49 pm
Sample : 50 STD..... Converted from RTE d
Misc :
Quant Time: Oct 25 9:46 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 Sep 21 12:47:27 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : c:\hpchem\1\data2\b8954.d
Acq On : 22 Oct 95 6:42 pm
Sample : 80 STD..... Converted from RTE d
Misc :
Quant Time: Oct 25 9:48 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 Sep 21 12:47:27 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.69	152	27758	40.00	ug/mL	-0.33
17) Naphthalene-d8	12.43	136	110409	40.00	ug/mL	-0.33
32) Acenaphthene-d10	17.74	164	64239	40.00	ug/mL	-0.34
50) Phenanthrene-d10	22.23	188	96790	40.00	ug/ml	-0.34
64) Chrysene-d12	30.31	240	65927	40.00	ug/mL	-0.38
73) Perylene-d12	34.25	264	27421	40.00	ug/mL	-0.45
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.11	112	45615	50.30	ug/mL	50.30%
3) Phenol-d5	8.11	99	73604	50.88	ug/mL	50.88%
18) Nitrobenzene-d5	10.41	82	74558	51.09	ug/mL	51.09%
36) 2-Fluorobiphenyl	15.90	172	95476	48.45	ug/mL	48.45%
54) 2,4,6-Tribromophenol	20.19	330	15745	60.91	ug/mL	60.91%
67) Terphenyl-d14	27.36	244	80989	38.23	ug/mL	38.23%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	2.14	74	43170	74.69	ug/ml	100
6) Phenol	8.15	94	107752	81.42	ug/mL	100
7) bis(2-Chloroethyl)ether	12.14	93	137545	88.16	ug/mL	93
8) 2-Chlorophenol	8.11	128	76031	80.94	ug/mL#	84
9) 1,3-Dichlorobenzene	8.50	146	78669	81.71	ug/mL	97
10) 1,4-Dichlorobenzene	8.75	146	79665	80.76	ug/mL	97
11) 1,2-Dichlorobenzene	9.14	146	77232	81.44	ug/mL	97
12) 2-Methylphenol	9.85	108	69148	80.08	ug/mLm	99
13) bis(2-chloroisopropyl)ethe	9.81	45	116703	96.34	ug/mL#	59
14) 4-Methylphenol	10.37	108	77308	80.07	ug/mL	99
15) N-Nitroso-Di-n-propylamine	10.24	70	82768	83.57	ug/mL	93
16) Hexachloroethane	10.08	117	50425	87.18	ug/mL#	78
19) Nitrobenzene	10.47	77	107228	80.13	ug/mL	91
20) Isophorone	11.31	82	234237	79.35	ug/mL	95
21) 2-Nitrophenol	11.39	139	55945	92.92	ug/mL#	92
22) 2,4-Dimethylphenol	11.89	107	87491	83.64	ug/mL#	100
23) bis(2-Chloroethoxy)methane	12.14	93	137545	85.38	ug/mL#	100
24) 2,4-Dichlorophenol	12.20	162	67435	86.32	ug/mL	93
25) 1,2,4-Trichlorobenzene	12.34	180	69245	84.78	ug/mL	94
26) Naphthalene	12.49	128	219568	80.29	ug/mL	100
27) 4-Chloroaniline	12.88	127	108351	84.37	ug/mL	100
28) Hexachlorobutadiene	13.01	225	36309	87.14	ug/mL	100
29) 4-Chloro-3-methylphenol	14.59	107	85056	85.45	ug/mL#	77
30) 2-Chloronaphthalene	16.08	162	143223	89.13	ug/ml#	100
31) 2-Methylnaphthalene	14.63	142	192207	118.92	ug/mL	96
33) Hexachlorocyclopentadiene	15.15	237	41659	98.56	ug/mL	98
34) 2,4,6-Trichlorophenol	15.63	196	53315	75.09	ug/mL	96
35) 2,4,5-Trichlorophenol	15.71	196	47946	79.73	ug/mL	97

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

Quantitation Report

Data File : c:\hpchem\1\data2\b8954.d
Acq On : 22 Oct 95 6:42 pm
Sample : 80 STD..... Converted from RTE d
Misc :
Quant Time: Oct 25 9:48 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 Sep 21 12:47:27 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37)	2-Nitroaniline	17.87	65	104963	99.96	ug/mL	87
38)	Dimethylphthalate	17.37	163	175032	84.87	ug/mL#	12
39)	Acenaphthylene	17.29	152	238659	83.33	ug/mL	97
40)	2,6-Dinitrotoluene	17.47	165	41143	75.39	ug/mL#	91
41)	3-Nitroaniline	19.76	138	45967	94.49	ug/mL	87
42)	Acenaphthene	17.85	153	134868	77.88	ug/mL	99
43)	2,4-Dinitrophenol	18.20	184	26551	129.44	ug/mL#	84
44)	4-Nitrophenol	18.70	109	28923	107.04	ug/mL#	53
45)	Dibenzofuran	18.39	168	196167	82.63	ug/mL	93
46)	2,4-Dinitrotoluene	18.62	165	65450	111.94	ug/mL#	1
47)	Diethylphthalate	19.59	149	197611	86.81	ug/mL	95
48)	Fluorene	19.43	166	144915	78.28	ug/mL	100
49)	4-Chlorophenyl-phenylether	19.63	204	64693	78.23	ug/mL#	85
51)	4-Nitroaniline	19.76	138	45967	84.07	ug/mL	87
52)	4,6-Dinitro-2-methylphenol	19.86	198	28218	93.85	ug/mL	100
53)	n-Nitrosodiphenylamine	20.07	169	108144	84.35	ug/mL	95
55)	1,2-Diphenylhydrazine (as	20.11	77	356011	74.13	ug/ml	100
56)	4-Bromophenyl-phenylether	21.08	248	37114	70.27	ug/mL	95
57)	Hexachlorobenzene	21.06	284	48488	81.66	ug/mL#	37
58)	Pentachlorophenol	21.77	266	30727	88.81	ug/mL	99
59)	Phenanthrene	22.31	178	211278	75.80	ug/mL	99
60)	Anthracene	22.47	178	209890	78.38	ug/mLm	99
61)	Carbazole	23.12	167	223505	86.89	ug/ml	97
62)	Di-n-butylphthalate	24.64	149	381823	74.63	ug/mL	98
63)	Fluoranthene	25.91	202	217602	84.25	ug/mL#	58
65)	Benzidine	26.59	184	35718	63.11	ug/ml	100
66)	Pyrene	26.53	202	214611	59.55	ug/mL#	71
68)	Butylbenzylphthalate	29.15	149	161233	74.04	ug/mL#	11
69)	Benzo[a]anthracene	30.27	228	191680	90.48	ug/mL	98
70)	3,3'-Dichlorobenzidine	30.41	252	54288	119.95	ug/mL#	91
71)	Chrysene	30.37	228	117879	71.53	ug/mLm	98
72)	bis(2-Ethylhexyl)phthalate	31.12	149	232983	76.50	ug/mL#	36
74)	Di-n-octylphthalate	33.03	149	305687	56.63	ug/mL#	100
75)	Benzo[b]fluoranthene	33.32	252	88515	60.24	ug/mL#	85
76)	Benzo[k]fluoranthene	33.38	252	60541	54.76	ug/mLm	85
77)	Benzo[a]pyrene	34.09	252	59358	73.68	ug/mLm	85
78)	Indeno[1,2,3-cd]pyrene	36.77	276	34042	95.92	ug/mL#	27
79)	Dibenz[a,h]anthracene	36.89	278	32174	112.54	ug/mL#	73
80)	Benzo[g,h,i]perylene	37.31	276	31449	103.65	ug/mLm	61

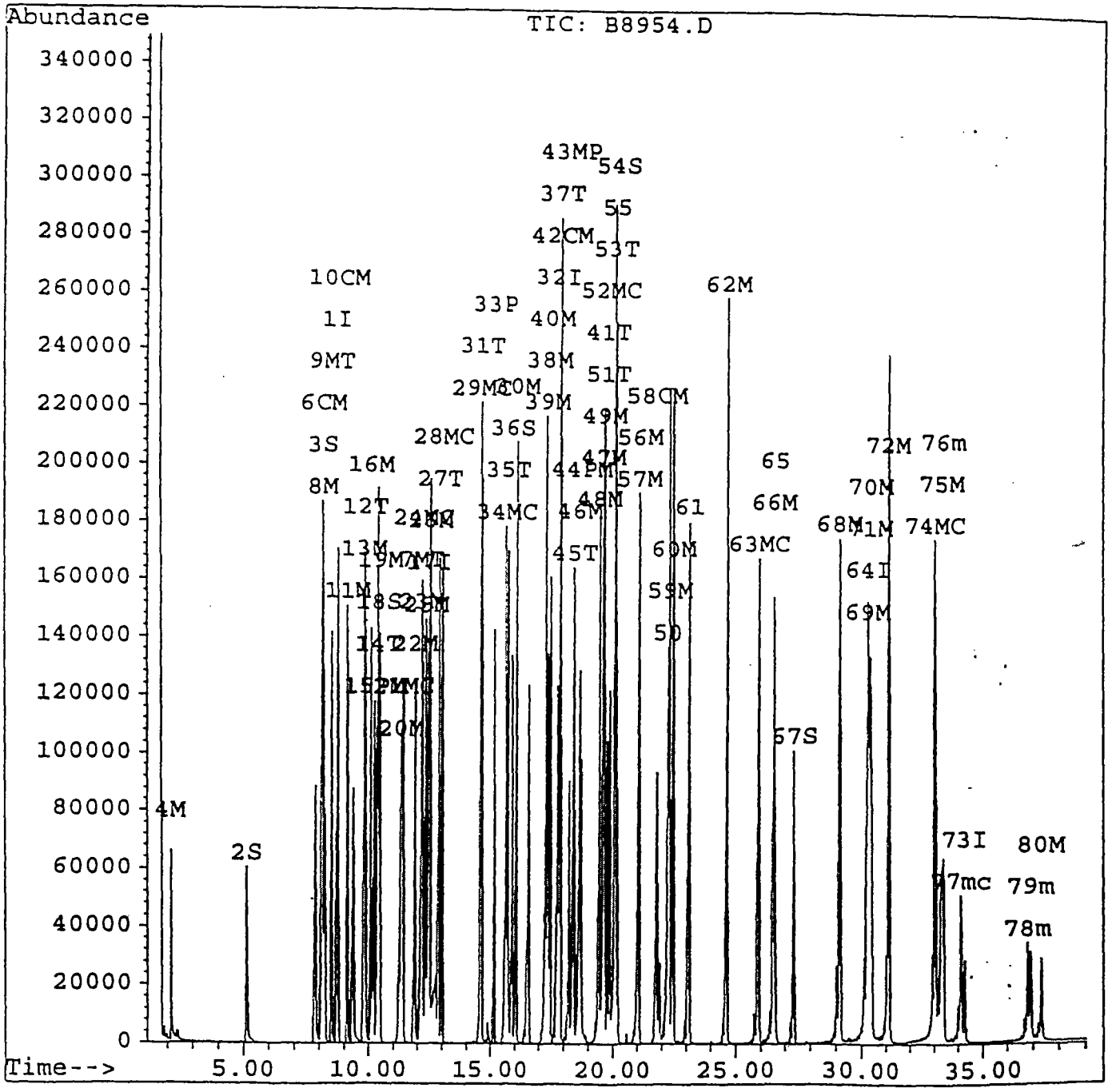
(#) = qualifier out of range (m)

Quantitation Report

Data File : c:\hpchem\1\data2\b8954.d
Acq On : 22 Oct 95 6:42 pm
Sample : 80 STD..... Converted from RTE d
Misc :
Quant Time: Oct 25 9:48 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 Sep 21 12:47:27 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : c:\hpchem\1\data2\b8955.d
Acq On : 22 Oct 95 7:33 pm
Sample : 120 STD..... Converted from RTE d
Misc :
Quant Time: Oct 25 10:18 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 Sep 21 12:47:27 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.70	152	27461	40.00	ug/mL	-0.32
17) Naphthalene-d8	12.44	136	106422	40.00	ug/mL	-0.32
32) Acenaphthene-d10	17.75	164	62579	40.00	ug/mL	-0.33
50) Phenanthrene-d10	22.23	188	90364	40.00	ug/ml	-0.35
64) Chrysene-d12	30.31	240	57405	40.00	ug/mL	-0.39
73) Perylene-d12	34.25	264	23394	40.00	ug/mL	-0.45
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.12	112	43975	49.01	ug/mL	49.01%
3) Phenol-d5	8.14	99	72439	50.61	ug/mL	50.61%
18) Nitrobenzene-d5	10.42	82	72866	51.80	ug/mL	51.80%
36) 2-Fluorobiphenyl	15.91	172	97613	50.85	ug/mL	50.85%
54) 2,4,6-Tribromophenol	20.20	330	14666	60.77	ug/mL	60.77%
67) Terphenyl-d14	27.36	244	77377	41.94	ug/mL	41.94%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	2.15	74	77244	135.08	ug/ml	100
6) Phenol	8.18	94	153731	117.41	ug/mL	100
7) bis(2-Chloroethyl)ether	12.17	93	187081	121.20	ug/mL	88
8) 2-Chlorophenol	8.14	128	109258	117.57	ug/mL#	81
9) 1,3-Dichlorobenzene	8.51	146	111126	116.67	ug/mL	98
10) 1,4-Dichlorobenzene	8.76	146	110282	113.00	ug/mL	96
11) 1,2-Dichlorobenzene	9.14	146	107878	114.99	ug/mL	96
12) 2-Methylphenol	9.88	108	104312	122.10	ug/mLm	98
13) bis(2-chloroisopropyl)ethe	9.80	45	171386	143.01	ug/mL#	85
14) 4-Methylphenol	10.40	108	115007	120.40	ug/mL	98
15) N-Nitroso-Di-n-propylamine	10.28	70	123864	126.42	ug/mL	94
16) Hexachloroethane	10.09	117	69400	121.28	ug/mL#	76
19) Nitrobenzene	10.49	77	147477	114.34	ug/mL	99
20) Isophorone	11.36	82	327700	115.17	ug/mLm	95
21) 2-Nitrophenol	11.42	139	77152	132.95	ug/mL#	94
22) 2,4-Dimethylphenol	11.92	107	127738	126.70	ug/mL#	100
23) bis(2-Chloroethoxy)methane	12.17	93	187081	120.48	ug/mL#	100
24) 2,4-Dichlorophenol	12.23	162	94341	125.29	ug/mL#	92
25) 1,2,4-Trichlorobenzene	12.35	180	96836	123.00	ug/mL	94
26) Naphthalene	12.52	128	326255	123.77	ug/mL	98
27) 4-Chloroaniline	12.89	127	147346	119.03	ug/mL	100
28) Hexachlorobutadiene	13.02	225	51692	128.71	ug/mL	99
29) 4-Chloro-3-methylphenol	14.60	107	123083	128.28	ug/mL#	60
30) 2-Chloronaphthalene	16.09	162	197694	127.64	ug/ml#	100
31) 2-Methylnaphthalene	14.64	142	274545	176.23	ug/mL	96
33) Hexachlorocyclopentadiene	15.16	237	60194	146.19	ug/mL#	96
34) 2,4,6-Trichlorophenol	15.64	196	90332	130.60	ug/mL	97
35) 2,4,5-Trichlorophenol	15.72	196	54995	93.88	ug/mL	97

Quantitation Report

Data File : c:\hpchem\1\data2\b8955.d
Acq On : 22 Oct 95 7:33 pm
Sample : 120 STD..... Converted from RTE d
Misc :
Quant Time: Oct 25 10:18 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 Sep 21 12:47:27 1995
Response via : Multiple Level Calibration

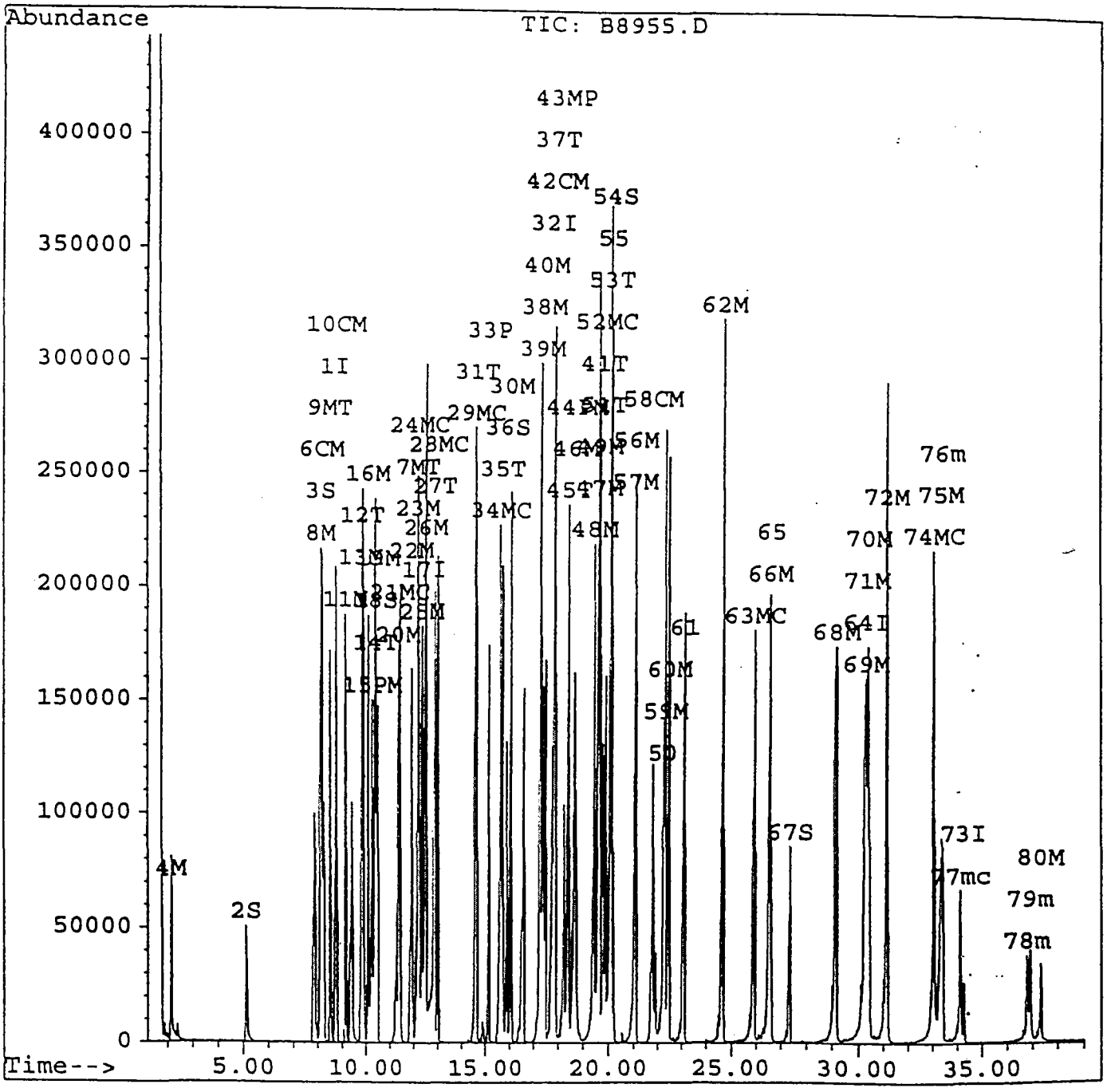
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37)	2-Nitroaniline	17.90	65	138140	135.05	ug/mL	88
38)	Dimethylphthalate	17.40	163	242759	120.83	ug/mL#	12
39)	Acenaphthylene	17.30	152	342901	122.91	ug/mL	97
40)	2,6-Dinitrotoluene	17.48	165	48493	91.22	ug/mL#	96
41)	3-Nitroaniline	19.78	138	59286	125.11	ug/mL	88
42)	Acenaphthene	17.86	153	190884	113.15	ug/mL	98
43)	2,4-Dinitrophenol	18.23	184	40770	204.04	ug/mL#	89
44)	4-Nitrophenol	18.71	109	42019	159.64	ug/mL#	54
45)	Dibenzofuran	18.42	168	296801	128.34	ug/mL	89
46)	2,4-Dinitrotoluene	18.66	165	94345	165.64	ug/mL#	1
47)	Diethylphthalate	19.62	149	290137	130.83	ug/mL#	92
48)	Fluorene	19.45	166	224635	124.55	ug/mL	98
49)	4-Chlorophenyl-phenylether	19.64	204	96095	119.28	ug/mL#	87
51)	4-Nitroaniline	19.78	138	59286	116.15	ug/mL	88
52)	4,6-Dinitro-2-methylphenol	19.89	198	39986	142.45	ug/mL	100
53)	n-Nitrosodiphenylamine	20.09	169	141300	118.05	ug/mL	94
55)	1,2-Diphenylhydrazine (as	20.12	77	478381	106.69	ug/ml	100
56)	4-Bromophenyl-phenylether	21.09	248	51369	104.17	ug/mL#	91
57)	Hexachlorobenzene	21.07	284	65026	117.30	ug/mL#	42
58)	Pentachlorophenol	21.78	266	45899	142.10	ug/mL	100
59)	Phenanthrene	22.33	178	298581	114.74	ug/mL	99
60)	Anthracene	22.48	178	287179	114.86	ug/mLm	99
61)	Carbazole	23.12	167	298791	124.42	ug/ml	96
62)	Di-n-butylphthalate	24.66	149	555739	116.35	ug/mL#	97
63)	Fluoranthene	25.91	202	302618	125.50	ug/mL#	71
65)	Benzidine	26.59	184	49499	100.44	ug/ml	100
66)	Pyrene	26.55	202	291218	92.80	ug/mL#	69
68)	Butylbenzylphthalate	29.15	149	219105	115.56	ug/mL#	13
69)	Benzo[a]anthracene	30.29	228	262300	142.20	ug/mL	99
70)	3,3'-Dichlorobenzidine	30.43	252	65850	167.10	ug/mL#	92
71)	Chrysene	30.35	228	152357	106.18	ug/mLm	99
72)	bis(2-Ethylhexyl)phthalate	31.14	149	325654	122.80	ug/mL#	38
74)	Di-n-octylphthalate	33.03	149	406461	88.26	ug/mL#	100
75)	Benzo[b]fluoranthene	33.30	252	147288	117.50	ug/mL#	84
76)	Benzo[k]fluoranthene	33.38	252	78044	82.74	ug/mLm	84
77)	Benzo[a]pyrene	34.11	252	74349	108.18	ug/mLm	83
78)	Indeno[1,2,3-cd]pyrene	36.77	276	44660	147.50	ug/mL#	47
79)	Dibenz[a,h]anthracene	36.89	278	42251	173.22	ug/mL#	78
80)	Benzo[g,h,i]perylene	37.31	276	40459	156.30	ug/mLm	71

Quantitation Report

Data File : c:\hpchem\1\data2\b8955.d
Acq On : 22 Oct 95 7:33 pm
Sample : 120 STD..... Converted from RTE d
Misc :
Quant Time: Oct 25 10:18 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 Sep 21 12:47:27 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : c:\hpchem\1\data2\b8956.d
Acq On : 22 Oct 95 8:24 pm
Sample : 150 STD....
Misc :
Quant Time: Oct 25 10:17 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 : Thu Sep 21 12:47:27 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.72	152	27386	40.00	ug/mL	-0.31
17) Naphthalene-d8	12.46	136	107758	40.00	ug/mL	-0.30
32) Acenaphthene-d10	17.76	164	64001	40.00	ug/mL	-0.32
50) Phenanthrene-d10	22.24	188	95140	40.00	ug/ml	-0.33
64) Chrysene-d12	30.32	240	58225	40.00	ug/mL	-0.37
73) Perylene-d12	34.24	264	21063	40.00	ug/mL	-0.45
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.13	112	44445	49.67	ug/mL	49.67%
3) Phenol-d5	8.16	99	75083	52.60	ug/mL	52.60%
18) Nitrobenzene-d5	10.43	82	72264	50.74	ug/mL	50.74%
36) 2-Fluorobiphenyl	15.91	172	99060	50.46	ug/mL	50.46%
54) 2,4,6-Tribromophenol	20.22	330	16295	64.13	ug/mL	64.13%
67) Terphenyl-d14	27.35	244	82703	44.20	ug/mL	44.20%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	2.17	74	103908	182.21	ug/ml	100
6) Phenol	8.21	94	225479	172.68	ug/mL	100
7) bis(2-Chloroethyl)ether	12.19	93	256181	166.42	ug/mL#	85
8) 2-Chlorophenol	8.16	128	146818	158.42	ug/mL#	83
9) 1,3-Dichlorobenzene	8.52	146	146004	153.71	ug/mL	97
10) 1,4-Dichlorobenzene	8.77	146	146889	150.93	ug/mL	96
11) 1,2-Dichlorobenzene	9.16	146	145353	155.36	ug/mL	97
12) 2-Methylphenol	9.89	108	140431	164.83	ug/mLm	98
13) bis(2-chloroisopropyl)ethe	9.91	45	341496	285.74	ug/mL#	1
14) 4-Methylphenol	10.43	108	147459	154.79	ug/mL	98
15) N-Nitroso-Di-n-propylamine	10.34	70	179120	183.32	ug/mL#	95
16) Hexachloroethane	10.10	117	94889	166.27	ug/mL#	68
19) Nitrobenzene	10.51	77	286692	219.52	ug/mL	90
20) Isophorone	11.42	82	441137	153.12	ug/mLm	92
21) 2-Nitrophenol	11.44	139	100411	170.88	ug/mL#	93
22) 2,4-Dimethylphenol	11.96	107	175209	171.62	ug/mL#	100
23) bis(2-Chloroethoxy)methane	12.19	93	256181	162.94	ug/mL#	100
24) 2,4-Dichlorophenol	12.27	162	129942	170.43	ug/mL#	91
25) 1,2,4-Trichlorobenzene	12.36	180	128880	161.68	ug/mL	94
26) Naphthalene	12.54	128	430569	161.32	ug/mL	98
27) 4-Chloroaniline	12.90	127	204994	163.55	ug/mL	100
28) Hexachlorobutadiene	13.02	225	66955	164.65	ug/mL	98
29) 4-Chloro-3-methylphenol	14.64	107	173471	178.55	ug/mL#	24
30) 2-Chloronaphthalene	16.10	162	277170	176.73	ug/ml#	100
31) 2-Methylnaphthalene	14.64	142	354781	224.91	ug/mL#	68
33) Hexachlorocyclopentadiene	15.16	237	78011	185.25	ug/mL	98
34) 2,4,6-Trichlorophenol	15.66	196	125669	177.65	ug/mL	96
35) 2,4,5-Trichlorophenol	15.74	196	69360	115.77	ug/mL	95

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

Quantitation Report

Data File : c:\hpchem\1\data2\b8956.d
Acq On : 22 Oct 95 8:24 pm
Sample : 160 STD....
Misc :
Quant Time: Oct 25 10:17 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 : Thu Sep 21 12:47:27 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37)	2-Nitroaniline	17.94	65	215417	205.92	ug/mL	88
38)	Dimethylphthalate	17.44	163	341294	166.10	ug/mL#	12
39)	Acenaphthylene	17.32	152	455035	159.47	ug/mL	97
40)	2,6-Dinitrotoluene	17.51	165	62227	114.45	ug/mL#	92
41)	3-Nitroaniline	19.87	138	76342	157.52	ug/mL	90
42)	Acenaphthene	17.88	153	252605	146.41	ug/mL	98
43)	2,4-Dinitrophenol	18.29	184	61925	303.03	ug/mL#	73
44)	4-Nitrophenol	18.77	109	62124	230.78	ug/mL#	58
45)	Dibenzofuran	18.44	168	392936	166.13	ug/mL#	88
46)	2,4-Dinitrotoluene	18.71	165	89489	153.63	ug/mL#	1
47)	Diethylphthalate	19.66	149	374865	165.28	ug/mL	94
48)	Fluorene	19.46	166	301296	163.35	ug/mL	99
49)	4-Chlorophenyl-phenylether	19.68	204	121982	148.05	ug/mL#	70
51)	4-Nitroaniline	19.87	138	76342	142.05	ug/mL	90
52)	4,6-Dinitro-2-methylphenol	19.93	198	54285	183.68	ug/mL	100
53)	n-Nitrosodiphenylamine	20.10	169	191063	151.61	ug/mL	95
55)	1,2-Diphenylhydrazine (as	20.14	77	657253	139.22	ug/ml	100
56)	4-Bromophenyl-phenylether	21.10	248	64647	124.52	ug/mL#	84
57)	Hexachlorobenzene	21.09	284	89180	152.80	ug/mL#	34
58)	Pentachlorophenol	21.82	266	66850	196.57	ug/mL	98
59)	Phenanthrene	22.34	178	400329	146.12	ug/mL	99
60)	Anthracene	22.50	178	391392	148.69	ug/mLm	99
61)	Carbazole	23.13	167	408325	161.50	ug/ml	95
62)	Di-n-butylphthalate	24.65	149	736070	146.37	ug/mL#	98
63)	Fluoranthene	26.52	202	405072	159.56	ug/mL#	56
65)	Benzidine	26.60	184	67999	136.03	ug/ml	100
66)	Pyrene	26.52	202	404840	127.19	ug/mL#	69
68)	Butylbenzylphthalate	29.15	149	308513	160.42	ug/mL#	9
69)	Benzo[a]anthracene	30.30	228	338083	180.70	ug/mL	99
70)	3,3'-Dichlorobenzidine	30.44	252	84475	211.34	ug/mL#	93
71)	Chrysene	30.38	228	179795	123.54	ug/mLm	99
72)	bis(2-Ethylhexyl)phthalate	31.13	149	408318	151.80	ug/mL#	37
74)	Di-n-octylphthalate	33.02	149	458843	110.66	ug/mL#	100
75)	Benzo[b]fluoranthene	33.31	252	156175	138.38	ug/mL#	83
76)	Benzo[k]fluoranthene	33.39	252	91964	108.29	ug/mLm	83
77)	Benzo[a]pyrene	34.10	252	88750	143.42	ug/mLm	83
78)	Indeno[1,2,3-cd]pyrene	36.78	276	49957	183.25	ug/mL#	44
79)	Dibenz[a,h]anthracene	36.90	278	50575	230.29	ug/mL#	79
80)	Benzo[g,h,i]perylene	37.32	276	46503	199.53	ug/mLm	69

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

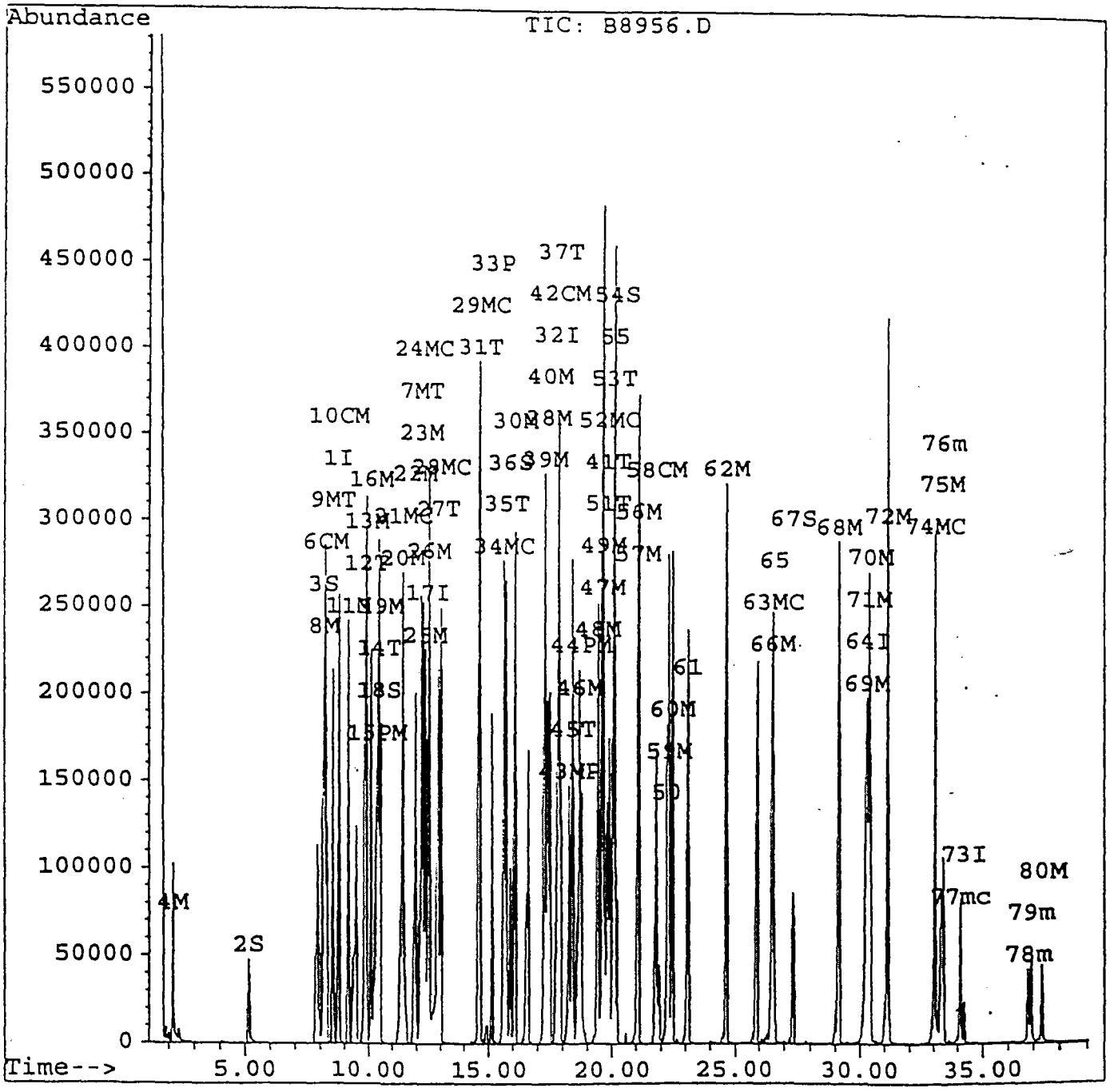
Quantitation Report

Data File : c:\hpchem\1\data2\b8956.d
Acq On : 22 Oct 95 8:24 pm
Sample : 160 STD....
Misc :
Quant Time: Oct 25 10:17 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 : Thu Sep 21 12:47:27 1995
Response via : Multiple Level Calibration



5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

172

Lab Name: EMSL ANALYTICAL Contract: _____

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

Lab File ID: B9151.D DFTPP Injection Date: 11/20/95

Instrument ID: ABNA DFTPP Injection Time: 1031

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	49.9
68	Less than 2.0% of mass 69	0.4 (0.6)1
69	Mass 69 relative abundance	69.6
70	Less than 2.0% of mass 69	0.4 (0.5)1
127	25.0 - 75.0% of mass 198	40.6
197	Less than 1.0% of mass 198	0.3
198	Base Peak, 100 % relative abundance	100.0
199	5.0 -.9.0% of mass 198	6.9
275	10.0 - 30.0% of mass 198	17.7
365	Greater than 0.75% of mass 198	1.7
441	Present, but less than mass 443	5.9
442	40.0 - 110.0% of mass 198	40.0
443	15.0 - 24.0% of mass 442	7.5 (18.9)2

1-Value is % mass 69 2-Value is % mass 442

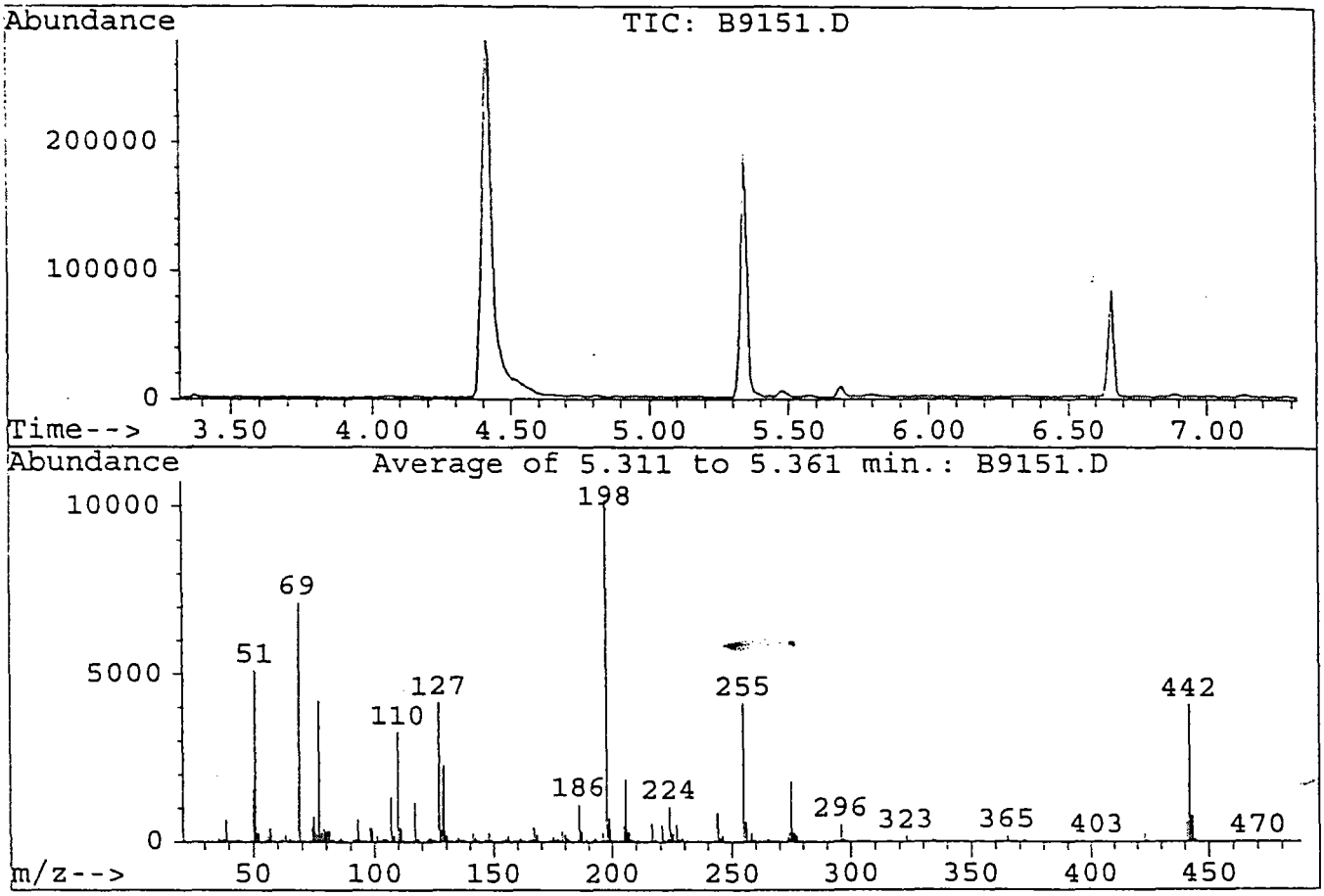
This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD020	20 STD	B9152.D	11/20/95	1229
02	SSTD050	50 STD	B9153.D	11/20/95	1322
03	SSTD080	80 STD	B9154.D	11/20/95	1414
04	SSTD120	120 STD	B9155.D	11/20/95	1511
05	SSTD160	160 STD	B9156.D	11/20/95	1604
06	SBLK01	BLANK1	B9159.D	11/20/95	1906
07	9552294B	9552294B	B9160.D	11/20/95	1959
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

Data File : C:\HPCHEM\1\DATA2\B9151.D
Acq On : 20 Nov 95 10:31 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: 232

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	49.9	5113	PASS
68	69	0	2	0.6	43	PASS
69	198	0	100	69.6	7132	PASS
70	69	0	2	0.5	36	PASS
127	198	40	60	40.6	4156	PASS
197	198	0	1	0.3	34	PASS
198	198	100	100	100.0	10248	PASS
199	198	5	9	6.9	707	PASS
275	198	10	30	17.7	1811	PASS
365	198	1	100	1.7	178	PASS
441	443	0	100	78.4	606	PASS
442	198	40	100	40.0	4100	PASS
443	442	17	23	18.9	773	PASS

Average of 5.311 to 5.361 min.: B9151.D

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	120	43.05	78	50.00	1553	56.85	6
36.90	32	44.00	61	51.05	5113	57.05	408
37.25	8	44.80	5	52.00	268	57.95	19
37.85	37	45.05	3	52.25	3	58.45	3
38.10	117	47.05	5	52.65	3	58.95	9
39.05	668	47.60	9	53.05	19	59.55	6
40.00	7	47.85	3	53.45	6	59.80	19
40.30	15	48.15	8	53.95	4	60.05	3
40.75	20	48.45	7	55.00	82	60.85	7
41.05	63	49.05	67	55.35	8	61.05	55
41.95	6	49.85	15	55.95	186	61.65	17

Average of 5.311 to 5.361 min.: B9151.D

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
61.95	91	68.05	43	75.05	781	82.65	4
62.35	9	68.95	7132	76.00	232	82.95	83
63.05	195	70.05	36	77.05	4211	83.55	6
63.25	2	70.85	7	78.00	302	83.85	8
64.10	28	71.00	23	79.00	410	84.10	10
64.45	5	71.55	12	79.85	5	85.05	91
65.05	99	72.05	2	80.05	305	85.20	27
65.75	6	73.00	49	80.45	3	86.00	124
66.30	15	73.45	3	80.65	3	87.05	37
67.10	27	73.85	7	81.00	365	87.90	22
67.65	4	74.00	456	82.10	83	88.85	3

Average of 5.311 to 5.361 min.: B9151.D

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
91.05	106	97.10	18	104.00	123	112.00	64
92.00	101	98.00	455	105.00	102	112.85	8
93.05	696	98.45	8	105.20	9	113.00	14
94.00	43	99.00	388	105.95	18	113.35	4
94.65	3	99.55	6	106.15	5	113.55	5
95.05	38	99.85	6	107.05	1331	114.75	3
95.55	7	100.10	30	108.05	189	115.15	14
95.85	21	101.00	167	108.45	7	115.35	2
95.95	5	102.00	13	108.75	3	116.05	80
96.10	19	103.00	68	110.05	3266	117.05	1191
96.85	18	103.65	5	111.05	423	117.65	4

Average of 5.311 to 5.361 min.: B9151.D

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
118.00	90	125.00	57	133.50	5	139.60	3
119.00	18	125.30	11	133.90	75	139.90	8
120.00	20	127.05	4156	135.00	150	140.10	23
120.95	12	128.05	357	136.05	65	140.30	10
121.30	13	129.05	2268	136.60	5	141.00	266
122.00	118	129.75	6	137.00	76	142.00	105
122.65	5	130.00	167	137.60	8	142.80	16
123.05	135	131.00	32	137.90	5	143.00	30
123.35	5	131.90	26	138.00	7	143.60	3
123.75	3	132.85	18	138.15	12	143.80	6
124.00	87	133.30	4	138.95	19	143.90	14

Average of 5.311 to 5.361 min.: B9151.D

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
144.10	7	150.20	5	156.70	6	164.00	13
144.85	6	151.00	10	157.05	40	164.20	4
145.15	10	151.25	30	157.95	38	164.80	6
146.05	50	151.70	5	159.00	35	165.00	91
146.95	113	151.90	12	160.00	80	166.00	68
147.70	6	152.50	7	161.00	105	166.90	9
148.00	265	153.00	51	161.65	11	167.05	425
148.80	16	154.00	78	162.05	39	167.40	5
149.05	70	154.80	5	162.90	2	167.60	4
149.70	5	155.05	124	163.20	8	168.00	208
150.00	19	156.10	186	163.60	4	169.05	31

Average of 5.311 to 5.361 min.: B9151.D

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
169.30	3	173.05	39	182.05	18	191.10	15
169.70	7	174.00	102	184.00	4	192.00	92
169.95	21	174.80	7	184.15	20	192.30	4
170.10	2	175.10	145	184.80	2	192.85	15
170.30	7	176.05	74	185.05	149	193.05	105
170.70	4	177.00	98	186.10	1117	194.10	7
171.00	11	177.95	26	187.10	307	194.50	3
171.20	3	178.95	317	188.15	30	194.80	3
171.60	3	179.70	3	189.05	98	195.10	13
171.90	11	180.05	218	190.05	13	196.05	282
172.80	9	181.05	102	190.40	3	196.75	34

Average of 5.311 to 5.361 min.: B9151.D

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
198.00	10248	204.05	270	210.70	2	217.75	7
199.00	707	204.30	4	211.15	82	218.00	73
200.00	49	205.10	475	211.60	17	218.75	6
200.60	4	206.10	1870	212.15	13	218.95	3
200.80	5	207.10	276	212.95	20	219.55	2
201.15	16	207.50	2	214.50	3	220.25	4
201.55	45	208.10	80	215.05	23	221.05	517
202.10	5	209.05	32	215.90	9	221.80	51
202.30	5	209.80	13	216.10	46	223.05	108
203.05	55	210.15	21	216.85	13	224.05	1053
203.80	4	210.50	28	216.95	548	225.05	252

Average of 5.311 to 5.361 min.: B9151.D

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
226.05	18	233.05	2	240.25	3	252.55	8
226.75	7	234.00	29	241.00	25	253.10	10
227.05	507	234.85	13	242.05	35	253.45	5
228.00	79	235.05	19	243.05	60	253.65	5
229.00	104	235.35	5	244.05	857	254.00	23
229.95	10	235.95	44	245.10	112	255.05	4135
230.25	7	236.65	4	246.05	167	256.05	597
231.05	42	237.00	30	247.00	22	256.85	5
232.05	5	237.85	4	247.75	3	257.10	49
232.55	4	239.05	26	249.00	24	258.05	259
232.80	10	239.95	5	252.25	6	259.00	50

Average of 5.311 to 5.361 min.: B9151.D

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
259.90	8	265.90	24	275.05	1811	285.55	3
260.95	5	266.90	11	276.00	239	289.15	4
261.15	4	267.65	2	277.10	168	290.15	4
261.65	2	268.45	2	277.65	3	291.15	4
262.75	3	270.15	4	277.95	22	291.45	2
263.85	13	270.85	3	279.35	5	292.05	2
264.15	4	271.20	9	283.05	19	293.00	32
264.65	4	271.55	2	283.35	3	294.95	7
265.05	95	272.05	6	283.65	3	295.25	4
265.45	6	273.05	121	284.10	11	296.05	513
265.65	6	274.05	328	285.15	26	297.00	69

Average of 5.311 to 5.361 min.: B9151.D

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
297.65	5	303.50	3	314.05	27	323.10	165
297.95	4	304.10	6	315.05	48	323.80	2
298.25	4	304.40	7	315.30	5	324.10	19
298.75	2	304.70	3	316.05	32	324.90	3
299.75	3	305.60	2	316.70	2	325.10	3
300.65	3	307.85	6	317.00	2	326.30	3
301.60	7	308.10	4	318.10	2	327.10	30
301.85	3	310.10	6	320.60	3	328.00	6
302.05	3	311.90	3	321.00	3	331.40	3
302.55	7	312.20	2	321.70	3	332.00	18
303.10	54	312.95	6	322.10	6	333.05	13

Average of 5.311 to 5.361 min.: B9151.D

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
333.30	3	346.10	40	355.90	2	370.90	3
334.05	93	346.60	2	356.55	7	371.30	6
334.50	3	347.90	3	356.80	3	372.15	82
335.05	22	349.40	3	360.50	3	373.10	30
335.90	6	350.70	4	362.80	4	373.65	6
336.90	3	351.10	3	365.05	178	375.20	2
337.50	3	352.00	13	366.10	16	376.20	4
340.30	2	352.15	36	367.70	3	376.80	3
341.20	5	353.10	35	369.60	2	379.10	3
341.50	3	353.60	4	370.10	3	380.40	2
342.30	4	354.05	51	370.50	2	381.30	2

Average of 5.311 to 5.361 min.: B9151.D

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
382.50	2	390.95	9	404.15	4	419.05	4
383.20	10	391.25	3	404.50	5	420.45	3
383.50	3	391.95	3	407.35	2	421.10	37
384.00	10	395.65	2	408.45	2	421.45	3
384.80	6	396.95	2	412.85	5	421.75	4
385.10	3	399.15	4	413.25	2	422.00	30
386.00	2	401.05	2	414.35	2	423.10	239
389.25	3	401.95	26	415.05	3	424.10	50
389.75	5	402.80	14	416.05	2	430.05	2
390.10	9	403.10	38	417.55	3	434.15	4
390.35	3	403.75	3	417.85	3	436.55	2

Average of 5.311 to 5.361 min.: B9151.D

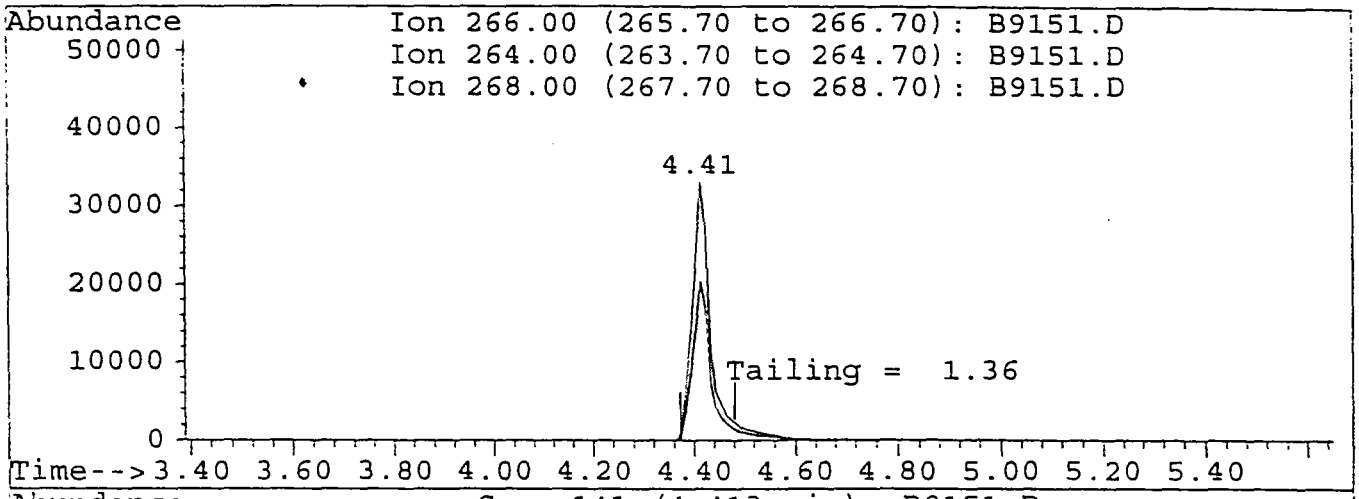
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
437.75	2	452.55	3	472.55	4		
440.15	5	457.85	3	473.05	4		
441.05	606	459.95	3				
442.05	4100	460.15	3				
443.10	773	461.15	2				
444.10	85	463.15	3				
444.95	4	465.05	2				
447.35	3	468.85	2				
450.75	9	470.15	3				
451.55	5	470.55	5				
452.05	2	471.35	2				

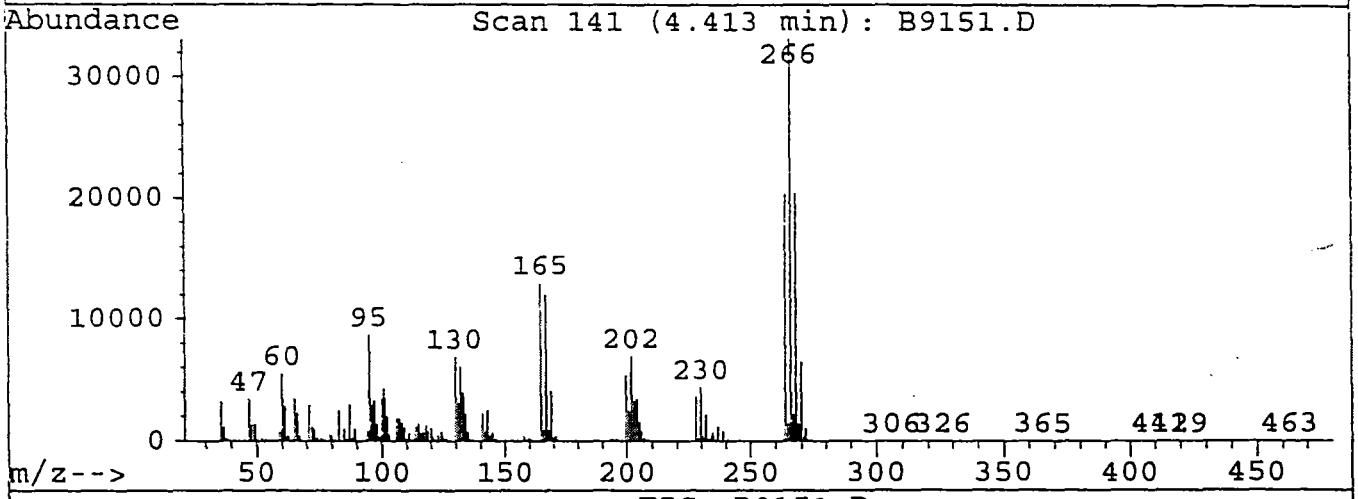
Quantitation Report

Data File : C:\HPCHEM\1\DATA2\B9151.D
Acq On : 20 Nov 95 10:31 am
Sample : DFTPP..... Converted from RTE d
Misc :
Quant Time: Nov 20 10:49 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 Oct 25 10:20:51 1995
Response via : Multiple Level Calibration





TIC: B9151.D

(1) Pentachlorophenol (CM)

4.41min 222.79ug/mL

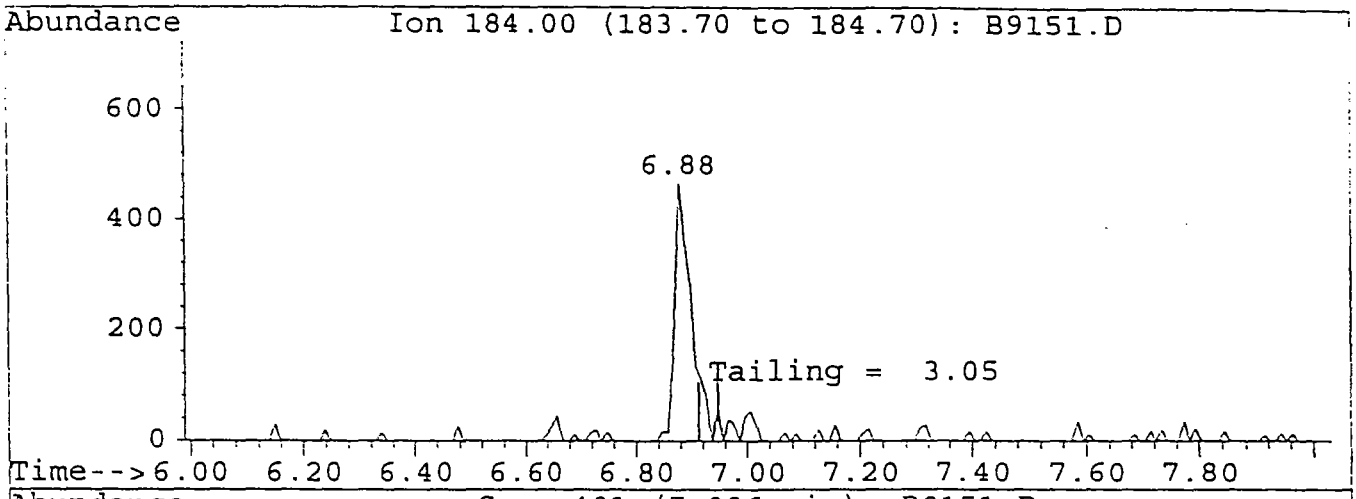
response 73587

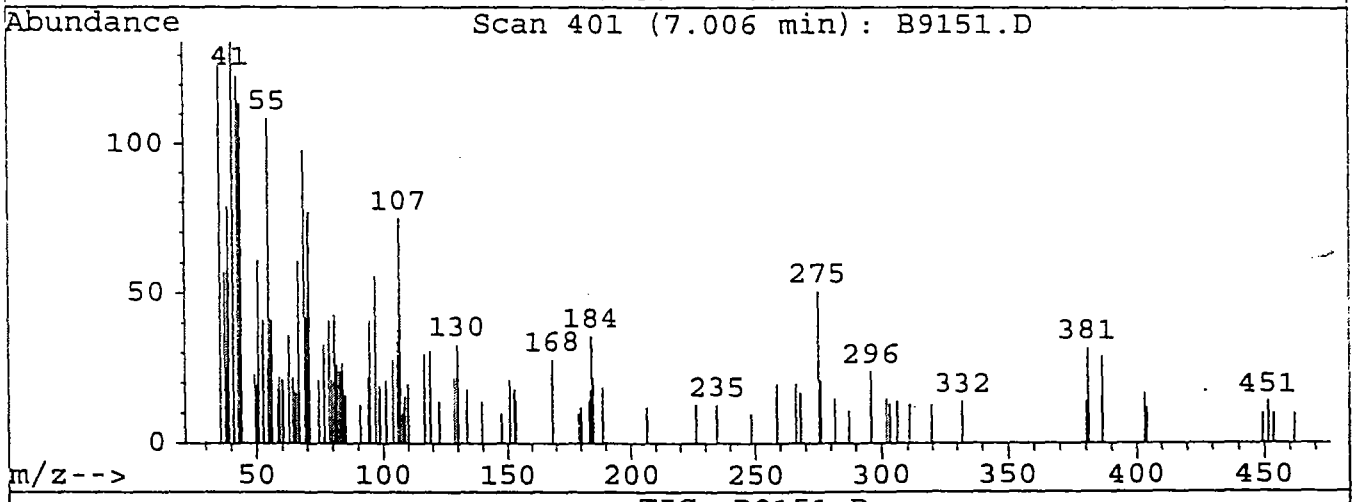
Ion	Exp%	Act%
266.00	100	100
264.00	64.30	61.17
268.00	64.70	61.60
0.00	0.00	0.00

Quantitation Report

Data File : C:\HPCHEM\1\DATA2\B9151.D Vial: 1
Acq On : 20 Nov 95 10:31 am Operator: SCOTTV
Sample : DFTPP..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Nov 20 10:49 1995

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed Oct 25 10:20:51 1995
Response via : Multiple Level Calibration





TIC: B9151.D

(2) Benzidine
7.01min 0.25ug/ml
response 76

Ion	Exp%	Act%
184.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Response Factor Report ABNA

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed Nov 22 12:12:16 1995
Response via : Initial Calibration

Calibration Files
160 =B9156.D 120 =B9155.D 80 =B9154.D
50 =B9153.D 20 =B9152.D

		Compound	160	120	80	50	20	Avg	%RSD
1)	I	1,4-Dichlorobenzene-d	----------ISTD----------						
2)	S	2-Fluorophenol	1.149	1.168	1.181	1.140	1.056	1.139	4.30
3)	S	Phenol-d5	1.977	1.978	1.952	1.867	1.707	1.896	6.06
4)	M	N-nitrosodimethylamin	0.809	0.955	0.814	0.835		0.853	8.06
5)		Pyridine		1.153		1.244	0.907	1.101	15.86
6)	CM	Phenol	1.570	1.774	1.746	1.573	1.582	1.649	6.18
7)	MT	bis(2-Chloroethyl)eth	2.083	2.141	2.231	2.154	2.174	2.157	2.48
8)	M	2-Chlorophenol	1.311	1.315	1.366	1.270	1.248	1.302	3.52
9)	MT	1,3-Dichlorobenzene	1.279	1.317	1.423	1.382	1.364	1.353	4.15
10)	CM	1,4-Dichlorobenzene	1.299	1.335	1.437	1.417	1.358	1.369	4.17
11)	M	1,2-Dichlorobenzene	1.265	1.367	1.444	1.392	1.326	1.359	4.98
12)	T	2-Methylphenol	1.228	1.263	1.204	1.186	1.210	1.218	2.39
13)	M	bis(2-chloroisopropyl	3.004	2.147	2.112	2.072	1.892	2.246	19.38
14)	T	4-Methylphenol	1.293	1.364	1.273	1.273	1.330	1.307	3.03
15)	PM	N-Nitroso-Di-n-propyl	1.485	1.449	1.447	1.345	1.312	1.408	5.32
16)	M	Hexachloroethane	0.799	0.838	0.878	0.841	0.785	0.828	4.46
17)	I	Naphthalene-d8	----------ISTD----------						
18)	S	Nitrobenzene-d5	0.492	0.503	0.501	0.450	0.444	0.478	6.05
19)	M	Nitrobenzene	0.579	0.567	0.603	0.547	0.500	0.559	6.90
20)	M	Isophorone	0.672	0.656	0.913	0.854	0.757	0.770	14.58
21)	MC	2-Nitrophenol	0.218	0.224	0.231	0.208	0.196	0.215	6.44
22)	M	2,4-Dimethylphenol	0.401	0.402	0.405	0.360	0.332	0.380	8.62
23)	M	bis(2-Chloroethoxy)me	0.500	0.509	0.542	0.511	0.521	0.517	3.05
24)	MC	2,4-Dichlorophenol	0.265	0.270	0.290	0.274	0.286	0.277	3.84
25)	M	1,2,4-Trichlorobenzen	0.288	0.303	0.328	0.316	0.329	0.313	5.53
26)	M	Naphthalene	0.932	0.984	0.960	0.959	0.955	0.958	1.93
27)	T	4-Chloroaniline	0.440	0.452	0.466	0.434	0.438	0.446	2.93
28)	MC	Hexachlorobutadiene	0.168	0.175	0.201	0.191	0.202	0.188	8.12
29)	MC	4-Chloro-3-methylphen	0.392	0.421	0.416	0.373	0.384	0.397	5.19
30)	M	2-Chloronaphthalene	0.634	0.707	0.749	0.665	0.708	0.693	6.38
31)	T	2-Methylnaphthalene	0.832	0.905	0.922	0.853	0.683	0.839	11.29
32)	I	Acenaphthene-d10	----------ISTD----------						
33)	P	Hexachlorocyclopentad	0.293	0.272	0.288	0.247	0.241	0.268	8.83
34)	MC	2,4,6-Trichlorophenol	0.372	0.346	0.344	0.311	0.384	0.351	8.12
35)	T	2,4,5-Trichlorophenol	0.346	0.341	0.355	0.357	0.384	0.357	4.76
36)	S	2-Fluorobiphenyl	1.141	1.089	1.028	0.966	1.093	1.063	6.37
37)	T	2-Nitroaniline	0.720	0.709	0.649	0.596	0.578	0.650	9.85
38)	M	Dimethylphthalate	1.336	1.336	1.348	1.314	1.496	1.366	5.39
39)	M	Acenaphthylene	1.516	1.563	1.571	1.641	1.743	1.607	5.49
40)	M	2,6-Dinitrotoluene	0.340	0.324	0.346	0.332	0.338	0.336	2.53
41)	T	3-Nitroaniline	0.332	0.307	0.297	0.331	0.361	0.326	7.66

(#) = Out of Range

Response Factor Report ABNA

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed Nov 22 12:12:16 1995
Response via : Initial Calibration

Calibration Files
160 =B9156.D 120 =B9155.D 80 =B9154.D
50 =B9153.D 20 =B9152.D

		Compound	160	120	80	50	20	Avg	%RSD
42)	CM	Acenaphthene	0.969	1.011	0.999	1.038	1.086	1.020	4.32
43)	MP	2,4-Dinitrophenol	0.213	0.201	0.181	0.135		0.183	18.75
44)	PM	4-Nitrophenol	0.265	0.244	0.231	0.197		0.234	12.20
45)	T	Dibenzofuran	1.278	1.362	1.485	1.435	1.602	1.433	8.57
46)	M	2,4-Dinitrotoluene	0.494	0.468	0.490	0.442	0.414	0.462	7.26
47)	M	Diethylphthalate	1.370	1.342	1.434	1.547	1.798	1.498	12.36
48)	M	Fluorene	1.013	1.072	1.131	1.160	1.246	1.125	7.87
49)	M	4-Chlorophenyl-phenyl	0.444	0.487	0.523	0.536	0.668	0.532	15.83
50)		Phenanthrene-d10	----------ISTD----------						
51)	T	4-Nitroaniline	0.182	0.169	0.165	0.180	0.200	0.179	7.62
52)	MC	4,6-Dinitro-2-methylp	0.148	0.133	0.116	0.126		0.131	10.01
53)	T	n-Nitrosodiphenylamin	0.369	0.401	0.411	0.406	0.532	0.424	14.81
54)	S	2,4,6-Tribromophenol	0.172	0.180	0.173	0.166	0.191	0.176	5.40
55)		1,2-Diphenylhydrazine	1.113	1.118	1.290	1.195	1.250	1.193	6.58
56)	M	4-Bromophenyl-phenyle	0.168	0.191	0.213	0.212	0.262	0.209	16.64
57)	M	Hexachlorobenzene	0.255	0.282	0.296	0.297	0.338	0.294	10.17
58)	CM	Pentachlorophenol	0.195	0.190	0.189	0.155		0.182	10.07
59)	M	Phenanthrene	0.962	0.968	1.041	0.933	1.040	0.989	4.93
60)	M	Anthracene	0.973	0.985	1.021	0.945	1.068	0.998	4.77
61)		Carbazole	0.958	0.971	0.988	0.903	0.939	0.952	3.41
62)	M	Di-n-butylphthalate	1.841	1.773	1.864	1.743	1.930	1.830	4.07
63)	MC	Fluoranthene	1.199	1.070	1.098	1.020	1.074	1.092	6.04
64)	I	Chrysene-d12	----------ISTD----------						
65)		Benzidine	0.088	0.104	0.113	0.160		0.116	26.55
66)	M	Pyrene	1.549	1.656	1.565	1.353	1.284	1.481	10.53
67)	S	Terphenyl-d14	1.237	1.223	1.200	0.953	0.903	1.103	14.62
68)	M	Butylbenzylphthalate	1.100	1.195	1.185	0.947	1.002	1.086	10.12
69)	M	Benzo[a]anthracene	1.326	1.388	1.275	1.166	1.112	1.253	9.06
70)	M	3,3'-Dichlorobenzidin	0.396	0.417	0.388	0.338	0.398	0.387	7.67
71)	M	Chrysene	0.801	0.884	0.963	0.846	1.030	0.905	10.16
72)	M	bis(2-Ethylhexyl)phth	1.402	1.581	1.620	1.371	1.469	1.489	7.30
73)	I	Perylene-d12	----------ISTD----------						
74)	MC	Di-n-octylphthalate	3.439	3.618	5.097	4.812		4.241	19.68
75)	M	Benzo[b]fluoranthene	1.486	1.439	1.979	1.620	1.591	1.623	13.09
76)	m	Benzo[k]fluoranthene	1.061	1.050	1.412	1.195	1.379	1.220	14.02
77)	mc	Benzo[a]pyrene	1.005	0.979	1.197	0.992	0.989	1.032	8.94
78)	m	Indeno[1,2,3-cd]pyren	0.635	0.748	0.839	0.688		0.728	12.03
79)	m	Dibenz[a,h]anthracene	0.632	0.716	0.921	0.583		0.713	20.97
80)	M	Benzo[g,h,i]perylene	0.641	0.793	0.905	0.561		0.725	21.22

(#) = Out of Range

Quantitation Report

Data File : c:\hpchem\1\data2\b9152.d Vial: 2
Acq On : 20 Nov 95 12:29 pm Operator: SCOTTV
Sample : 20 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Nov 22 12:04 1995

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed Nov 22 12:21:54 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.82	152	19366	40.00	ug/mL	-0.87
17) Naphthalene-d8	11.55	136	80785	40.00	ug/mL	-0.88
32) Acenaphthene-d10	16.81	164	60680	40.00	ug/mL	-0.92
50) Phenanthrene-d10	21.24	188	109687	40.00	ug/ml	-0.99
64) Chrysene-d12	29.21	240	94436	40.00	ug/mL	-1.07
73) Perylene-d12	33.16	264	40655	40.00	ug/mL	-1.08
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	4.14	112	25564	41.41	ug/mL	41.41%
3) Phenol-d5	7.32	99	41332	41.26	ug/mL	41.26%
18) Nitrobenzene-d5	9.53	82	44810	40.93	ug/mL	40.93%
36) 2-Fluorobiphenyl	15.02	172	82935	44.81	ug/mL	44.81%
54) 2,4,6-Tribromophenol	19.22	330	26134	75.24	ug/mL	75.24%
67) Terphenyl-d14	26.36	244	106635	45.46	ug/mL	45.46%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	1.68	74	8144	18.95	ug/mlm	100
6) Phenol	7.34	94	15318	16.30	ug/mL	100
7) bis(2-Chloroethyl)ether	11.30	93	21053	18.33	ug/mL	95
8) 2-Chlorophenol	7.24	128	12080	18.72	ug/mL	98
9) 1,3-Dichlorobenzene	7.61	146	13209	19.96	ug/mL	100
10) 1,4-Dichlorobenzene	7.86	146	13150	19.63	ug/mL	99
11) 1,2-Dichlorobenzene	8.24	146	12839	19.68	ug/mL	96
12) 2-Methylphenol	9.05	108	11721	18.93	ug/mLm	96
13) bis(2-chloroisopropyl)ethe	8.97	45	18321	16.94	ug/mL	99
14) 4-Methylphenol	9.55	108	12878	18.97	ug/mL	96
15) N-Nitroso-Di-n-propylamine	9.36	70	12705	17.17	ug/mL	92
16) Hexachloroethane	9.21	117	7598	18.08	ug/mL#	79
19) Nitrobenzene	9.57	77	20210	19.28	ug/mL	93
20) Isophorone	10.40	82	30563	13.74	ug/mL	95
21) 2-Nitrophenol	10.51	139	7899	16.35	ug/mL	89
22) 2,4-Dimethylphenol	11.07	107	13413	17.17	ug/mL#	100
23) bis(2-Chloroethoxy)methane	11.30	93	21053	17.29	ug/mL#	100
24) 2,4-Dichlorophenol	11.34	162	11549	19.36	ug/mL	99
25) 1,2,4-Trichlorobenzene	11.46	180	13274	21.60	ug/mL	94
26) Naphthalene	11.59	128	38588	19.04	ug/mL	100
27) 4-Chloroaniline	12.00	127	17680	18.61	ug/mL	99
28) Hexachlorobutadiene	12.13	225	8178	25.38	ug/mL	97
29) 4-Chloro-3-methylphenol	13.79	107	15510	19.78	ug/mL	93
30) 2-Chloronaphthalene	15.16	162	28609	22.33	ug/ml#	100
31) 2-Methylnaphthalene	13.73	142	27588	15.71	ug/mL	97
33) Hexachlorocyclopentadiene	14.25	237	7301	16.64	ug/mL	97
34) 2,4,6-Trichlorophenol	14.85	196	11665	18.05	ug/mL	97
35) 2,4,5-Trichlorophenol	14.85	196	11665	22.14	ug/mL	97

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

Quantitation Report

Data File : c:\hpchem\1\data2\b9152.d Vial: 2
Acq On : 20 Nov 95 12:29 pm Operator: SCOTTV
Sample : 20 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Nov 22 12:04 1995

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed Nov 22 12:21:54 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37)	2-Nitroaniline	16.95	65	17542	14.77	ug/mL	89
38)	Dimethylphthalate	16.46	163	45385	21.87	ug/mL#	11
39)	Acenaphthylene	16.33	152	52878	19.36	ug/mL	97
40)	2,6-Dinitrotoluene	16.54	165	10244	21.96	ug/mL#	96
41)	3-Nitroaniline	18.80	138	10963	21.13	ug/mL	96
42)	Acenaphthene	16.89	153	32947	21.30	ug/mL	99
43)	2,4-Dinitrophenol	17.27	184	3292	10.35	ug/mL	89
44)	4-Nitrophenol	17.87	109	5992	17.33	ug/mL	89
45)	Dibenzofuran	17.45	168	48601	20.88	ug/mL#	87
46)	2,4-Dinitrotoluene	17.68	165	12573	18.32	ug/mL#	1
47)	Diethylphthalate	18.68	149	54555	23.11	ug/mL	96
48)	Fluorene	18.47	166	37810	21.35	ug/mL	98
49)	4-Chlorophenyl-phenylether	18.70	204	20266	26.26	ug/mL#	82
51)	4-Nitroaniline	18.80	138	10963	17.36	ug/mL	96
52)	4,6-Dinitro-2-methylphenol	18.87	198	6263	15.40	ug/mL	100
53)	n-Nitrosodiphenylamine	19.12	169	29203	19.63	ug/mL	94
55)	1,2-Diphenylhydrazine (as	19.16	77	68532	14.01	ug/ml	100
56)	4-Bromophenyl-phenylether	20.13	248	14362	28.00	ug/mL	97
57)	Hexachlorobenzene	20.05	284	18525	28.47	ug/mL	94
58)	Pentachlorophenol	20.80	266	8983	20.16	ug/mL	95
59)	Phenanthrene	21.30	178	57020	19.13	ug/mLm	99
60)	Anthracene	21.45	178	58588	20.01	ug/mL	99
61)	Carbazole	22.13	167	51513	17.65	ug/ml	98
62)	Di-n-butylphthalate	23.71	149	105848	19.19	ug/mL	99
63)	Fluoranthene	24.86	202	58902	19.67	ug/mLm	71
65)	Benzidine	21.24	184	15975	24.74	ug/ml	100
66)	Pyrene	25.48	202	60645	16.05	ug/mL#	81
68)	Butylbenzylphthalate	28.15	149	47305	16.09	ug/mL#	26
69)	Benzo[a]anthracene	29.19	228	52514	15.56	ug/mL	98
70)	3,3'-Dichlorobenzidine	29.41	252	18775	20.60	ug/mL#	94
71)	Chrysene	29.29	228	48650	24.05	ug/mLm	98
72)	bis(2-Ethylhexyl)phthalate	30.16	149	69386	16.47	ug/mL#	23
74)	Di-n-octylphthalate	32.06	149	102182	17.66	ug/mL#	100
75)	Benzo[b]fluoranthene	32.20	252	32331	16.29	ug/mL#	96
76)	Benzo[k]fluoranthene	32.28	252	28031	23.73	ug/mLm	96
77)	Benzo[a]pyrene	32.99	252	20100	18.29	ug/mLm	96
78)	Indeno[1,2,3-cd]pyrene	35.65	276	8011	14.04	ug/mL#	78
79)	Dibenz[a,h]anthracene	35.78	278	7814	14.01	ug/mL	94
80)	Benzo[g,h,i]perylene	36.17	276	7059	13.63	ug/mLm	87

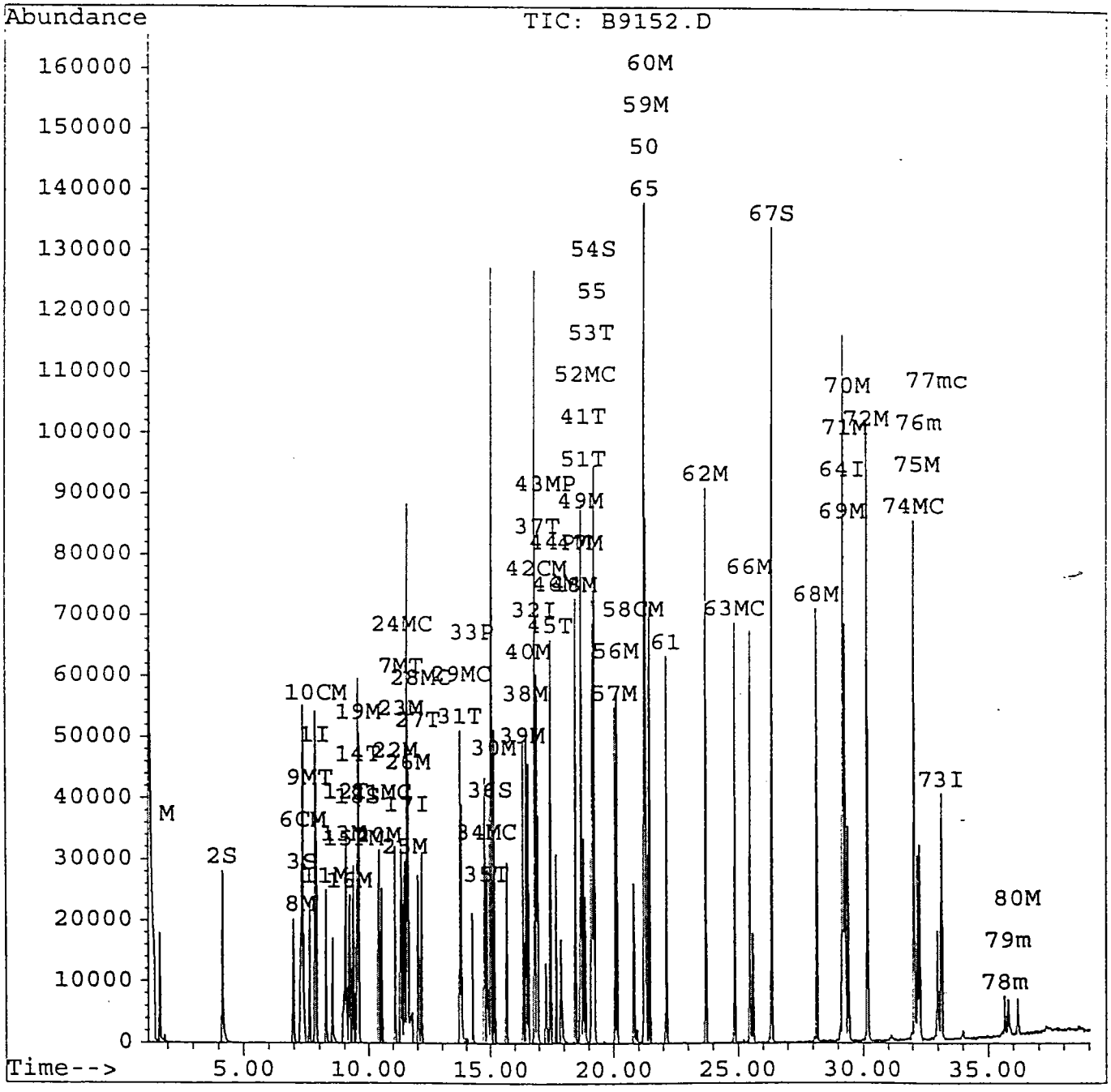
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data2\b9152.d
Acq On : 20 Nov 95 12:29 pm
Sample : 20 STD..... Converted from RTE d
Misc :
Quant Time: Nov 22 12:04 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 Nov 22 12:21:54 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : c:\hpchem\1\data2\b9153.d
Acq On : 20 Nov 95 1:22 pm
Sample : 50 STD..... Converted from RTE d
Misc :
Quant Time: Nov 22 12:06 1995

Vial: 3
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed Nov 22 12:21:54 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.84	152	21909	40.00	ug/mL	-0.85
17) Naphthalene-d8	11.58	136	92328	40.00	ug/mL	-0.86
32) Acenaphthene-d10	16.83	164	67130	40.00	ug/mL	-0.90
50) Phenanthrene-d10	21.25	188	123423	40.00	ug/ml	-0.98
64) Chrysene-d12	29.24	240	92844	40.00	ug/mL	-1.04
73) Perylene-d12	33.15	264	30755	40.00	ug/mL	-1.09
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	4.16	112	31216	44.69	ug/mL	44.69%
3) Phenol-d5	7.34	99	51130	45.12	ug/mL	45.12%
18) Nitrobenzene-d5	9.55	82	51901	41.48	ug/mL	41.48%
36) 2-Fluorobiphenyl	15.04	172	81039	39.58	ug/mL	39.58%
54) 2,4,6-Tribromophenol	19.24	330	25579	65.45	ug/mL	65.45%
67) Terphenyl-d14	26.37	244	110564	47.94	ug/mL	47.94%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	1.68	74	22873	47.06	ug/mlm	100
6) Phenol	7.38	94	43087	40.53	ug/mL	100
7) bis(2-Chloroethyl)ether	11.34	93	58997	45.40	ug/mL	90
8) 2-Chlorophenol	7.26	128	34772	47.64	ug/mL	96
9) 1,3-Dichlorobenzene	7.63	146	37839	50.53	ug/mL	96
10) 1,4-Dichlorobenzene	7.88	146	38816	51.23	ug/mL	95
11) 1,2-Dichlorobenzene	8.26	146	38125	51.66	ug/mL	99
12) 2-Methylphenol	9.07	108	32481	46.36	ug/mLm	97
13) bis(2-chloroisopropyl)ethe	8.99	45	56748	46.37	ug/mL	98
14) 4-Methylphenol	9.59	108	34858	45.39	ug/mL	97
15) N-Nitroso-Di-n-propylamine	9.40	70	36828	44.01	ug/mL	97
16) Hexachloroethane	9.23	117	23023	48.41	ug/mL#	74
19) Nitrobenzene	9.61	77	63152	52.71	ug/mL	98
20) Isophorone	10.44	82	98532	38.76	ug/mL	94
21) 2-Nitrophenol	10.55	139	24042	43.53	ug/mL	97
22) 2,4-Dimethylphenol	11.11	107	41512	46.50	ug/mL#	100
23) bis(2-Chloroethoxy)methane	11.34	93	58997	42.39	ug/mL#	100
24) 2,4-Dichlorophenol	11.38	162	31594	46.35	ug/mL	96
25) 1,2,4-Trichlorobenzene	11.48	180	36479	51.94	ug/mL	96
26) Naphthalene	11.63	128	110640	47.77	ug/mL	98
27) 4-Chloroaniline	12.04	127	50119	46.15	ug/mL	97
28) Hexachlorobutadiene	12.15	225	22043	59.86	ug/mL	98
29) 4-Chloro-3-methylphenol	13.81	107	43074	48.07	ug/mL#	83
30) 2-Chloronaphthalene	15.18	162	76788	52.45	ug/ml#	100
31) 2-Methylnaphthalene	13.75	142	98486	49.06	ug/mL	97
33) Hexachlorocyclopentadiene	14.27	237	20721	42.68	ug/mL	97
34) 2,4,6-Trichlorophenol	14.77	196	26093	36.50	ug/mL	97
35) 2,4,5-Trichlorophenol	14.87	196	29970	51.42	ug/mL	97

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

Data File : c:\hpchem\1\data2\b9153.d Vial: 3
Acq On : 20 Nov 95 1:22 pm Operator: SCOTTV
Sample : 50 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Nov 22 12:06 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed Nov 22 12:21:54 1995
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37) 2-Nitroaniline	16.99	65	50018	38.07	ug/mL	93
38) Dimethylphthalate	16.51	163	110296	48.05	ug/mL#	12
39) Acenaphthylene	16.37	152	137726	45.57	ug/mL	99
40) 2,6-Dinitrotoluene	16.58	165	27838	53.93	ug/mL#	95
41) 3-Nitroaniline	18.86	138	27743	48.34	ug/mL	95
42) Acenaphthene	16.93	153	87062	50.87	ug/mL	95
43) 2,4-Dinitrophenol	17.30	184	11345	32.23	ug/mL	96
44) 4-Nitrophenol	17.89	109	16525	43.20	ug/mL#	85
45) Dibenzofuran	17.47	168	120453	46.78	ug/mL	92
46) 2,4-Dinitrotoluene	17.72	165	37128	48.90	ug/mL#	1
47) Diethylphthalate	18.70	149	129774	49.69	ug/mL	95
48) Fluorene	18.49	166	97369	49.70	ug/mL	98
49) 4-Chlorophenyl-phenylether	18.72	204	44994	52.70	ug/mL#	80
51) 4-Nitroaniline	18.86	138	27743	39.05	ug/mL	95
52) 4,6-Dinitro-2-methylphenol	18.94	198	19466	42.54	ug/mL	100
53) n-Nitrosodiphenylamine	19.15	169	62685	37.45	ug/mL	98
55) 1,2-Diphenylhydrazine (as	19.19	77	184330	33.48	ug/ml	100
56) 4-Bromophenyl-phenylether	20.15	248	32649	56.57	ug/mL	92
57) Hexachlorobenzene	20.07	284	45836	62.60	ug/mL#	89
58) Pentachlorophenol	20.82	266	23919	47.70	ug/mL	95
59) Phenanthrene	21.33	178	143981	42.93	ug/mL	99
60) Anthracene	21.48	178	145750	44.25	ug/mL	100
61) Carbazole	22.15	167	139335	42.42	ug/ml	95
62) Di-n-butylphthalate	23.73	149	268835	43.32	ug/mL#	97
63) Fluoranthene	24.89	202	157414	46.71	ug/mLm	78
65) Benzidine	21.27	184	18516	29.17	ug/ml	100
66) Pyrene	25.51	202	157017	42.27	ug/mL#	87
68) Butylbenzylphthalate	28.18	149	109897	38.03	ug/mL#	19
69) Benzo[a]anthracene	29.20	228	135286	40.78	ug/mL	99
70) 3,3'-Dichlorobenzidine	29.42	252	39213	43.76	ug/mL#	98
71) Chrysene	29.30	228	98159	49.36	ug/mLm	99
72) bis(2-Ethylhexyl)phthalate	30.19	149	159156	38.42	ug/mL#	30
74) Di-n-octylphthalate	32.07	149	184983	42.27	ug/mL#	100
75) Benzo[b]fluoranthene	32.21	252	62291	41.49	ug/mL#	94
76) Benzo[k]fluoranthene	32.29	252	45934	51.40	ug/mLm	94
77) Benzo[a]pyrene	33.00	252	38144	45.88	ug/mLm	94
78) Indeno[1,2,3-cd]pyrene	35.66	276	26456	61.30	ug/mLm	80
79) Dibenz[a,h]anthracene	35.79	278	22396	53.09	ug/mL#	93
80) Benzo[g,h,i]perylene	36.18	276	21568	55.05	ug/mL#	89

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

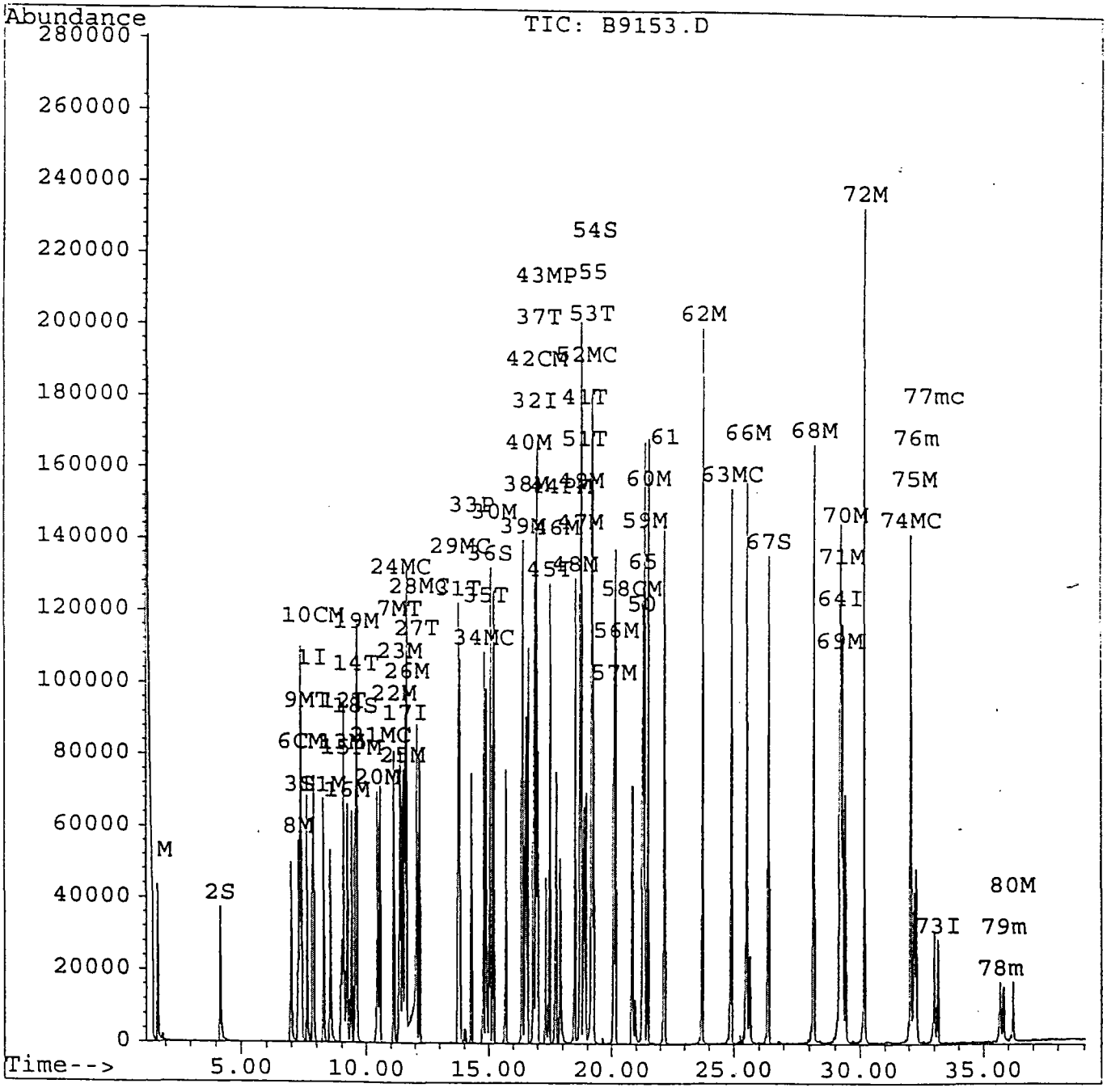
Quantitation Report

187

Data File : c:\hpchem\1\data2\b9153.d
Acq On : 20 Nov 95 1:22 pm
Sample : 50 STD..... Converted from RTE d
Misc :
Quant Time: Nov 22 12:06 1995

Vial: 3
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed Nov 22 12:21:54 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : c:\hpchem\1\data2\b9154.d
Acq On : 20 Nov 95 2:14 pm
Sample : 80 STD..... Converted from RTE d
Misc :
Quant Time: Nov 22 12:07 1995

Vial: 4
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed Nov 22 12:21:54 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.85	152	21149	40.00	ug/mL	-0.85
17) Naphthalene-d8	11.58	136	87105	40.00	ug/mL	-0.85
32) Acenaphthene-d10	16.85	164	65230	40.00	ug/mL	-0.89
50) Phenanthrene-d10	21.26	188	117422	40.00	ug/ml	-0.97
64) Chrysene-d12	29.26	240	78246	40.00	ug/mL	-1.03
73) Perylene-d12	33.15	264	29586	40.00	ug/mL	-1.09
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	4.17	112	31217	46.30	ug/mL	46.30%
3) Phenol-d5	7.36	99	51615	47.18	ug/mL	47.18%
18) Nitrobenzene-d5	9.56	82	54570	46.23	ug/mL	46.23%
36) 2-Fluorobiphenyl	15.05	172	83814	42.13	ug/mL	42.13%
54) 2,4,6-Tribromophenol	19.26	330	25349	68.18	ug/mL	68.18%
67) Terphenyl-d14	26.37	244	117341	60.37	ug/mL	60.37%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	1.69	74	34411	73.34	ug/mlm	100
6) Phenol	7.40	94	73852	71.96	ug/mL	100
7) bis(2-Chloroethyl)ether	11.35	93	94368	75.23	ug/mL	96
8) 2-Chlorophenol	7.29	128	57794	82.02	ug/mL	91
9) 1,3-Dichlorobenzene	7.63	146	60192	83.27	ug/mL	100
10) 1,4-Dichlorobenzene	7.90	146	60774	83.09	ug/mL	97
11) 1,2-Dichlorobenzene	8.29	146	61063	85.72	ug/mL	95
12) 2-Methylphenol	9.10	108	50920	75.29	ug/mLm	100
13) bis(2-chloroisopropyl)ethe	9.00	45	89347	75.63	ug/mL	96
14) 4-Methylphenol	9.62	108	53851	72.64	ug/mL	100
15) N-Nitroso-Di-n-propylamine	9.45	70	61188	75.74	ug/mL#	94
16) Hexachloroethane	9.23	117	37125	80.87	ug/mL#	75
19) Nitrobenzene	9.64	77	105018	92.90	ug/mL	97
20) Isophorone	10.49	82	159088	66.33	ug/mL	97
21) 2-Nitrophenol	10.56	139	40246	77.24	ug/mL	91
22) 2,4-Dimethylphenol	11.14	107	70519	83.74	ug/mL#	100
23) bis(2-Chloroethoxy)methane	11.35	93	94368	71.87	ug/mL#	100
24) 2,4-Dichlorophenol	11.41	162	50454	78.45	ug/mL	95
25) 1,2,4-Trichlorobenzene	11.49	180	57084	86.14	ug/mL	96
26) Naphthalene	11.64	128	167173	76.51	ug/mL	100
27) 4-Chloroaniline	12.07	127	81200	79.26	ug/mL	98
28) Hexachlorobutadiene	12.18	225	34993	100.72	ug/mL	98
29) 4-Chloro-3-methylphenol	13.82	107	72479	85.73	ug/mL	89
30) 2-Chloronaphthalene	15.19	162	130435	94.44	ug/ml#	100
31) 2-Methylnaphthalene	13.76	142	160669	84.83	ug/mL	99
33) Hexachlorocyclopentadiene	14.28	237	37611	79.73	ug/mL#	97
34) 2,4,6-Trichlorophenol	14.78	196	44855	64.57	ug/mL	98
35) 2,4,5-Trichlorophenol	14.88	196	46266	81.69	ug/mL	96

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

Quantitation Report

Data File : c:\hpchem\1\data2\b9154.d
Acq On : 20 Nov 95 2:14 pm
Sample : 80 STD..... Converted from RTE d
Misc :
Quant Time: Nov 22 12:07 1995

Vial: 4
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed Nov 22 12:21:54 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37)	2-Nitroaniline	17.02	65	84624	66.28	ug/mL	89
38)	Dimethylphthalate	16.54	163	175842	78.83	ug/mL#	12
39)	Acenaphthylene	16.38	152	205000	69.80	ug/mL	99
40)	2,6-Dinitrotoluene	16.61	165	45185	90.09	ug/mL#	99
41)	3-Nitroaniline	18.91	138	38767	69.52	ug/mL	98
42)	Acenaphthene	16.94	153	130279	78.33	ug/mL	99
43)	2,4-Dinitrophenol	17.35	184	23597	69.00	ug/mL#	81
44)	4-Nitrophenol	17.91	109	30181	81.21	ug/mL	84
45)	Dibenzofuran	17.50	168	193762	77.44	ug/mL	88
46)	2,4-Dinitrotoluene	17.75	165	63886	86.58	ug/mL#	1
47)	Diethylphthalate	18.74	149	187094	73.73	ug/mL	95
48)	Fluorene	18.52	166	147613	77.55	ug/mL	96
49)	4-Chlorophenyl-phenylether	18.74	204	68166	82.17	ug/mL#	83
51)	4-Nitroaniline	18.91	138	38767	57.36	ug/mL	98
52)	4,6-Dinitro-2-methylphenol	18.97	198	27346	62.82	ug/mL	100
53)	n-Nitrosodiphenylamine	19.18	169	96556	60.63	ug/mL	97
55)	1,2-Diphenylhydrazine (as	19.20	77	303006	57.85	ug/ml	100
56)	4-Bromophenyl-phenylether	20.16	248	49920	90.92	ug/mL	93
57)	Hexachlorobenzene	20.11	284	69411	99.65	ug/mL#	80
58)	Pentachlorophenol	20.86	266	44474	93.22	ug/mL	100
59)	Phenanthrene	21.34	178	244369	76.58	ug/mLm	98
60)	Anthracene	21.49	178	239679	76.48	ug/mL	98
61)	Carbazole	22.17	167	231960	74.22	ug/ml	95
62)	Di-n-butylphthalate	23.75	149	437710	74.14	ug/mL#	97
63)	Fluoranthene	24.90	202	257785	80.40	ug/mLm	79
65)	Benzidine	21.26	184	17684	33.05	ug/ml	100
66)	Pyrene	25.52	202	244857	78.22	ug/mL#	89
68)	Butylbenzylphthalate	28.20	149	185366	76.11	ug/mL#	18
69)	Benzo[a]anthracene	29.22	228	199585	71.39	ug/mL	100
70)	3,3'-Dichlorobenzidine	29.42	252	60675	80.35	ug/mL#	94
71)	Chrysene	29.32	228	150741	89.95	ug/mLm	100
72)	bis(2-Ethylhexyl)phthalate	30.19	149	253443	72.60	ug/mL#	24
74)	Di-n-octylphthalate	32.07	149	301609	71.64	ug/mL#	100
75)	Benzo[b]fluoranthene	32.21	252	117097	81.08	ug/mL#	94
76)	Benzo[k]fluoranthene	32.31	252	83571	97.21	ug/mLm	94
77)	Benzo[a]pyrene	33.00	252	70806	88.54	ug/mLm	93
78)	Indeno[1,2,3-cd]pyrene	35.66	276	49674	119.65	ug/mLm	71
79)	Dibenz[a,h]anthracene	35.79	278	54514	134.34	ug/mL	93
80)	Benzo[g,h,i]perylene	36.20	276	53556	142.09	ug/mL#	83

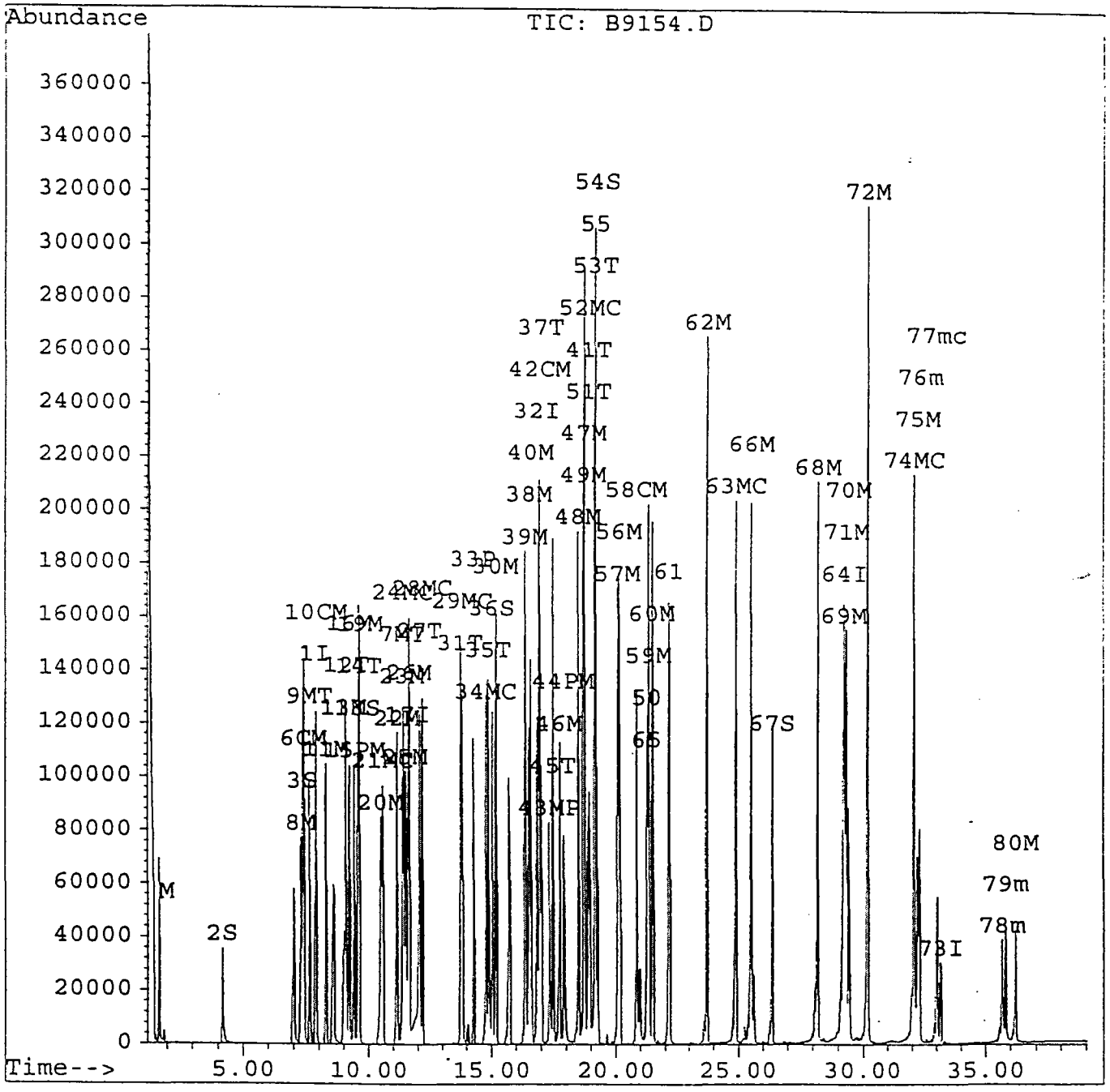
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data2\b9154.d
Acq On : 20 Nov 95 2:14 pm
Sample : 80 STD..... Converted from RTE d
Misc :
Quant Time: Nov 22 12:07 1995

Vial: 4
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed Nov 22 12:21:54 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : c:\hpchem\1\data2\b9155.d
Acq On : 20 Nov 95 3:11 pm
Sample : 120 STD..... Converted from RTE d
Misc :
Quant Time: Nov 22 12:18 1995

Vial: 5
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed Nov 22 12:21:54 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.86	152	21393	40.00	ug/mL	-0.83
17) Naphthalene-d8	11.60	136	89884	40.00	ug/mL	-0.83
32) Acenaphthene-d10	16.86	164	68594	40.00	ug/mL	-0.87
50) Phenanthrene-d10	21.28	188	124831	40.00	ug/ml	-0.95
64) Chrysene-d12	29.28	240	80803	40.00	ug/mL	-1.01
73) Perylene-d12	33.17	264	40378	40.00	ug/mL	-1.07
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	4.18	112	31242	45.81	ug/mL	45.81%
3) Phenol-d5	7.38	99	52903	47.81	ug/mL	47.81%
18) Nitrobenzene-d5	9.60	82	56558	46.43	ug/mL	46.43%
36) 2-Fluorobiphenyl	15.07	172	93337	44.61	ug/mL	44.61%
54) 2,4,6-Tribromophenol	19.30	330	28016	70.88	ug/mL	70.88%
67) Terphenyl-d14	26.37	244	123504	61.53	ug/mL	61.53%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	1.70	74	61263	129.08	ug/mlm	100
6) Phenol	7.44	94	113845	109.67	ug/mL	100
7) bis(2-Chloroethyl)ether	11.39	93	137382	108.27	ug/mL	90
8) 2-Chlorophenol	7.30	128	84421	118.44	ug/mL	94
9) 1,3-Dichlorobenzene	7.65	146	84510	115.58	ug/mL	96
10) 1,4-Dichlorobenzene	7.92	146	85696	115.82	ug/mL	99
11) 1,2-Dichlorobenzene	8.29	146	87755	121.79	ug/mL	99
12) 2-Methylphenol	9.13	108	81052	118.48	ug/mLm	100
13) bis(2-chloroisopropyl)ethe	9.02	45	137800	115.32	ug/mL	97
14) 4-Methylphenol	9.67	108	87534	116.73	ug/mL	100
15) N-Nitroso-Di-n-propylamine	9.48	70	93023	113.83	ug/mL	98
16) Hexachloroethane	9.23	117	53808	115.88	ug/mL	85
19) Nitrobenzene	9.65	77	153016	131.18	ug/mL	95
20) Isophorone	10.56	82	176763	71.42	ug/mL#	93
21) 2-Nitrophenol	10.60	139	60412	112.37	ug/mL	96
22) 2,4-Dimethylphenol	11.18	107	108531	124.89	ug/mL#	100
23) bis(2-Chloroethoxy)methane	11.39	93	137382	101.39	ug/mL#	100
24) 2,4-Dichlorophenol	11.45	162	72744	109.61	ug/mL	95
25) 1,2,4-Trichlorobenzene	11.50	180	81586	119.31	ug/mL	93
26) Naphthalene	11.68	128	265432	117.73	ug/mL	99
27) 4-Chloroaniline	12.08	127	121913	115.32	ug/mL	96
28) Hexachlorobutadiene	12.18	225	47234	131.75	ug/mL	99
29) 4-Chloro-3-methylphenol	13.86	107	113540	130.15	ug/mL#	83
30) 2-Chloronaphthalene	15.21	162	190634	133.76	ug/ml#	100
31) 2-Methylnaphthalene	13.78	142	244141	124.92	ug/mL	97
33) Hexachlorocyclopentadiene	14.30	237	55971	112.83	ug/mL	98
34) 2,4,6-Trichlorophenol	14.80	196	71133	97.38	ug/mL	95
35) 2,4,5-Trichlorophenol	14.90	196	70146	117.78	ug/mL	96

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

Quantitation Report

Data File : c:\hpchem\1\data2\b9155.d Vial: 5
Acq On : 20 Nov 95 3:11 pm Operator: SCOTTV
Sample : 120 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Nov 22 12:18 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed Nov 22 12:21:54 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37)	2-Nitroaniline	17.08	65	145818	108.61	ug/mL	85
38)	Dimethylphthalate	16.57	163	274872	117.18	ug/mL#	12
39)	Acenaphthylene	16.40	152	321563	104.12	ug/mL	99
40)	2,6-Dinitrotoluene	16.65	165	66698	126.46	ug/mL#	96
41)	3-Nitroaniline	18.97	138	63194	107.76	ug/mL	97
42)	Acenaphthene	16.96	153	208073	118.97	ug/mL	99
43)	2,4-Dinitrophenol	17.40	184	41392	115.10	ug/mL#	70
44)	4-Nitrophenol	17.96	109	50217	128.49	ug/mL#	88
45)	Dibenzofuran	17.52	168	280201	106.49	ug/mL#	87
46)	2,4-Dinitrotoluene	17.81	165	96403	124.25	ug/mL#	1
47)	Diethylphthalate	18.77	149	276218	103.51	ug/mL#	93
48)	Fluorene	18.54	166	220505	110.16	ug/mL	95
49)	4-Chlorophenyl-phenylether	18.75	204	100302	114.98	ug/mL#	80
51)	4-Nitroaniline	18.97	138	63194	87.95	ug/mL	97
52)	4,6-Dinitro-2-methylphenol	19.03	198	49923	107.88	ug/mL	100
53)	n-Nitrosodiphenylamine	19.22	169	150343	88.80	ug/mL	99
55)	1,2-Diphenylhydrazine (as	19.24	77	418716	75.19	ug/ml	100
56)	4-Bromophenyl-phenylether	20.18	248	71656	122.76	ug/mL	93
57)	Hexachlorobenzene	20.12	284	105667	142.69	ug/mL#	76
58)	Pentachlorophenol	20.88	266	71152	140.28	ug/mL	99
59)	Phenanthrene	21.38	178	362651	106.91	ug/mL	99
60)	Anthracene	21.53	178	368967	110.75	ug/mL	99
61)	Carbazole	22.19	167	363617	109.44	ug/ml	94
62)	Di-n-butylphthalate	23.75	149	663866	105.77	ug/mL	98
63)	Fluoranthene	24.92	202	400665	117.55	ug/mLm	72
65)	Benzidine	21.28	184	25272	45.74	ug/mlm	100
66)	Pyrene	25.54	202	401509	124.20	ug/mL#	83
68)	Butylbenzylphthalate	28.20	149	289743	115.20	ug/mL#	18
69)	Benzo[a]anthracene	29.24	228	336557	116.57	ug/mL	98
70)	3,3'-Dichlorobenzidine	29.43	252	101174	129.73	ug/mL#	96
71)	Chrysene	29.34	228	214314	123.84	ug/mLm	98
72)	bis(2-Ethylhexyl)phthalate	30.19	149	383155	106.29	ug/mL#	22
74)	Di-n-octylphthalate	32.07	149	438231	76.28	ug/mL#	100
75)	Benzo[b]fluoranthene	32.25	252	174291	88.43	ug/mL#	92
76)	Benzo[k]fluoranthene	32.33	252	127243	108.45	ug/mLm	92
77)	Benzo[a]pyrene	33.02	252	118613	108.67	ug/mLm	92
78)	Indeno[1,2,3-cd]pyrene	35.68	276	90641	159.97	ug/mLm	70
79)	Dibenz[a,h]anthracene	35.81	278	86714	156.58	ug/mL	93
80)	Benzo[g,h,i]perylene	36.22	276	96038	186.69	ug/mL#	83

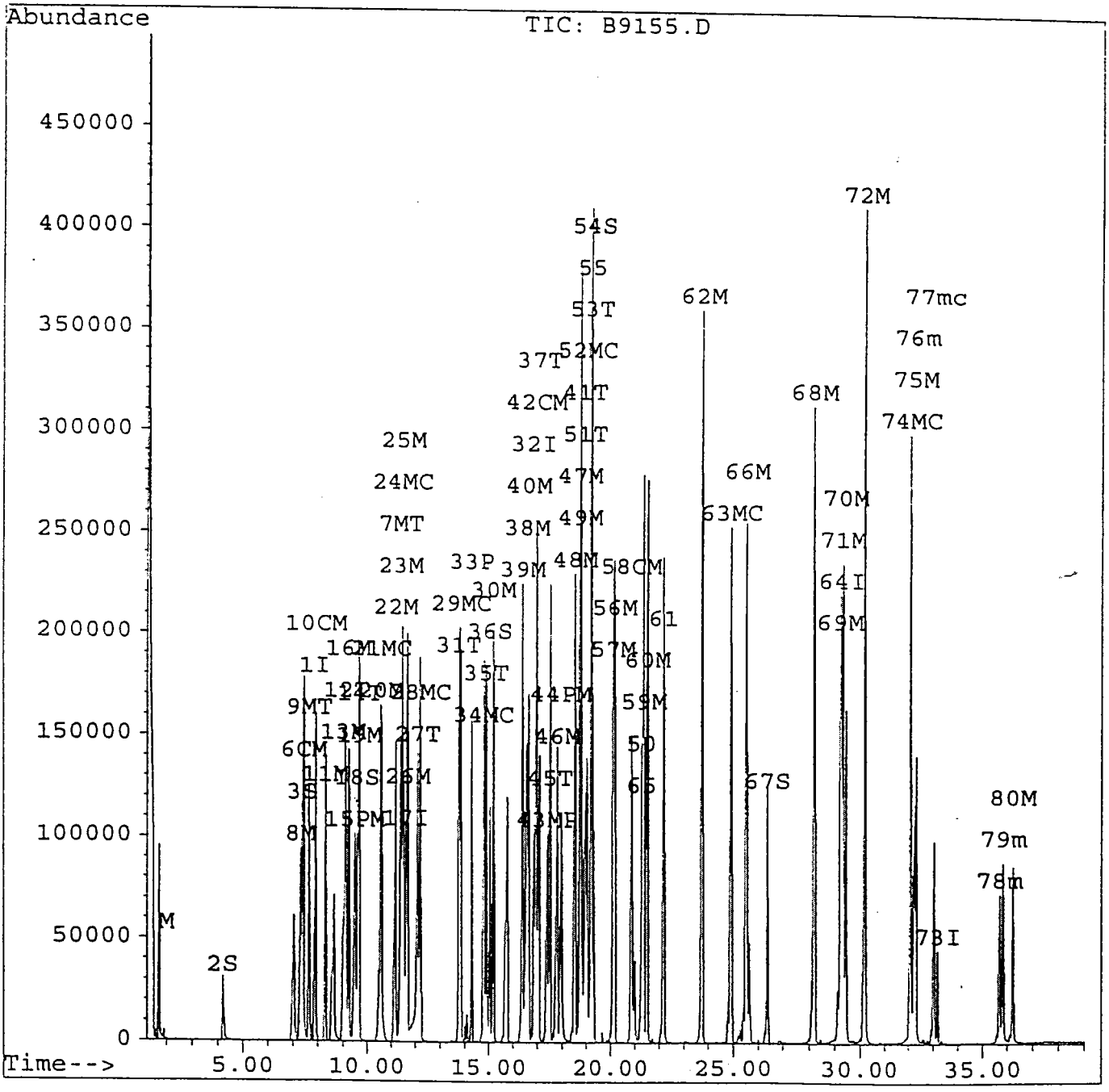
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data2\b9155.d
Acq On : 20 Nov 95 3:11 pm
Sample : 120 STD..... Converted from RTE d
Misc :
Quant Time: Nov 22 12:18 1995

Vial: 5
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed Nov 22 12:21:54 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : c:\hpchem\1\data2\b9156.d
Acq On : 20 Nov 95 4:04 pm
Sample : 160 STD..... Converted from RTE d
Misc :
Quant Time: Nov 22 12:21 1995

Vial: 6
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed Nov 22 12:21:54 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.86	152	22101	40.00	ug/mL	-0.83
17) Naphthalene-d8	11.62	136	92020	40.00	ug/mL	-0.81
32) Acenaphthene-d10	16.87	164	64329	40.00	ug/mL	-0.87
50) Phenanthrene-d10	21.30	188	117328	40.00	ug/ml	-0.93
64) Chrysene-d12	29.28	240	89266	40.00	ug/mL	-1.00
73) Perylene-d12	33.18	264	45167	40.00	ug/mL	-1.06
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	4.20	112	31739	45.05	ug/mL	45.05%
3) Phenol-d5	7.42	99	54612	47.77	ug/mL	47.77%
18) Nitrobenzene-d5	9.62	82	56583	45.37	ug/mL	45.37%
36) 2-Fluorobiphenyl	15.07	172	91744	46.76	ug/mL	46.76%
54) 2,4,6-Tribromophenol	19.32	330	25154	67.71	ug/mL	67.71%
67) Terphenyl-d14	26.37	244	137972	62.22	ug/mL	62.22%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	1.70	74	71477	145.77	ug/mlm	100
6) Phenol	7.46	94	138751	129.38	ug/mL	100
7) bis(2-Chloroethyl)ether	11.41	93	184172	140.49	ug/mL	89
8) 2-Chlorophenol	7.32	128	115858	157.34	ug/mL	94
9) 1,3-Dichlorobenzene	7.67	146	113094	149.72	ug/mL	97
10) 1,4-Dichlorobenzene	7.92	146	114850	150.25	ug/mL	98
11) 1,2-Dichlorobenzene	8.30	146	111815	150.20	ug/mL	97
12) 2-Methylphenol	9.15	108	108583	153.64	ug/mL	68
13) bis(2-chloroisopropyl)ethe	9.02	45	265566	215.12	ug/mL#	95
14) 4-Methylphenol	9.71	108	114296	147.53	ug/mL	98
15) N-Nitroso-Di-n-propylamine	9.54	70	131314	155.54	ug/mL#	98
16) Hexachloroethane	9.25	117	70643	147.26	ug/mL#	80
19) Nitrobenzene	9.69	77	212977	178.35	ug/mL	90
20) Isophorone	10.62	82	247293	97.60	ug/mL#	93
21) 2-Nitrophenol	10.62	139	80291	145.87	ug/mL	99
22) 2,4-Dimethylphenol	11.22	107	147781	166.11	ug/mL#	100
23) bis(2-Chloroethoxy)methane	11.41	93	184172	132.77	ug/mL#	100
24) 2,4-Dichlorophenol	11.47	162	97425	143.39	ug/mL	94
25) 1,2,4-Trichlorobenzene	11.52	180	106068	151.52	ug/mL	93
26) Naphthalene	11.68	128	343139	148.66	ug/mL	100
27) 4-Chloroaniline	12.10	127	161976	149.65	ug/mL	99
28) Hexachlorobutadiene	12.20	225	62019	168.98	ug/mL	98
29) 4-Chloro-3-methylphenol	13.88	107	144226	161.48	ug/mL	86
30) 2-Chloronaphthalene	15.23	162	233262	159.87	ug/ml#	100
31) 2-Methylnaphthalene	13.80	142	306392	153.13	ug/mL	92
33) Hexachlorocyclopentadiene	14.30	237	75372	162.01	ug/mL	99
34) 2,4,6-Trichlorophenol	14.84	196	95784	139.82	ug/mL	100
35) 2,4,5-Trichlorophenol	14.92	196	88905	159.18	ug/mL	98

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

Quantitation Report

Data File : c:\hpchem\1\data2\b9156.d Vial: 6
Acq On : 20 Nov 95 4:04 pm Operator: SCOTTV
Sample : 160 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Nov 22 12:21 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed Nov 22 12:21:54 1995
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37) 2-Nitroaniline	17.12	65	185263	147.14	ug/mL	89
38) Dimethylphthalate	16.59	163	343745	156.26	ug/mL#	12
39) Acenaphthylene	16.42	152	390100	134.69	ug/mL	99
40) 2,6-Dinitrotoluene	16.69	165	87603	177.11	ug/mL#	94
41) 3-Nitroaniline	19.01	138	85342	155.18	ug/mL	94
42) Acenaphthene	16.98	153	249378	152.04	ug/mL	97
43) 2,4-Dinitrophenol	17.44	184	54798	162.48	ug/mL#	85
44) 4-Nitrophenol	18.02	109	68223	186.14	ug/mL#	77
45) Dibenzofuran	17.54	168	328941	133.31	ug/mL#	83
46) 2,4-Dinitrotoluene	17.85	165	127167	174.76	ug/mL#	1
47) Diethylphthalate	18.81	149	352507	140.86	ug/mL#	92
48) Fluorene	18.56	166	260696	138.87	ug/mL	98
49) 4-Chlorophenyl-phenylether	18.78	204	114266	139.67	ug/mL#	75
51) 4-Nitroaniline	19.01	138	85342	126.37	ug/mL	94
52) 4,6-Dinitro-2-methylphenol	19.08	198	69259	159.23	ug/mL	100
53) n-Nitrosodiphenylamine	19.24	169	173217	108.85	ug/mL	96
55) 1,2-Diphenylhydrazine (as	19.26	77	522383	99.81	ug/ml	100
56) 4-Bromophenyl-phenylether	20.20	248	78677	143.41	ug/mL#	87
57) Hexachlorobenzene	20.15	284	119797	172.12	ug/mL#	66
58) Pentachlorophenol	20.90	266	91464	191.86	ug/mL	98
59) Phenanthrene	21.40	178	451397	141.58	ug/mLm	99
60) Anthracene	21.56	178	456755	145.86	ug/mL	99
61) Carbazole	22.21	167	449707	144.01	ug/ml	95
62) Di-n-butylphthalate	23.77	149	863992	146.46	ug/mL#	98
63) Fluoranthene	24.95	202	562658	175.63	ug/mLm	77
65) Benzidine	21.30	184	31272	51.24	ug/mlm	100
66) Pyrene	25.54	202	552982	154.84	ug/mL#	87
68) Butylbenzylphthalate	28.22	149	392647	141.31	ug/mL#	17
69) Benzo[a]anthracene	29.26	228	473299	148.40	ug/mL	99
70) 3,3'-Dichlorobenzidine	29.44	252	141407	164.13	ug/mL#	95
71) Chrysene	29.36	228	286102	149.64	ug/mLm	100
72) bis(2-Ethylhexyl)phthalate	30.19	149	500621	125.71	ug/mL#	29
74) Di-n-octylphthalate	32.10	149	621312	96.68	ug/mL#	100
75) Benzo[b]fluoranthene	32.27	252	268405	121.74	ug/mL#	93
76) Benzo[k]fluoranthene	32.35	252	191711	146.08	ug/mLm	93
77) Benzo[a]pyrene	33.04	252	181522	148.68	ug/mLm	93
78) Indeno[1,2,3-cd]pyrene	35.70	276	114792	181.12	ug/mL#	78
79) Dibenz[a,h]anthracene	35.84	278	114109	184.20	ug/mL#	86
80) Benzo[g,h,i]perylene	36.22	276	115784	201.21	ug/mL#	86

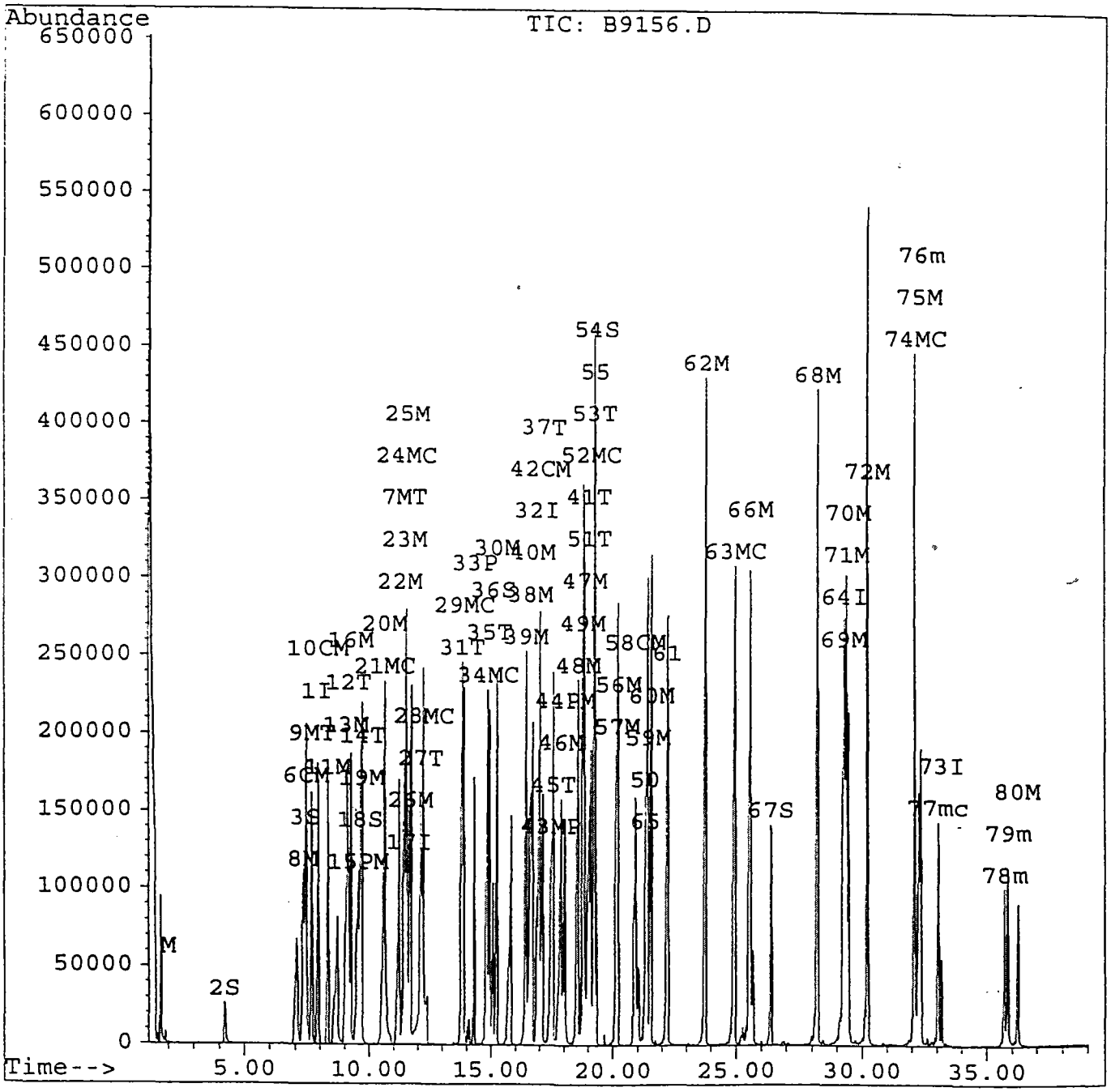
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data2\b9156.d
Acq On : 20 Nov 95 4:04 pm
Sample : 160 STD..... Converted from RTE d
Misc :
Quant Time: Nov 22 12:21 1995

Vial: 6
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed Nov 22 12:21:54 1995
Response via : Multiple Level Calibration



5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: EMSL ANALYTICAL Contract: _____

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

Lab File ID: B9005.D DFTPP Injection Date: 10/27/95

Instrument ID: ABNA DFTPP Injection Time: 1121

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	58.5
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	76.5
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	25.0 - 75.0% of mass 198	46.5
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	7.5
275	10.0 - 30.0% of mass 198	19.3
365	Greater than 0.75% of mass 198	2.3
441	Present, but less than mass 443	10.1
442	40.0 - 110.0% of mass 198	62.3
443	15.0 - 24.0% of mass 442	11.8 (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:

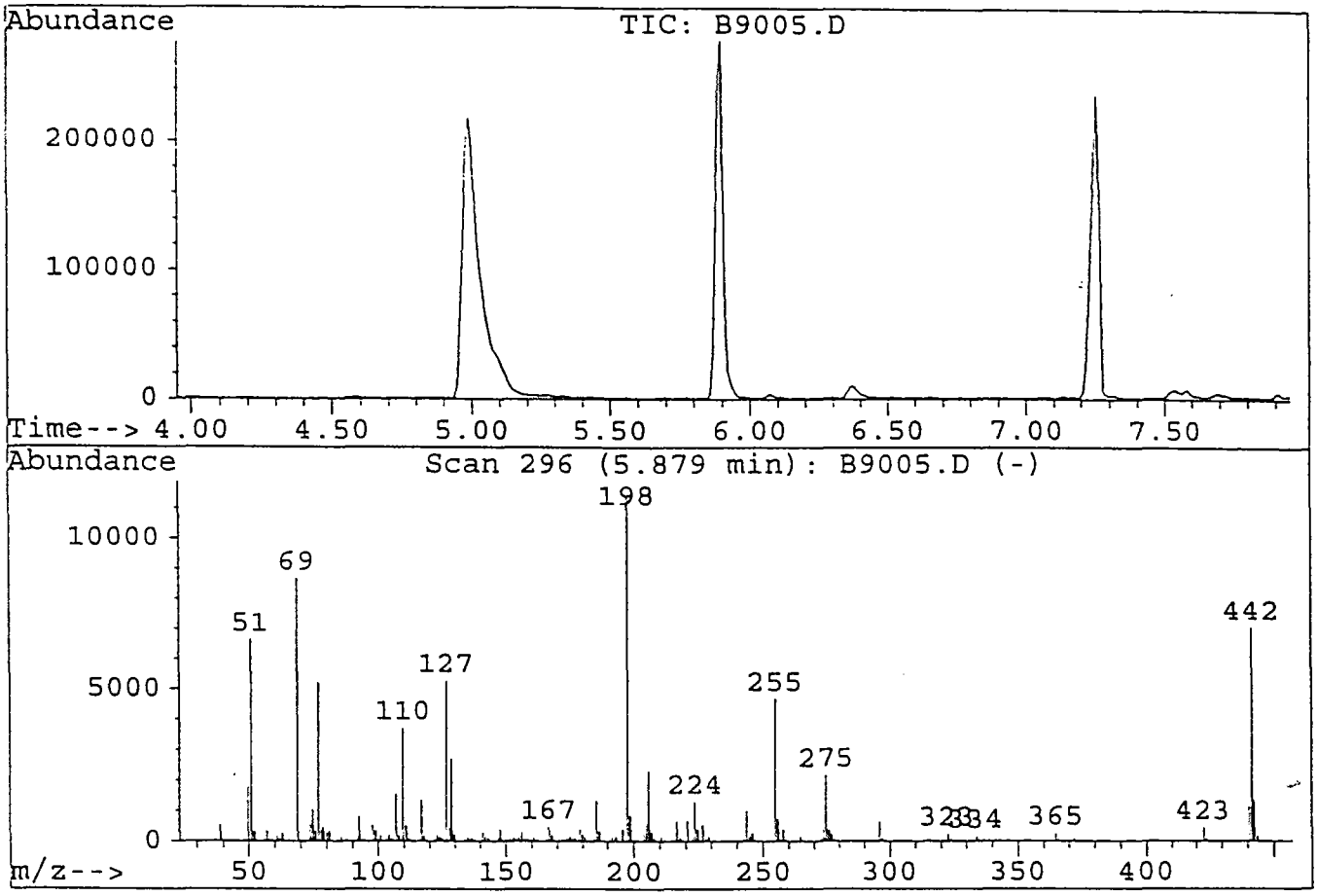
	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD050	50 STD	B9008.D	10/27/95	1329
02	SBLK01	BLANK1	B9009.D	10/27/95	1421
03	9547000B	9547000B	B9010.D	10/27/95	1512
04	46360MS	46360MS	B9011.D	10/27/95	1604
05	46360MSD	46360MSD	B9012.D	10/27/95	1656
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

DFTPP

Data File : C:\HPCHEM\1\DATA2\B9005.D
Acq On : 27 Oct 95 11:21 am
Sample : DFTPP.....
Misc :

Vial: 1
Operator: SCOTTV
Converted from RTE d Inst : ABNA
BT Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration



Peak Apex is scan: 303

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	58.5	6640	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	76.5	8681	PASS
70	69	0	2	0.0	0	PASS
127	198	40	60	46.5	5278	PASS
197	198	0	1	0.0	0	PASS
198	198	100	100	100.0	11354	PASS
199	198	5	9	7.5	851	PASS
275	198	10	30	19.3	2186	PASS
365	198	1	100	2.3	262	PASS
441	443	0	100	85.7	1150	PASS
442	198	40	100	62.3	7070	PASS
443	442	17	23	19.0	1342	PASS

Scan 296 (5.879 min): B9005.D

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
37.00	76	61.05	162	78.05	357	92.95	836
39.10	538	62.05	105	78.95	456	94.05	60
40.10	11	63.05	251	80.05	272	96.00	4
49.15	60	64.05	21	81.05	337	98.00	514
50.10	1802	65.05	39	82.05	22	99.00	334
51.10	6640	69.05	8681	83.95	27	100.00	61
52.10	309	73.25	96	84.15	30	100.90	173
56.05	84	74.05	568	85.95	152	102.10	23
57.05	325	74.95	1043	87.05	60	103.00	131
57.95	40	75.95	325	88.15	24	104.00	213
58.95	33	77.05	5224	92.15	139	105.00	77

Scan 296 (5.879 min): B9005.D

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
106.10	45	119.20	28	131.95	21	145.95	60
107.00	1558	120.10	23	133.85	94	147.05	123
108.00	176	122.10	159	135.05	173	147.95	389
109.10	71	123.10	219	135.95	85	148.85	58
109.95	3714	124.00	134	136.95	116	150.05	34
111.00	519	125.00	94	137.75	36	151.25	56
112.00	87	127.00	5278	140.05	29	151.95	43
113.10	31	128.00	424	140.95	285	152.95	140
116.00	131	128.95	2715	141.95	153	153.95	69
117.00	1370	129.85	217	143.05	97	154.95	138
117.90	140	131.10	50	145.05	19	156.05	290

Scan 296 (5.879 min): B9005.D

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
157.15	71	169.10	53	178.80	398	189.90	28
157.95	86	170.20	25	179.85	215	190.90	62
158.95	48	170.90	34	180.90	122	191.90	140
159.95	73	171.90	78	181.90	29	193.00	137
160.85	143	173.00	95	182.80	17	195.00	27
161.95	53	174.00	147	184.00	47	195.90	402
164.05	17	175.00	154	184.80	122	197.90	11354
164.90	13	176.00	98	185.85	1327	198.80	851
165.95	79	177.10	135	186.90	319	200.00	72
166.90	470	177.80	31	187.90	49	201.40	85
167.90	186	178.10	37	188.80	46	203.00	60

Scan 296 (5.879 min): B9005.D

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
203.80	274	220.95	681	234.95	47	246.90	54
204.95	542	222.85	148	235.95	43	247.60	10
205.95	2320	223.85	1298	236.95	67	248.90	64
206.85	289	224.95	385	239.05	37	253.40	16
207.95	112	225.95	47	239.90	19	254.90	4690
208.95	41	226.95	533	240.90	49	255.80	735
210.75	167	227.95	107	241.80	74	256.90	64
214.85	42	228.85	163	242.90	80	257.90	400
215.95	68	229.95	32	243.90	1011	258.90	49
216.75	644	230.85	57	244.80	168	264.90	163
217.95	101	233.85	55	245.90	273	271.80	20

Scan 296 (5.879 min): B9005.D

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
272.90	141	302.85	75	331.70	25	365.85	41
273.80	394	303.95	33	332.90	24	370.85	31
274.90	2186	313.80	44	333.90	159	371.85	130
275.90	356	314.90	72	334.90	33	382.55	16
276.85	235	315.90	45	340.70	20	382.95	24
277.75	37	320.70	24	345.80	64	389.70	22
282.95	18	321.80	17	351.95	54	401.90	58
284.95	37	322.90	232	352.95	51	402.80	67
293.05	43	323.90	53	353.85	74	403.70	21
295.85	649	326.70	36	354.85	17	420.90	47
296.85	108	327.90	29	364.85	262	422.90	447

Scan 296 (5.879 min): B9005.D

Modified:subtracted

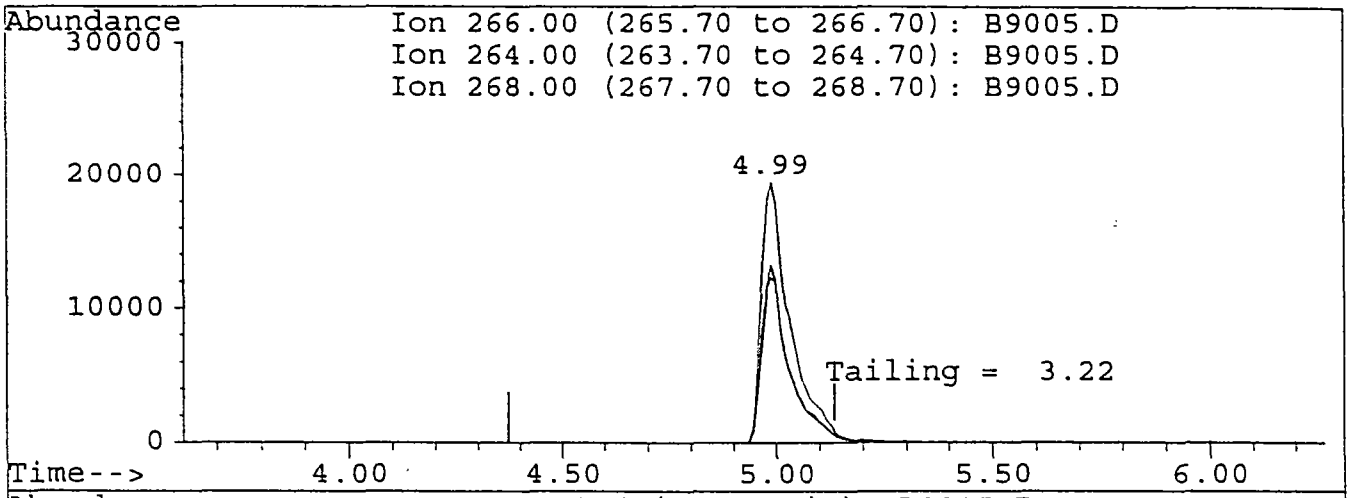
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
423.85	81						
440.85	1150						
441.85	7070						
442.75	1342						
443.75	155						

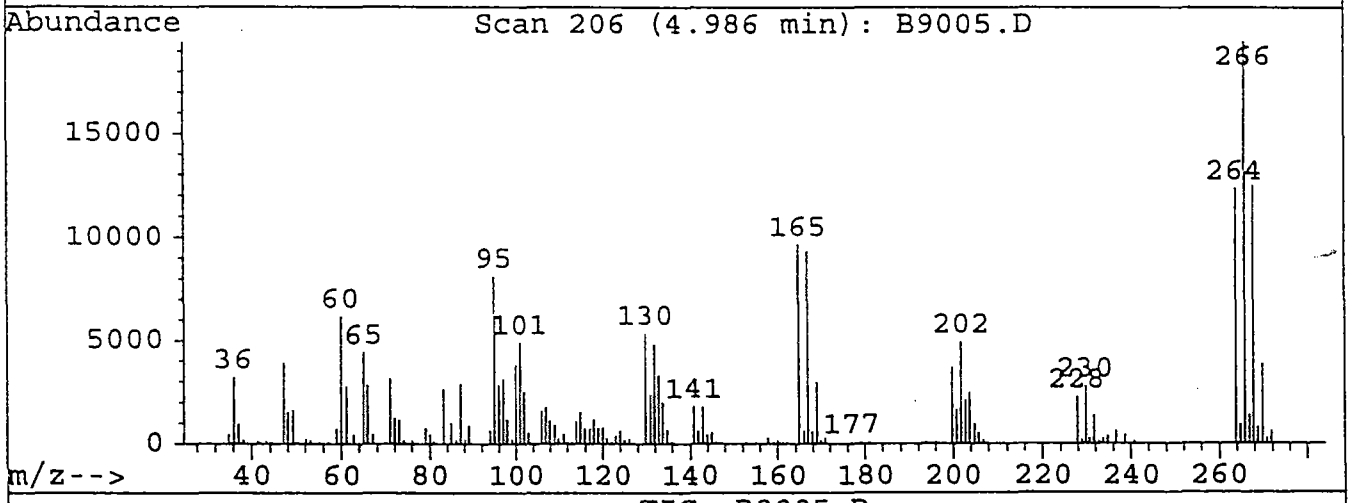
Quantitation Report

Data File : C:\HPCHEM\1\DATA2\B9005.D
Acq On : 27 Oct 95 11:21 am
Sample : DFTPP.....
Misc :
Quant Time: Oct 27 12:32 1995

Vial: 1
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 Oct 25 10:20:51 1995
Response via : Multiple Level Calibration





TIC: B9005.D

(1) Pentachlorophenol (CM)

4.99min 272.64ug/mL

response 90052

Ion	Exp%	Act%
266.00	100	100
264.00	64.30	63.35
268.00	64.70	68.27
0.00	0.00	0.00

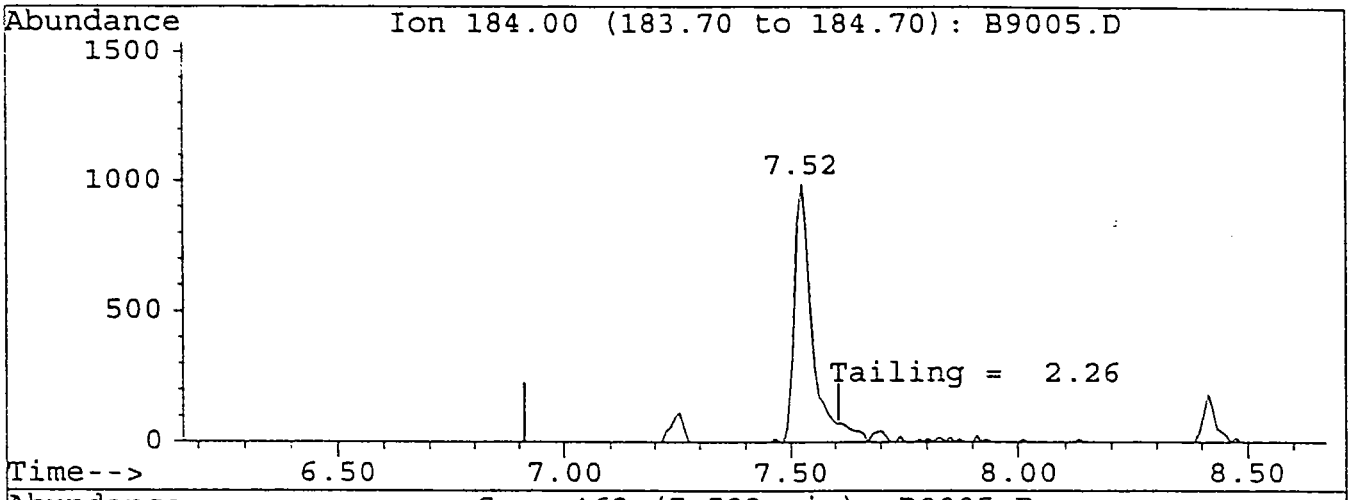
Quantitation Report

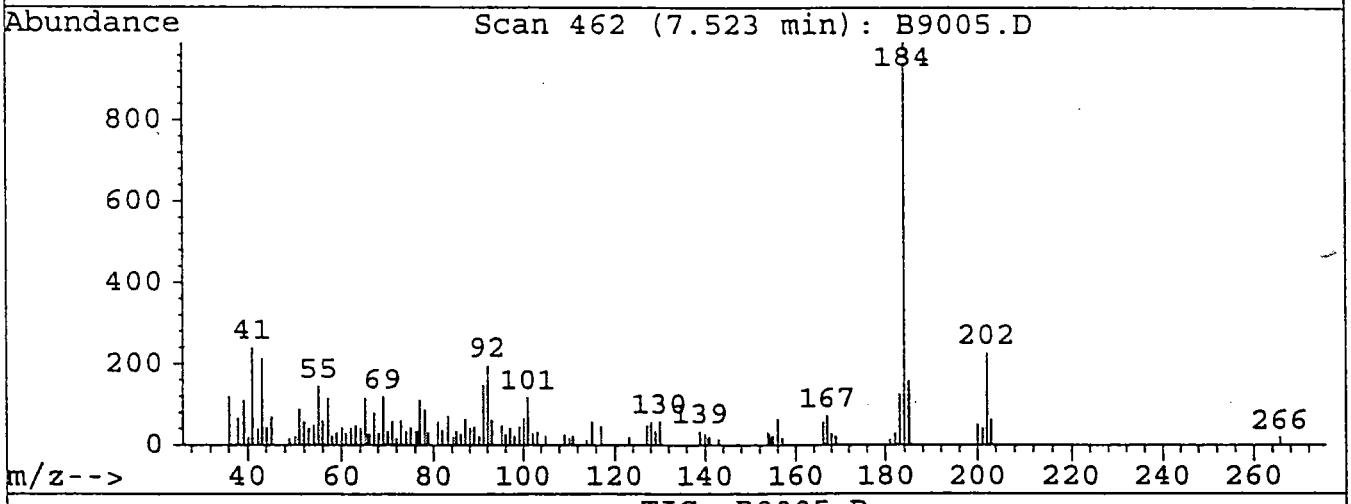
202

Data File : C:\HPCHEM\1\DATA2\B9005.D
Acq On : 27 Oct 95 11:21 am
Sample : DFTPP..... Converted from RTE d
Misc :
Quant Time: Oct 27 12:32 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 Oct 25 10:20:51 1995
Response via : Multiple Level Calibration





TIC: B9005.D

(2) Benzidine
7.52min 9.14ug/ml
response 2809

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: #### Time: 1329

Lab File ID: B9008.D Init. Calib. Date(s): #### 1/0/00

Init. Calib. Times: 1329 0000

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
N-nitrosodimethylamine	0.887	0.841		5.2	
bis(2-Chloroethyl)ether	2.373	2.336		1.6	
1,3-Dichlorobenzene	1.367	1.410		-3.1	
1,4-Dichlorobenzene	1.383	1.419		-2.6	30.0
1,2-Dichlorobenzene	1.347	1.385		-2.8	
bis(2-chloroisopropyl)ether	2.234	1.940		13.2	
N-Nitroso-Di-n-propylamine	1.528	1.444	0.050	5.5	
Hexachloroethane	0.868	0.883		-1.7	
Nitrobenzene	0.519	0.516		0.6	
Isophorone	1.101	1.024		7.0	
bis(2-Chloroethoxy)methane	0.603	0.598		0.8	
1,2,4-Trichlorobenzene	0.304	0.309		-1.6	
Naphthalene	1.003	0.942		6.1	
Hexachlorobutadiene	0.160	0.160		0.0	30.0
Hexachlorocyclopentadiene	0.289	0.246	0.050	14.9	
2-Chloronaphthalene	0.634	0.647		-2.1	
Dimethylphthalate	1.368	1.400		-2.3	
Acenaphthylene	1.801	1.833		-1.8	
2,6-Dinitrotoluene	0.308	0.351		-14.0	
Acenaphthene	1.020	1.150		-12.7	30.0
2,4-Dinitrotoluene	0.452	0.459		-1.5	
Diethylphthalate	1.556	1.602		-3.0	
Fluorene	1.167	1.206		-3.3	
4-Chlorophenyl-phenylether	0.509	0.505		0.8	
n-Nitrosodiphenylamine	0.543	0.578		-6.4	
1,2-Diphenylhydrazine(as azo)	0.000	0.000			
4-Bromophenyl-phenylether	0.187	0.199		-6.4	
Hexachlorobenzene	0.237	0.247		-4.2	
Phenanthrene	1.087	1.152		-6.0	
Anthracene	1.068	1.135		-6.3	
Di-n-butylphthalate	2.011	1.728		14.1	
Fluoranthene	1.092	0.939		14.0	30.0
Benzidine	0.274	0.276		-0.7	
Pyrene	1.600	1.832		-14.5	
Butylbenzylphthalate	1.245	1.293		-3.9	
Benzo[a]anthracene	1.429	1.239		13.3	
3,3'-Dichlorobenzidine	0.386	0.330		14.5	

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: #### Time: 1329

Lab File ID: B9008.D Init. Calib. Date(s): #### 1/0/00

Init. Calib. Times: 1329 0000

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Chrysene	0.857	1.008		-17.6	
bis(2-Ethylhexyl)phthalate	1.785	1.714		4.0	
Di-n-octylphthalate	5.692	5.727		-0.6	30.0
Benzo[b]fluoranthene	1.952	1.846		5.4	
Benzo[k]fluoranthene	1.162	1.246		-7.2	
Benzo[a]pyrene	1.081	1.178		-9.0	30.0
Indeno[1,2,3-cd]pyrene	0.561	0.585		-4.3	
Dibenz[a,h]anthracene	0.549	0.494		10.0	
Benzo[g,h,i]perylene	0.510	0.437		14.3	
Nitrobenzene-d5	0.542	0.524		3.3	
2-Fluorobiphenyl	1.220	1.209		0.9	
Terphenyl-d14	0.994	1.151		-15.8	

All other compounds must meet a minimum RRF of 0.010.

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA2\B9008.D Vial: 2
Acq On : 27 Oct 95 1:29 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 : Wed Oct 25 10:20:51 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	89	-0.10
2	S	2-Fluorophenol	1.275	1.248	2.1	88	-0.08
3	S	Phenol-d5	2.069	2.002	3.2	89	-0.04
4	M	N-nitrosodimethylamine	0.887	0.841	5.2	84	-0.06
5		Pyridine	0.795	0.000#	100.0#	0#	-1.55#
6	CM	Phenol	1.941	2.100	-8.2	100	-0.04
7	MT	bis(2-Chloroethyl)ether	2.373	2.336	1.6	90	-0.08
8	M	2-Chlorophenol	1.333	1.349	-1.2	90	-0.08
9	MT	1,3-Dichlorobenzene	1.367	1.410	-3.1	90	-0.08
10	CM	1,4-Dichlorobenzene	1.383	1.419	-2.6	87	-0.10
11	M	1,2-Dichlorobenzene	1.347	1.385	-2.8	89	-0.10
12	T	2-Methylphenol	1.279	1.273	0.5	88	-0.06
13	M	bis(2-chloroisopropyl)ether	2.234	1.940	13.2	93	-0.06
14	T	4-Methylphenol	1.402	1.302	7.1	78	-0.06
15	PM	N-Nitroso-Di-n-propylamine	1.528	1.444	5.5	86	-0.08
16	M	Hexachloroethane	0.868	0.883	-1.7	90	-0.10
17	I	Naphthalene-d8	1.000	1.000	0.0	88	-0.10
18	S	Nitrobenzene-d5	0.542	0.524	3.4	87	-0.08
19	M	Nitrobenzene	0.519	0.516	0.6	93	-0.08
20	M	Isophorone	1.101	1.024	7.0	88	-0.10
21	MC	2-Nitrophenol	0.239	0.227	5.2	81	-0.10
22	M	2,4-Dimethylphenol	0.387	0.378	2.2	89	-0.06
23	M	bis(2-Chloroethoxy)methane	0.603	0.598	0.8	90	-0.08
24	MC	2,4-Dichlorophenol	0.295	0.282	4.4	85	-0.06
25	M	1,2,4-Trichlorobenzene	0.304	0.309	-1.6	88	-0.10
26	M	Naphthalene	1.003	0.942	6.1	82	-0.10
27	T	4-Chloroaniline	0.470	0.439	6.7	86	-0.08
28	MC	Hexachlorobutadiene	0.160	0.160	-0.5	88	-0.08
29	MC	4-Chloro-3-methylphenol	0.388	0.356	8.4	80	-0.04
30	M	2-Chloronaphthalene	0.634	0.647	-2.0	90	-0.08
31	T	2-Methylnaphthalene	0.870	0.829	4.7	81	-0.10
32	I	Acenaphthene-d10	1.000	1.000	0.0	87	-0.10
33	P	Hexachlorocyclopentadiene	0.289	0.246	15.1	88	-0.08
34	MC	2,4,6-Trichlorophenol	0.426	0.387	9.2	83	-0.08
35	T	2,4,5-Trichlorophenol	0.347	0.413	-18.9	89	-0.06
36	S	2-Fluorobiphenyl	1.220	1.209	0.9	84	-0.10
37	T	2-Nitroaniline	0.783	0.773	1.3	89	-0.06
38	M	Dimethylphthalate	1.368	1.400	-2.3	88	-0.08
39	M	Acenaphthylene	1.801	1.833	-1.8	86	-0.10
40	M	2,6-Dinitrotoluene	0.308	0.351	-14.1	81	-0.08

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA2\B9008.D Vial: 2
Acq On : 27 Oct 95 1:29 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 : Wed Oct 25 10:20:51 1995
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
41	T	3-Nitroaniline	0.342	0.354	-3.5	84	-0.06
42	CM	Acenaphthene	1.020	1.150	-12.8	96	-0.10
43	MP	2,4-Dinitrophenol	0.210	0.227	-8.3	114	-0.08
44	PM	4-Nitrophenol	0.228	0.222	2.4	88	0.00
45	T	Dibenzofuran	1.534	1.481	3.5	82	-0.10
46	M	2,4-Dinitrotoluene	0.452	0.459	-1.4	85	-0.08
47	M	Diethylphthalate	1.556	1.602	-2.9	88	-0.08
48	M	Fluorene	1.167	1.206	-3.3	87	-0.08
49	M	4-Chlorophenyl-phenylether	0.509	0.505	0.8	85	-0.10
50		Phenanthrene-d10	1.000	1.000	0.0	80	-0.10
51	T	4-Nitroaniline	0.230	0.259	-12.3	84	-0.06
52	MC	4,6-Dinitro-2-methylphenol	0.148	0.147	1.1	74	-0.08
53	T	n-Nitrosodiphenylamine	0.543	0.578	-6.6	82	-0.08
54	S	2,4,6-Tribromophenol	0.127	0.123	2.6	81	-0.08
55		1,2-Diphenylhydrazine (as a	1.784	1.999	-12.0	85	-0.08
56	M	4-Bromophenyl-phenylether	0.187	0.199	-6.3	85	-0.10
57	M	Hexachlorobenzene	0.237	0.247	-4.3	83	-0.10
58	CM	Pentachlorophenol	0.163	0.130	19.7	71	-0.10
59	M	Phenanthrene	1.087	1.152	-6.0	82	-0.09
60	M	Anthracene	1.068	1.135	-6.3	82	-0.09
61		Carbazole	1.065	0.890	16.4	68	-0.09
62	M	Di-n-butylphthalate	2.011	1.728	14.1	67	-0.11
63	MC	Fluoranthene	1.092	0.939	14.1	67	-0.74#
64	I	Chrysene-d12	1.000	1.000	0.0	36#	-0.11
65		Benzidine	0.274	0.276	-0.9	42#	-0.10
66	M	Pyrene	1.600	1.832	-14.5	42#	-0.11
67	S	Terphenyl-d14	0.994	1.151	-15.8	45#	-0.11
68	M	Butylbenzylphthalate	1.245	1.293	-3.9	38#	-0.11
69	M	Benzo[a]anthracene	1.429	1.239	13.3	30#	-0.13
70	M	3,3'-Dichlorobenzidine	0.386	0.330	14.4	30#	-0.09
71	M	Chrysene	0.857	1.008	-17.6	42#	-0.11
72	M	bis(2-Ethylhexyl)phthalate	1.785	1.714	3.9	35#	-0.11
73	I	Perylene-d12	1.000	1.000	0.0	34#	-0.09
74	MC	Di-n-octylphthalate	5.692	5.727	-0.6	33#	-0.11
75	M	Benzo[b]fluoranthene	1.952	1.846	5.5	26#	-0.11
76	m	Benzo[k]fluoranthene	1.162	1.246	-7.2	36#	-0.11
77	mc	Benzo[a]pyrene	1.081	1.178	-8.9	37#	-0.09
78	m	Indeno[1,2,3-cd]pyrene	0.561	0.585	-4.3	34#	-0.09
79	m	Dibenz[a,h]anthracene	0.549	0.494	9.9	30#	-0.09

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA2\B9008.D Vial: 2
Acq On : 27 Oct 95 1:29 pm Operator: SCOTTV SUB
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 Oct 25 10:20:51 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	0.510	0.437	14.3	28#	-0.09
81		1-Methyl naphthalene	0.000	0.000#	0.0	0#	-14.07#
82		7,12-Dimethylbenz(a)anthrac	0.000	0.000#	0.0	0#	-36.48#
83		Quinoline	0.000	0.000#	0.0	85	-0.08
84		Thiophenol	0.000	0.000#	0.0	0#	-5.86#
85		4-Methyl chrysene	0.000	0.000#	0.0	0#	-31.87#
86		Dibenz(a,j)acridine	0.000	0.000#	0.0	29#	-0.09
87		Indene	0.000	0.000#	0.0	0#	-9.67#
88		Benzyl alcohol	0.000	0.000#	0.0	91	-0.10
89		Benzoic acid	0.000	0.000#	0.0	90	-0.06

Quantitation Report

Data File : c:\hpchem\1\data2\b9008.d
Acq On : 27 Oct 95 1:29 pm
Sample : 50 STD..... Converted from RTE d
Misc :
Quant Time: Oct 30 14:27 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 Oct 25 10:20:51 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.59	152	26722	40.00	ug/mL	-0.10
17) Naphthalene-d8	12.33	136	104351	40.00	ug/mL	-0.10
32) Acenaphthene-d10	17.63	164	57774	40.00	ug/mL	-0.10
50) Phenanthrene-d10	22.12	188	79042	40.00	ug/ml	-0.10
64) Chrysene-d12	30.18	240	25699	40.00	ug/mL	-0.11
73) Perylene-d12	34.15	264	9983	40.00	ug/mL	-0.09
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.03	112	41696	48.95	ug/mL	48.95%
3) Phenol-d5	8.05	99	66887	48.39	ug/mL	48.39%
18) Nitrobenzene-d5	10.31	82	68307	48.30	ug/mL	48.30%
36) 2-Fluorobiphenyl	15.80	172	87328	49.56	ug/mL	49.56%
54) 2,4,6-Tribromophenol	20.08	330	12186	48.69	ug/mL	48.69%
67) Terphenyl-d14	27.25	244	36967	57.91	ug/mL	57.91%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	2.08	74	28093	47.39	ug/ml	100
6) Phenol	8.09	94	70156	54.11	ug/mL	100
7) bis(2-Chloroethyl)ether	12.04	93	78019	49.22	ug/mL	99
8) 2-Chlorophenol	8.03	128	45049	50.60	ug/mL#	80
9) 1,3-Dichlorobenzene	8.40	146	47089	51.56	ug/mL	96
10) 1,4-Dichlorobenzene	8.65	146	47410	51.30	ug/mL	97
11) 1,2-Dichlorobenzene	9.04	146	46258	51.39	ug/mL	96
12) 2-Methylphenol	9.77	108	42525	49.77	ug/mLm	100
13) bis(2-chloroisopropyl)ethe	9.71	45	64814	43.42	ug/mL	99
14) 4-Methylphenol	10.29	108	43505	46.44	ug/mL	100
15) N-Nitroso-Di-n-propylamine	10.13	70	48217	47.24	ug/mL	93
16) Hexachloroethane	9.98	117	29491	50.85	ug/mL#	74
19) Nitrobenzene	10.37	77	67275	49.68	ug/mLm	91
20) Isophorone	11.17	82	133559	46.48	ug/mL	94
21) 2-Nitrophenol	11.29	139	29599	47.42	ug/mL#	90
22) 2,4-Dimethylphenol	11.81	107	49328	48.89	ug/mL#	100
23) bis(2-Chloroethoxy)methane	12.04	93	78019	49.60	ug/mL#	100
24) 2,4-Dichlorophenol	12.12	162	36829	47.80	ug/mL	96
25) 1,2,4-Trichlorobenzene	12.22	180	40319	50.79	ug/mL	94
26) Naphthalene	12.39	128	122894	46.95	ug/mL	100
27) 4-Chloroaniline	12.78	127	57235	46.63	ug/mL	99
28) Hexachlorobutadiene	12.91	225	20908	50.23	ug/mL	99
29) 4-Chloro-3-methylphenol	14.53	107	46386	45.80	ug/mL#	1
30) 2-Chloronaphthalene	15.97	162	84381	51.00	ug/ml#	100
31) 2-Methylnaphthalene	14.53	142	108166	47.67	ug/mL#	71
33) Hexachlorocyclopentadiene	15.05	237	17734	42.44	ug/mL#	96
34) 2,4,6-Trichlorophenol	15.53	196	27935	45.40	ug/mL	96
35) 2,4,5-Trichlorophenol	15.63	196	29810	59.43	ug/mL	95

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

Quantitation Report

Data File : c:\hpchem\1\data2\b9008.d
Acq On : 27 Oct 95 1:29 pm
Sample : 50 STD..... Converted from RTE d
Misc :
Quant Time: Oct 30 14:27 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 Oct 25 10:20:51 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37)	2-Nitroaniline	17.79	65	55820	49.36	ug/mL	86
38)	Dimethylphthalate	17.27	163	101087	51.16	ug/mL#	12
39)	Acenaphthylene	17.17	152	132357	50.88	ug/mL	98
40)	2,6-Dinitrotoluene	17.34	165	25335	57.03	ug/mLm	99
41)	3-Nitroaniline	19.68	138	25550	51.73	ug/mL	89
42)	Acenaphthene	17.73	153	83055	56.38	ug/mL	98
43)	2,4-Dinitrophenol	18.10	184	16396	54.13	ug/mLm	83
44)	4-Nitrophenol	18.65	109	16063	48.80	ug/mLm	55
45)	Dibenzofuran	18.29	168	106926	48.25	ug/mL	94
46)	2,4-Dinitrotoluene	18.52	165	33124	50.69	ug/mL#	1
47)	Diethylphthalate	19.48	149	115678	51.47	ug/mL#	93
48)	Fluorene	19.33	166	87065	51.64	ug/mL	98
49)	4-Chlorophenyl-phenylether	19.52	204	36435	49.59	ug/mL#	85
51)	4-Nitroaniline	19.68	138	25550	56.16	ug/mL	89
52)	4,6-Dinitro-2-methylphenol	19.73	198	14484	49.43	ug/mL	100
53)	n-Nitrosodiphenylamine	19.97	169	57135	53.30	ug/mL	95
55)	1,2-Diphenylhydrazine (as	20.00	77	197478	56.01	ug/ml	100
56)	4-Bromophenyl-phenylether	20.97	248	19642	53.15	ug/mL	91
57)	Hexachlorobenzene	20.93	284	24441	52.13	ug/mL#	50
58)	Pentachlorophenol	21.66	266	12892	40.14	ug/mLm	97
59)	Phenanthrene	22.20	178	113864	53.01	ug/mL	99
60)	Anthracene	22.36	178	112150	53.16	ug/mLm	99
61)	Carbazole	23.01	167	87921	41.79	ug/ml	96
62)	Di-n-butylphthalate	24.53	149	170725	42.96	ug/mL	99
63)	Fluoranthene	25.78	202	92729	42.97	ug/mLm	70
65)	Benzidine	22.12	184	8865	50.45	ug/mlm	100
66)	Pyrene	26.42	202	58853	57.24	ug/mLm	60
68)	Butylbenzylphthalate	29.04	149	41544	51.93	ug/mL#	12
69)	Benzo[a]anthracene	30.14	228	39805	43.35	ug/mL	99
70)	3,3'-Dichlorobenzidine	30.33	252	10615	42.80	ug/mL#	90
71)	Chrysene	30.25	228	32370	58.81	ug/mLm	99
72)	bis(2-Ethylhexyl)phthalate	31.03	149	55067	48.03	ug/mL#	34
74)	Di-n-octylphthalate	32.93	149	71466	50.31	ug/mL#	100
75)	Benzo[b]fluoranthene	33.20	252	23032	47.27	ug/mL#	80
76)	Benzo[k]fluoranthene	33.28	252	15551	53.61	ug/mLm	80
77)	Benzo[a]pyrene	34.00	252	14699	54.47	ug/mLm	80
78)	Indeno[1,2,3-cd]pyrene	36.67	276	7304	52.14	ug/mLm	32
79)	Dibenz[a,h]anthracene	36.79	278	6166	45.03	ug/mL#	83
80)	Benzo[g,h,i]perylene	37.21	276	5449	42.84	ug/mL#	63

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

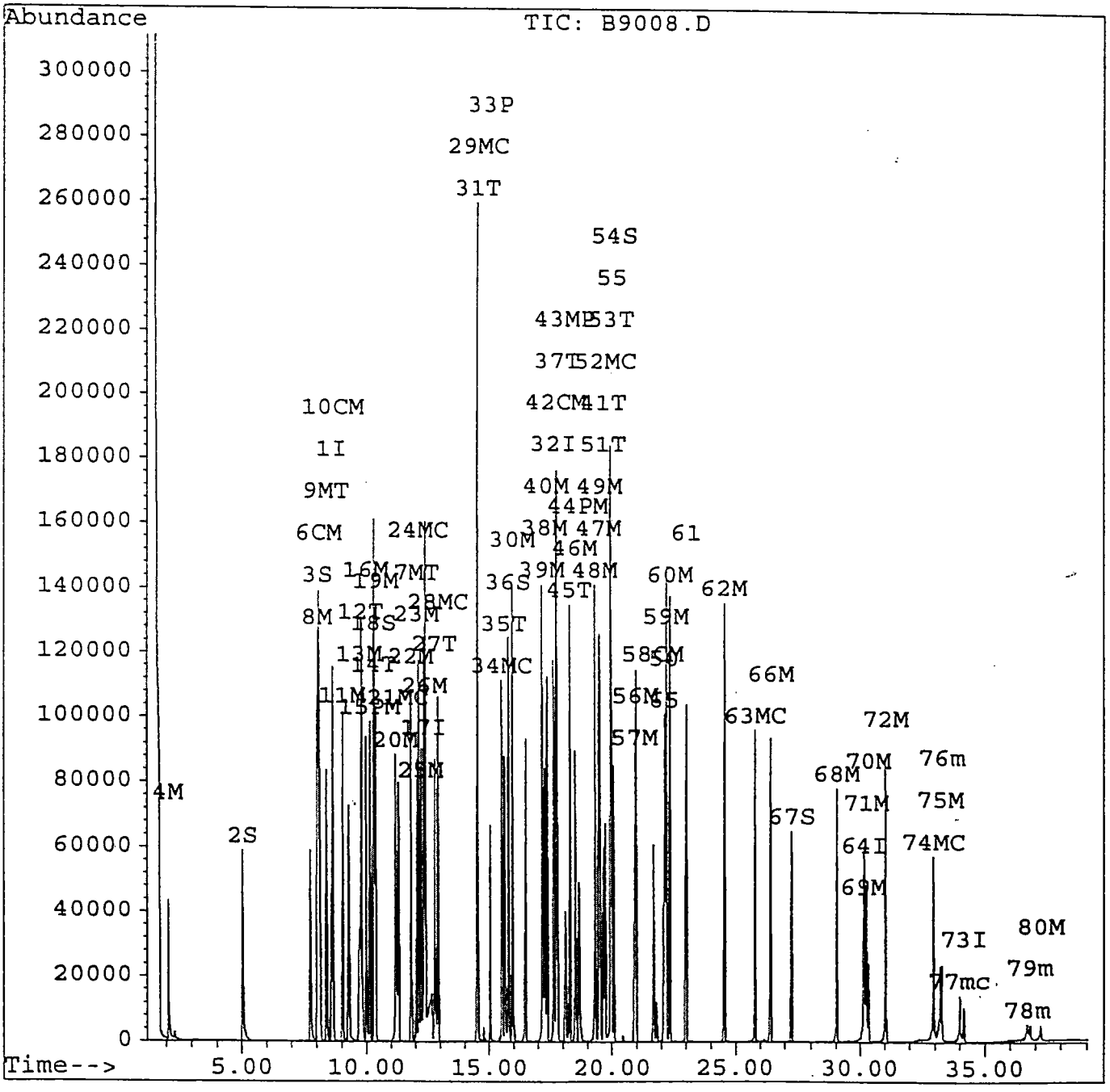
Quantitation Report

210

Data File : c:\hpchem\1\data2\b9008.d
Acq On : 27 Oct 95 1:29 pm
Sample : 50 STD..... Converted from RTE d
Misc :
Quant Time: Oct 30 14:27 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 Oct 25 10:20:51 1995
Response via : Multiple Level Calibration



5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name : EMSL ANALYTICAL Contract: _____

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

Lab File ID: B9300.D DFTPP Injection Date: 12/7/95

Instrument ID: ABNA DFTPP Injection Time: 1749

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	55.5
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	67.4
70	Less than 2.0% of mass 69	1.2 (1.8)1
127	25.0 - 75.0% of mass 198	40.5
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	5.5
275	10.0 - 30.0% of mass 198	13.6
365	Greater than 0.75% of mass 198	2.2
441	Present, but less than mass 443	5.4
442	40.0 - 110.0% of mass 198	42.4
443	15.0 - 24.0% of mass 442	7.9 (18.7)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	B9301.D	12/7/95	1832
02	SBLK01	BLANK1	B9302.D	12/7/95	1923
03	9554748B	9554748B	B9303.D	12/7/95	2014
04	SBLK02	BLANK2	B9304.D	12/7/95	2105
05	9554739B	9554739B	B9305.D	12/7/95	2156
06	9554740B	9554740B	B9306.D	12/7/95	2247
07	9554741B	9554741B	B9307.D	12/7/95	2338
08	9554738B	9554738B	B9308.D	12/8/95	0029
09	SBLK03	BLANK3	B9309.D	12/8/95	0120
10	9554551B	9554551B	B9310.D	12/8/95	0210
11	9554552B	9554552B	B9311.D	12/8/95	0301
12	9554554B	9554554B	B9312.D	12/8/95	0352
13	9554555B	9554555B	B9313.D	12/8/95	0443
14	9554556B	9554556B	B9314.D	12/8/95	0534
15	9554557B	9554557B	B9315.D	12/8/95	0625
16	9554558B	9554558B	B9316.D	12/8/95	0716
17					
18					
19					
20					
21					
22					

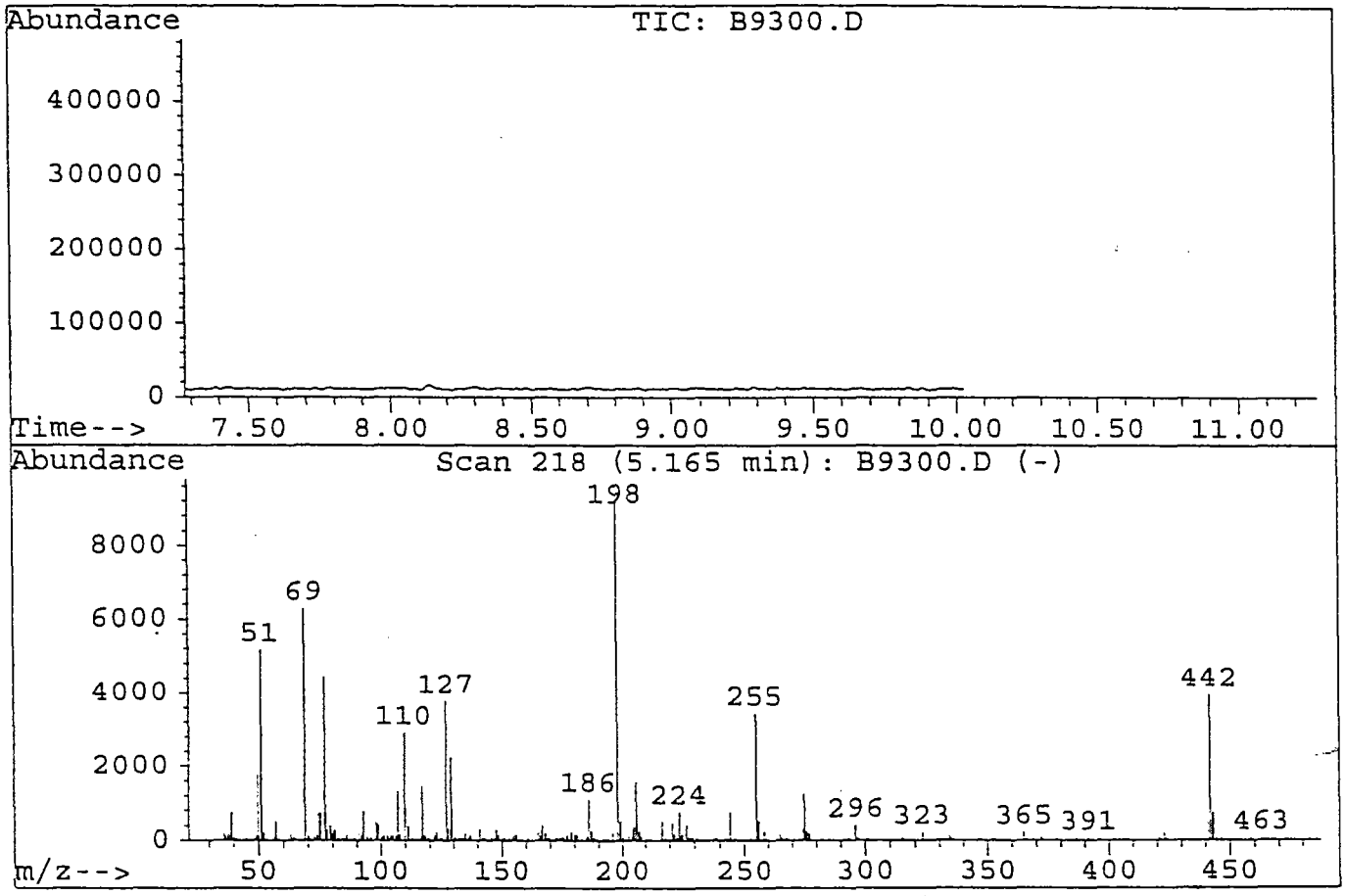
FORM V SV

DFTPP

Data File : C:\HPCHEM\1\DATA2\B9300.D
Acq On : 7 Dec 95 5:49 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: 623.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	55.5	5181	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	67.4	6289	PASS
70	69	0	2	1.8	112	PASS
127	198	40	60	40.5	3780	PASS
197	198	0	1	0.0	0	PASS
198	198	100	100	100.0	9335	PASS
199	198	5	9	5.5	513	PASS
275	198	10	30	13.6	1265	PASS
365	198	1	100	2.2	209	PASS
441	443	0	100	67.7	501	PASS
442	198	40	100	42.4	3954	PASS
443	442	17	23	18.7	740	PASS

Scan 218 (5.165 min): B9300.D

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.20	171	51.05	5181	64.05	82	77.80	281
36.80	101	52.05	189	65.05	35	79.00	395
37.80	156	52.95	18	66.05	21	79.85	167
39.10	753	56.05	96	68.95	6289	80.05	180
40.00	61	56.95	513	70.00	112	80.95	274
41.05	35	57.85	31	70.75	34	82.20	62
44.95	46	60.95	22	72.45	83	83.95	70
47.65	22	61.85	20	72.95	144	84.85	78
48.35	69	62.15	46	73.95	725	85.95	176
49.05	140	62.45	2	74.95	744	87.10	14
49.95	1765	63.05	175	77.05	4458	87.95	55

Scan 218 (5.165 min): B9300.D

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
89.05	65	100.65	85	111.65	5	119.65	60
89.85	11	101.05	132	112.55	41	121.40	28
90.95	197	102.75	117	112.85	39	121.65	98
92.05	143	103.15	69	113.05	52	122.05	153
92.90	801	104.00	124	114.55	70	122.25	143
94.55	82	104.95	135	115.35	32	123.05	249
95.75	66	106.05	131	116.15	136	123.85	35
95.95	63	107.05	1344	117.05	1481	124.45	63
98.05	500	107.95	148	118.15	129	125.15	67
98.90	417	109.95	2921	118.75	28	127.00	3780
100.15	66	111.05	384	119.15	20	127.95	309

Scan 218 (5.165 min): B9300.D

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
129.00	2243	137.50	22	150.10	53	163.20	28
130.00	31	139.10	27	151.00	83	165.00	203
130.30	77	140.90	309	153.00	69	166.00	118
130.60	69	142.05	68	154.20	60	166.90	405
132.20	75	142.80	73	154.80	149	168.00	193
132.70	26	143.05	35	155.95	155	169.05	68
133.40	64	145.90	82	158.00	53	169.70	65
134.90	198	147.00	78	158.90	27	172.00	76
136.20	72	147.90	291	159.95	39	172.60	68
136.40	61	148.50	139	160.70	47	173.10	71
137.00	133	149.50	22	161.10	70	174.10	81

Scan 218 (5.165 min): B9300.D

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
175.00	123	187.00	265	199.00	513	210.20	52
175.95	36	188.00	95	199.70	11	210.95	25
177.10	141	189.00	57	200.20	76	211.40	55
178.90	233	189.80	21	201.60	38	211.80	45
180.05	152	191.60	49	202.80	120	212.40	23
181.00	143	191.90	44	204.10	350	216.10	73
183.00	45	192.10	43	204.95	398	216.95	539
183.40	26	193.00	87	206.10	1587	218.05	76
184.80	104	194.30	46	207.00	232	219.35	59
185.10	124	196.10	203	207.80	99	220.05	46
186.00	1107	198.00	9335	209.60	31	220.95	489

Scan 218 (5.165 min): B9300.D

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
221.65	148	230.75	92	246.05	65	259.00	45
222.85	98	232.65	34	247.45	39	261.75	11
223.95	769	236.25	75	248.85	53	263.65	72
225.05	166	237.65	43	249.85	37	264.95	150
226.05	9	237.95	46	251.25	32	265.65	50
226.95	430	238.15	47	252.65	92	267.15	33
227.75	81	238.75	77	253.95	42	267.35	32
228.05	74	241.85	53	254.95	3451	267.75	54
228.25	60	242.15	58	255.95	517	270.45	30
228.55	58	242.95	84	256.85	38	272.95	65
229.05	109	244.05	764	258.05	245	274.05	310

Scan 218 (5.165 min): B9300.D

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
274.95	1265	296.00	405	311.80	16	334.20	129
275.95	216	296.65	44	314.00	54	334.90	37
276.90	167	296.95	52	314.90	92	339.90	14
279.65	15	298.75	23	317.60	52	340.80	15
282.35	14	300.10	13	322.40	35	346.20	73
284.90	41	300.85	60	323.00	215	347.50	41
285.15	45	302.75	11	324.60	21	351.70	64
287.65	26	304.10	28	325.50	32	352.70	43
291.25	54	304.90	23	328.80	41	353.10	55
292.95	49	306.10	31	331.80	52	356.00	7
293.55	51	308.50	30	333.30	43	356.40	15

Scan 218 (5.165 min): B9300.D

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
357.30	34	391.95	41	407.85	28	439.65	39
364.90	209	395.45	33	410.15	21	440.95	501
365.85	28	396.25	11	413.55	6	441.95	3954
371.60	39	396.55	29	418.55	29	442.95	740
372.10	99	400.85	20	420.95	93	444.75	44
375.10	37	402.05	45	421.75	23	446.55	61
378.20	45	402.55	25	423.05	187	449.45	36
386.40	47	403.85	30	423.85	56	453.35	39
388.50	38	404.05	28	427.35	28	457.95	66
390.90	2	405.75	21	429.65	38	458.85	40
391.45	66	406.55	41	435.35	36	459.75	11

Scan 218 (5.165 min): B9300.D

Modified:subtracted

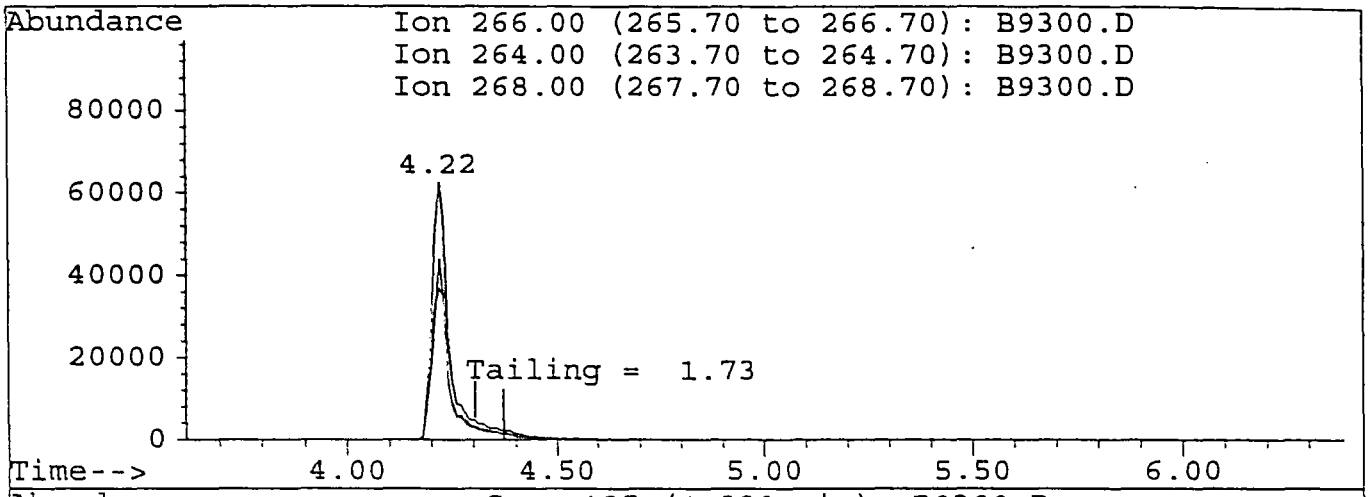
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
462.95	66						
467.35	32						
467.85	16						
472.95	54						

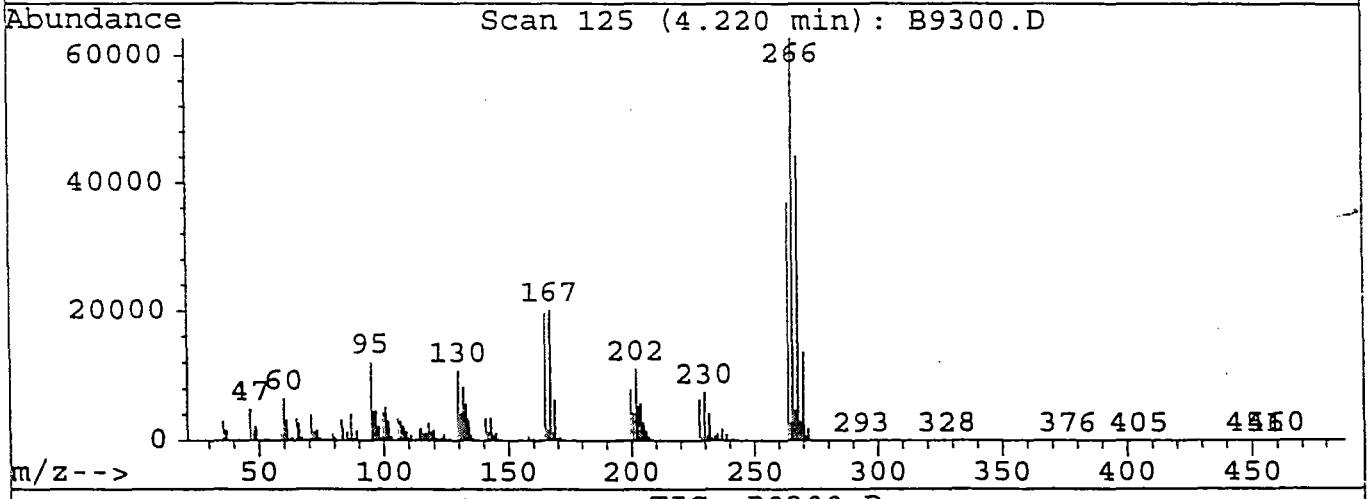
Quantitation Report

Data File : C:\HPCHEM\1\DATA2\B9300.D
Acq On : 7 Dec 95 5:49 pm
Sample : DFTPP..... Converted from RTE d
Misc :
Quant Time: Dec 7 18:19 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 Nov 22 12:21:54 1995
Response via : Multiple Level Calibration





TIC: B9300.D

(1) Pentachlorophenol (CM)

5.34min 1.21ug/mL

response 399

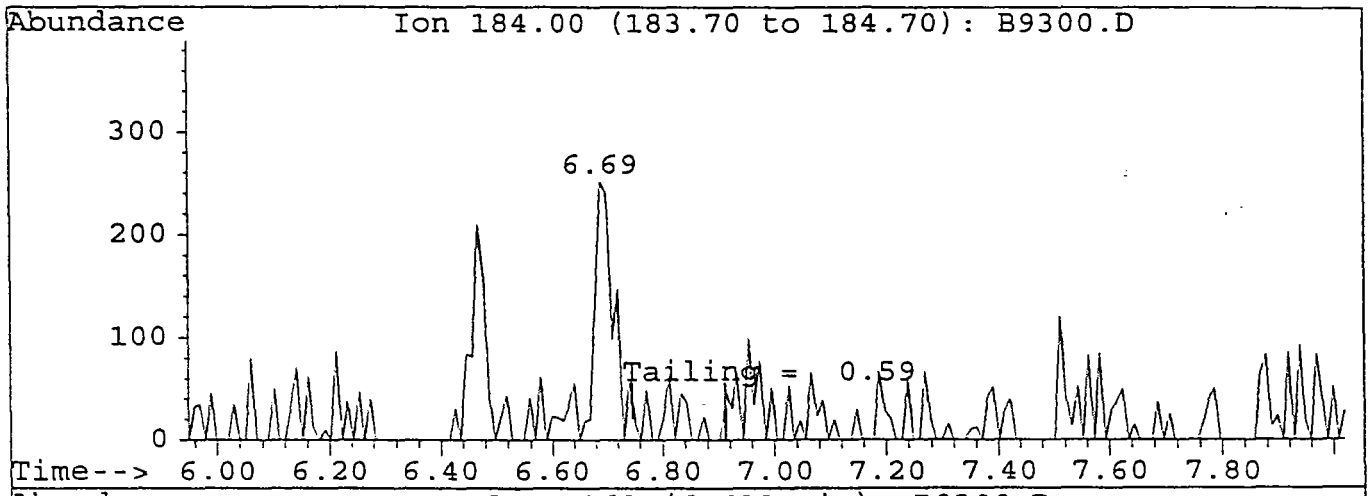
Ion	Exp%	Act%
266.00	100	100
264.00	64.30	47.66#
268.00	64.70	39.84#
0.00	0.00	0.00

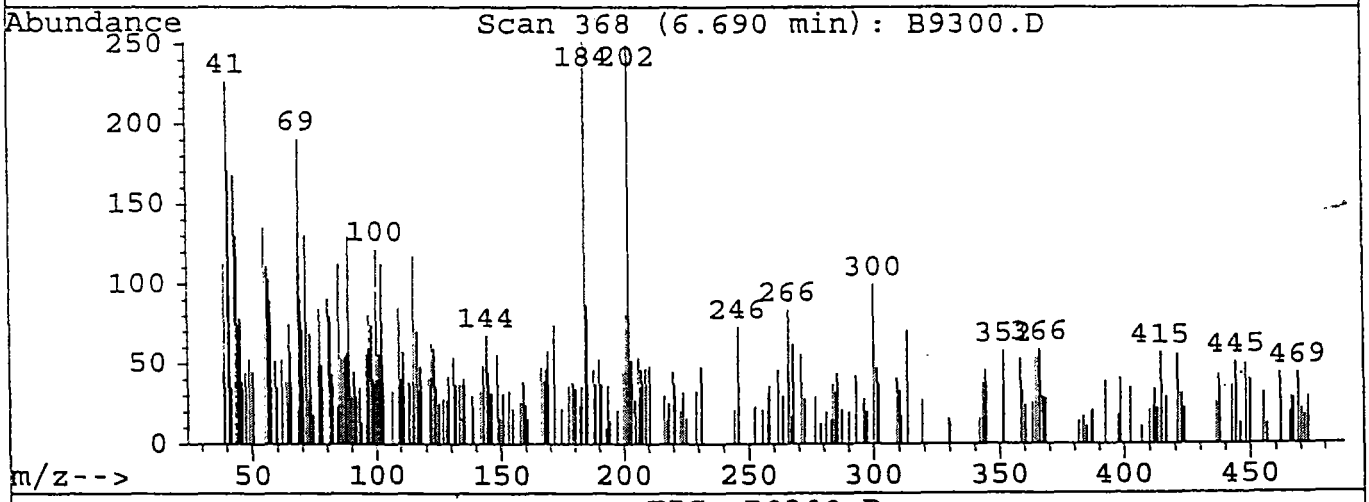
Quantitation Report

Data File : C:\HPCHEM\1\DATA2\B9300.D
Acq On : 7 Dec 95 5:49 pm
Sample : DFTPP..... Converted from RTE d
Misc :
Quant Time: Dec 7 18:19 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 Nov 22 12:21:54 1995
Response via : Multiple Level Calibration





TIC: B9300.D

(2) Benzidine
6.95min 0.52ug/ml
response 160

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

Lab Name: EMSL ANALYTICAL Contract: _____

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

Instrument ID: ABNA Calibration Date: 12/7/95 Time: 1832

Lab File ID: B9301.D Init. Calib. Date(s): 12/7/95 1/0/00

Init. Calib. Times: 1832 0000

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
N-nitrosodimethylamine	0.853	0.693		18.8	
bis(2-Chloroethyl)ether	2.157	1.828		15.3	
1,3-Dichlorobenzene	1.353	1.349		0.3	
1,4-Dichlorobenzene	1.369	1.375		-0.4	30.0
1,2-Dichlorobenzene	1.359	1.338		1.5	
bis(2-chloroisopropyl)ether	2.246	1.880		16.3	
N-Nitroso-Di-n-propylamine	1.408	1.263	0.050	10.3	
Hexachloroethane	0.828	0.847		-2.3	
Nitrobenzene	0.559	0.455		18.6	
Isophorone	0.770	0.662		14.0	
bis(2-Chloroethoxy)methane	0.517	0.423		18.2	
1,2,4-Trichlorobenzene	0.313	0.325		-3.8	
Naphthalene	0.958	0.885		7.6	
Hexachlorobutadiene	0.188	0.217		-15.4	30.0
Hexachlorocyclopentadiene	0.268	0.216	0.050	19.4	
2-Chloronaphthalene	0.693	0.716		-3.3	
Dimethylphthalate	1.366	1.334		2.3	
Acenaphthylene	1.607	1.596		0.7	
2,6-Dinitrotoluene	0.336	0.352		-4.8	
Acenaphthene	1.020	0.971		4.8	30.0
2,4-Dinitrotoluene	0.462	0.423		8.4	
Diethylphthalate	1.498	1.418		5.3	
Fluorene	1.125	1.175		-4.4	
4-Chlorophenyl-phenylether	0.532	0.559		-5.1	
n-Nitrosodiphenylamine	0.424	0.410		3.3	
1,2-Diphenylhydrazine(as azo)	0.000	0.000			
4-Bromophenyl-phenylether	0.209	0.229		-9.6	
Hexachlorobenzene	0.294	0.322		-9.5	
Phenanthrene	0.989	0.952		3.7	
Anthracene	0.998	0.935		6.3	
Di-n-butylphthalate	1.830	1.738		5.0	
Fluoranthene	1.092	1.110		-1.6	30.0
Benzidine	0.116	0.124		-6.9	
Pyrene	1.481	1.336		9.8	
Butylbenzylphthalate	1.086	0.940		13.4	
Benzo[a]anthracene	1.253	1.107		11.7	
3,3'-Dichlorobenzidine	0.387	0.365		5.7	

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: 12/7/95 Time: 1832

Lab File ID: B9301.D Init. Calib. Date(s): 12/7/95 1/0/00

Init. Calib. Times: 1832 0000

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Chrysene	0.905	0.858		5.2	
bis(2-Ethylhexyl)phthalate	1.489	1.262		15.2	
Di-n-octylphthalate	4.241	4.181		1.4	30.0
Benzo[b]fluoranthene	1.623	1.574		3.0	
Benzo[k]fluoranthene	1.220	1.407		-15.3	
Benzo[a]pyrene	1.032	0.972		5.8	30.0
Indeno[1,2,3-cd]pyrene	0.728	0.630		13.5	
Dibenz[a,h]anthracene	0.713	0.559		21.6	
Benzo[g,h,i]perylene	0.725	0.676		6.8	
Nitrobenzene-d5	0.478	0.417		12.8	
2-Fluorobiphenyl	1.063	1.061		0.2	
Terphenyl-d14	1.103	1.054		4.4	

All other compounds must meet a minimum RRF of 0.010.

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA2\B9301.D Vial: 2
Acq On : 7 Dec 95 6:32 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 : Wed Nov 22 12:21:54 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	57	-0.32
2	S	2-Fluorophenol	1.139	1.009	11.4	51	-0.36
3	S	Phenol-d5	1.896	1.587	16.3	49#	-0.29
4	M	N-nitrosodimethylamine	0.853	0.693	18.8	48#	-0.15
5		Pyridine	1.101	0.000#	100.0#	0#	-1.55#
6	CM	Phenol	1.649	1.487	9.8	54	-0.29
7	MT	bis(2-Chloroethyl)ether	2.157	1.828	15.2	49#	-0.31
8	M	2-Chlorophenol	1.302	1.185	9.0	53	-0.32
9	MT	1,3-Dichlorobenzene	1.353	1.349	0.3	56	-0.32
10	CM	1,4-Dichlorobenzene	1.369	1.375	-0.4	56	-0.32
11	M	1,2-Dichlorobenzene	1.359	1.338	1.5	55	-0.32
12	T	2-Methylphenol	1.218	1.170	4.0	57	-0.29
13	M	bis(2-chloroisopropyl)ether	2.246	1.880	16.3	52	-0.25
14	T	4-Methylphenol	1.307	1.278	2.2	58	-0.27
15	PM	N-Nitroso-Di-n-propylamine	1.408	1.263	10.3	54	-0.29
16	M	Hexachloroethane	0.828	0.847	-2.2	58	-0.34
17	I	Naphthalene-d8	1.000	1.000	0.0	61	-0.32
18	S	Nitrobenzene-d5	0.478	0.417	12.7	56	-0.30
19	M	Nitrobenzene	0.559	0.455	18.7	50	-0.30
20	M	Isophorone	0.770	0.662	14.0	47#	-0.29
21	MC	2-Nitrophenol	0.215	0.201	6.5	58	-0.32
22	M	2,4-Dimethylphenol	0.380	0.325	14.5	55	-0.29
23	M	bis(2-Chloroethoxy)methane	0.517	0.423	18.2	50	-0.31
24	MC	2,4-Dichlorophenol	0.277	0.283	-2.4	63	-0.29
25	M	1,2,4-Trichlorobenzene	0.313	0.325	-3.8	62	-0.32
26	M	Naphthalene	0.958	0.885	7.6	56	-0.32
27	T	4-Chloroaniline	0.446	0.413	7.4	58	-0.31
28	MC	Hexachlorobutadiene	0.188	0.217	-15.6	69	-0.31
29	MC	4-Chloro-3-methylphenol	0.397	0.333	16.1	54	-0.29
30	M	2-Chloronaphthalene	0.693	0.716	-3.4	65	-0.32
31	T	2-Methylnaphthalene	0.839	0.908	-8.2	64	-0.32
32	I	Acenaphthene-d10	1.000	1.000	0.0	61	-0.34
33	P	Hexachlorocyclopentadiene	0.268	0.216	19.5	54	-0.32
34	MC	2,4,6-Trichlorophenol	0.351	0.352	-0.2	70	-0.32
35	T	2,4,5-Trichlorophenol	0.357	0.405	-13.5	70	-0.31
36	S	2-Fluorobiphenyl	1.063	1.061	0.3	67	-0.32
37	T	2-Nitroaniline	0.650	0.529	18.7	55	-0.31
38	M	Dimethylphthalate	1.366	1.334	2.3	62	-0.31
39	M	Acenaphthylene	1.607	1.596	0.7	60	-0.34
40	M	2,6-Dinitrotoluene	0.336	0.352	-4.7	65	-0.31

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA2\B9301.D Vial: 2
Acq On : 7 Dec 95 6:32 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 : Wed Nov 22 12:21:54 1995
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1	T	3-Nitroaniline	0.326	0.306	6.1	57	-0.33
2	CM	Acenaphthene	1.020	0.971	4.8	58	-0.34
43	MP	2,4-Dinitrophenol	0.183	0.179	2.1	81	-0.31
44	PM	4-Nitrophenol	0.234	0.231	1.6	72	-0.29
5	T	Dibenzofuran	1.433	1.509	-5.4	65	-0.34
46	M	2,4-Dinitrotoluene	0.462	0.423	8.4	59	-0.31
47	M	Diethylphthalate	1.498	1.418	5.3	56	-0.33
8	M	Fluorene	1.125	1.175	-4.5	62	-0.34
9	M	4-Chlorophenyl-phenylether	0.532	0.559	-5.1	64	-0.34
50		Phenanthrene-d10	1.000	1.000	0.0	60	-0.35
1	T	4-Nitroaniline	0.179	0.170	4.8	57	-0.33
52	MC	4,6-Dinitro-2-methylphenol	0.131	0.108	17.6	51	-0.33
53	T	n-Nitrosodiphenylamine	0.424	0.410	3.4	60	-0.33
4	S	2,4,6-Tribromophenol	0.176	0.178	-1.4	65	-0.34
55		1,2-Diphenylhydrazine (as a	1.193	0.966	19.0	48#	-0.34
56	M	4-Bromophenyl-phenylether	0.209	0.229	-9.3	65	-0.34
7	M	Hexachlorobenzene	0.294	0.322	-9.8	65	-0.34
8	CM	Pentachlorophenol	0.182	0.177	3.2	68	-0.33
59	M	Phenanthrene	0.989	0.952	3.8	61	-0.35
0	M	Anthracene	0.998	0.935	6.4	59	-0.36
1		Carbazole	0.952	0.859	9.8	57	-0.35
62	M	Di-n-butylphthalate	1.830	1.738	5.0	60	-0.35
63	MC	Fluoranthene	1.092	1.110	-1.6	65	-0.37
64	I	Chrysene-d12	1.000	1.000	0.0	69	-0.37
65		Benzidine	0.116	0.124	-6.8	54	-0.36
6	M	Pyrene	1.481	1.336	9.8	68	-0.37
7	S	Terphenyl-d14	1.103	1.054	4.4	76	-0.35
68	M	Butylbenzylphthalate	1.086	0.940	13.5	68	-0.35
9	M	Benzo[a]anthracene	1.253	1.107	11.7	65	-0.37
0	M	3,3'-Dichlorobenzidine	0.387	0.365	5.7	75	-0.37
71	M	Chrysene	0.905	0.858	5.2	70	-0.37
72	M	bis(2-Ethylhexyl)phthalate	1.489	1.262	15.2	63	-0.35
73	I	Perylene-d12	1.000	1.000	0.0	62	-0.35
74	MC	Di-n-octylphthalate	4.241	4.181	1.4	54	-0.35
5	M	Benzo[b]fluoranthene	1.623	1.574	3.0	60	-0.37
6	m	Benzo[k]fluoranthene	1.220	1.407	-15.4	73	-0.37
77	mc	Benzo[a]pyrene	1.032	0.972	5.8	61	-0.35
8	m	Indeno[1,2,3-cd]pyrene	0.728	0.630	13.5	57	-0.35
9	m	Dibenz[a,h]anthracene	0.713	0.559	21.5	59	-0.35

Evaluate Continuing Calibration Report

221

Data File : C:\HPCHEM\1\DATA2\B9301.D Vial: 2
Acq On : 7 Dec 95 6:32 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 : Wed Nov 22 12:21:54 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	0.725	0.676	6.8	75	-0.35

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

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

222

Lab Name: EMSL ANALYTICAL Contract: _____

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

Lab File ID (Standard): B9008.D Date Analyzed: 10/27/95

Instrument ID: ABNA Time Analyzed: 1329

		IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
	12 HOUR STD	26722	8.59	104351	12.33	57774	17.63
	UPPER LIMIT	53444	9.09	208702	12.83	115548	18.13
	LOWER LIMIT	13361	8.09	52176	11.83	28887	17.13
	SAMPLE NO.						
01	SBLK01	22496	8.59	83610	12.31	47426	17.62
02	9547000B	24097	8.60	94497	12.32	54817	17.61
03	46360MS	24328	8.60	97435	12.32	56181	17.64
04	46360MSD	25002	8.60	97241	12.34	55587	17.64
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.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

223

Lab Name: EMSL ANALYTICAL Contract: _____

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

Lab File ID (Standard): B9008.D Date Analyzed: 10/27/95

Instrument ID: ABNA Time Analyzed: 1329

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
	12 HOUR STD	79042	22.12	25699	30.18	9983	34.15
	UPPER LIMIT	158084	22.62	51398	30.68	19966	34.65
	LOWER LIMIT	39521	21.62	12850	29.68	4992	33.65
	SAMPLE NO.						
01	SBLK01	61940	22.09	43279	30.18	19502	34.16
02	9547000B	77921	22.11	44563	30.17	16352	34.16
03	46360MS	74786	22.13	35528	30.18	16536	34.14
04	46360MSD	77102	22.13	28509	30.19	10719	34.15
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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

224

Lab Name: EMSL ANALYTICAL Contract: _____

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

Lab File ID (Standard): B9301.D Date Analyzed: 12/7/95

Instrument ID: ABNA Time Analyzed: 1832

		IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
	12 HOUR STD	12552	7.51	55859	11.25	41239	16.49
	UPPER LIMIT	25104	8.01	111718	11.75	82478	16.99
	LOWER LIMIT	6276	7.01	27930	10.75	20620	15.99
	SAMPLE NO.						
01	SBLK01	10248	7.49	47523	11.23	30909	16.46
02	9554748B	10448	7.49	46119	11.21	32492	16.46
03	SBLK02	10754	7.50	45450	11.21	30398	16.47
04	9554739B	11429	7.49	48207	11.22	33956	16.46
05	9554740B	12152	7.49	54261	11.21	34229	16.46
06	9554741B	11926	7.49	51863	11.21	37751	16.46
07	9554738B	12481	7.48	51577	11.21	36232	16.47
08	SBLK03	13214	7.49	57506	11.23	38030	16.46
09	9554551B	12591	7.49	55162	11.23	39445	16.47
10	9554552B	11760	7.49	49833	11.21	35216	16.47
11	9554554B	10086	7.49	45945	11.21	31194	16.46
12	9554555B	11834	7.49	48191	11.21	34931	16.47
13	9554556B	10233	7.49	41813	11.21	31976	16.46
14	9554557B	13122	7.49	55278	11.21	37148	16.46
15	9554558B	10925	7.47	45621	11.21	32808	16.46
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

Lab Name: EMSL ANALYTICAL Contract: _____

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

Lab File ID (Standard): B9301.D Date Analyzed: 12/7/95

Instrument ID: ABNA Time Analyzed: 1832

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
	12 HOUR STD	73998	20.90	64001	28.88	19039	32.81
	UPPER LIMIT	147996	21.40	128002	29.38	38078	33.31
	LOWER LIMIT	36999	20.40	32001	28.38	9520	32.31
	SAMPLE NO.						
01	SBLK01	51342	20.87	48010	28.84	15946	32.81
02	9554748B	52081	20.87	42633	28.84	15392	32.79
03	SBLK02	54361	20.87	43820	28.84	14326	32.81
04	9554739B	58099	20.86	54163	28.84	20120	32.79
05	9554740B	56159	20.87	54498	28.84	18350	32.79
06	9554741B	63262	20.87	54199	28.84	22178	32.79
07	9554738B	63510	20.87	51164	28.83	21186	32.79
08	SBLK03	61176	20.87	55171	28.84	17234	32.79
09	9554551B	65698	20.88	50081	28.84	18361	32.79
10	9554552B	64514	20.88	47488	28.84	14577	32.78
11	9554554B	50056	20.87	37914	28.84	12115	32.78
12	9554555B	60678	20.86	44912	28.84	14123	32.79
13	9554556B	51660	20.87	38952	28.84	11771	32.78
14	9554557B	61548	20.87	50354	28.82	13578	32.79
15	9554558B	56480	20.87	40684	28.84	11235	32.79
16							
17							
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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. 226

1980-3
9554554B
Field Blank

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: Bldg 482 Location: EG Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 9554554B

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B9312.D

Level: (low/med) _____ Date Received: 11/27/95

% Moisture: 0 decanted: (Y/N): N Date Extracted: 12/4/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 12/8/95

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. 227

19960.3
9554554B
Field Blank

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: 666482 Location: FB Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 9554554B

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B9312.D

Level: (low/med) _____ Date Received: 11/27/95

% Moisture: 0 decanted: (Y/N): N Date Extracted: 12/4/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 12/8/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

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

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
129-00-0	Pyrene	2	U
85-68-7	Butylbenzylphthalate	9	U
56-55-3	Benzo[a]anthracene	2	U
91-94-1	3,3'-Dichlorobenzidine	15	U
218-01-9	Chrysene	2	U
117-81-7	bis(2-Ethylhexyl)phthalate	4	U
117-84-0	Di-n-octylphthalate	2	U
205-99-2	Benzo[b]fluoranthene	1	U
207-08-9	Benzo[k]fluoranthene	2	U
50-32-8	Benzo[a]pyrene	2	U
193-39-5	Indeno[1,2,3-cd]pyrene	2	U
53-70-3	Dibenz[a,h]anthracene	3	U
191-24-2	Benzo[g,h,i]perylene	2	U

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO. 226
1980.3
9554554B
Field Blank

Lab Name: EMSL ANALYTICAL Contract:

Project No.: Site: Bldg 48C Location: FB Group:

Matrix: (soil/water) WATER Lab Sample ID: 9554554B

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: B9312.D

Level: (low/med) Date Received: 11/27/95

% Moisture: 0 decanted: (Y/N) N Date Extracted: 12/4/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 12/8/95

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 Hydrocarbon	8.14	5	J
2. 57-10-3	Hexadecanoic acid	23.52	2	J
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Quantitation Report

Data File : c:\hpchem\1\data2\b9312.d
Acq On : 8 Dec 95 3:52 am
Sample : 54554.....
Misc :
Quant Time: Dec 11 13:31 1995

Vial: 13
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 Nov 22 12:21:54 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.49	152	10086	40.00	ug/mL	-0.35
17) Naphthalene-d8	11.21	136	45945	40.00	ug/mL	-0.37
32) Acenaphthene-d10	16.46	164	31194	40.00	ug/mL	-0.37
50) Phenanthrene-d10	20.87	188	50056	40.00	ug/ml	-0.38
64) Chrysene-d12	28.84	240	37914	40.00	ug/mL	-0.41
73) Perylene-d12	32.78	264	12115	40.00	ug/mL	-0.37
System Monitoring Compounds						**%Recovery**
2) 2-Fluorophenol	0.00	112	0	0.00	ug/mL	0.00%
3) Phenol-d5	7.49	99	233	0.49	ug/mL	0.49%
18) Nitrobenzene-d5	9.20	82	34693	63.19	ug/mL	63.19%
36) 2-Fluorobiphenyl	14.69	172	63804	76.94	ug/mL	76.94%
54) 2,4,6-Tribromophenol	0.00	330	0	0.00	ug/mL	0.00%
67) Terphenyl-d14	26.03	244	97434	93.20	ug/mL	93.20%
Target Compounds						**Qvalue**

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

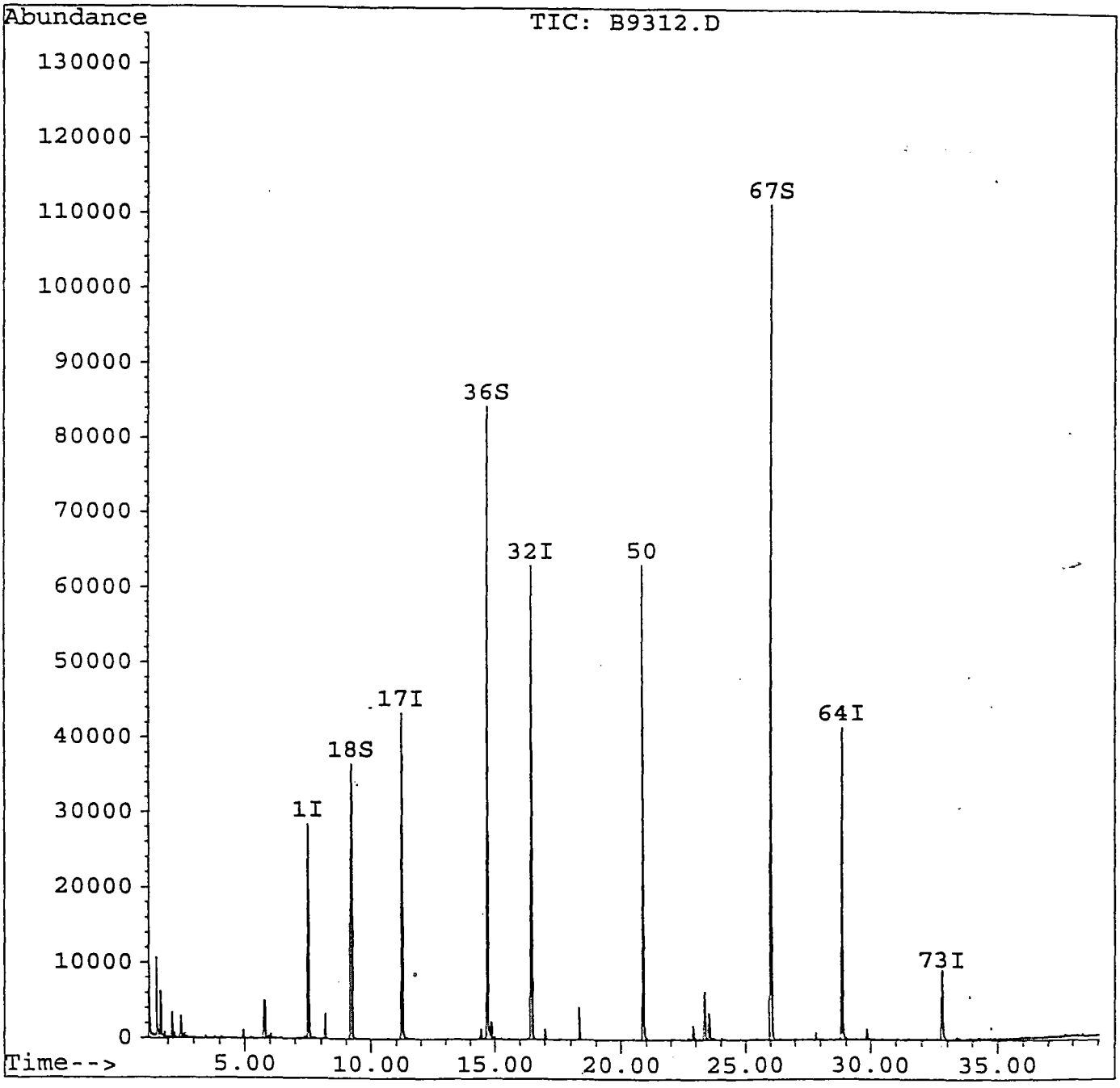
Quantitation Report

Data File : c:\hpchem\1\data2\b9312.d
Acq On : 8 Dec 95 3:52 am
Sample : 54554.....
Misc :
Quant Time: Dec 11 13:31 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 Nov 22 12:21:54 1995
Response via : Multiple Level Calibration



Library Search Compound Report

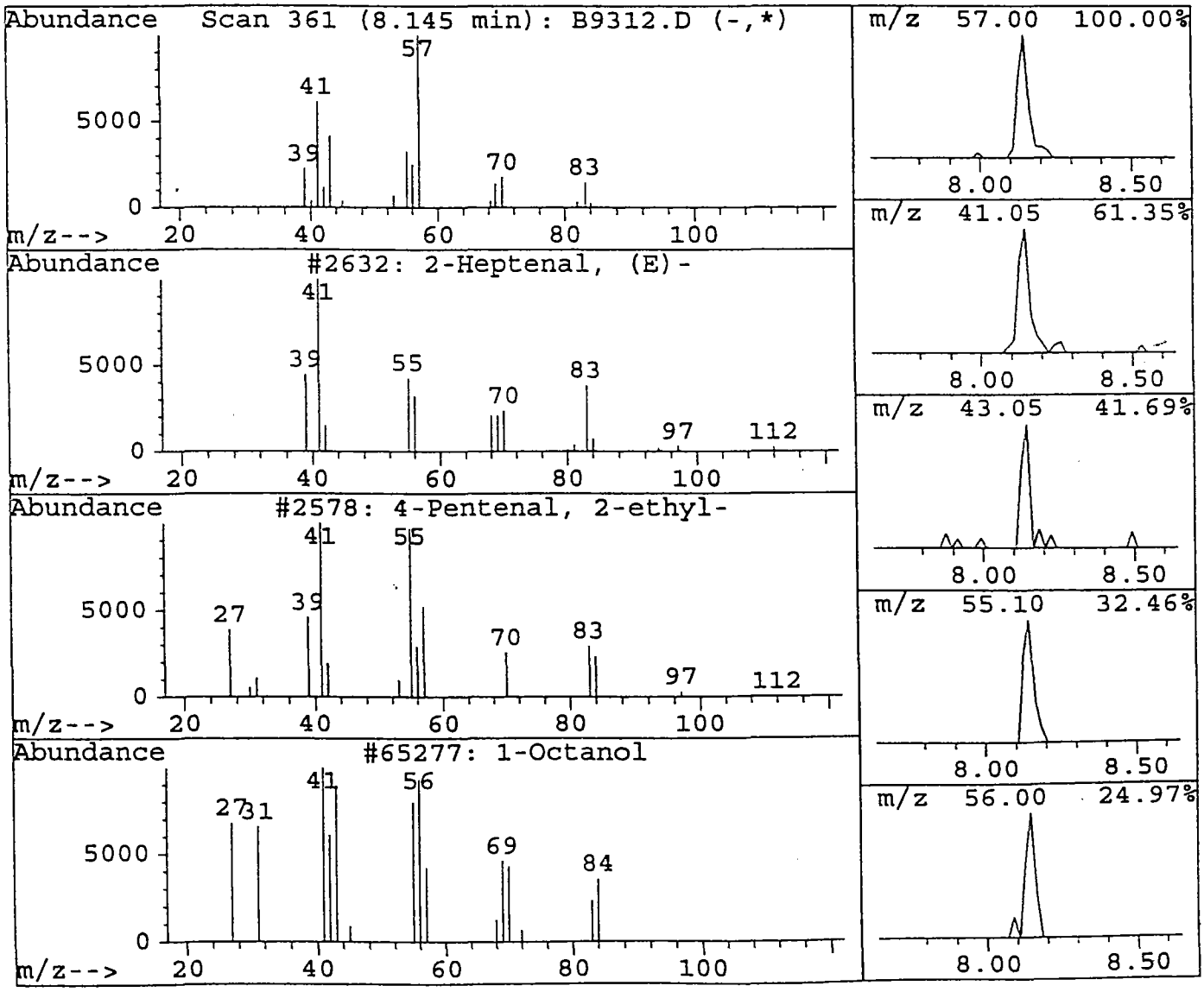
Data File : c:\hpchem\1\data2\b9312.d
Acq On : 8 Dec 95 3:52 am
Sample : 54554..... Converted from RTE d
Misc :

Vial: 13
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.
8.14	4.63 ug/mL	8300	1,4-Dichlorobenzene-d4	7.49

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Heptenal, (E)-	2632	018829-55-5	42
2	4-Pentenal, 2-ethyl-	2578	005204-80-8	40
3	1-Octanol	65277	000111-87-5	38
4	Propanoic acid, heptyl ester	68350	002216-81-1	17
5	1-Butene	62308	000106-98-9	9



Library Search Compound Report

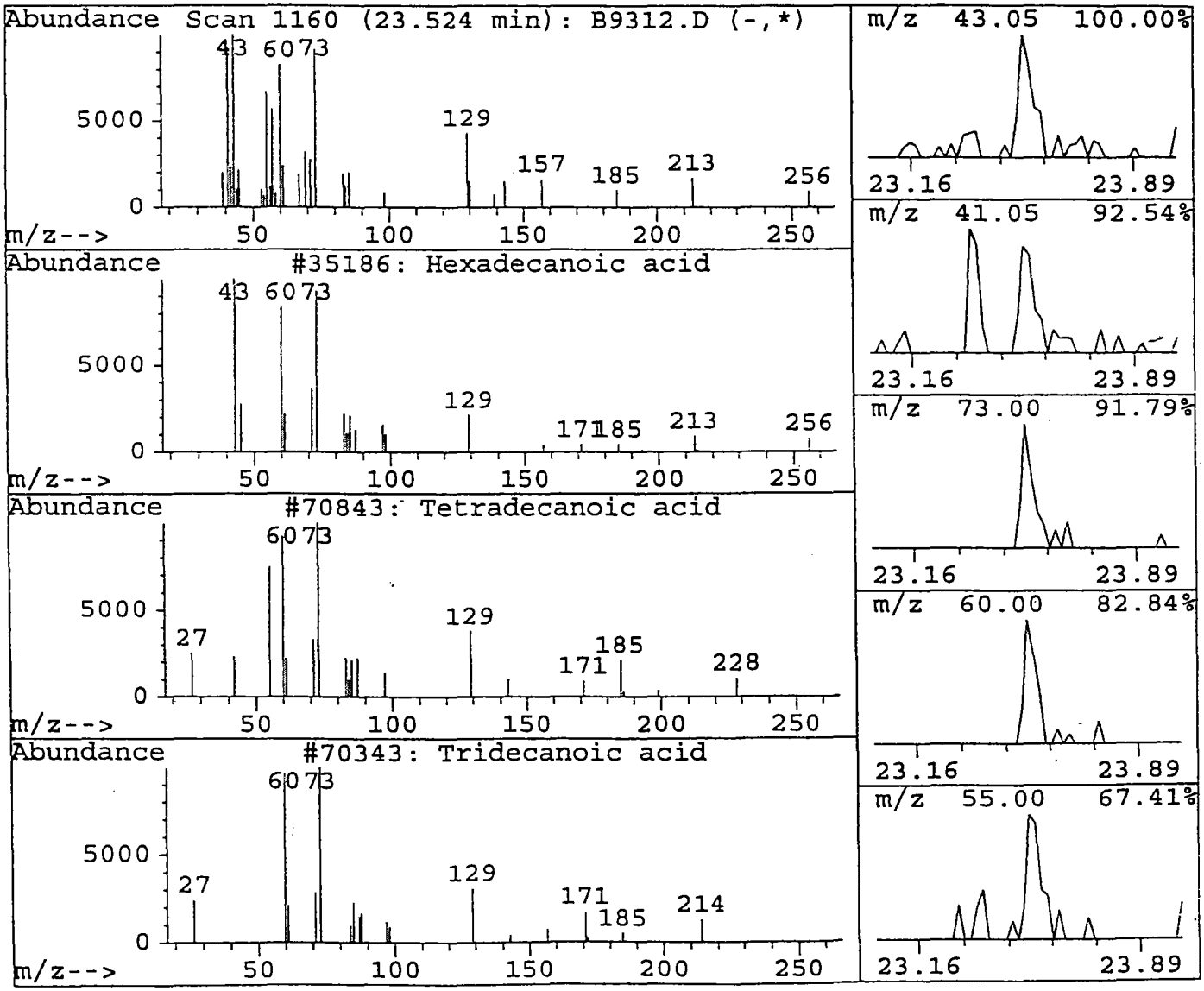
Data File : c:\hpchem\1\data2\b9312.d
Acq On : 8 Dec 95 3:52 am
Sample : 54554.....
Misc :

Vial: 13
Operator: SCOTTV
Inst : ABNA
Converted from RTE d
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.
23.52	2.45 ug/mL	9490	Phenanthrene-d10	20.87

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Hexadecanoic acid	35186	000057-10-3	93
2	Tetradecanoic acid	70843	000544-63-8	72
3	Tridecanoic acid	70343	000638-53-9	59
4	Pentadecanoic acid	32396	001002-84-2	59
5	Undecanoic acid	69096	000112-37-8	53



1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO. 232

1981.1
9554557B
2933763

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: Bldg 2018 Location: Mw #1 Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 9554557B

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B9315.D

Level: (low/med) _____ Date Received: 11/27/95

% Moisture: 0 decanted: (Y/N): N Date Extracted: 12/4/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 12/8/95

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	4	
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. 233

1981.1
9554557B
2933763

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: Bldg 2018 Location: MW#1 Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 9554557B

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B9315.D

Level: (low/med) _____ Date Received: 11/27/95

% Moisture: 0 decanted: (Y/N): N Date Extracted: 12/4/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 12/8/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

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

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
129-00-0	Pyrene	2	U
85-68-7	Butylbenzylphthalate	9	U
56-55-3	Benzo[a]anthracene	2	U
91-94-1	3,3'-Dichlorobenzidine	15	U
218-01-9	Chrysene	2	U
117-81-7	bis(2-Ethylhexyl)phthalate	4	U
117-84-0	Di-n-octylphthalate	2	U
205-99-2	Benzo[b]fluoranthene	1	U
207-08-9	Benzo[k]fluoranthene	2	U
50-32-8	Benzo[a]pyrene	2	U
193-39-5	Indeno[1,2,3-cd]pyrene	2	U
53-70-3	Dibenz[a,h]anthracene	3	U
191-24-2	Benzo[g,h,i]perylene	2	U

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO. 234
1981.1
9554557B
2933763

Lab Name: EMSL ANALYTICAL Contract: MW#1

Project No.: _____ Site: Bldg 2018 Location: MW#1 Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 9554557B

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: B9315.D

Level: (low/med) _____ Date Received: 11/27/95

% Moisture: 0 decanted: (Y/N) N Date Extracted: 12/4/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 12/8/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

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

Number TICs found: 8 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc	Q
1. 95-93-2	Benzene, 1,2,4,5-tetramethyl	10.61	2	J
2. 91-57-6	Naphthalene, 2-methyl-	13.40	9	J
3. 90-12-0	Naphthalene, 1-methyl-	13.65	8	J
4. 575-43-9	Naphthalene, 1,6-dimethyl-	15.33	3	J
5. 575-41-7	Naphthalene, 1,3-dimethyl-	15.54	5	J
6. 582-16-1	Naphthalene, 2,7-dimethyl-	15.60	3	J
7. 575-43-9	Naphthalene, 1,6-dimethyl-	15.87	2	J
8. 57-10-3	Hexadecanoic acid	23.55	8	J
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Quantitation Report

Data File : c:\hpchem\1\data2\b9315.d Vial: 16
Acq On : 8 Dec 95 6:25 am Operator: SCOTTV
Sample : 54557..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Dec 11 13:34 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed Nov 22 12:21:54 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.49	152	13122	40.00	ug/mL	-0.35
17) Naphthalene-d8	11.21	136	55278	40.00	ug/mL	-0.37
32) Acenaphthene-d10	16.46	164	37148	40.00	ug/mL	-0.37
50) Phenanthrene-d10	20.87	188	61548	40.00	ug/ml	-0.38
64) Chrysene-d12	28.82	240	50354	40.00	ug/mL	-0.42
73) Perylene-d12	32.79	264	13578	40.00	ug/mL	-0.36
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	3.83	112	29	0.08	ug/mL	0.08%
3) Phenol-d5	7.49	99	383	0.62	ug/mL	0.62%
18) Nitrobenzene-d5	9.22	82	42253	63.97	ug/mL	63.97%
36) 2-Fluorobiphenyl	14.69	172	71765	72.67	ug/mL	72.67%
54) 2,4,6-Tribromophenol	0.00	330	0	0.00	ug/mL	0.00%
67) Terphenyl-d14	26.01	244	110585	79.64	ug/mL	79.64%
Target Compounds						Qvalue
26) Naphthalene	11.26	128	5625	4.25	ug/mL	98

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

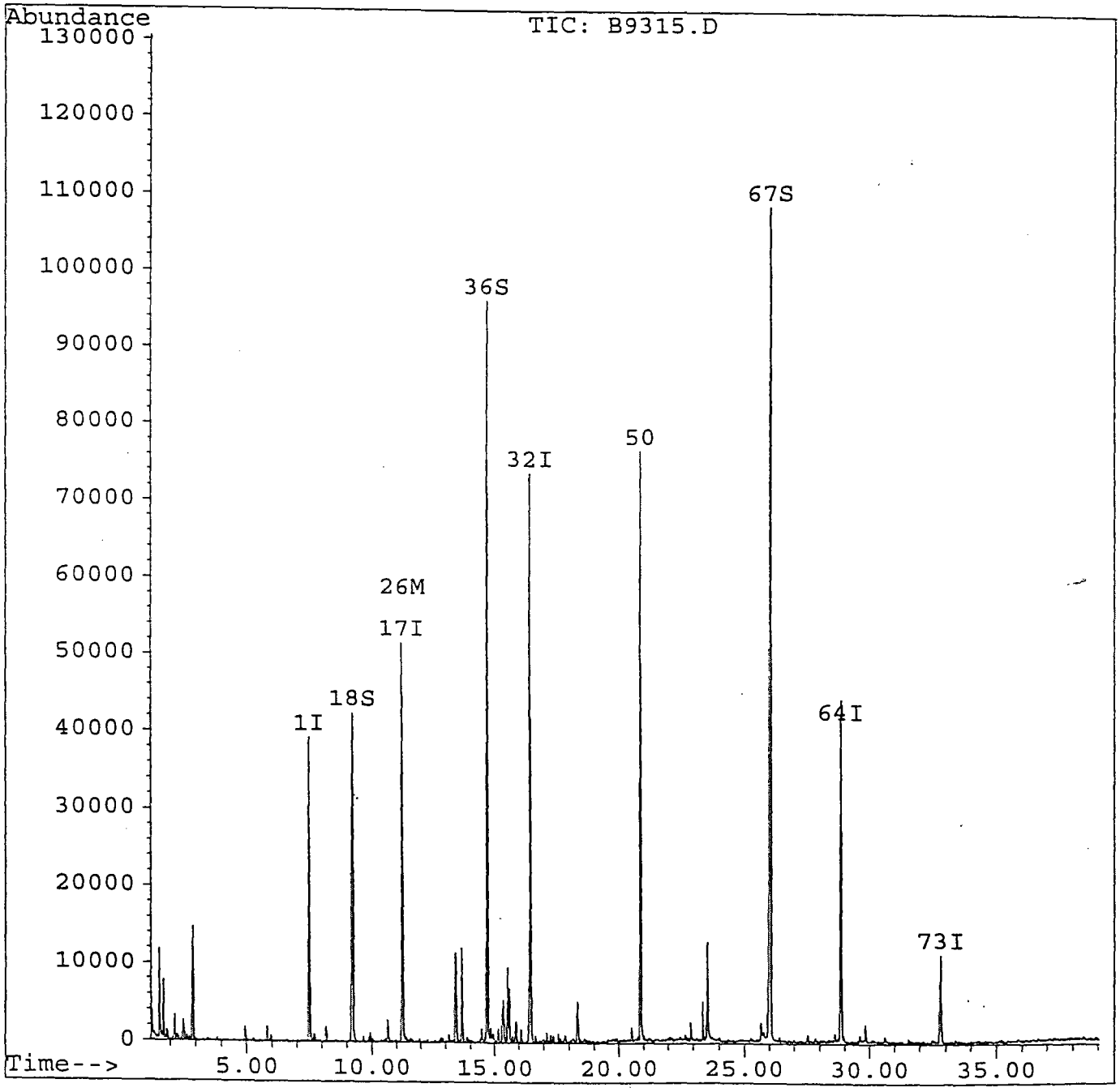
Quantitation Report

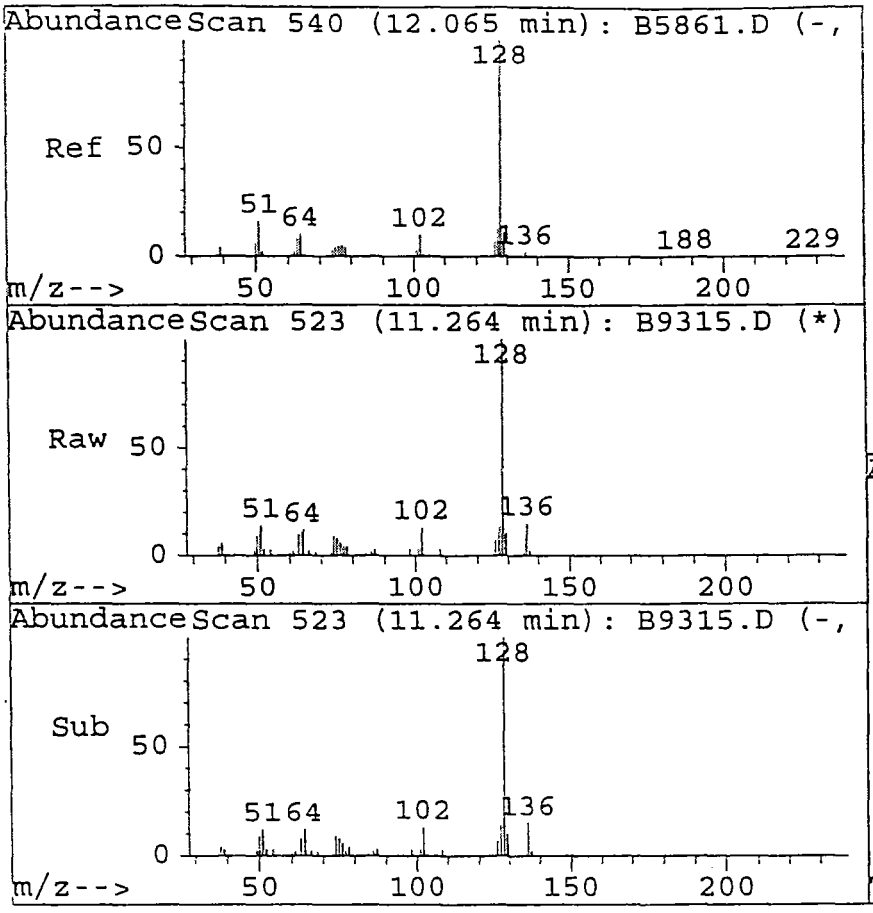
Data File : c:\hpchem\1\data2\b9315.d
Acq On : 8 Dec 95 6:25 am
Sample : 54557.....
Misc :
Quant Time: Dec 11 13:34 1995

Converted from RTE d

Vial: 16
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed Nov 22 12:21:54 1995
Response via : Multiple Level Calibration

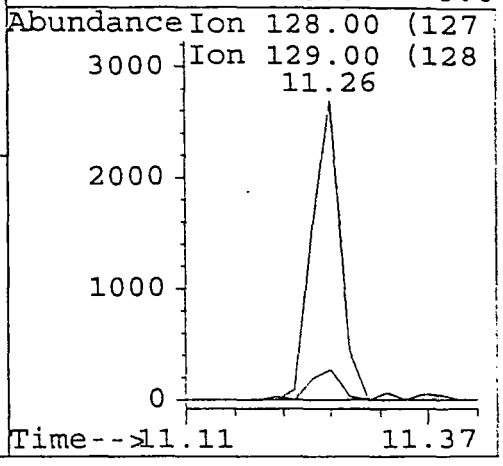




#26
Naphthalene
Concen: 4.25 ug/mL
RT: 11.26 min Scan# 523
Delta R.T. -0.37 min
Lab File: b9315.d
Acq: 8 Dec 95 6:25 am

Tgt Ion:128 Resp: 5625

Ion	Ratio	Lower	Upper
128	100		
129	10.0	8.7	13.0
0	0.0	0.0	0.0
0	0.0	0.0	0.0



Library Search Compound Report

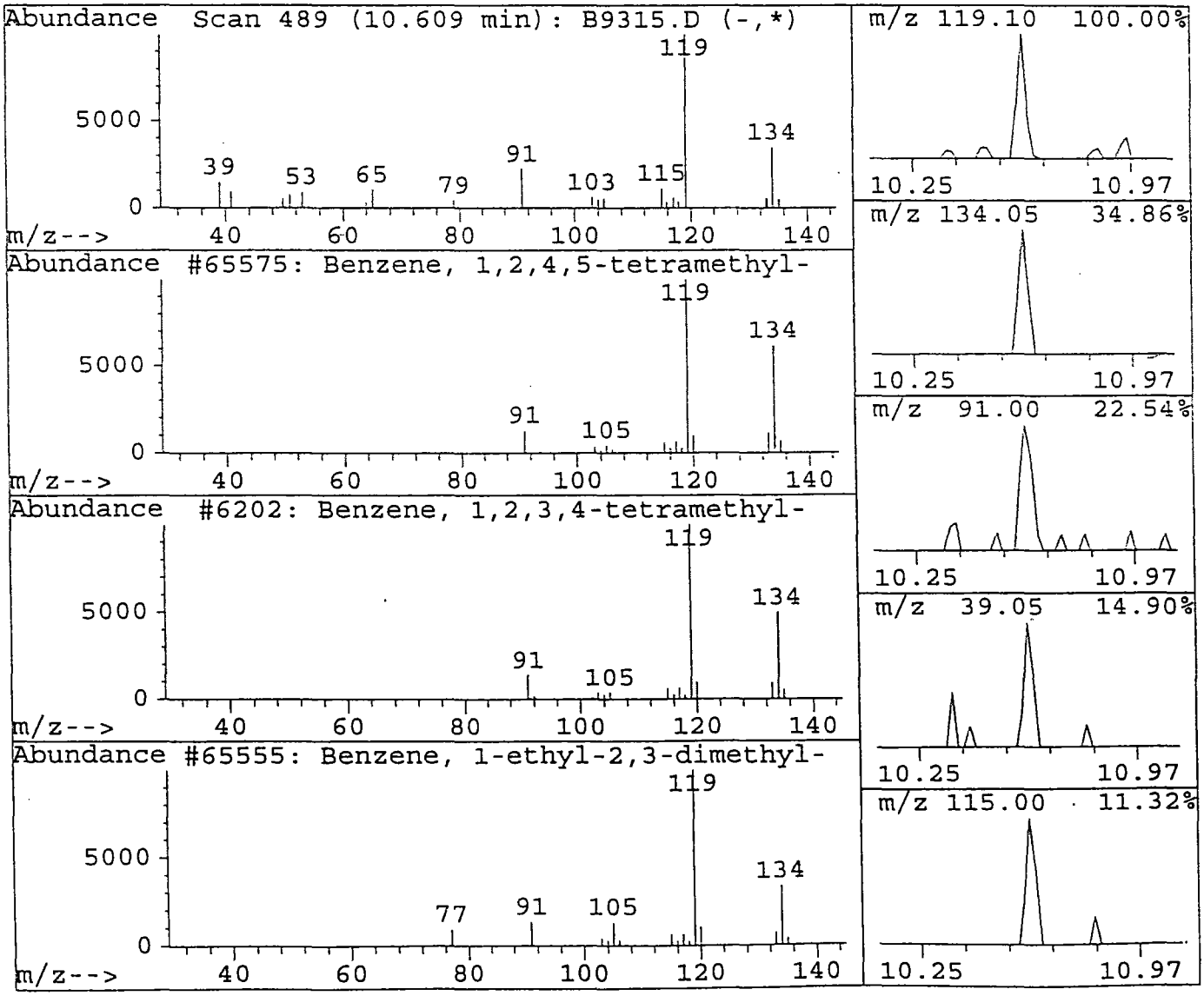
Data File : c:\hpchem\1\data2\b9315.d
Acq On : 8 Dec 95 6:25 am
Sample : 54557.....
Misc :

Vial: 16
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.
10.61	1.82 ug/mL	6334	Naphthalene-d8	11.21

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1,2,4,5-tetramethyl-	65575	000095-93-2	90
2	Benzene, 1,2,3,4-tetramethyl-	6202	000488-23-3	90
3	Benzene, 1-ethyl-2,3-dimethyl-	65555	000933-98-2	87
4	Benzene, 1,2,3,5-tetramethyl-	65571	000527-53-7	87
5	Benzene, 1-ethyl-3,5-dimethyl-	65553	000934-74-7	86



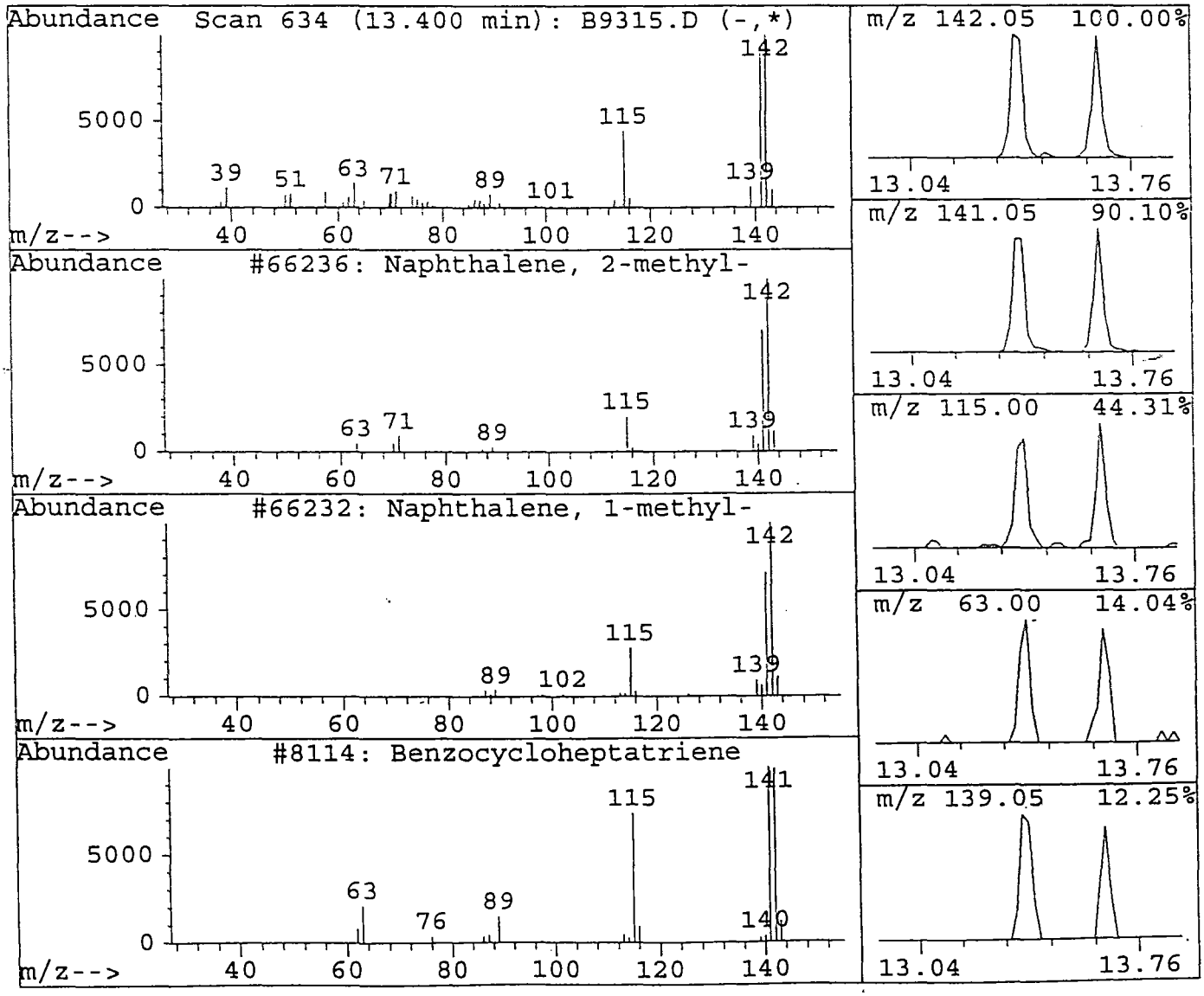
Library Search Compound Report

Data File : c:\hpchem\1\data2\b9315.d Vial: 16
Acq On : 8 Dec 95 6:25 am Operator: SCOTTV
Sample : 54557..... 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.
13.40	9.17 ug/mL	31975	Naphthalene-d8	11.21

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Naphthalene, 2-methyl-	66236	000091-57-6	91
2	Naphthalene, 1-methyl-	66232	000090-12-0	91
3	Benzocycloheptatriene	8114	000264-09-5	91
4	1,4-Methanonaphthalene, 1,4-dihydro	8112	004453-90-1	90
5	1H-Indene, 1-ethylidene-	8113	002471-83-2	72



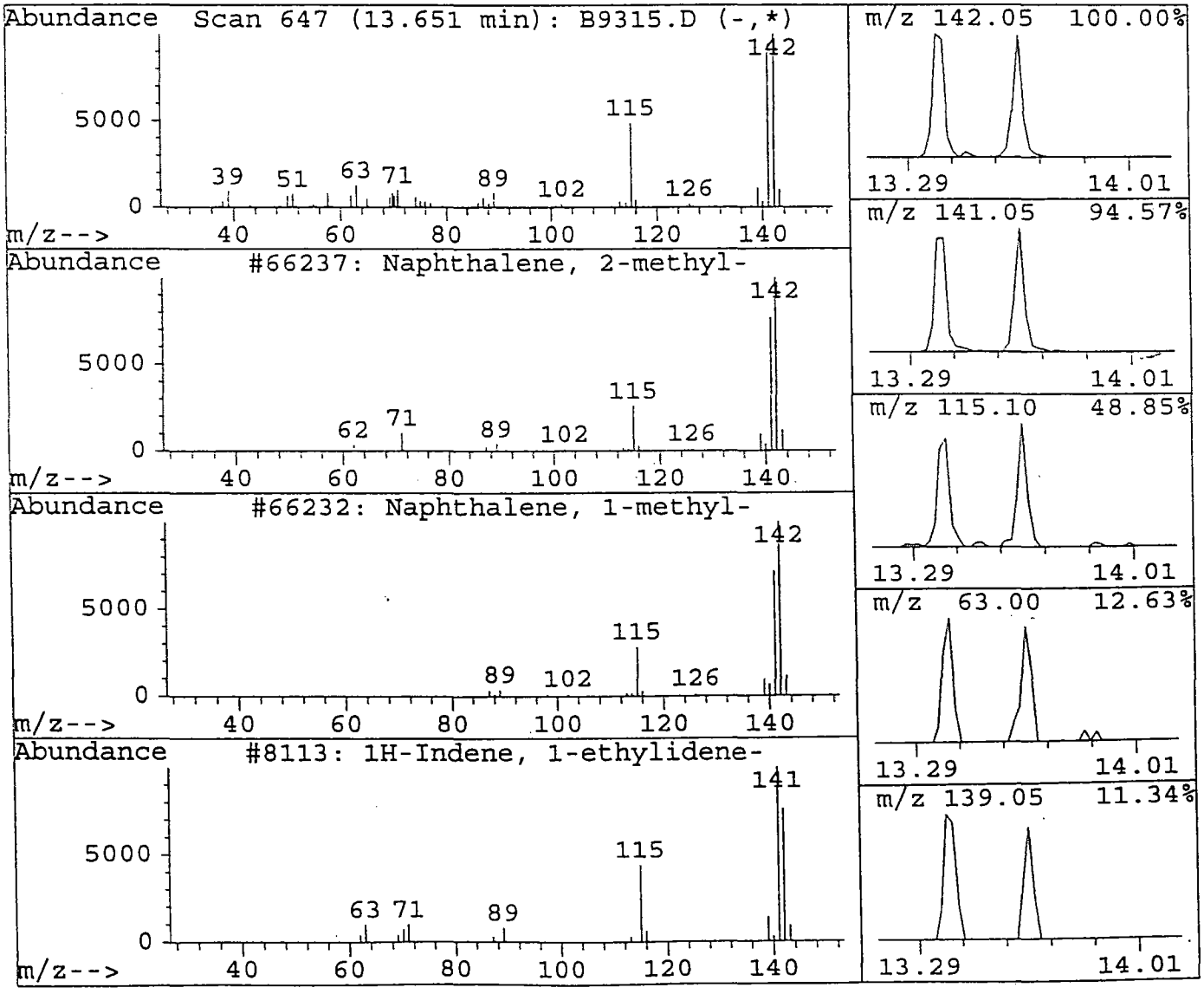
Library Search Compound Report

Data File : c:\hpchem\1\data2\b9315.d Vial: 16
Acq On : 8 Dec 95 6:25 am Operator: SCOTTV
Sample : 54557..... 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.
13.65	8.06 ug/mL	28095	Naphthalene-d8	11.21

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Naphthalene, 2-methyl-	66237	000091-57-6	95
2	Naphthalene, 1-methyl-	66232	000090-12-0	94
3	1H-Indene, 1-ethylidene-	8113	002471-83-2	93
4	1,4-Methanonaphthalene, 1,4-dihydro	8112	004453-90-1	91
5	Benzocycloheptatriene	8114	000264-09-5	91



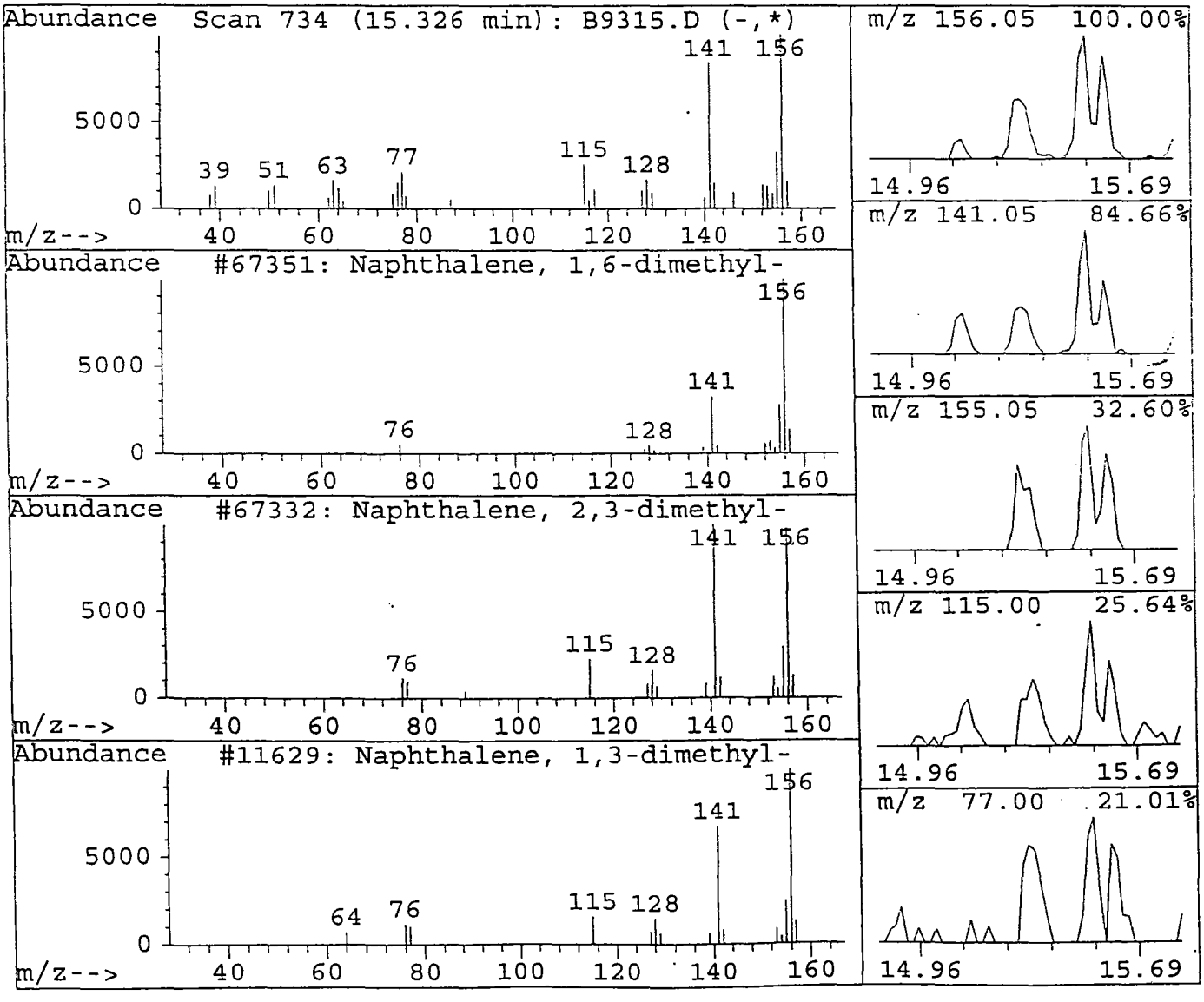
Library Search Compound Report

Data File : c:\hpchem\1\data2\b9315.d Vial: 16
Acq On : 8 Dec 95 6:25 am Operator: SCOTTV
Sample : 54557..... 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.
15.33	3.47 ug/mL	16144	Acenaphthene-d10	16.46

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Naphthalene, 1,6-dimethyl-	67351	000575-43-9	97
2	Naphthalene, 2,3-dimethyl-	67332	000581-40-8	96
3	Naphthalene, 1,3-dimethyl-	11629	000575-41-7	95
4	Naphthalene, 1,7-dimethyl-	11628	000575-37-1	95
5	Naphthalene, 1,5-dimethyl-	67354	000571-61-9	94



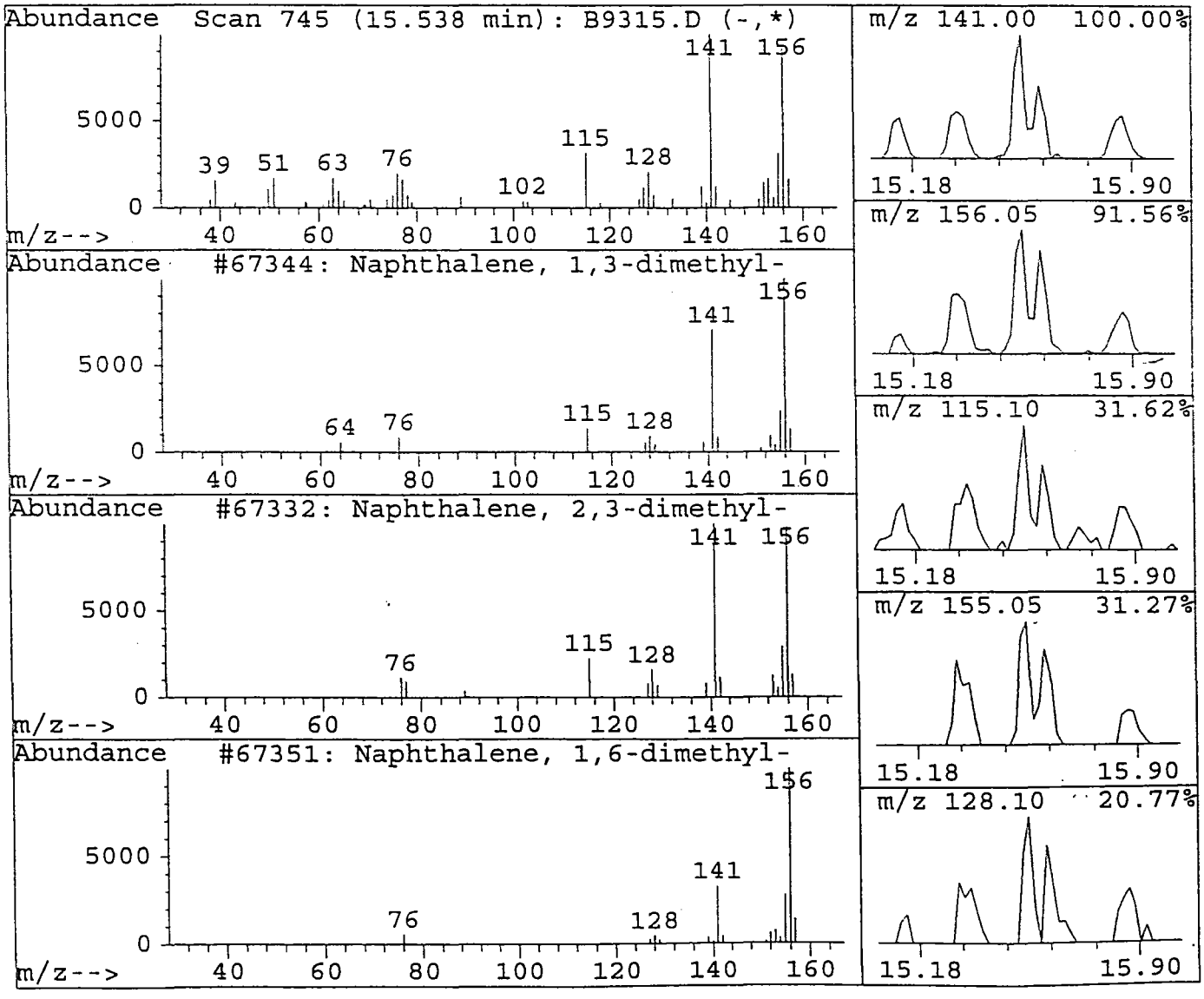
Library Search Compound Report

Data File : c:\hpchem\1\data2\b9315.d Vial: 16
Acq On : 8 Dec 95 6:25 am Operator: SCOTTV
Sample : 54557..... 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.
15.54	5.38 ug/mL	25073	Acenaphthene-d10	16.46

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Naphthalene, 1,3-dimethyl-	67344	000575-41-7	97
2	Naphthalene, 2,3-dimethyl-	67332	000581-40-8	97
3	Naphthalene, 1,6-dimethyl-	67351	000575-43-9	96
4	Naphthalene, 1,7-dimethyl-	67343	000575-37-1	96
5	Naphthalene, 2,6-dimethyl-	67337	000581-42-0	96



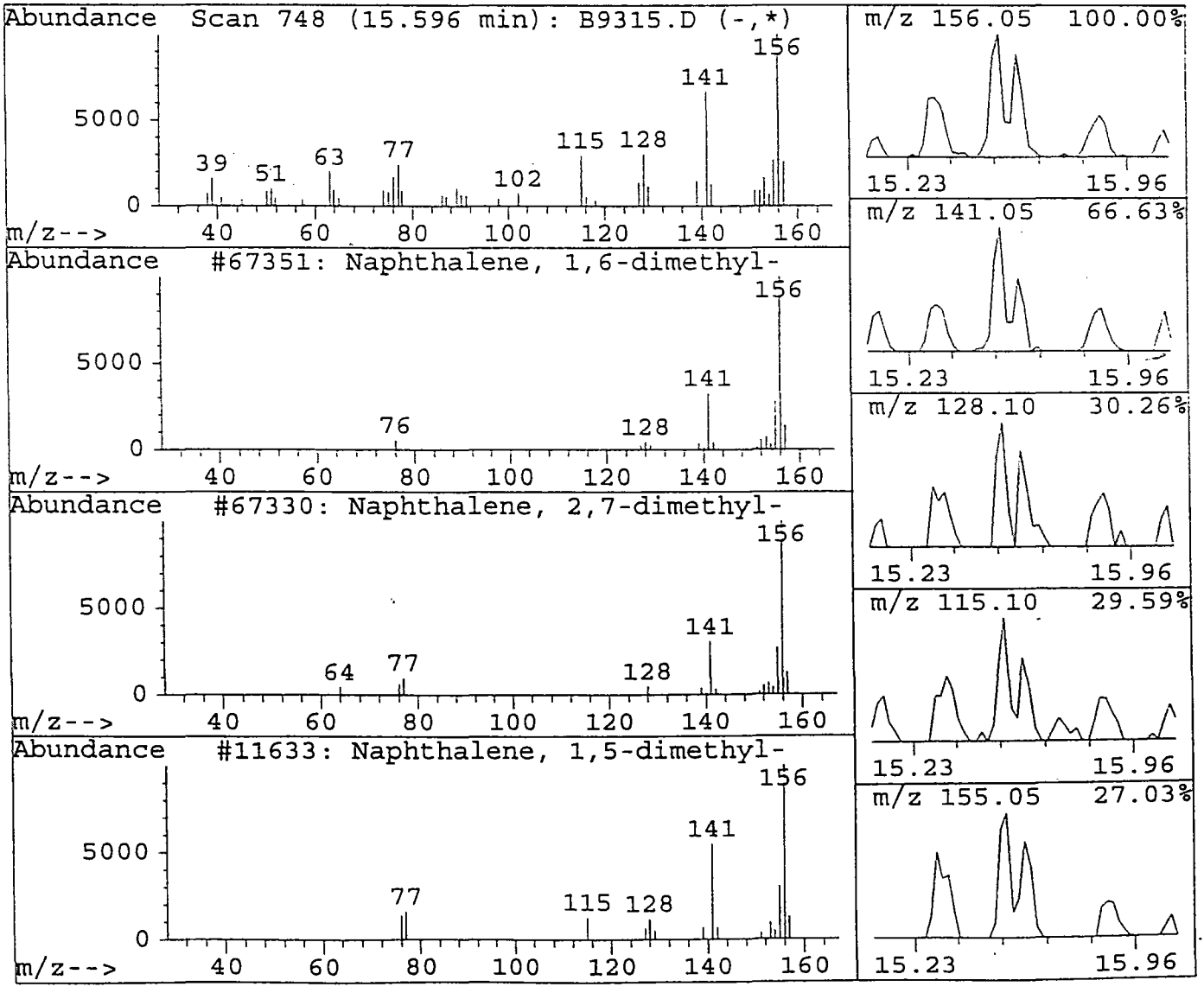
Library Search Compound Report

Data File : c:\hpchem\1\data2\b9315.d Vial: 16
Acq On : 8 Dec 95 6:25 am Operator: SCOTTV
Sample : 54557..... 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.
15.60	2.94 ug/mL	13712	Acenaphthene-d10	16.46

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Naphthalene, 1,6-dimethyl-	67351	000575-43-9	87
2	Naphthalene, 2,7-dimethyl-	67330	000582-16-1	87
3	Naphthalene, 1,5-dimethyl-	11633	000571-61-9	81
4	Naphthalene, 2,6-dimethyl-	11624	000581-42-0	81
5	Naphthalene, 1,3-dimethyl-	11629	000575-41-7	81



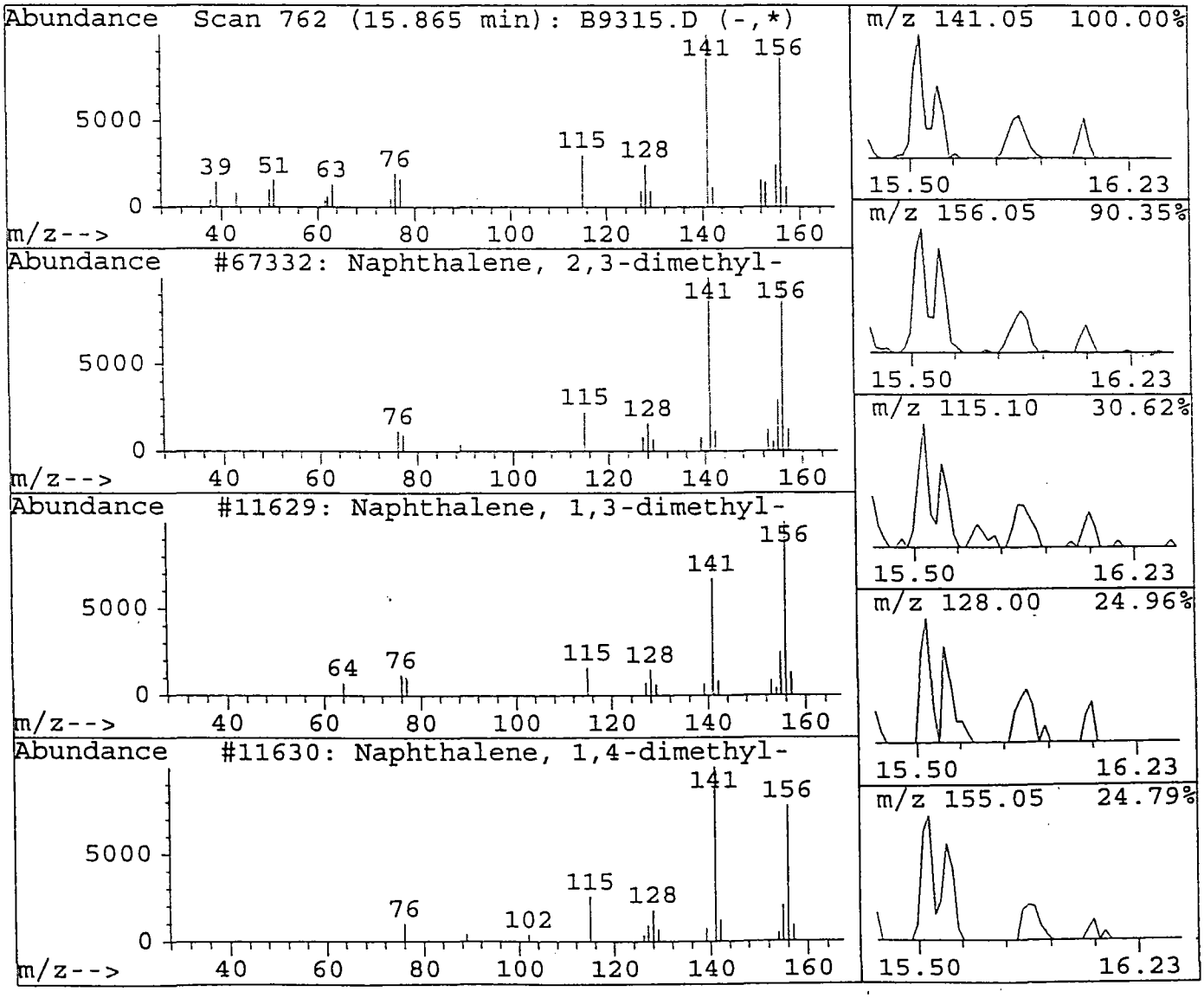
Library Search Compound Report

Data File : c:\hpchem\1\data2\b9315.d Vial: 16
Acq On : 8 Dec 95 6:25 am Operator: SCOTTV
Sample : 54557..... 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.
15.87	2.10 ug/mL	9781	Acenaphthene-d10	16.46

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Naphthalene, 2,3-dimethyl-	67332	000581-40-8	95
2	Naphthalene, 1,3-dimethyl-	11629	000575-41-7	94
3	Naphthalene, 1,4-dimethyl-	11630	000571-58-4	93
4	Naphthalene, 1,6-dimethyl-	67351	000575-43-9	91
5	Naphthalene, 1,2-dimethyl-	11623	000573-98-8	90



Library Search Compound Report

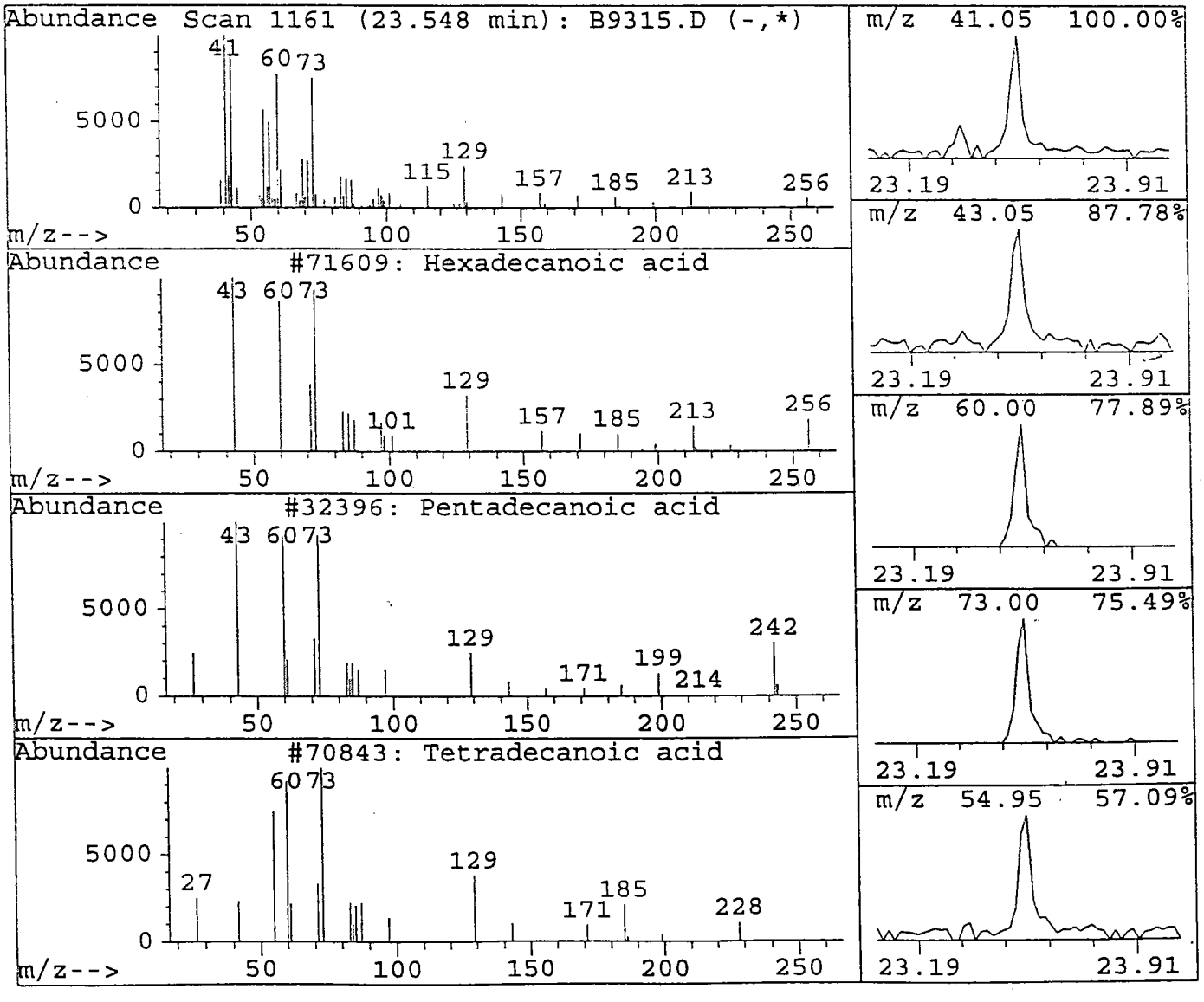
Data File : c:\hpchem\1\data2\b9315.d
Acq On : 8 Dec 95 6:25 am
Sample : 54557.....
Misc :

Vial: 16
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.
23.55	8.30 ug/mL	40719	Phenanthrene-d10	20.87

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Hexadecanoic acid	71609	000057-10-3	98
2	Pentadecanoic acid	32396	001002-84-2	87
3	Tetradecanoic acid	70843	000544-63-8	87
4	Undecanoic acid	19473	000112-37-8	80
5	Dodecanamide, N,N-bis(2-hydroxyethy	40673	000120-40-1	74



WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: EMSL ANALYTICAL Contract: _____

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

	SAMPLE NO.	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	#	#	#	#	#	TOT OUT
01	SBLK01	41	37	65						
02	9547000B	56	49	91						
03	46360MS	54	58	110						
04	46360MSD	51	56	121						
05										
06										
07										
08										
09										
10										
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23										
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25										
26										
27										
28										
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30										

	QC LIMITS
S1 (NBZ) = Nitrobenzene-d5	(22-101)
S2 (FBP) = 2-Fluorobiphenyl	(20-94)
S3 (TPH) = Terphenyl-d14	(35-127)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogate diluted out

2C

WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: EMSL ANALYTICAL Contract: _____

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

	SAMPLE NO.	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	#	#	#	#	#	TOT OUT
01	SBLK01	62	80	78						
02	9554748B	66	78	90						
03	SBLK03	57	66	84						
04	9554551B	43	57	76						
05	9554552B	58	65	93						
06	9554554B	63	77	93						
07	9554555B	54	65	94						
08	9554556B	61	72	97						
09	9554557B	64	73	80						
10	9554558B	54	55	88						
11										
12										
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29										
30										

	QC LIMITS
S1 (NBZ) = Nitrobenzene-d5	(22-101)
S2 (FBP) = 2-Fluorobiphenyl	(20-94)
S3 (TPH) = Terphenyl-d14	(35-127)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogate diluted out

SAMPLE NO. 248

SEMIVOLATILE METHOD BLANK SUMMARY

SBLK01

Lab Name: EMSL ANALYTICAL Contract: _____

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

Lab File ID: B9009.D Lab Sample ID: BLANK1

Instrument ID: ABNA Date Extracted: 10/18/95

Matrix: (soil/water) WATER Date Analyzed: 10/27/95

Level: (low/med) _____ Time Analyzed: 1421

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

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	9547000B	9547000B	B9010.D	10/27/95
02	46360MS	46360MS	B9011.D	10/27/95
03	46360MSD	46360MSD	B9012.D	10/27/95
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
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COMMENTS:

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO. 249

SBLK01

Lab Name: EMSL ANALYTICAL Contract: _____

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

Matrix: (soil/water) WATER Lab Sample ID: BLANK1

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B9009.D

Level: (low/med) _____ Date Received: 10/13/95

% Moisture: _____ decanted: (Y/N): N Date Extracted: 10/18/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/27/95

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	
206-44-0	Fluoranthene	1	U
92-87-5	Benzidine	1	U

1B

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: BLANK1

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B9009.D

Level: (low/med) _____ Date Received: 10/13/95

% Moisture: _____ decanted: (Y/N): N Date Extracted: 10/18/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/27/95

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

IF

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO. 251

SBLK01

Lab Name: EMSL ANALYTICAL Contract:

Project No.: Site: Location: Group:

Matrix: (soil/water) WATER Lab Sample ID: BLANK1

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: B9009.D

Level: (low/med) Date Received: 10/13/95

% Moisture: decanted: (Y/N) N Date Extracted: 10/18/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/27/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 1 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc	Q
1.	Unknown	6.94	2	J
2.				
3.				
4.				
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30.				

Quantitation Report

Data File : c:\hpchem\1\data2\b9009.d Vial: 3
Acq On : 27 Oct 95 2:21 pm Operator: SCOTTV
Sample : BLANK..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Oct 31 15:20 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed Oct 25 10:20:51 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.59	152	22496	40.00	ug/mL	-0.10
17) Naphthalene-d8	12.31	136	83610	40.00	ug/mL	-0.12
32) Acenaphthene-d10	17.62	164	47426	40.00	ug/mL	-0.11
50) Phenanthrene-d10	22.09	188	61940	40.00	ug/ml	-0.14
64) Chrysene-d12	30.18	240	43279	40.00	ug/mL	-0.11
73) Perylene-d12	34.16	264	19502	40.00	ug/mL	-0.08
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.01	112	31567	44.02	ug/mL	44.02%
3) Phenol-d5	8.01	99	53072	45.61	ug/mL	45.61%
18) Nitrobenzene-d5	10.27	82	46833	41.33	ug/mL	41.33%
36) 2-Fluorobiphenyl	15.77	172	53376	36.90	ug/mL	36.90%
54) 2,4,6-Tribromophenol	20.03	330	7869	40.12	ug/mL	40.12%
67) Terphenyl-d14	27.27	244	69697	64.83	ug/mL	64.83%
Target Compounds						Qvalue
62) Di-n-butylphthalate	24.52	149	16902	5.43	ug/mL#	98

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

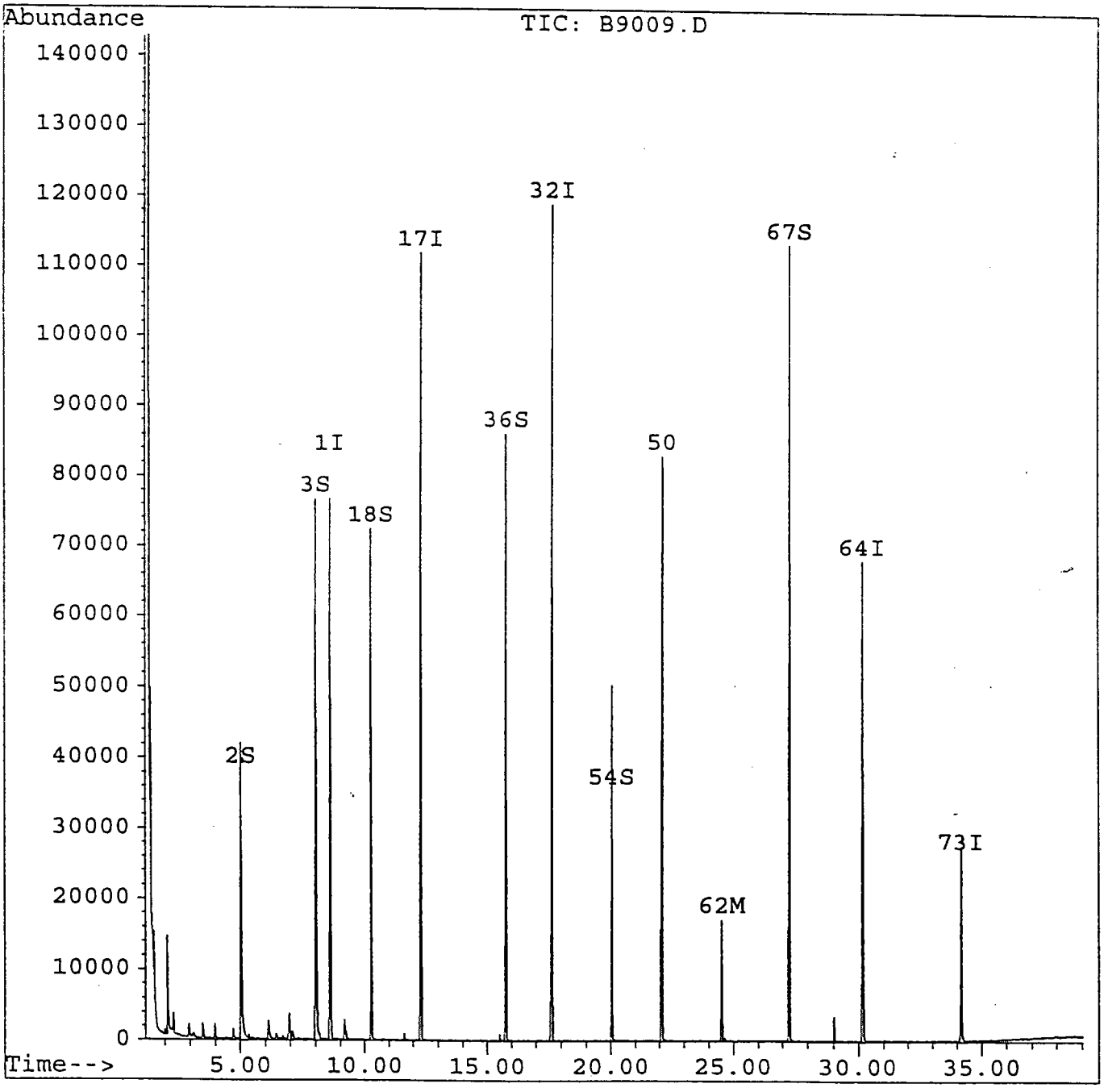
Quantitation Report

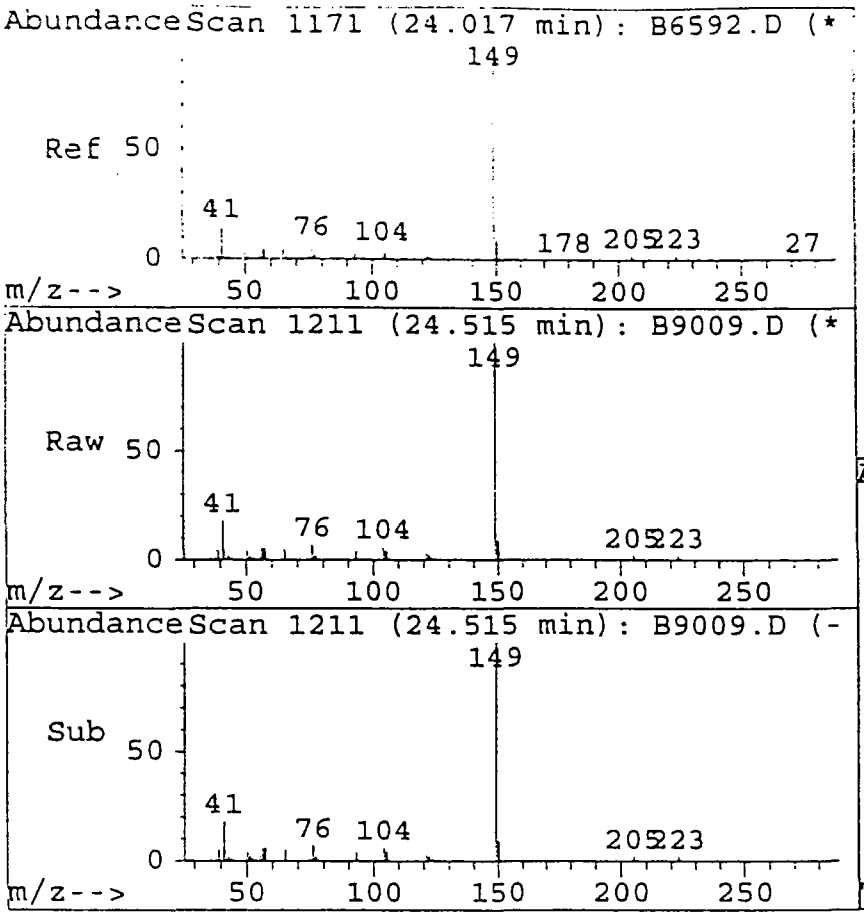
Data File : c:\hpchem\1\data2\b9009.d
Acq On : 27 Oct 95 2:21 pm
Sample : BLANK.....
Misc :
Quant Time: Oct 31 15:20 1995

Converted from RTE d

Vial: 3
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed Oct 25 10:20:51 1995
Response via : Multiple Level Calibration

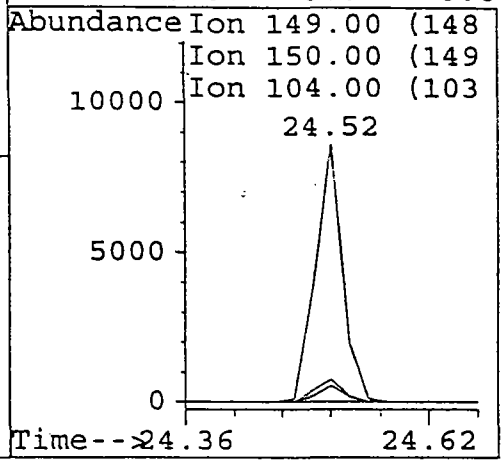




#62
Di-n-butylphthalate
Concen: 5.43 ug/mL
RT: 24.52 min Scan# 1211
Delta R.T. -0.12 min
Lab File: b9009.d
Acq: 27 Oct 95 2:21 pm

Tgt Ion:149 Resp: 16902

Ion	Ratio	Lower	Upper
149	100		
150	8.9	7.3	10.9
104	6.4	3.7	5.5#
0	0.0	0.0	0.0

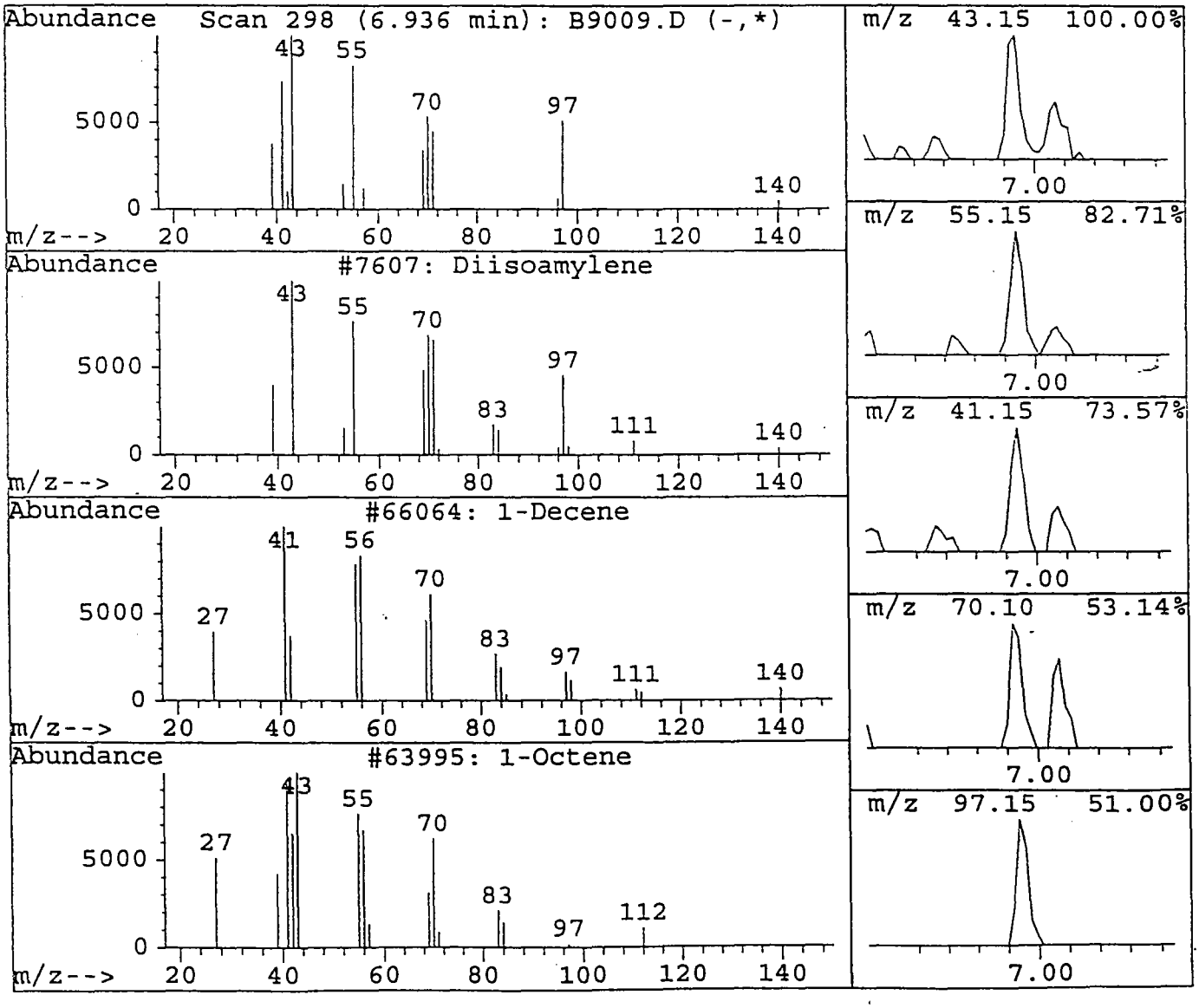


Data File : c:\hpchem\1\data2\b9009.d Vial: 3
Acq On : 27 Oct 95 2:21 pm Operator: SCOTTV
Sample : BLANK..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Library : C:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
6.94	2.46 ug/ml	10825	1,4-Dichlorobenzene-d4	8.59

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Diisoamylene	7607	054063-09-1	64
2	1-Decene	66064	000872-05-9	35
3	1-Octene	63995	000111-66-0	35
4	Heptane, 4-methyl-	3096	000589-53-7	25
5	Cyclopentane, 1,2-dimethyl-, cis-	1367	001192-18-3	25



4B

SEMIVOLATILE METHOD BLANK SUMMARY

SAMPLE NO.

SBLK03

Lab Name: EMSL ANALYTICAL Contract: _____

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

Lab File ID: B9309.D Lab Sample ID: BLANK3

Instrument ID: ABNA Date Extracted: 12/4/95

Matrix: (soil/water) WATER Date Analyzed: 12/8/95

Level: (low/med) _____ Time Analyzed: 0120

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

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	9554551B	9554551B	B9310.D	12/08/95
02	9554552B	9554552B	B9311.D	12/08/95
03	9554554B	9554554B	B9312.D	12/08/95
04	9554555B	9554555B	B9313.D	12/08/95
05	9554556B	9554556B	B9314.D	12/08/95
06	9554557B	9554557B	B9315.D	12/08/95
07	9554558B	9554558B	B9316.D	12/08/95
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
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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: B9309.D

Level: (low/med) _____ Date Received: 11/27/95

% Moisture: 0 decanted: (Y/N): N Date Extracted: 12/4/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 12/8/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

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

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
62-75-9	N-nitrosodimethylamine	2	U
111-44-4	bis(2-Chloroethyl)ether	1	U
541-73-1	1,3-Dichlorobenzene	2	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	2	U
108-60-1	bis(2-chloroisopropyl)ether	5	U
621-64-7	N-Nitroso-Di-n-propylamine	2	U
67-72-1	Hexachloroethane	1	U
98-95-3	Nitrobenzene	2	U
78-59-1	Isophorone	1	U
111-91-1	bis(2-Chloroethoxy)methane	3	U
120-82-1	1,2,4-Trichlorobenzene	2	U
91-20-3	Naphthalene	2	U
87-68-3	Hexachlorobutadiene	2	U
77-47-4	Hexachlorocyclopentadiene	12	U
91-58-7	2-Chloronaphthalene	1	U
131-11-3	Dimethylphthalate	1	U
208-96-8	Acenaphthylene	5	U
606-20-2	2,6-Dinitrotoluene	2	U
83-32-9	Acenaphthene	3	U
121-14-2	2,4-Dinitrotoluene	3	U
84-66-2	Diethylphthalate	1	U
86-73-7	Fluorene	3	U
7005-72-3	4-Chlorophenyl-phenylether	3	U
86-30-6	n-Nitrosodiphenylamine	6	U
122-66-7	1,2-Diphenylhydrazine(as azo)	6	U
101-55-3	4-Bromophenyl-phenylether	2	U
118-74-1	Hexachlorobenzene	2	U
85-01-08	Phenanthrene	2	U
120-12-7	Anthracene	2	U
84-74-2	Di-n-butylphthalate	5	U
206-44-0	Fluoranthene	1	U
92-87-5	Benzidine	1	U

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO. 258

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: B9309.D

Level: (low/med) _____ Date Received: 11/27/95

% Moisture: 0 decanted: (Y/N): N Date Extracted: 12/4/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 12/8/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

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

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
129-00-0	Pyrene	2	U
85-68-7	Butylbenzylphthalate	9	U
56-55-3	Benzo[a]anthracene	2	U
91-94-1	3,3'-Dichlorobenzidine	15	U
218-01-9	Chrysene	2	U
117-81-7	bis(2-Ethylhexyl)phthalate	4	U
117-84-0	Di-n-octylphthalate	2	U
205-99-2	Benzo[b]fluoranthene	1	U
207-08-9	Benzo[k]fluoranthene	2	U
50-32-8	Benzo[a]pyrene	2	U
193-39-5	Indeno[1,2,3-cd]pyrene	2	U
53-70-3	Dibenz[a,h]anthracene	3	U
191-24-2	Benzo[g,h,i]perylene	2	U

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
SBLK03

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: B9309.D

Level: (low/med) Date Received: 11/27/95

% Moisture: 0 decanted: (Y/N) N Date Extracted: 12/4/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 12/8/95

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.				
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28.				
29.				
30.				

Quantitation Report

Data File : c:\hpchem\1\data2\b9309.d Vial: 10
Acq On : 8 Dec 95 1:20 am Operator: SCOTTV
Sample : BLANK..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Dec 11 12:49 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed Nov 22 12:21:54 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.49	152	13214	40.00	ug/mL	-0.34
17) Naphthalene-d8	11.23	136	57506	40.00	ug/mL	-0.35
32) Acenaphthene-d10	16.46	164	38030	40.00	ug/mL	-0.37
50) Phenanthrene-d10	20.87	188	61176	40.00	ug/ml	-0.38
64) Chrysene-d12	28.84	240	55171	40.00	ug/mL	-0.40
73) Perylene-d12	32.79	264	17234	40.00	ug/mL	-0.37
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	0.00	112	0	0.00	ug/mL	0.00%
3) Phenol-d5	7.49	99	359	0.57	ug/mL	0.57%
18) Nitrobenzene-d5	9.23	82	39268	57.14	ug/mL	57.14%
36) 2-Fluorobiphenyl	14.69	172	66686	65.96	ug/mL	65.96%
54) 2,4,6-Tribromophenol	0.00	330	0	0.00	ug/mL	0.00%
67) Terphenyl-d14	26.03	244	127672	83.92	ug/mL	83.92%
Target Compounds						Qvalue

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

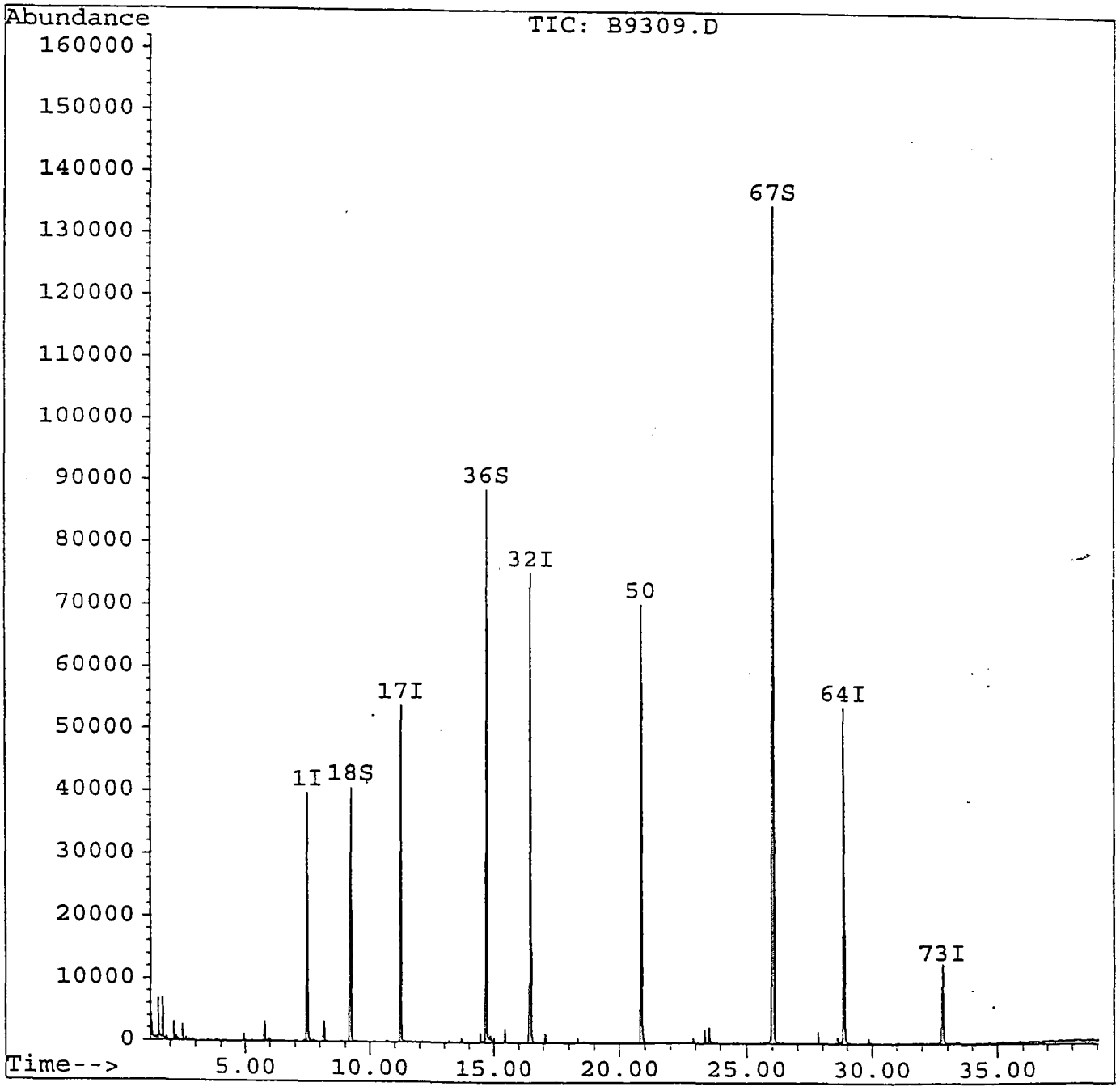
Quantitation Report

Data File : c:\hpchem\1\data2\b9309.d
Acq On : 8 Dec 95 1:20 am
Sample : BLANK.....
Misc :
Quant Time: Dec 11 12:49 1995

Converted from RTE d

Vial: 10
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed Nov 22 12:21:54 1995
Response via : Multiple Level Calibration



Spike Recovery and RPD Summary Report - WATER

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed Nov 22 12:21:54 1995
Response via : Initial Calibration

Non-Spiked Sample: B8997.D

	Spike Sample	Spike Duplicate Sample
File ID :	B9011.D	B9012.D
Sample :	46360MS.....	Converted from RTE data file >B9011::D5

Compound	Sample Conc	Spike Added	Spike Res	Dup Res	Spike %Rec	Dup %Rec	RPD	QC Limits RPD	QC Limits % Rec
N-nitrosodimethylami	0.3	100	42	50	41	49	18	100	1-300
Phenol	0.6	100	59	59	59	59	0	23	5-112
bis(2-Chloroethyl)et	0.0	100	57	51	57	51	11	55	12-158
2-Chlorophenol	0.0	100	57	53	57	53	8	29	23-134
1,3-Dichlorobenzene	0.0	100	45	43	45	43	3	42	1-172
1,4-Dichlorobenzene	0.0	100	47	45	47	45	5	32	20-124
1,2-Dichlorobenzene	0.0	100	47	45	47	45	5	31	32-129
bis(2-chloroisopropy	0.0	100	77	72	77	72	7	46	36-166
N-Nitroso-Di-n-propy	0.0	100	51	47	51	47	9	55	1-230
Hexachloroethane	0.0	100	44	41	44	41	7	25	40-113
Nitrobenzene	0.2	100	50	48	50	47	5	39	35-180
Isophorone	0.0	100	48	45	48	45	7	63	21-196
2-Nitrophenol	0.0	100	54	50	54	50	8	35	29-182
2,4-Dimethylphenol	0.0	100	75	84	75	84	11	26	32-119
bis(2-Chloroethoxy)m	0.0	100	56	51	56	51	8	35	33-184
2,4-Dichlorophenol	0.0	100	72	77	72	77	7	26	39-135
1,2,4-Trichlorobenze	0.0	100	49	46	49	46	7	28	44-142
Naphthalene	0.3	100	52	48	51	48	7	30	21-133
Hexachlorobutadiene	0.0	100	52	48	52	48	6	26	24-116
4-Chloro-3-methylphe	0.0	100	74	83	74	83	11	37	22-147
2-Chloronaphthalene	0.0	100	63	61	63	61	3	13	60-118
2,4,6-Trichloropheno	0.0	100	65	73	65	73	12	32	37-144
Dimethylphthalate	0.0	100	11	11	11	11	3	23	1-112
Acenaphthylene	0.0	100	62	63	62	63	2	40	33-145
2,6-Dinitrotoluene	0.0	100	96	99	96	99	3	30	50-158
Acenaphthene	0.0	100	73	74	73	74	1	28	47-145
2,4-Dinitrophenol	0.0	100	54	60	54	60	10	50	1-191
4-Nitrophenol	0.0	100	50	52	50	52	3	47	1-132
2,4-Dinitrotoluene	0.0	100	83	83	83	83	0	22	39-139
Diethylphthalate	0.0	100	20	20	20	20	1	27	1-114
Fluorene	0.0	100	80	83	80	83	4	21	59-121
4-Chlorophenyl-pheny	0.0	100	78	81	78	81	3	33	25-158
4,6-Dinitro-2-methyl	0.1	100	85	87	85	87	2	93	1-181
4-Bromophenyl-phenyl	0.0	100	93	89	93	89	4	23	53-127
Hexachlorobenzene	0.0	100	88	88	88	88	0	25	1-152
Pentachlorophenol	0.0	100	77	81	77	81	5	49	14-176
Phenanthrene	0.1	100	86	94	86	94	9	21	54-120
Anthracene	0.1	100	74	79	74	79	7	32	52-115
Di-n-butylphthalate	20.6	100	53	59	33	38	14	17	1-118
Fluoranthene	0.1	100	75	75	75	75	0	33	26-137
Pyrene	0.2	100	102	101	102	100	2	25	52-115
Butylbenzylphthalate	0.0	100	62	65	62	65	5	23	1-152
Benzo[a]anthracene	0.2	100	84	88	83	88	5	28	33-143

Chrysene	0.3	100	86	92	85	92	8	48	17-168
bis(2-Ethylhexyl)pht	0.0	100	89	101	89	101	12	41	8-158
Di-n-octylphthalate	0.2	100	74	87	74	86	16	31	4-146
Benzo[b]fluoranthene	0.0	100	71	89	71	89	23	39	24-159
Benzo[k]fluoranthene	0.0	100	71	77	71	77	7	32	11-162
Benzo[a]pyrene	0.0	100	83	88	83	88	7	39	17-163
Indeno[1,2,3-cd]pyre	0.0	100	81	94	81	94	15	45	1-171
Dibenz[a,h]anthracen	0.0	100	70	86	70	86	20	70	1-227
Benzo[g,h,i]perylene	0.0	100	72	86	72	86	17	59	1-219

BNACLP.M Wed Nov 22 14:47:04 1995 BNA

Quantitation Report

Data File : c:\hpchem\1\data2\b9011.d
Acq On : 27 Oct 95 4:04 pm
Sample : 46360MS.....
Misc :
Quant Time: Oct 31 15:39 1995

Converted from RTE d

Vial: 5
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed Oct 25 10:20:51 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.60	152	24328	40.00	ug/mL	-0.09
17) Naphthalene-d8	12.32	136	97435	40.00	ug/mL	-0.11
32) Acenaphthene-d10	17.64	164	56181	40.00	ug/mL	-0.09
50) Phenanthrene-d10	22.13	188	74786	40.00	ug/ml	-0.10
64) Chrysene-d12	30.18	240	35528	40.00	ug/mL	-0.10
73) Perylene-d12	34.14	264	16536	40.00	ug/mL	-0.10
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.07	112	40915	52.76	ug/mL	52.76%
3) Phenol-d5	8.10	99	81492	64.76	ug/mL	64.76%
18) Nitrobenzene-d5	10.29	82	71765	54.35	ug/mL	54.35%
36) 2-Fluorobiphenyl	15.81	172	99873	58.28	ug/mL	58.28%
54) 2,4,6-Tribromophenol	20.10	330	20403	86.16	ug/mL	86.16%
67) Terphenyl-d14	27.26	244	97283	110.24	ug/mL	110.24%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	2.10	74	22456	41.61	ug/ml	100
6) Phenol	8.12	94	70099	59.38	ug/mL	100
7) bis(2-Chloroethyl)ether	12.03	93	82048	56.86	ug/mL	100
8) 2-Chlorophenol	8.06	128	46342	57.17	ug/mL#	83
9) 1,3-Dichlorobenzene	8.39	146	37275	44.83	ug/mL	99
10) 1,4-Dichlorobenzene	8.66	146	39314	46.72	ug/mL	97
11) 1,2-Dichlorobenzene	9.04	146	38547	47.04	ug/mL#	96
12) 2-Methylphenol	9.29	108	5196	6.68	ug/mL	53
13) bis(2-chloroisopropyl)ethe	9.72	45	104911	77.20	ug/mL	98
15) N-Nitroso-Di-n-propylamine	10.12	70	47254	50.85	ug/mL	98
16) Hexachloroethane	9.99	117	23206	43.95	ug/mL#	67
19) Nitrobenzene	10.35	77	62972	49.80	ug/mL#	86
20) Isophorone	11.18	82	128772	48.00	ug/mL#	93
21) 2-Nitrophenol	11.30	139	31651	54.31	ug/mL#	92
22) 2,4-Dimethylphenol	14.60	107	70299	74.63	ug/mLm	100
23) bis(2-Chloroethoxy)methane	12.03	93	82048	55.86	ug/mL#	100
24) 2,4-Dichlorophenol	12.18	162	51706	71.87	ug/mL#	90
25) 1,2,4-Trichlorobenzene	12.22	180	36372	49.07	ug/mL	95
26) Naphthalene	12.40	128	126554	51.78	ug/mL	98
27) 4-Chloroaniline	12.40	127	15664	13.67	ug/mL#	13
28) Hexachlorobutadiene	12.90	225	20087	51.69	ug/mL	98
29) 4-Chloro-3-methylphenol	14.60	107	70394	74.44	ug/mL	90
30) 2-Chloronaphthalene	15.97	162	96889	62.71	ug/mlm	100
31) 2-Methylnaphthalene	14.60	142	50713	23.94	ug/mL#	16
34) 2,4,6-Trichlorophenol	15.56	196	38970	65.14	ug/mL	97
35) 2,4,5-Trichlorophenol	15.56	196	38970	79.89	ug/mL	97
37) 2-Nitroaniline	18.53	65	4756	4.33	ug/mL#	38
38) Dimethylphthalate	17.26	163	21170	11.02	ug/mL#	13

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

Quantitation Report

Data File : c:\hpchem\1\data2\b9011.d Vial: 5
Acq On : 27 Oct 95 4:04 pm Operator: SCOTTV
Sample : 46360MS..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Oct 31 15:39 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed Oct 25 10:20:51 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
39)	Acenaphthylene	17.18	152	156148	61.73	ug/mL	97
40)	2,6-Dinitrotoluene	17.35	165	41277	95.56	ug/mL#	79
41)	3-Nitroaniline	19.34	138	1557	3.24	ug/mL#	19
42)	Acenaphthene	17.74	153	105172	73.42	ug/mL	98
43)	2,4-Dinitrophenol	18.11	184	15991	54.29	ug/mL#	85
44)	4-Nitrophenol	18.86	109	16078	50.23	ug/mL#	61
46)	2,4-Dinitrotoluene	18.53	165	52578	82.74	ug/mL#	1
47)	Diethylphthalate	19.46	149	43228	19.78	ug/mL	97
48)	Fluorene	19.34	166	131556	80.24	ug/mL	98
49)	4-Chlorophenyl-phenylether	19.54	204	55916	78.26	ug/mL#	84
51)	4-Nitroaniline	19.34	138	1557	3.62	ug/mL#	19
52)	4,6-Dinitro-2-methylphenol	19.73	198	23619	85.19	ug/mL	100
53)	n-Nitrosodiphenylamine	19.94	169	71016	70.01	ug/mL	96
55)	1,2-Diphenylhydrazine (as	19.54	77	69196	20.74	ug/ml	100
56)	4-Bromophenyl-phenylether	20.99	248	32480	92.88	ug/mL#	88
57)	Hexachlorobenzene	20.95	284	38892	87.66	ug/mL#	39
58)	Pentachlorophenol	21.70	266	23340	76.81	ug/mL	99
59)	Phenanthrene	22.20	178	174965	86.09	ug/mL	99
60)	Anthracene	22.36	178	148000	74.15	ug/mLm	99
62)	Di-n-butylphthalate	24.54	149	201030	53.46	ug/mL	99
63)	Fluoranthene	25.81	202	152814	74.83	ug/mL#	53
65)	Benzidine	22.13	184	11493	47.31	ug/ml	100
66)	Pyrene	26.43	202	145327	102.25	ug/mL#	70
68)	Butylbenzylphthalate	29.04	149	68443	61.89	ug/mL#	15
69)	Benzo[a]anthracene	30.17	228	106111	83.59	ug/mL	99
70)	3,3'-Dichlorobenzidine	30.32	252	3672	10.71	ug/mL#	93
71)	Chrysene	30.26	228	65164	85.64	ug/mLm	99
72)	bis(2-Ethylhexyl)phthalate	31.04	149	141688	89.39	ug/mL#	37
74)	Di-n-octylphthalate	32.95	149	174136	74.01	ug/mL#	100
75)	Benzo[b]fluoranthene	33.20	252	56999	70.62	ug/mL#	89
76)	Benzo[k]fluoranthene	33.28	252	34292	71.37	ug/mLm	89
77)	Benzo[a]pyrene	34.01	252	36949	82.66	ug/mLm	89
78)	Indeno[1,2,3-cd]pyrene	36.69	276	18775	80.91	ug/mL#	25
79)	Dibenz[a,h]anthracene	36.81	278	15952	70.33	ug/mL#	75
80)	Benzo[g,h,i]perylene	37.21	276	15258	72.43	ug/mLm	60

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

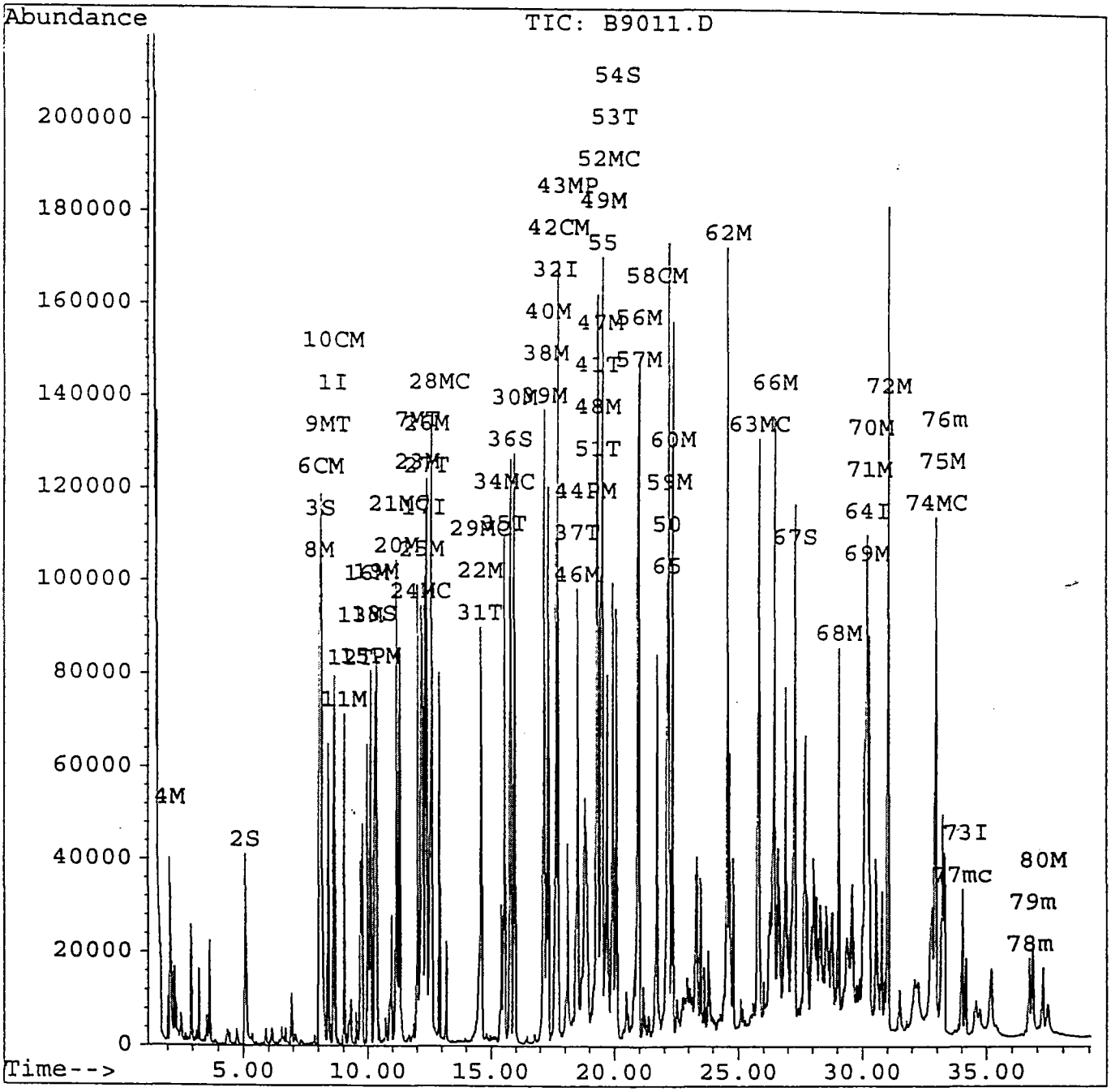
Quantitation Report

Data File : c:\hpchem\1\data2\b9011.d
Acq On : 27 Oct 95 4:04 pm
Sample : 46360MS.....
Misc :
Quant Time: Oct 31 15:39 1995

Converted from RTE d

Vial: 5
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed Oct 25 10:20:51 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : c:\hpchem\1\data2\b9012.d
Acq On : 27 Oct 95 4:56 pm
Sample : 46360MSD.....
Misc :
Quant Time: Oct 31 15:38 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 : Wed Oct 25 10:20:51 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.60	152	25002	40.00	ug/mL	-0.09
17) Naphthalene-d8	12.34	136	97241	40.00	ug/mL	-0.09
32) Acenaphthene-d10	17.64	164	55587	40.00	ug/mL	-0.09
50) Phenanthrene-d10	22.13	188	77102	40.00	ug/ml	-0.10
64) Chrysene-d12	30.19	240	28509	40.00	ug/mL	-0.10
73) Perylene-d12	34.15	264	10719	40.00	ug/mL	-0.09
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.07	112	41071	51.53	ug/mL	51.53%
3) Phenol-d5	8.10	99	86409	66.82	ug/mL	66.82%
18) Nitrobenzene-d5	10.29	82	67083	50.90	ug/mL	50.90%
36) 2-Fluorobiphenyl	15.81	172	95217	56.16	ug/mL	56.16%
54) 2,4,6-Tribromophenol	20.10	330	21999	90.11	ug/mL	90.11%
67) Terphenyl-d14	27.29	244	85795	121.15	ug/mL	121.15%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	2.10	74	27505	49.59	ug/ml	100
6) Phenol	8.13	94	71763	59.15	ug/mL	100
7) bis(2-Chloroethyl)ether	12.03	93	75257	50.75	ug/mL	97
8) 2-Chlorophenol	8.06	128	44078	52.91	ug/mL#	84
9) 1,3-Dichlorobenzene	8.39	146	37044	43.35	ug/mL	96
10) 1,4-Dichlorobenzene	8.66	146	38620	44.66	ug/mL	97
11) 1,2-Dichlorobenzene	9.04	146	37641	44.70	ug/mL	97
12) 2-Methylphenol	9.29	108	5280	6.60	ug/mL	56
13) bis(2-chloroisopropyl)ethe	9.72	45	100159	71.72	ug/mL	100
15) N-Nitroso-Di-n-propylamine	10.12	70	44456	46.55	ug/mL#	97
16) Hexachloroethane	9.99	117	22213	40.93	ug/mL#	69
19) Nitrobenzene	10.35	77	59971	47.52	ug/mL	88
20) Isophorone	11.18	82	119927	44.79	ug/mL#	92
21) 2-Nitrophenol	11.30	139	29087	50.01	ug/mL#	93
22) 2,4-Dimethylphenol	14.61	107	78542	83.54	ug/mLm	100
23) bis(2-Chloroethoxy)methane	12.03	93	75257	51.34	ug/mL#	100
24) 2,4-Dichlorophenol	12.18	162	55427	77.20	ug/mL#	92
25) 1,2,4-Trichlorobenzene	12.22	180	33976	45.93	ug/mL	94
26) Naphthalene	12.40	128	117900	48.34	ug/mL	99
27) 4-Chloroaniline	12.40	127	14859	12.99	ug/mL#	9
28) Hexachlorobutadiene	12.90	225	18787	48.44	ug/mL	98
29) 4-Chloro-3-methylphenol	14.61	107	78226	82.88	ug/mL	88
30) 2-Chloronaphthalene	15.96	162	94046	60.99	ug/mlm	100
31) 2-Methylnaphthalene	14.61	142	56412	26.68	ug/mL#	16
34) 2,4,6-Trichlorophenol	15.58	196	43455	73.41	ug/mL	96
35) 2,4,5-Trichlorophenol	15.58	196	43455	90.04	ug/mL	96
37) 2-Nitroaniline	18.53	65	5027	4.62	ug/mL#	36
38) Dimethylphthalate	17.26	163	21488	11.30	ug/mL#	14

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

Quantitation Report

Data File : c:\hpchem\1\data2\b9012.d
Acq On : 27 Oct 95 4:56 pm
Sample : 46360MSD..... Converted from RTE d
Misc :
Quant Time: Oct 31 15:38 1995

Vial: 6
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed Oct 25 10:20:51 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
39)	Acenaphthylene	17.18	152	157682	63.01	ug/mL	98
40)	2,6-Dinitrotoluene	17.35	165	42117	98.54	ug/mL#	93
41)	3-Nitroaniline	19.34	138	1555	3.27	ug/mL#	19
42)	Acenaphthene	17.74	153	104941	74.04	ug/mL	98
43)	2,4-Dinitrophenol	18.13	184	17570	60.29	ug/mL#	82
44)	4-Nitrophenol	18.96	109	16471	52.01	ug/mL#	60
46)	2,4-Dinitrotoluene	18.53	165	52140	82.92	ug/mL#	1
47)	Diethylphthalate	19.48	149	43087	19.93	ug/mL#	93
48)	Fluorene	19.34	166	134877	83.15	ug/mL	99
49)	4-Chlorophenyl-phenylether	19.54	204	56911	80.50	ug/mL#	86
51)	4-Nitroaniline	19.34	138	1555	3.50	ug/mL#	19
52)	4,6-Dinitro-2-methylphenol	19.73	198	24840	86.90	ug/mL	100
53)	n-Nitrosodiphenylamine	19.96	169	73730	70.51	ug/mL	94
55)	1,2-Diphenylhydrazine (as	19.54	77	71856	20.89	ug/ml	100
56)	4-Bromophenyl-phenylether	20.99	248	32240	89.43	ug/mL#	90
57)	Hexachlorobenzene	20.95	284	40163	87.81	ug/mL#	46
58)	Pentachlorophenol	21.72	266	25232	80.54	ug/mL	99
59)	Phenanthrene	22.20	178	196854	93.95	ug/mL	99
60)	Anthracene	22.36	178	162894	79.16	ug/mLm	99
62)	Di-n-butylphthalate	24.56	149	227050	58.57	ug/mLm	98
63)	Fluoranthene	25.82	202	157448	74.79	ug/mL#	68
65)	Benzidine	22.13	184	12053	61.83	ug/ml	100
66)	Pyrene	26.44	202	114720	100.58	ug/mLm	73
68)	Butylbenzylphthalate	29.07	149	57991	65.35	ug/mLm	1
69)	Benzo[a]anthracene	30.17	228	89943	88.30	ug/mL	98
70)	3,3'-Dichlorobenzidine	30.33	252	3072	11.16	ug/mL#	89
71)	Chrysene	30.27	228	56444	92.44	ug/mLm	98
72)	bis(2-Ethylhexyl)phthalate	31.04	149	127927	100.58	ug/mL#	36
74)	Di-n-octylphthalate	32.93	149	132028	86.56	ug/mL#	100
75)	Benzo[b]fluoranthene	33.20	252	46610	89.08	ug/mL#	86
76)	Benzo[k]fluoranthene	33.28	252	23877	76.66	ug/mLm	86
77)	Benzo[a]pyrene	34.02	252	25611	88.39	ug/mLm	86
78)	Indeno[1,2,3-cd]pyrene	36.70	276	14190	94.34	ug/mL#	28
79)	Dibenz[a,h]anthracene	36.81	278	12632	85.92	ug/mL#	72
80)	Benzo[g,h,i]perylene	37.22	276	11729	85.89	ug/mLm	61

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Vial: 6
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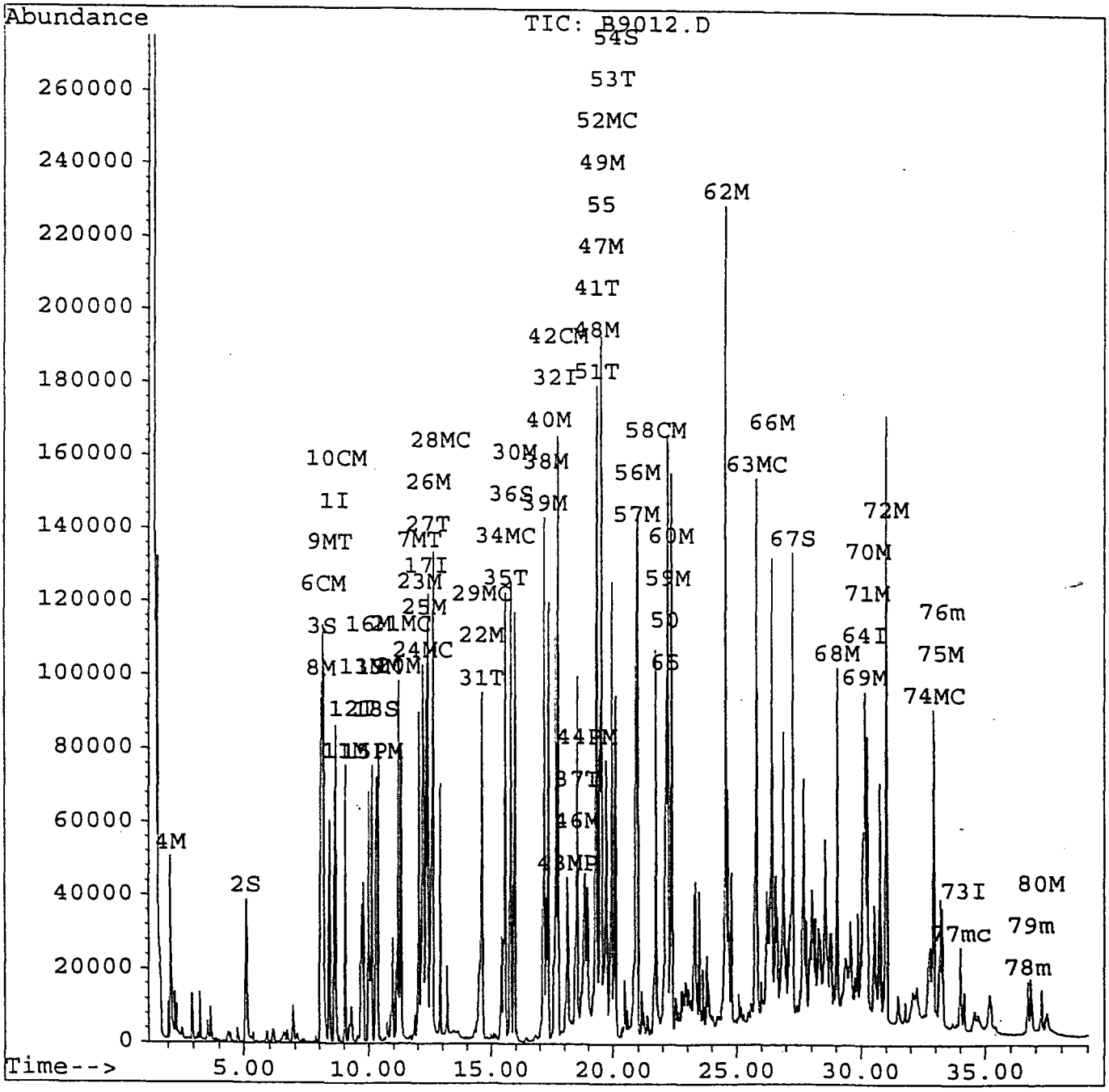

New Jersey Department of Environmental Protection
Division of Water Resources
Bureau of Underground Storage Tanks
CN-029, Trenton, New Jersey 08625

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 Craig

Laboratory Manager (as defined in N.J.A.C. 7:18)

Bldg 2018 MW Anal
12/18/95 001

EMSL ANALYTICAL, INC.

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Seattle, WA 98134
(206) 233-9007

ANALYTICAL DATA REPORT
FOR
E-SYSTEMS
P.O. Box 360
Fort Monmouth, NJ 07703

PROJECT : **MW Sampling, Bldg. 2018**

EMSL Project: # 95129583

Field Sample No. & Location	Laboratory Sample ID	Matrix	Date & Time of Collection	Date Received
2003.1 MW1, 2933763	**95-58315**	**Aqueous**	**12/18/95 @ 1152**	**12/18/95**
2002.2, Trip Blank	**95-58312**	**Aqueous**	**12/18/95 @ 0700**	**12/18/95**
2002.3, Field Blank	**95-58313**	**Aqueous**	**12/18/95 @ 1450**	**12/18/95**

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 — 1-23-96

EMSL

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. Initial Calibration Data	
. Continuing Calibration DFTPP Tune	
. Continuing Calibration Data	
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. Sample Results	
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. Method Blank Data	
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SAMPLE DATA SUMMARY PACKAGE

EMSL

Date of Report: 01/16/96
Project Number: 95129583
Lab ID: 95-0058315
Date Collected: 12/18/95 11:52
Collected By: Client
Date Received: 12/18/95 16:00

ttention: Barbara O'Toole
E-Systems
P.O. Box 360
Fort Monmouth NJ 07703

Client Project: MW Sampling Bldg.2018

lient Designation: MW1-2933763

	Conc.	Unit
ORGANIC		
Semi-Volatiles		
BN by 625 with Library Search	see attached	ug/l
Volatiles		
Volatiles by 524.2 w/ Library Search	see attached	ug/l
Xylenes	see attached	ug/l

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

2003.1
9558315B
29337763

005

Lab Name: EMSL ANALYTICAL Contract:

Project No.: Site: Location: mw 1 Group: Bldg 2018

Matrix: (soil/water) WATER Lab Sample ID: 9558315B

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B9481.D

Level: (low/med) Date Received:

% Moisture: decanted: (Y/N): N Date Extracted: 12/23/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 12/26/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
62-75-9	N-nitrosodimethylamine	2	U
111-44-4	bis(2-Chloroethyl)ether	1	U
541-73-1	1,3-Dichlorobenzene	2	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	2	U
108-60-1	bis(2-chloroisopropyl)ether	5	U
621-64-7	N-Nitroso-Di-n-propylamine	2	U
67-72-1	Hexachloroethane	1	U
98-95-3	Nitrobenzene	2	U
78-59-1	Isophorone	1	U
111-91-1	bis(2-Chloroethoxy)methane	3	U
120-82-1	1,2,4-Trichlorobenzene	2	U
91-20-3	Naphthalene	2	U
87-68-3	Hexachlorobutadiene	2	U
77-47-4	Hexachlorocyclopentadiene	12	U
91-58-7	2-Chloronaphthalene	1	U
131-11-3	Dimethylphthalate	1	U
208-96-8	Acenaphthylene	5	U
606-20-2	2,6-Dinitrotoluene	2	U
83-32-9	Acenaphthene	3	U
121-14-2	2,4-Dinitrotoluene	3	U
84-66-2	Diethylphthalate	1	U
86-73-7	Fluorene	3	U
7005-72-3	4-Chlorophenyl-phenylether	3	U
86-30-6	n-Nitrosodiphenylamine	6	U
122-66-7	1,2-Diphenylhydrazine(as azo)	6	U
101-55-3	4-Bromophenyl-phenylether	2	U
118-74-1	Hexachlorobenzene	2	U
85-01-08	Phenanthrene	2	U
120-12-7	Anthracene	2	U
84-74-2	Di-n-butylphthalate	16	
206-44-0	Fluoranthene	1	U
92-87-5	Benzidine	1	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

2003.1
9558315B
29337G3

000

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: MW01 Group: Bldg 2018

Matrix: (soil/water) WATER Lab Sample ID: 9558315B

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B9481.D

Level: (low/med) _____ Date Received: _____

% Moisture: _____ decanted: (Y/N): N Date Extracted: 12/23/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 12/26/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

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

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
129-00-0	Pyrene	2	U
85-68-7	Butylbenzylphthalate	9	U
56-55-3	Benzo[a]anthracene	2	U
91-94-1	3,3'-Dichlorobenzidine	15	U
218-01-9	Chrysene	2	U
117-81-7	bis(2-Ethylhexyl)phthalate	4	U
117-84-0	Di-n-octylphthalate	2	U
205-99-2	Benzo[b]fluoranthene	1	U
207-08-9	Benzo[k]fluoranthene	2	U
50-32-8	Benzo[a]pyrene	2	U
193-39-5	Indeno[1,2,3-cd]pyrene	2	U
53-70-3	Dibenz[a,h]anthracene	3	U
191-24-2	Benzo[g,h,i]perylene	2	U

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO. 007
2003.1
9558315B
2933763

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: Mw 1 Group: Bldg 2018

Matrix: (soil/water) WATER Lab Sample ID: 9558315B

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: B9481.D

Level: (low/med) _____ Date Received: _____

% Moisture: _____ decanted: (Y/N) N Date Extracted: 12/23/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 12/26/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

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

Number TICs found: 0 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc	Q
1.	NONE FOUND			
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 2003:1 29337163

006

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: 2018 NJDEP MW#: 1

Bldg 2018

Matrix: (soil/water) WATER Lab Sample ID: 9558315V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0888.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. NA Date Analyzed: 1/4/96

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	.50	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	31	
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# 2003.1 29337763 009

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: 2018 NJDEP MW#: 1 Bldg 2018

Matrix: (soil/water) WATER Lab Sample ID: 9558315V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0888.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. NA Date Analyzed: 1/4/96

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	2.7	
87-61-6	1,2,3-Trichlorobenzene	.50	U
1634-04-4	Methy-tertiary butyl ether	.50	U
75-65-0	tertiary-Butyl alcohol	2.0	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FMETL# 2003.1 2933763 010

Bldg 2018

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No. FT. MONMOUTH NJ BLDG#: 2018 NJDEP MW#: 1

Matrix: (soil/water) WATER Lab Sample ID: 9558315V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0888.D

Level: (low/med) LOW Date Received: NA

% Moisture: not dec. NA Date Analyzed: 1/4/96

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

CAS Number	Compound Name	RT	Est. Conc.	Q
1. 526-73-8	Benzene, 1,2,3-trimethyl-	21.55	1	J
2.	Column Bleed	23.01	2	J
3. 99-87-6	Benzene, 1-methyl-4-(1-methy	24.37	1	J
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EMSL

Date of Report: 01/16/96
Project Number: 95129581
Lab ID: 95-0058312
Date Collected: 12/18/95 07:00
Collected By: Client
Date Received: 12/18/95 16:00

Attention: Barbara O'Toole
E-Systems
P.O. Box 360
Fort Monmouth NJ 07703

Client Project: MW Sampling Bldg 290

Client Designation: Trip Blank

	Conc.	Unit
ORGANIC		
Volatiles		
Volatiles by 524.2 w/ Library Search	see attached	ug/l
Xylenes	see attached	ug/l

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 012

Trip Blank

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: NJDEP MW#: TB

Matrix: (soil/water) WATER Lab Sample ID: 9558312V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0783.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. NA Date Analyzed: 12/29/96

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 1.0

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	.50	U
74-87-3	Chloromethane	.50	U
75-01-4	Vinyl chloride	.50	U
74-83-9	Bromomethane	.50	U
75-00-3	Chloroethane	.50	U
75-69-4	Trichlorofluoromethane	.50	U
75-35-4	1,1-Dichloroethene	.50	U
75-09-2	Methylene chloride	1.4	B
156-60-65	trans-1,2-Dichloroethene	.50	U
75-34-3	1,1-Dichloroethane	.50	U
594-20-7	2,2-Dichloropropane	.50	U
156-59-2	cis-1,2-Dichloroethene	.50	U
74-97-1	Bromochloromethane	.50	U
67-66-3	Chloroform	.50	U
71-55-6	1,1,1-Trichloroethane	.50	U
56-23-1	Carbon tetrachloride	.50	U
563-58-6	1,1-Dichloropropene	.50	U
71-43-2	Benzene	.50	U
107-06-2	1,2-Dichloroethane	.50	U
79-01-6	Trichloroethene	.50	U
78-87-1	1,2-Dichloropropane	.50	U
74-95-3	Dibromomethane	.50	U
75-27-4	Bromodichloromethane	.50	U
10061-01-1	cis-1,3-Dichloropropene	.50	U
108-88-3	Toluene	.50	U
10061-02-6	trans-1,3-Dichloropropene	.50	U
79-00-1	1,1,2-Trichloroethane	.50	U
127-18-4	Tetrachloroethene	.50	U
142-28-9	1,3-Dichloropropane	.50	U
124-48-1	Dibromochloromethane	.50	U
106-93-4	1,2-Dibromomethane	.50	U
108-90-7	Chlorobenzene	.50	U
630-20-6	1,1,1,2-Tetrachloroethane	.50	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 013

Trip Blank

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: 290 NJDEP MW#: TB

Matrix: (soil/water) WATER Lab Sample ID: 9558312V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0783.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. NA Date Analyzed: 12/29/96

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
100-41-4	Ethylbenzene	.50	U
1330-29-7	Xylene (total)	.50	U
100-42-1	Styrene	.50	U
75-25-2	Bromoform	.50	U
98-82-8	Isopropylbenzene	.50	U
108-86-1	Bromobenzene	.50	U
79-34-1	1,1,2,2-Tetrachloroethane	.50	U
96-18-4	1,2,3-Trichloropropane	.50	U
103-65-1	n-Propylbenzene	.50	U
95-49-8	2-Chlorotoluene	.50	U
106-43-4	4-Chlorotoluene	.50	U
108-67-8	1,3,5-Trimethylbenzene	.50	U
98-06-6	tert-Butylbenzene	.50	U
95-63-6	1,2,4-Trimethylbenzene	.50	U
135-98-8	sec-Butylbenzene	.50	U
541-73-1	1,3-Dichlorobenzene	.50	U
99-87-6	4-Isopropyltoluene	.50	U
106-46-7	1,4-Dichlorobenzene	.50	U
95-50-1	1,2-Dichlorobenzene	.50	U
104-51-8	n-Butylbenzene	.50	U
96-12-8	1,2-Dibromo-3-chloropropane	.50	U
120-82-1	1,2,4-Trichlorobenzene	.50	U
87-68-3	Hexachlorobutadiene	.50	U
91-20-3	Naphthalene	.50	U
87-61-6	1,2,3-Trichlorobenzene	.50	U
1634-04-4	Methy-tertiary butyl ether	.50	U
75-65-0	tertiary-Butyl alcohol	2.0	U

1E

FMETL# 014

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No. FT. MONMOUTH NJ Bldg#: _____ NJDEP MW#: TB

Matrix: (soil/water) WATER Lab Sample ID: 9558312V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0783.D

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. NA Date Analyzed: 12/29/95

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

CAS Number	Compound Name	RT	Est. Conc.	Q
1. 109-99-9	Furan, tetrahydro-	10.61	2	J
2.	Column Bleed	19:62	2	J
3.	Column Bleed	23.00	1	J
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EMSL

Date of Report: 01/17/96
Project Number: 95129581
Lab ID: 95-0058313
Date Collected: 12/18/95 14:50
Colledted By: Client
Date Received: 12/18/95 16:00

Attention: Barbara O'Toole
E-Systems
P.O. Box 360
Fort Monmouth NJ 07703

Client Project: MW Sampling Bldg. 290

Client Designation: Field Blank

	Conc.	Unit
ORGANIC		
Semi-Volatiles		
TCL BNA's with Library Search	see attached	ug/l
Volatiles		
Volatiles by 524.2 w/Library Search	see attached	ug/l
Xylenes	see attached	ug/l

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO. 016

9558313B
Field Blank

Lab Name: EMSL ANALYTICAL Contract: _____

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

Matrix: (soil/water) WATER Lab Sample ID: 9558313B

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B9479.D

Level: (low/med) _____ Date Received: _____

% Moisture: _____ decanted: (Y/N): N Date Extracted: 12/23/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 12/26/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

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

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
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.

9558313B
Field Blank

Lab Name: EMSL ANALYTICAL Contract: _____

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

Matrix: (soil/water) WATER Lab Sample ID: 9558313B

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B9479.D

Level: (low/med) _____ Date Received: _____

% Moisture: _____ decanted: (Y/N): N Date Extracted: 12/23/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 12/26/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

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

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
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.
9558313B
Field Blank

Lab Name: EMSL ANALYTICAL Contract: _____

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

Matrix: (soil/water) WATER Lab Sample ID: 9558313B

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: B9479.D

Level: (low/med) _____ Date Received: _____

% Moisture: _____ decanted: (Y/N) N Date Extracted: 12/23/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 12/26/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

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

Number TICs found: 1 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc	Q
1.	Unknown Hydrocarbon	27.84	6	J
2.				
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VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL#

Field Blank

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: NJDEP MW#: FB

Matrix: (soil/water) WATER Lab Sample ID: 9558313V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0784.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. NA Date Analyzed: 12/29/96

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 1.0

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	.50	U
74-87-3	Chloromethane	.50	U
75-01-4	Vinyl chloride	.50	U
74-83-9	Bromomethane	.50	U
75-00-3	Chloroethane	.50	U
75-69-4	Trichlorofluoromethane	.50	U
75-35-4	1,1-Dichloroethene	.50	U
75-09-2	Methylene chloride	1.4	B
156-60-65	trans-1,2-Dichloroethene	.50	U
75-34-3	1,1-Dichloroethane	.50	U
594-20-7	2,2-Dichloropropane	.50	U
156-59-2	cis-1,2-Dichloroethene	.50	U
74-97-1	Bromochloromethane	.50	U
67-66-3	Chloroform	.50	U
71-55-6	1,1,1-Trichloroethane	.50	U
56-23-1	Carbon tetrachloride	.50	U
563-58-6	1,1-Dichloropropene	.50	U
71-43-2	Benzene	.50	U
107-06-2	1,2-Dichloroethane	.50	U
79-01-6	Trichloroethene	.50	U
78-87-1	1,2-Dichloropropane	.50	U
74-95-3	Dibromomethane	.50	U
75-27-4	Bromodichloromethane	.50	U
10061-01-1	cis-1,3-Dichloropropene	.50	U
108-88-3	Toluene	.50	U
10061-02-6	trans-1,3-Dichloropropene	.50	U
79-00-1	1,1,2-Trichloroethane	.50	U
127-18-4	Tetrachloroethene	.50	U
142-28-9	1,3-Dichloropropane	.50	U
124-48-1	Dibromochloromethane	.50	U
106-93-4	1,2-Dibromomethane	.50	U
108-90-7	Chlorobenzene	.50	U
630-20-6	1,1,1,2-Tetrachloroethane	.50	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 020

Field Blank

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: 290 NJDEP MW#: FB

Matrix: (soil/water) WATER Lab Sample ID: 9558313V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0784.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. NA Date Analyzed: 12/29/96

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 1.0

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
100-41-4	Ethylbenzene	.50	U
1330-29-7	Xylene (total)	.50	U
100-42-1	Styrene	.50	U
75-25-2	Bromoform	.50	U
98-82-8	Isopropylbenzene	.50	U
108-86-1	Bromobenzene	.50	U
79-34-1	1,1,2,2-Tetrachloroethane	.50	U
96-18-4	1,2,3-Trichloropropane	.50	U
103-65-1	n-Propylbenzene	.50	U
95-49-8	2-Chlorotoluene	.50	U
106-43-4	4-Chlorotoluene	.50	U
108-67-8	1,3,5-Trimethylbenzene	.50	U
98-06-6	tert-Butylbenzene	.50	U
95-63-6	1,2,4-Trimethylbenzene	.50	U
135-98-8	sec-Butylbenzene	.50	U
541-73-1	1,3-Dichlorobenzene	.50	U
99-87-6	4-Isopropyltoluene	.50	U
106-46-7	1,4-Dichlorobenzene	.50	U
95-50-1	1,2-Dichlorobenzene	.50	U
104-51-8	n-Butylbenzene	.50	U
96-12-8	1,2-Dibromo-3-chloropropane	.50	U
120-82-1	1,2,4-Trichlorobenzene	.50	U
87-68-3	Hexachlorobutadiene	.50	U
91-20-3	Naphthalene	.50	U
87-61-6	1,2,3-Trichlorobenzene	.50	U
1634-04-4	Methy-tertiary butyl ether	.50	U
75-65-0	tertiary-Butyl alcohol	2.0	U

1E

FMETL# 021

Field Blank

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No. FT. MONMOUTH NJ Bldg#: _____ NJDEP MW#: FB

Matrix: (soil/water) WATER Lab Sample ID: 9558313V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0784.D

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. NA Date Analyzed: 12/29/95

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. 109-99-9	Furan, tetrahydro-	10.60	2	J
2.	Column Bleed	19.61	1	J
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
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29.				
30.				

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 USEPA CLP.	X
12	Non-Conformance Summary	X

Paul Tarsi

Laboratory Manager or Environmental Consultant's Signature

1-23-96

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.
29-30	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.
31	11.	A list of all parameters (constituents and conditions) for which the analyses were performed.
3-21	12.	Sample results and corresponding units for each parameter.

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CHAIN OF CUSTODY

EMSL ANALYTICAL INC.
3 Cooper Street
Westmont, New Jersey 08108
609-858-9573
609-858-4571 (Fax)

Chain of Custody / Analysis Request Form

EMSL Project # 95129583
PO # IJO#95-0091/SAI

Custody and Sample Information - Print ALL information. Put N/A in blanks not applicable. Press firmly.

1. Report to:	2. Bill to:	Project: Bldg 2018
US ARMY FT.MONMOUTH Charles Appleby SELFM-PW-EV Env.Lab.Cert#13461		MW SAMPLING Tel #: 908-532-6224 FAX #:

3. Sampled by (Signature)	4. # of Samples in Shipment	5. Date of Sample Shipment	6. Date Results Needed
Baxter/Palilonis			

Item No.	Sample Number	Station Location / Sample ID	COMP	GRAB	Matrix: WATER	SOIL	AIR	SLUDGE	OTHER	Method Preserved: HCl	HNO_3	H_2SO_4	ICE	NONE	OTHER	Sampling: Date	Time	Number of Containers	Indicate Analysis Requested: VOA 524.2 +Lib	Cl or. Xylenes	BN 625 + 15	Laboratory Number
1	2003.1	MW1-2933763		X	X					X				X		12/18	1152		X	X		58315
2	2002.2	TB		X	X					X						↓	700		X			58312
3	.3	FB		X	X					X				X		↓	1450		X	X		58313
4																						
5																						
6																						
7																						
8																						
9																						

Released by (Signature)	Date/Time Released	Delivery Method	Received by (Signature)	Company/Agency Affiliation	Date/Time Received	Condition Noted
[signature]	12/18/95 / 1600		[signature]	EMSL	12-18-95 / 1600	
	/				/	
	/				/	

Please indicate turnaround time: (standard) 10D 5D 72HR 48HR 24HR (Must call for quick turn)

Comments: Page 1 of 1
* A drawing depicting sample location on reverse side. NA

Please indicate reporting requirements:
1) Results only 2) Results & QC 3) Reduced Deliverables

C30

EMSL ANALYTICAL, INC.

INTERNAL CHAIN OF CUSTODY

EMSL LAB ID NO. 58315 PROJECT NO. 95129583

SAMPLE/CONTAINERS

PARAMETERS

B/N

DATE	TIME	ANALYSIS	NAME (PRINT)	SIGNATURE
12/23/95		B/N extraction	Charles Bartolone	Charles Bartolone

INTERNAL CHAIN OF CUSTODY(ORGANICS)

SAMPLE No(S).	ANALYSIS	DATE ANALYZED	NAME (PRINT)	NAME (SIGNATURE)
9556580	VOA 8240	12/20/95	M. CIAMPI	
5617B	BNA625	12/21/95	S. VanBaten	
5657U-85	8021/8240	12/18, 12/19, 12/20	S. Kosola	
95 56 805-807	VOA + LS	12/15 - 12/26	M. CIAMPI	
95 56 784	VOA + LS	12/14 - 12/26	M. CIAMPI	
95 56785-88	VOA + NAPH + LS	12/14 - 12/26	M. CIAMPI	
95 58182	TCLP	12/22 - 12/26	M. CIAMPI	
95 58375	TCLP	12/22 - 12/26	M. CIAMPI	
95 57721	TCLP	12/22 - 12/26	M. CIAMPI	
95 57087-99	TCLP	12/21 - 12/26	M. CIAMPI	
9558350-51	BTEX 8240	12/22 - 12/26	M. CIAMPI	
9.558378-83	BTEX	12/22 - 12/26	M. CIAMPI	
95558366	BENZENE + QC	12/22 - 12/26	M. CIAMPI	
9557838	BENZENE + QC	12/22 - 12/26	M. CIAMPI	
9156789-96	VOA + LS	12/14 - ~~12/28~~ 12/29	M. CIAMPI	
9557835	VOA + AC/BC + 2CLVE + DCBS	12/26/95	M. CIAMPI	
9557836	VOA + AC/BC + 2CLVE + DCBS	12/26/95	M. CIAMPI	
9557564	VOA + AC/BC + 2CLVE + DCBS	12/20 - 12/26/95	M. CIAMPI	
9558188-91, 9596	BNA625+	12/26/95	S. VanBaten	
58311+13	TCLBNA+	11	S. VanBaten	
58314-7	BN625+	11	S. VanBaten	
9556808-812	VOA + MTBE + TBA + LS	12/14 - 12/28/95	M. CIAMPI	

120

INTERNAL CHAIN OF CUSTODY(ORGANICS)

MPLE No(S).	ANALYSIS	DATE ANALYZED	NAME (PRINT)	NAME (SIGNATURE)
59189-96	602 + MTBE	12/28/95	S. VanEtten	SV
[illegible]	TCL/HEAR	[illegible]	[illegible]	
[illegible]	"	[illegible]	[illegible]	
58920	"	1-4-96	S. VanEtten	SV
59346	BN625+	1-3-96	S. VanEtten	SV
96 00201	GASOLINE	01/04/96	M. CIAMPI	
9558432	VOA +LS +TICR	01/09/96	M. CIAMPI	
9558920	BTEX 8240	01/04/96	M. CIAMPI	
9558823	VOA +QC	~~12/29/95~~ 01/04/96	M. CIAMPI	
9558311-59346	5242	12/29/95/1/4/96	S. Kessler	
96-275	PAH	1-10-96	S. VanEtten	SV
59202/4	BNA625	1-10-96	S. VanEtten	SV
59223	BNA625	1-10-96	S. VanEtten	SV
96-271+4	TCL BNA	1-11-96	S. VanEtten	SV
96-465	" "	1-11-96	S. VanEtten	SV
95 58731, 32, 54	TCL VOA +TIC/TIC LS + SCOTT	12/29/95 - 01/05/96	M. CIAMPI	
9559334-339	VOA +LS +TICR	01/04/96	M. CIAMPI	
9558873-882	VOA +LS	12/26 - 12/28/95	M. CIAMPI	
9559168, 70	VOA	12/29/95 - 01/04/96	M. CIAMPI	
9559771-774	VOA +LS +TICR	01/09/96	M. CIAMPI	
96 00271, 274	TCL	01/11/96	M. CIAMPI	
483-507	BTEX/MTBE	1/11-12/96	S. VanEtten	SV

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATASHEET

1125

IJO#95-0091
BLDG.#: 2018 MW#: MW1 NJDEPE WELL ID # 29337G3
LABORATORY: EMSL Analytical Services, NJDEP CERT # 04653
SAMPLING CONTRACTOR: EMSL Analytical Services Inc.
SAMPLERS NAMES: Tom Baxter, Susan Palilonis

DATE: 12-13-95
WEATHER CONDITIONS: Cold

ELEVATION OF CASING SURVEY MARK: ____.____FT
TOTAL DEPTH FROM TOP OF SURVEYORS MARK: 15.76 FT
DEPTH FROM SURVEYORS MARK TO SCREEN: ____.____FT
LENGTH OF SCREENED SECTION: ____.____FT
DEPTH TO H2O PRIOR TO PURGING AND SAMPLING: 7.39 FT
ELEVATION OF GW PRIOR TO PURGING: ____.____FT
THICKNESS OF LNAPL PRIOR TO PURGING: 0.0 FT

PID/Hnu READING IMMEDIATELY AFTER CAP REMOVAL: 41 PPM None Detect.
DEPTH OF WELL: ____.____FT HEIGHT OF WATER: ____.____FT
GAL OF H2O TO BE EVACUATED (EST) 16 GAL
(8.37 X 0.65 X 3 = 16.32)
PURGE METHOD: (FLOW OF <0.5 GPM TO >5.0 GPM) Pump
PURGE RATE (0.5 GPM) : 2 GPM

PURGE START TIME: 1122
pH: 3.93 s.u. TEMP: 13.2 Deg.C
Dissolved Oxygen: 2.3 PPM Specific Conductivity: 5.01 us/cm

PURGE END TIME: 1142
pH: 3.91 s.u. TEMP: 13.9 Deg.C
Dissolved Oxygen: 2.0 PPM Specific Conductivity: 495 us/cm

DEPTH TO H2O AFTER PURGING AND BEFORE SAMPLING: 11.22 FT 1152
SAMPLING METHOD: DEDICATED, DECONTAMINATED (IAW NJDEP FSPM 1992) TEFLON (R) BAILER
TOTAL VOLUME PURGED : 16 GAL.
pH: 3.93 s.u. TEMP: 13.9 Deg.C
Dissolved Oxygen: 1.7 PPM Specific Conductivity: 502 us/cm

COMMENTS: _____

EMSL

METHODOLOGY SUMMARY

METHODOLOGY SUMMARY

EPA Method 524.2 - Aqueous

This is a purge and trap gas chromatograph/mass spectrometer (GC/MS) method. The organic compounds are separated by the gas chromatograph and detected using the mass spectrometer.

An HP5890/5970 GC/MS was used with a capiullary column (DB-624 0.53 mn ID).

Method detection limits are as stated.

Semivolatiles by GC/MS - Aqueous

EPA Method 625 - This is a gas chromatograph/mass spectrometer (GC/MS) method applicable to the determination of a number of organic compounds that are partitioned in an organic solvent and amenable to gas chromatography. Reference is Federal Register, Vol. 40, No. 136, July, 1988.

An HP5890/5970B GC/MS is used with a DB-5 fused silica capillary column.

If tentatively identified compounds are requested, a computer program analyzes the non-priority pollutant/HSL/TCL compounds with standard mass spectra found in the latest version of the NIH/NBS/EPA mass spectral library.

Method detection limits are as stated.

EMSL

LABORATORY CHRONICLE

Lab ID: **95-58315, 95-58312, 95-58313** Client: **E-Systems**

	I DATE	II	Hold Time
Date Sampled	**12/18/95**		
Receipt/Refrigeration	**12/18/95**		
Extractions			
1. Semivolatile Organics	**12/23/95**		**7 days**
Analyses			
1. Volatile Organics	**12/29/95 - 1/4/96**		**14 days**
2. Semivolatile Organics	**12/26/95**		**40 days**

QC Supervisor
Review & Approval

(Signature) Peter B. Panton
(Printed Name) Peter B. Panton
(Date) 01/23/96

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 0.80 - 0.90 ppb.**		
	b. B/N Fraction **46360 MS/MSD: Di-n-butylphthalate 5 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		
	b. B/N Fraction		
	c. Acid Fraction		
9.	Internal Standard Area/Retention Time Shift Meet Criteria **58311-58317 IS #6 outside QC limits.**	X	

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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 Young Date: 1-23-96

EMSL

GC/MS VOLATILE ORGANIC DATA PACKAGE

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: EMSL ANALYTICAL Contract: _____

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

Lab File ID: C0610.D BFB Injection Date: 12/18/95

Instrument ID: 5972-INSTRUMENT 1 BFB Injection Time: 1640

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	18.5
75	30.0 - 60.0% of mass 95	44.8
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 (0.0)1
174	Greater than 50.0% of mass 95	63.6
175	5.0 - 9.0% of mass 174	4.7 (7.4)1
176	95.0 - 101.0% of mass 174	62.9 (98.9)1
177	5.0 - 9.0% of mass 176	4.2 (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:

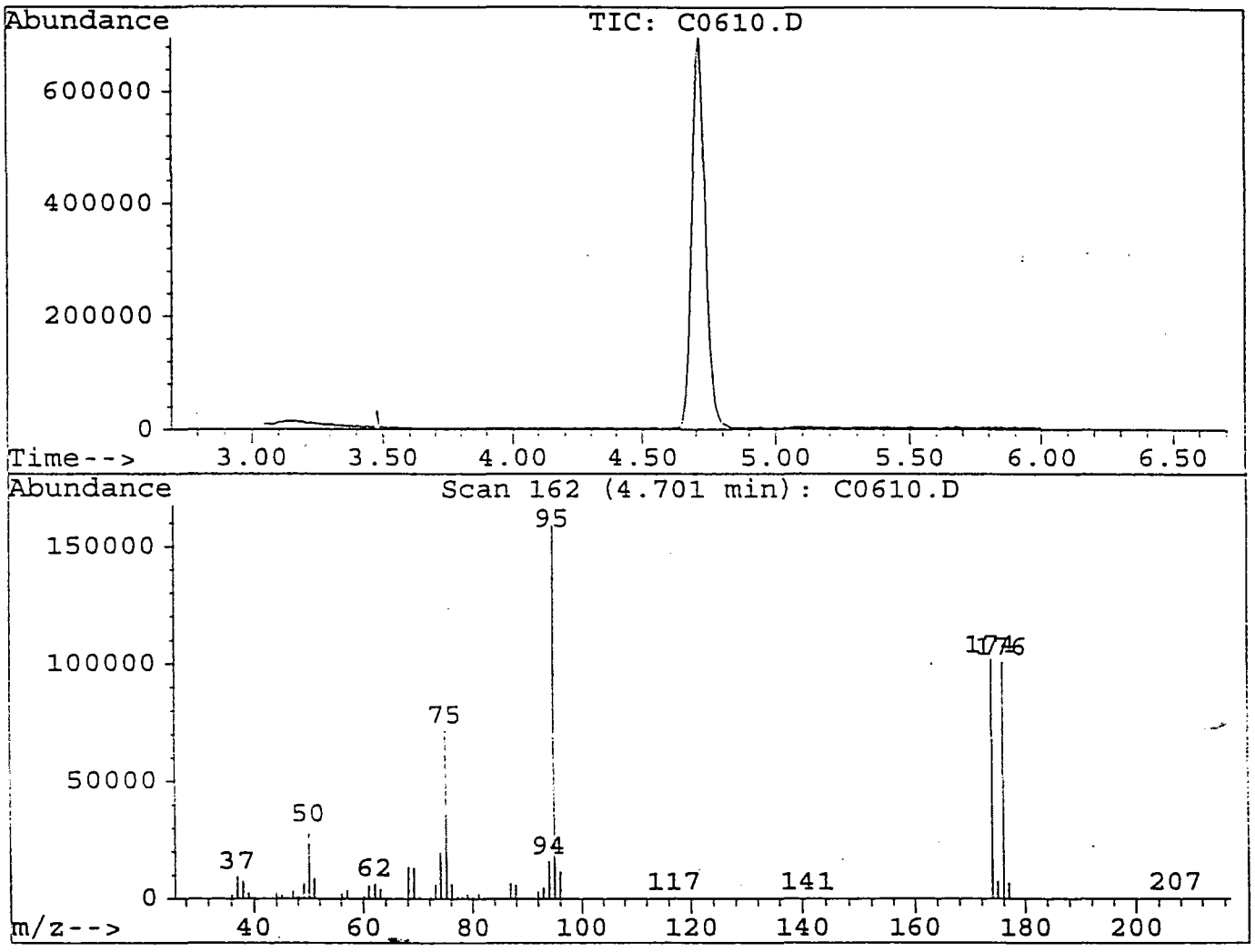
	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		0.5 PPB STANDARD	C0611.D	12/18/95	1653
02		10 PPB STANDARD	C0612.D	12/18/95	1727
03		20 PPB STANDARD	C0613.D	12/18/95	1801
04		30 PPB STANDARD	C0614.D	12/18/95	1836
05		40 PPB STANDARD	C0615.D	12/18/95	1910
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

CLPBFB

Data File : D:\HPCHEM\1\DATA\C0610.D
Acq On : 18 Dec 95 4:40 pm
Sample : BFB TUNE
Misc : 50 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: 162

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.5	29648	PASS
75	95	30	80	44.8	71608	PASS
95	95	100	100	100.0	159872	PASS
96	95	5	9	7.3	11653	PASS
173	174	0	2	0.0	0	PASS
174	95	50	100	63.6	101680	PASS
175	174	5	9	7.4	7494	PASS
176	174	95	101	98.9	100576	PASS
177	176	5	9	6.7	6725	PASS

Scan 162 (4.701 min): C0610.D
BFB TUNE

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.10	1951	51.05	8686	72.05	774	87.00	6910
37.10	9477	55.05	543	73.05	6276	87.95	5903
38.10	7601	56.10	2264	74.05	20048	90.95	540
39.10	2622	57.10	3783	75.05	71608	92.05	3239
40.00	562	60.10	1637	76.05	6530	93.05	4789
44.00	2493	61.00	5859	77.10	1173	94.05	15988
45.00	1687	62.00	6282	78.00	918	95.05	159872
47.05	3137	63.00	4298	79.00	1963	96.05	11653
48.05	1090	68.05	13513	80.00	687	116.95	676
49.05	6503	69.05	13174	81.00	2275	118.90	565
50.05	29648	70.05	980	82.00	509	140.90	664

Scan 162 (4.701 min): C0610.D
BFB TUNE

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
142.90	660						
173.95	101680						
174.95	7494						
175.95	100576						
176.95	6725						
207.00	554						

Response Factor Report 5972 - In

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Dec 19 13:49:27 1995
Response via : Initial Calibration

Calibration Files
0.5 =C0611.D 10 =C0612.D 20 =C0613.D
30 =C0614.D 40 =C0615.D

		Compound	0.5	10	20	30	40	Avg	%RSD
1)		Fluorobenzene	ISTD						
2)	M	Dichlorodifluorometha	0.188	0.216	0.206	0.209	0.206	0.205	5.14
3)	M	Chloromethane	0.200	0.212	0.202	0.199	0.195	0.202	3.20
4)	M	Vinyl chloride	0.192	0.229	0.219	0.216	0.215	0.214	6.39
5)	M	Bromomethane	0.132	0.119	0.119	0.119	0.117	0.121	5.05
6)	M	Chloroethane	0.132	0.148	0.137	0.126	0.108	0.130	11.36
7)	M	Trichlorofluoromethan	0.355	0.395	0.385	0.374	0.373	0.376	3.98
8)	M	1,1-Dichloroethene	0.215	0.244	0.238	0.238	0.238	0.234	4.85
9)	M	Methylene chloride		0.252	0.217	0.209	0.201	0.220	10.33
10)	M	trans-1,2-Dichloroeth	0.242	0.275	0.274	0.272	0.273	0.267	5.30
11)		Hexane						0.000#	-1.00
12)	M	1,1-Dichloroethane	0.463	0.514	0.505	0.504	0.500	0.497	3.94
13)	M	2,2-Dichloropropane	0.385	0.424	0.414	0.407	0.403	0.407	3.60
14)	M	cis-1,2-Dichloroethen	0.233	0.261	0.256	0.260	0.259	0.254	4.70
15)		2-Butanone						0.000#	-1.00
16)	M	Bromochloromethane	0.092	0.099	0.099	0.102	0.101	0.098	3.88
17)	M	Chloroform	0.416	0.446	0.443	0.445	0.443	0.439	2.92
18)	M	1,1,1-Trichloroethane	0.417	0.459	0.452	0.453	0.452	0.447	3.75
19)	M	Carbon tetrachloride	0.347	0.420	0.418	0.417	0.419	0.404	7.88
20)	M	1,1-Dichloropropene	0.379	0.432	0.425	0.421	0.420	0.416	5.07
21)	M	Benzene	0.858	0.870	0.854	0.855	0.846	0.857	1.00
22)	M	1,2-Dichloroethane	0.148	0.167	0.164	0.168	0.165	0.163	5.22
23)	M	Trichloroethene	0.319	0.358	0.356	0.355	0.354	0.348	4.74
24)	M	1,2-Dichloropropane	0.265	0.293	0.291	0.291	0.284	0.285	4.02
25)	M	Dibromomethane	0.102	0.115	0.114	0.117	0.115	0.113	5.20
26)	M	Bromodichloromethane	0.296	0.350	0.349	0.356	0.352	0.341	7.39
27)	M	cis-1,3-Dichloroprope	0.275	0.321	0.323	0.326	0.319	0.313	6.85
28)	M	Toluene	0.643	0.626	0.619	0.619	0.613	0.624	1.84
29)	M	trans-1,3-Dichloropro	0.176	0.213	0.214	0.217	0.211	0.206	8.35
30)	M	1,1,2-Trichloroethane	0.095	0.112	0.113	0.115	0.113	0.110	7.81
31)	M	Tetrachloroethene	0.384	0.419	0.414	0.415	0.416	0,410	3.50
32)	M	1,3-Dichloropropane	0.201	0.216	0.216	0.221	0.213	0.213	3.54
33)	M	Dibromochloromethane	0.185	0.218	0.220	0.228	0.225	0.215	7.98
34)	M	1,2-Dibromoethane	0.136	0.158	0.161	0.164	0.161	0.156	7.38
35)	M	Chlorobenzene	0.610	0.678	0.670	0.677	0.662	0.660	4.33
36)	M	1,1,1,2-Tetrachloroet	0.235	0.270	0.271	0.275	0.272	0.265	6.34
37)	M	Ethylbenzene	1.163	1.285	1.258	1.256	1.241	1.241	3.71
38)	M	Xylene (para & meta)	0.447	0.496	0.479	0.476	0.468	0.473	3.77
39)	M	Xylene (Ortho)	0.400	0.438	0.429	0.431	0.424	0.424	3.45
40)	M	Styrene	0.545	0.654	0.645	0.650	0.637	0.626	7.34
41)	M	Bromoform		0.115	0.119	0.123	0.121	0.119	3.09
42)	M	Isopropylbenzene	1.121	1.253	1.227	1.229	1.217	1.210	4.23
43)	S	4-Bromofluorobenzene	0.478	0.470	0.471	0.472	0.467	0.472	0.90

(#) = Out of Range

Response Factor Report 5972 - In

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Dec 19 13:49:27 1995
Response via : Initial Calibration

Calibration Files
0.5 =C0611.D 10 =C0612.D 20 =C0613.D
30 =C0614.D 40 =C0615.D

		Compound	0.5	10	20	30	40	Avg	%RSD
44)	M	Bromobenzene	0.248	0.284	0.281	0.287	0.282	0.276	5.82
45)	M	1,1,2,2-Tetrachloroet	0.124	0.145	0.145	0.148	0.144	0.141	6.83
46)	M	1,2,3-Trichloropropan	0.138	0.131	0.138	0.132	0.136	0.135	2.43
47)	M	n-Propylbenzene	1.571	1.739	1.693	1.687	1.669	1.672	3.70
48)	M	2-Chlorotoluene	0.913	1.006	0.985	0.977	0.953	0.967	3.67
49)	M	4-Chlorotoluene	0.963	1.084	1.051	1.048	1.029	1.035	4.32
50)	M	1,3,5-Trimethylbenzen	0.944	1.065	1.037	1.039	1.028	1.023	4.51
51)	M	tert-Butylbenzene	0.997	1.086	1.192	1.068	1.045	1.078	6.70
52)	M	1,2,4-Trimethylbenzen	0.917	1.036	1.011	1.011	0.992	0.993	4.60
53)	M	sec-Butylbenzene	1.506	1.697	1.648	1.638	1.615	1.621	4.35
54)	M	1,3-Dichlorobenzene	0.515	0.574	0.562	0.563	0.552	0.553	4.14
55)	M	4-Isopropyltoluene	1.161	1.354	1.304	1.297	1.272	1.277	5.60
56)	M	1,4-Dichlorobenzene	0.502	0.555	0.544	0.544	0.532	0.536	3.80
57)	S	1,2-Dichlorobenzene-d	0.281	0.280	0.278	0.280	0.268	0.278	1.91
58)	M	1,2-Dichlorobenzene	0.400	0.433	0.425	0.429	0.417	0.421	3.04
59)	M	n-Butylbenzene	1.197	1.397	1.349	1.340	1.317	1.320	5.65
60)	M	1,2-Dibromo-3-chlorop		0.026	0.026	0.028	0.027	0.027	3.34
61)	M	1,2,4-Trichlorobenzen	0.307	0.351	0.347	0.355	0.346	0.341	5.76
62)	M	Hexachlorobutadiene	0.278	0.329	0.323	0.329	0.322	0.316	6.81
63)	M	Naphthalene	0.339	0.336	0.339	0.345	0.332	0.338	1.40
64)	M	1,2,3-Trichlorobenzen	0.216	0.257	0.254	0.262	0.250	0.248	7.38
65)		Methyl-tert butyl eth		0.266	0.264	0.271	0.263	0.266	1.38
66)		tert-Butyl Alcohol		0.004	0.004	0.004	0.004	0.004	5.17

#) = Out of Range

Quantitation Report

040

Data File : D:\HPCHEM\1\DATA\C0611.D
Acq On : 18 Dec 95 4:53 pm
Sample : 0.5 PPB STANDARD
Misc : 25 ML 524.2 INITIAL CALIBRATION
Quant Time: Dec 19 12:50 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 Dec 18 17:39:51 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	12.07	96	1410703	5.00	ug/L		0.00
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.31	95	674726	4.43	ug/L		88.60%
57) 1,2-Dichlorobenzene-d4	22.11	152	396261	4.15	ug/L		82.99%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.44	85	26510	0.35	ug/L		94
3) Chloromethane	3.84	50	28198	0.49	ug/L		95
4) Vinyl chloride	4.05	62	27080	0.42	ug/L		85
5) Bromomethane	4.79	94	18626	0.42	ug/L	#	80
6) Chloroethane	5.00	64	18626	0.52	ug/L		99
7) Trichlorofluoromethane	5.56	101	50085	0.45	ug/L		88
8) 1,1-Dichloroethene	6.67	96	30283	0.45	ug/L		94
9) Methylene chloride	7.68	84	308737	4.62	ug/L		98
10) trans-1,2-Dichloroethene	8.23	96	34130	0.45	ug/L		97
12) 1,1-Dichloroethane	9.01	63	65371	0.46	ug/L		95
13) 2,2-Dichloropropane	10.06	77	54250	0.45	ug/L		98
14) cis-1,2-Dichloroethene	10.07	96	32804	0.44	ug/L		96
16) Bromochloromethane	10.51	128	12987	0.40	ug/L		95
17) Chloroform	10.65	83	58675	0.44	ug/L		89
18) 1,1,1-Trichloroethane	10.95	97	58842	0.46	ug/L		94
19) Carbon tetrachloride	11.24	117	48969	0.40	ug/L		96
20) 1,1-Dichloropropene	11.24	75	53433	0.45	ug/L		96
21) Benzene	11.60	78	121095	0.49	ug/L		97
22) 1,2-Dichloroethane	11.63	62	20829	0.38	ug/L		96
23) Trichloroethene	12.69	95	45011	0.44	ug/L		90
24) 1,2-Dichloropropane	13.07	63	37391	0.44	ug/L		87
25) Dibromomethane	13.28	93	14440	0.39	ug/L	#	83
26) Bromodichloromethane	13.55	83	41730	0.38	ug/L		99
27) cis-1,3-Dichloropropene	14.29	75	38735	0.39	ug/L		98
28) Toluene	14.87	92	90694	0.52	ug/L		99
29) trans-1,3-Dichloropropene	15.23	75	24799	0.36	ug/L		89
30) 1,1,2-Trichloroethane	15.54	83	13334	0.36	ug/L		93
31) Tetrachloroethene	15.82	166	54196	0.44	ug/L		96
32) 1,3-Dichloropropane	15.84	76	28304	0.41	ug/L		99
33) Dibromochloromethane	16.24	129	26111	0.36	ug/L		96
34) 1,2-Dibromoethane	16.45	107	19123	0.36	ug/L	m	95
35) Chlorobenzene	17.29	112	86019	0.43	ug/L		96
36) 1,1,1,2-Tetrachloroethane	17.44	131	33132	0.40	ug/L		92
37) Ethylbenzene	17.48	91	164092	0.46	ug/L	m	65
38) Xylene (para & meta)	17.67	106	126091	0.94	ug/L		93
39) Xylene (Ortho)	18.38	106	56402	0.46	ug/L		92
40) Styrene	18.41	104	76878	0.41	ug/L		97

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

Quantitation Report

041

Data File : D:\HPCHEM\1\DATA\C0611.D
Acq On : 18 Dec 95 4:53 pm
Sample : 0.5 PPB STANDARD
Misc : 25 ML 524.2 INITIAL CALIBRATION
Quant Time: Dec 19 12:50 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 Dec 18 17:39:51 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
41)	Bromoform	18.75	173	12260	0.31 ug/L	97
42)	Isopropylbenzene	19.03	105	158171	0.46 ug/L	95
44)	Bromobenzene	19.60	156	34990	0.39 ug/L	97
45)	1,1,2,2-Tetrachloroethane	19.56	83	17548	0.39 ug/L	93
46)	1,2,3-Trichloropropane	19.64	75	19419	0.42 ug/L m	24
47)	n-Propylbenzene	19.78	91	221664	0.47 ug/L	98
48)	2-Chlorotoluene	19.94	91	128781	0.47 ug/L m	98
49)	4-Chlorotoluene	20.13	91	135904	0.44 ug/L	99
50)	1,3,5-Trimethylbenzene	20.09	105	133193	0.45 ug/L	96
51)	tert-Butylbenzene	20.68	119	140621	0.42 ug/L m	99
52)	1,2,4-Trimethylbenzene	20.77	105	129296	0.43 ug/L	99
53)	sec-Butylbenzene	21.08	105	212499	0.47 ug/L	98
54)	1,3-Dichlorobenzene	21.30	146	72600	0.41 ug/L m	98
55)	4-Isopropyltoluene	21.34	119	163775	0.45 ug/L	97
56)	1,4-Dichlorobenzene	21.46	146	70849	0.41 ug/L	99
58)	1,2-Dichlorobenzene	22.14	146	56487	0.41 ug/L	99
59)	n-Butylbenzene	22.10	91	168895	0.46 ug/L	99
60)	1,2-Dibromo-3-chloropropan	23.57	75	2913	0.31 ug/L	90
61)	1,2,4-Trichlorobenzene	25.12	180	43246	0.38 ug/L	94
62)	Hexachlorobutadiene	25.44	225	39266	0.40 ug/L	100
63)	Naphthalene	25.58	128	47805	0.44 ug/L	100
64)	1,2,3-Trichlorobenzene	26.07	180	30509	0.37 ug/L	93
65)	Methyl-tert butyl ether	8.28	73	49934	0.58 ug/L	95

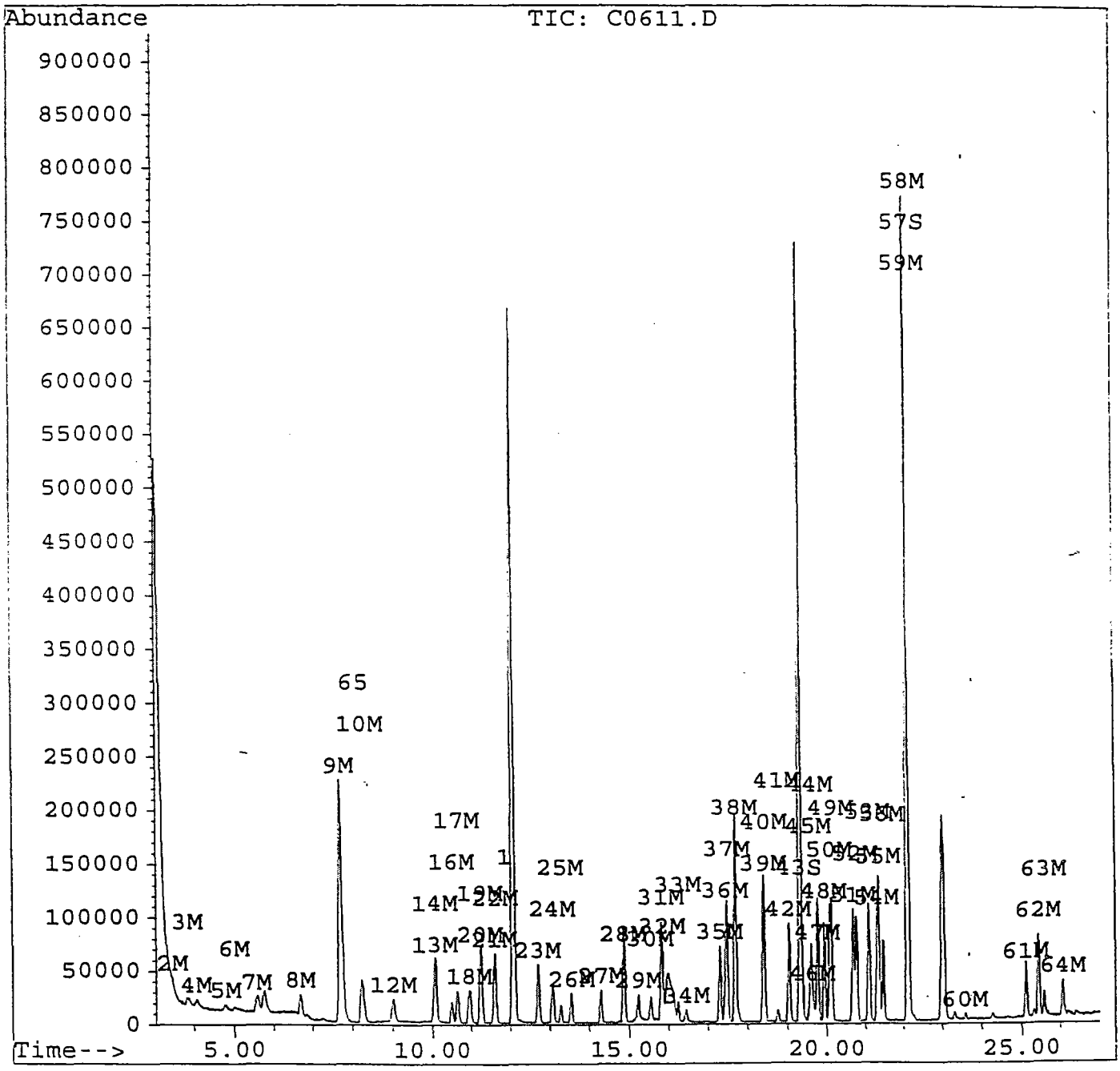
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\C0611.D
Acq On : 18 Dec 95 4:53 pm
Sample : 0.5 PPB STANDARD
Misc : 25 ML 524.2 INITIAL CALIBRATION
Quant Time: Dec 19 12:50 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 Dec 18 17:39:51 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : d:\hpchem\1\data\c0612.d
Acq On : 18 Dec 95 5:27 pm
Sample : 10 PPB STANDARD
Misc : 25 ML 524.2 INITIAL CALIBRATION
Quant Time: Dec 19 12:55 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 Dec 19 13:49:27 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	12.07	96	1438450	5.00	ug/L	0.00
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.32	95	676254	4.35	ug/L	87.09%
57) 1,2-Dichlorobenzene-d4	22.12	152	403346	4.14	ug/L	82.84%
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.44	85	622804	8.00	ug/L	99
3) Chloromethane	3.85	50	610433	10.32	ug/L	99
4) Vinyl chloride	4.07	62	659628	10.02	ug/L	99
5) Bromomethane	4.74	94	343472	7.51	ug/L	99
6) Chloroethane	4.99	64	425615	11.64	ug/L	100
7) Trichlorofluoromethane	5.58	101	1136662	10.00	ug/L	98
8) 1,1-Dichloroethene	6.68	96	702241	10.31	ug/L	99
9) Methylene chloride	7.69	84	725538	10.66	ug/L	97
10) trans-1,2-Dichloroethene	8.23	96	792522	10.19	ug/L	100
12) 1,1-Dichloroethane	9.02	63	1478477	10.12	ug/L	98
13) 2,2-Dichloropropane	10.07	77	1220112	9.99	ug/L	99
14) cis-1,2-Dichloroethene	10.08	96	749877	9.81	ug/L	96
16) Bromochloromethane	10.51	128	284264	8.58	ug/L	96
17) Chloroform	10.65	83	1283724	9.51	ug/L	99
18) 1,1,1-Trichloroethane	10.96	97	1320582	10.11	ug/L	99
19) Carbon tetrachloride	11.26	117	1207310	9.77	ug/L	99
20) 1,1-Dichloropropene	11.25	75	1242676	10.20	ug/L	99
21) Benzene	11.60	78	2501575	10.00	ug/L	100
22) 1,2-Dichloroethane	11.63	62	481648	8.59	ug/L	97
23) Trichloroethene	12.70	95	1031083	9.94	ug/L	97
24) 1,2-Dichloropropane	13.07	63	842803	9.70	ug/L	99
25) Dibromomethane	13.28	93	330109	8.66	ug/L	96
26) Bromodichloromethane	13.55	83	1008179	8.96	ug/L	99
27) cis-1,3-Dichloropropene	14.29	75	923180	9.11	ug/L	99
28) Toluene	14.87	92	1799577	10.20	ug/L	99
29) trans-1,3-Dichloropropene	15.23	75	613382	8.77	ug/L	100
30) 1,1,2-Trichloroethane	15.55	83	323232	8.60	ug/L	99
31) Tetrachloroethene	15.82	166	1204667	9.62	ug/L	97
32) 1,3-Dichloropropane	15.84	76	620713	8.73	ug/L	99
33) Dibromochloromethane	16.24	129	626620	8.38	ug/L	100
34) 1,2-Dibromoethane	16.44	107	453960	8.29	ug/L	98
35) Chlorobenzene	17.29	112	1951331	9.59	ug/L	99
36) 1,1,1,2-Tetrachloroethane	17.43	131	777407	9.20	ug/L	99
37) Ethylbenzene	17.48	91	3696407	10.19	ug/L	100
38) Xylene (para & meta)	17.68	106	2853533	20.79	ug/L	94
39) Xylene (Ortho)	18.38	106	1260630	10.01	ug/L	100
40) Styrene	18.40	104	1882088	9.74	ug/L	99

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

Quantitation Report

Data File : d:\hpchem\1\data\c0612.d
Acq On : 18 Dec 95 5:27 pm
Sample : 10 PPB STANDARD
Misc : 25 ML 524.2 INITIAL CALIBRATION
Quant Time: Dec 19 12:55 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 Dec 19 13:49:27 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.75	173	329927	8.05	ug/L		98
42)	Isopropylbenzene	19.03	105	3605914	10.29	ug/L	m	0
44)	Bromobenzene	19.60	156	817692	9.00	ug/L		96
45)	1,1,2,2-Tetrachloroethane	19.56	83	417968	9.09	ug/L		99
46)	1,2,3-Trichloropropane	19.64	75	377473	7.99	ug/L	m	99
47)	n-Propylbenzene	19.78	91	5001751	10.45	ug/L		100
48)	2-Chlorotoluene	19.95	91	2893424	10.34	ug/L	m	99
49)	4-Chlorotoluene	20.14	91	3118209	10.00	ug/L		99
50)	1,3,5-Trimethylbenzene	20.09	105	3065048	10.08	ug/L		98
51)	tert-Butylbenzene	20.68	119	3125169	9.15	ug/L	m	99
52)	1,2,4-Trimethylbenzene	20.78	105	2979989	9.81	ug/L		99
53)	sec-Butylbenzene	21.08	105	4881376	10.53	ug/L		100
54)	1,3-Dichlorobenzene	21.30	146	1650878	9.18	ug/L		100
55)	4-Isopropyltoluene	21.34	119	3894952	10.45	ug/L		99
56)	1,4-Dichlorobenzene	21.47	146	1597802	9.07	ug/L		99
58)	1,2-Dichlorobenzene	22.15	146	1244718	8.76	ug/L		96
59)	n-Butylbenzene	22.09	91	4019796	10.62	ug/L		98
60)	1,2-Dibromo-3-chloropropan	23.57	75	74841	7.70	ug/L		97
61)	1,2,4-Trichlorobenzene	25.12	180	1009467	8.77	ug/L		99
62)	Hexachlorobutadiene	25.44	225	947757	9.47	ug/L		99
63)	Naphthalene	25.58	128	966149	8.68	ug/L		100
64)	1,2,3-Trichlorobenzene	26.06	180	739730	8.82	ug/L		99
65)	Methyl-tert butyl ether	8.27	73	764807	8.69	ug/L		99
66)	tert-Butyl Alcohol	8.03	59	22206	17.13	ug/L	m	100

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

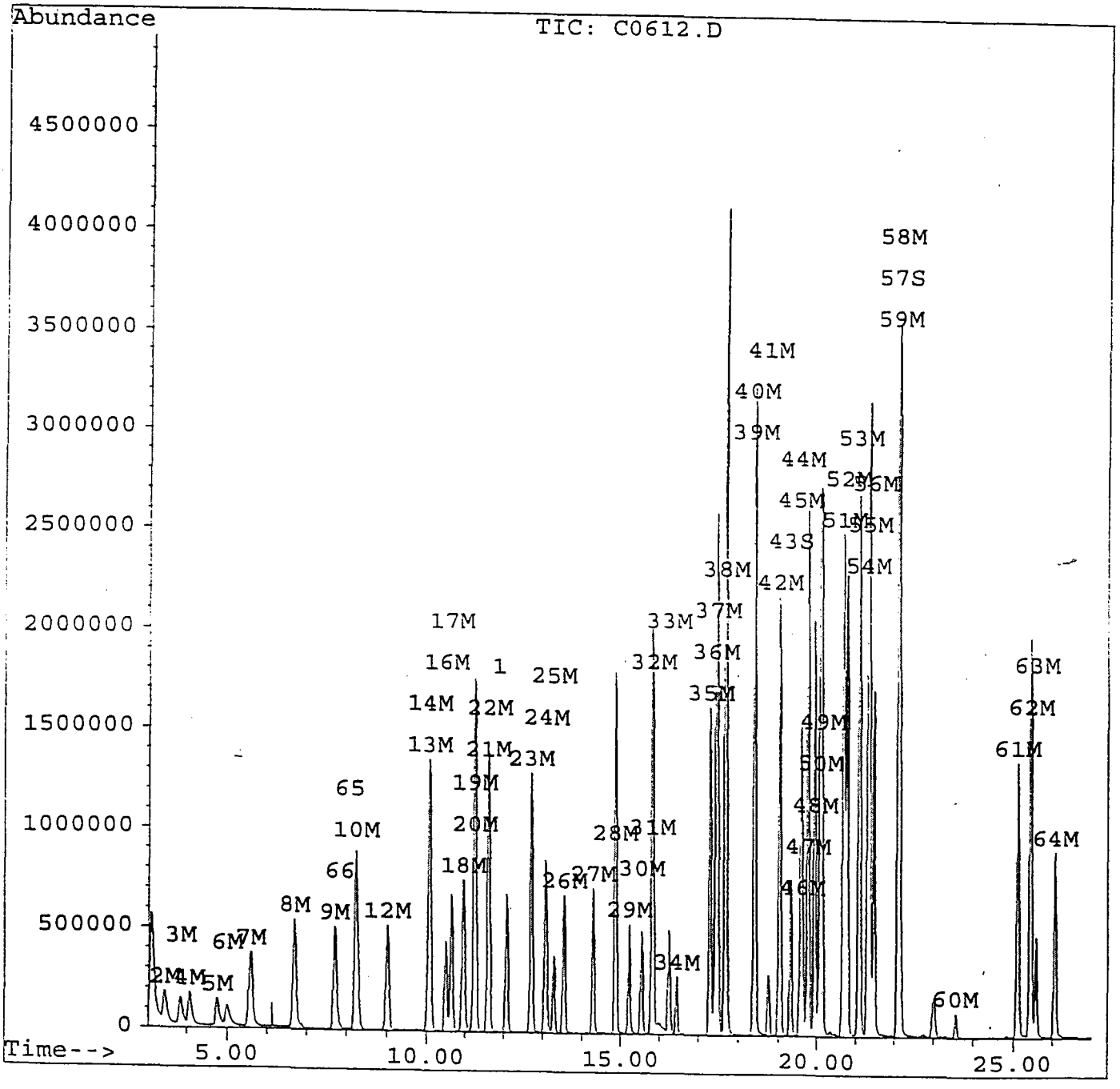
Quantitation Report

045

Data File : d:\hpchem\1\data\c0612.d
Acq On : 18 Dec 95 5:27 pm
Sample : 10 PPB STANDARD
Misc : 25 ML 524.2 INITIAL CALIBRATION
Quant Time: Dec 19 12:55 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 Dec 19 13:49:27 1995
Response via : Multiple Level Calibration



Quantitation Report

046

Data File : d:\hpchem\1\data\c0613.d
Acq On : 18 Dec 95 6:01 pm
Sample : 20 PPB STANDARD
Misc : 25 ML 524.2 INITIAL CALIBRATION
Quant Time: Dec 19 12:59 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 Dec 19 13:49:27 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	12.08	96	1407214	5.00	ug/L	0.00
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.32	95	662993	4.36	ug/L	87.28%
57) 1,2-Dichlorobenzene-d4	22.12	152	390880	4.10	ug/L	82.06%
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.45	85	1157405	15.20	ug/L	100
3) Chloromethane	3.85	50	1135619	19.62	ug/L	99
4) Vinyl chloride	4.07	62	1232853	19.15	ug/L	100
5) Bromomethane	4.73	94	668805	14.96	ug/L	96
6) Chloroethane	4.97	64	770953	21.55	ug/L	99
7) Trichlorofluoromethane	5.56	101	2167619	19.49	ug/L	99
8) 1,1-Dichloroethene	6.68	96	1337170	20.07	ug/L	99
9) Methylene chloride	7.69	84	1220128	18.32	ug/L	95
10) trans-1,2-Dichloroethene	8.23	96	1540653	20.24	ug/L	97
12) 1,1-Dichloroethane	9.01	63	2840312	19.87	ug/L	99
13) 2,2-Dichloropropane	10.08	77	2329892	19.51	ug/L	100
14) cis-1,2-Dichloroethene	10.09	96	1442121	19.28	ug/L	100
16) Bromochloromethane	10.51	128	555971	17.15	ug/L	96
17) Chloroform	10.65	83	2494279	18.89	ug/L	100
18) 1,1,1-Trichloroethane	10.96	97	2543034	19.89	ug/L	99
19) Carbon tetrachloride	11.26	117	2351013	19.45	ug/L	99
20) 1,1-Dichloropropene	11.25	75	2393919	20.08	ug/L	99
21) Benzene	11.60	78	4808098	19.64	ug/L	99
22) 1,2-Dichloroethane	11.63	62	925848	16.88	ug/L	98
23) Trichloroethene	12.70	95	2002780	19.73	ug/L	99
24) 1,2-Dichloropropane	13.08	63	1635263	19.24	ug/L	99
25) Dibromomethane	13.28	93	641361	17.21	ug/L	96
26) Bromodichloromethane	13.55	83	1966352	17.87	ug/L	100
27) cis-1,3-Dichloropropene	14.29	75	1817611	18.33	ug/L	98
28) Toluene	14.87	92	3486596	20.19	ug/L	100
29) trans-1,3-Dichloropropene	15.23	75	1205130	17.61	ug/L	99
30) 1,1,2-Trichloroethane	15.55	83	637883	17.36	ug/L	98
31) Tetrachloroethene	15.82	166	2329861	19.02	ug/L	97
32) 1,3-Dichloropropane	15.84	76	1217712	17.50	ug/L	100
33) Dibromochloromethane	16.24	129	1240668	16.96	ug/L	100
34) 1,2-Dibromoethane	16.45	107	903843	16.87	ug/L	99
35) Chlorobenzene	17.29	112	3773745	18.96	ug/L	100
36) 1,1,1,2-Tetrachloroethane	17.44	131	1525321	18.44	ug/L	99
37) Ethylbenzene	17.48	91	7083623	19.96	ug/L	100
38) Xylene (para & meta)	17.68	106	5388703	40.14	ug/L	96
39) Xylene (Ortho)	18.39	106	2413775	19.59	ug/L	98
40) Styrene	18.41	104	3633015	19.21	ug/L	99

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

Quantitation Report

Data File : d:\hpchem\1\data\c0613.d
Acq On : 18 Dec 95 6:01 pm
Sample : 20 PPB STANDARD
Misc : 25 ML 524.2 INITIAL CALIBRATION
Quant Time: Dec 19 12:59 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 Dec 19 13:49:27 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.75	173	668039	16.66	ug/L		100
42)	Isopropylbenzene	19.04	105	6904404	20.13	ug/L	m	0
44)	Bromobenzene	19.60	156	1579998	17.78	ug/L		98
45)	1,1,2,2-Tetrachloroethane	19.56	83	813627	18.08	ug/L		99
46)	1,2,3-Trichloropropane	19.64	75	778215	16.84	ug/L	m	1
47)	n-Propylbenzene	19.78	91	9531856	20.36	ug/L		100
48)	2-Chlorotoluene	19.94	91	5543384	20.25	ug/L	m	99
49)	4-Chlorotoluene	20.14	91	5917632	19.40	ug/L		100
50)	1,3,5-Trimethylbenzene	20.09	105	5839813	19.63	ug/L		98
51)	tert-Butylbenzene	20.68	119	6709069	20.08	ug/L		99
52)	1,2,4-Trimethylbenzene	20.78	105	5692640	19.15	ug/L		99
53)	sec-Butylbenzene	21.09	105	9273631	20.44	ug/L		99
54)	1,3-Dichlorobenzene	21.30	146	3164433	17.99	ug/L		98
55)	4-Isopropyltoluene	21.34	119	7337427	20.12	ug/L		99
56)	1,4-Dichlorobenzene	21.47	146	3059938	17.75	ug/L		99
58)	1,2-Dichlorobenzene	22.15	146	2392863	17.21	ug/L		97
59)	n-Butylbenzene	22.10	91	7591468	20.51	ug/L		99
60)	1,2-Dibromo-3-chloropropan	23.57	75	145800	15.34	ug/L		97
61)	1,2,4-Trichlorobenzene	25.12	180	1950474	17.31	ug/L		99
62)	Hexachlorobutadiene	25.44	225	1819360	18.59	ug/L		99
63)	Naphthalene	25.58	128	1910502	17.55	ug/L		100
64)	1,2,3-Trichlorobenzene	26.07	180	1430512	17.43	ug/L		98
65)	Methyl-tert butyl ether	8.27	73	1486618	17.26	ug/L		100
66)	tert-Butyl Alcohol	8.04	59	44313	34.94	ug/L	m	100

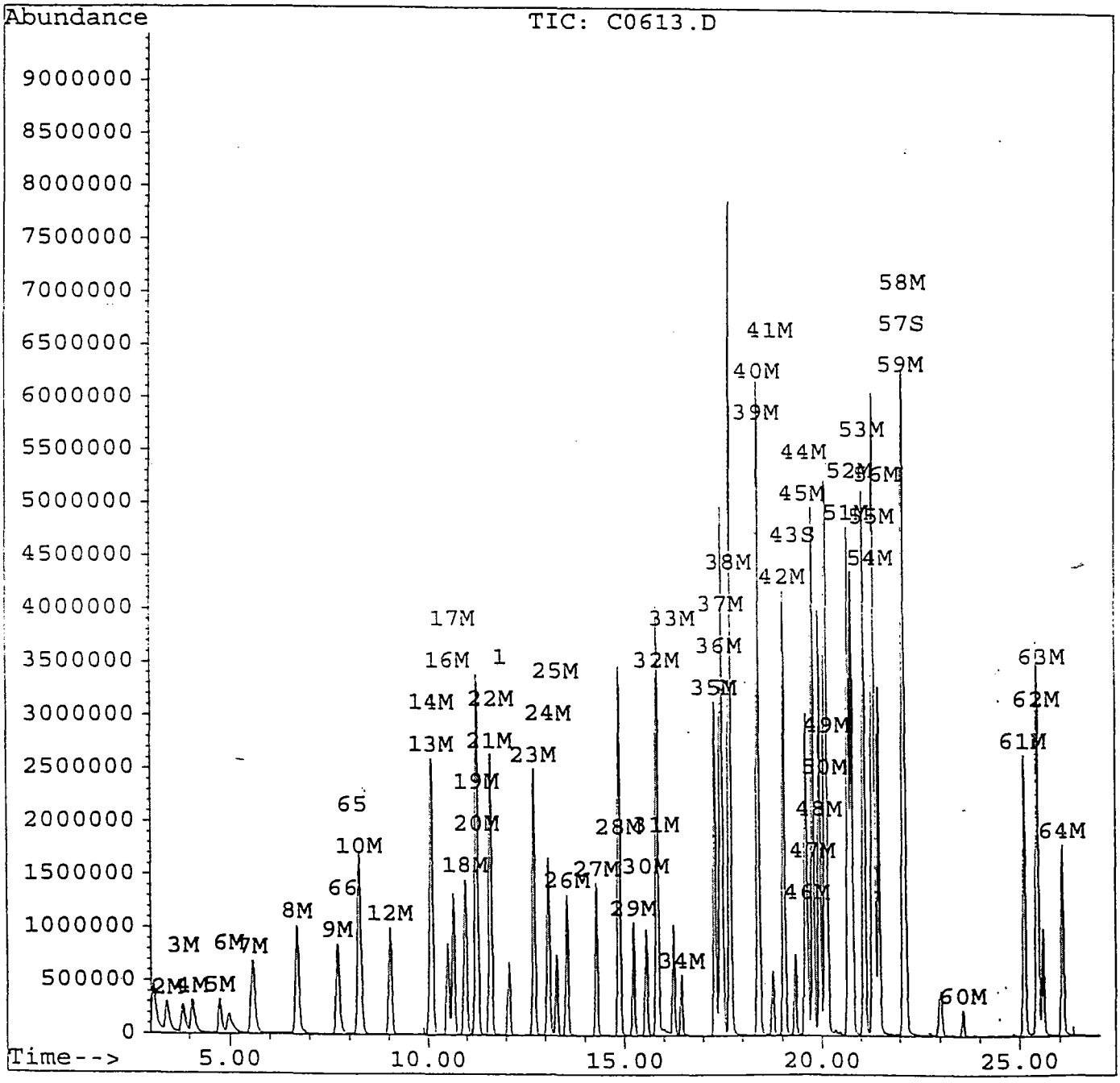
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c0613.d
Acq On : 18 Dec 95 6:01 pm
Sample : 20 PPB STANDARD
Misc : 25 ML 524.2 INITIAL CALIBRATION
Quant Time: Dec 19 12:59 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 Dec 19 13:49:27 1995
Response via : Multiple Level Calibration



Quantitation Report

049

Data File : d:\hpchem\1\data\c0614.d
Acq On : 18 Dec 95 6:36 pm
Sample : 30 PPB STANDARD
Misc : 25 ML 524.2 INITIAL CALIBRATION
Quant Time: Dec 19 13:03 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 : Tue Dec 19 13:49:27 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	12.08	96	1332396	5.00 ug/L	0.00
System Monitoring Compounds					%Recovery
43) 4-Bromofluorobenzene	19.32	95	629223	4.37 ug/L	87.48%
57) 1,2-Dichlorobenzene-d4	22.12	152	373341	4.14 ug/L	82.78%
Target Compounds					Qvalue
2) Dichlorodifluoromethane	3.44	85	1674231	23.22 ug/L	99
3) Chloromethane	3.84	50	1589959	29.01 ug/L	99
4) Vinyl chloride	4.07	62	1728649	28.36 ug/L	98
5) Bromomethane	4.73	94	948463	22.40 ug/L	98
6) Chloroethane	4.95	64	1004742	29.66 ug/L	99
7) Trichlorofluoromethane	5.55	101	2993479	28.43 ug/L	99
8) 1,1-Dichloroethene	6.68	96	1901722	30.15 ug/L	98
9) Methylene chloride	7.69	84	1669396	26.47 ug/L	99
10) trans-1,2-Dichloroethene	8.23	96	2174013	30.17 ug/L	98
12) 1,1-Dichloroethane	9.02	63	4028967	29.77 ug/L	99
13) 2,2-Dichloropropane	10.07	77	3257364	28.80 ug/L	99
14) cis-1,2-Dichloroethene	10.08	96	2077736	29.34 ug/L	98
16) Bromochloromethane	10.52	128	812023	26.45 ug/L	98
17) Chloroform	10.66	83	3559313	28.47 ug/L	99
18) 1,1,1-Trichloroethane	10.97	97	3620306	29.91 ug/L	99
19) Carbon tetrachloride	11.26	117	3331686	29.12 ug/L	99
20) 1,1-Dichloropropene	11.26	75	3369064	29.84 ug/L	99
21) Benzene	11.61	78	6834627	29.48 ug/L	100
22) 1,2-Dichloroethane	11.63	62	1346517	25.93 ug/L	98
23) Trichloroethene	12.71	95	2836186	29.51 ug/L	99
24) 1,2-Dichloropropane	13.08	63	2324715	28.89 ug/L	100
25) Dibromomethane	13.29	93	934117	26.47 ug/L	97
26) Bromodichloromethane	13.55	83	2842039	27.28 ug/L	99
27) cis-1,3-Dichloropropene	14.30	75	2604057	27.73 ug/L	99
28) Toluene	14.88	92	4950191	30.28 ug/L	98
29) trans-1,3-Dichloropropene	15.23	75	1737974	26.82 ug/L	99
30) 1,1,2-Trichloroethane	15.55	83	922443	26.51 ug/L	99
31) Tetrachloroethene	15.83	166	3320481	28.62 ug/L	98
32) 1,3-Dichloropropane	15.84	76	1763212	26.76 ug/L	99
33) Dibromochloromethane	16.25	129	1818986	26.26 ug/L	99
34) 1,2-Dibromoethane	16.44	107	1309782	25.83 ug/L	98
35) Chlorobenzene	17.30	112	5411175	28.71 ug/L	100
36) 1,1,1,2-Tetrachloroethane	17.43	131	2199322	28.09 ug/L	99
37) Ethylbenzene	17.49	91	10037171	29.87 ug/L	100
38) Xylene (para & meta)	17.69	106	7617139	59.92 ug/L	95
39) Xylene (Ortho)	18.39	106	3446421	29.54 ug/L	97
40) Styrene	18.41	104	5197567	29.03 ug/L	99

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

Quantitation Report

050

Data File : d:\hpchem\1\data\c0614.d
Acq On : 18 Dec 95 6:36 pm
Sample : 30 PPB STANDARD
Misc : 25 ML 524.2 INITIAL CALIBRATION
Quant Time: Dec 19 13:03 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 : Tue Dec 19 13:49:27 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.75	173	984215	25.92	ug/L		98
42)	Isopropylbenzene	19.04	105	9827464	30.26	ug/L	m	0
44)	Bromobenzene	19.61	156	2296884	27.30	ug/L		100
45)	1,1,2,2-Tetrachloroethane	19.57	83	1187143	27.86	ug/L		100
46)	1,2,3-Trichloropropane	19.65	75	1054548	24.10	ug/L	m	1
47)	n-Propylbenzene	19.78	91	13486064	30.42	ug/L		100
48)	2-Chlorotoluene	19.95	91	7806544	30.12	ug/L	m	100
49)	4-Chlorotoluene	20.15	91	8376804	29.01	ug/L		99
50)	1,3,5-Trimethylbenzene	20.09	105	8309199	29.50	ug/L		99
51)	tert-Butylbenzene	20.69	119	8540352	26.99	ug/L	m	99
52)	1,2,4-Trimethylbenzene	20.77	105	8085353	28.72	ug/L		100
53)	sec-Butylbenzene	21.09	105	13095526	30.48	ug/L		100
54)	1,3-Dichlorobenzene	21.31	146	4501828	27.04	ug/L		99
55)	4-Isopropyltoluene	21.35	119	10368606	30.03	ug/L		100
56)	1,4-Dichlorobenzene	21.47	146	4349999	26.65	ug/L		99
58)	1,2-Dichlorobenzene	22.16	146	3428548	26.04	ug/L		98
59)	n-Butylbenzene	22.10	91	10709424	30.55	ug/L		99
60)	1,2-Dibromo-3-chloropropan	23.58	75	222530	24.72	ug/L		100
61)	1,2,4-Trichlorobenzene	25.12	180	2838531	26.61	ug/L		99
62)	Hexachlorobutadiene	25.45	225	2630469	28.39	ug/L	m	81
63)	Naphthalene	25.59	128	2755342	26.74	ug/L	m	0
64)	1,2,3-Trichlorobenzene	26.07	180	2097630	26.99	ug/L		100
65)	Methyl-tert butyl ether	8.27	73	2169381	26.60	ug/L		100
66)	tert-Butyl Alcohol	8.06	59	69142	57.57	ug/L	m	100

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

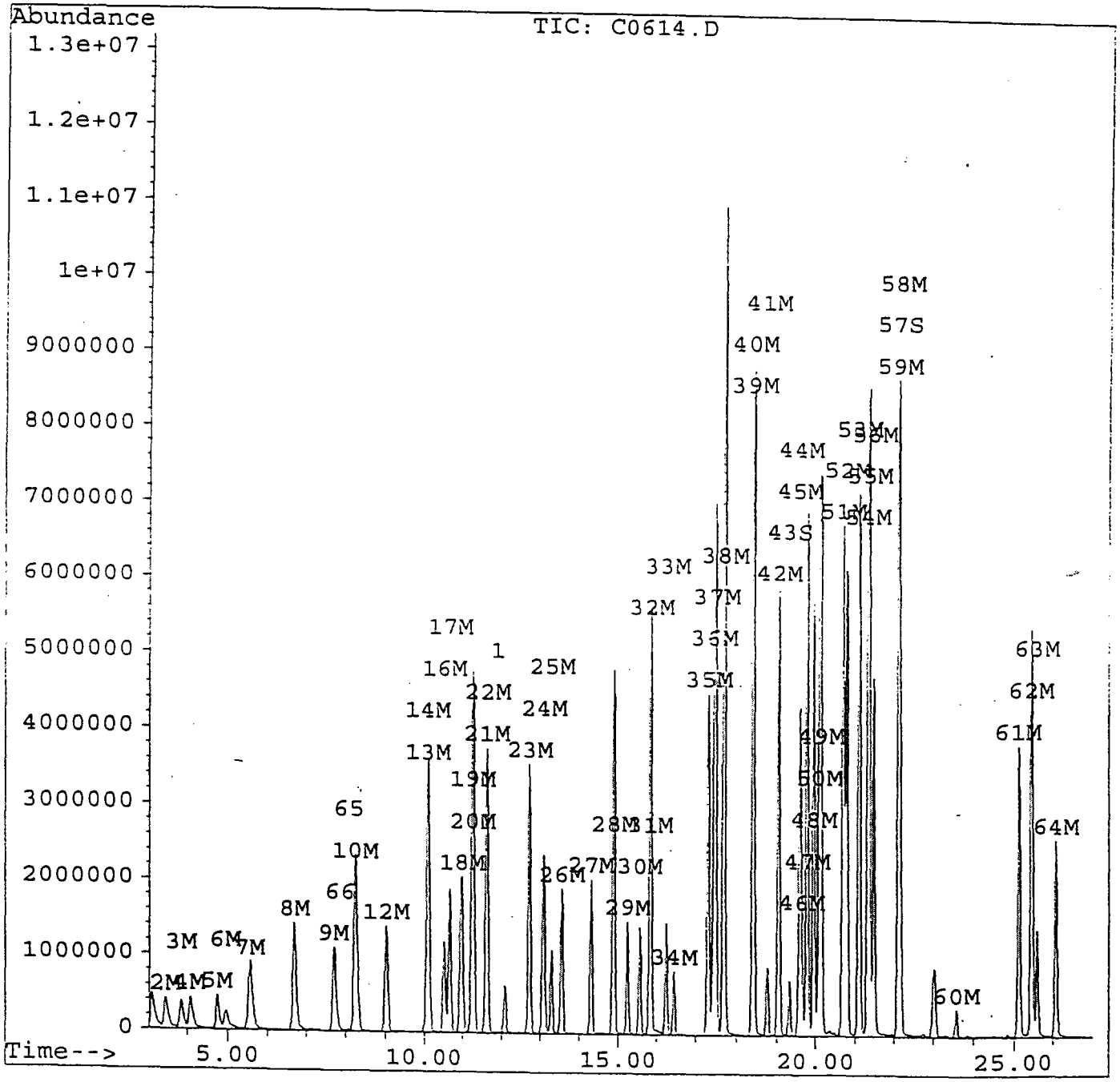
Quantitation Report

051

Data File : d:\hpchem\1\data\c0614.d
Acq On : 18 Dec 95 6:36 pm
Sample : 30 PPB STANDARD
Misc : 25 ML 524.2 INITIAL CALIBRATION
Quant Time: Dec 19 13:03 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 : Tue Dec 19 13:49:27 1995
Response via : Multiple Level Calibration



Quantitation Report

052

Data File : d:\hpchem\1\data\c0615.d
Acq On : 18 Dec 95 7:10 pm
Sample : 40 PPB STANDARD
Misc : 25 ML 524.2 INITIAL CALIBRATION
Quant Time: Dec 19 13:31 1995

Vial: 6
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Dec 19 13:49:27 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	12.08	96	1328775	5.00	ug/L		0.00
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.33	95	620145	4.32	ug/L		86.46%
57) 1,2-Dichlorobenzene-d4	22.13	152	356451	3.96	ug/L		79.25%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.45	85	2193367	30.50	ug/L		99
3) Chloromethane	3.85	50	2072353	37.92	ug/L		99
4) Vinyl chloride	4.07	62	2286904	37.62	ug/L		99
5) Bromomethane	4.73	94	1244374	29.47	ug/L	m	84
6) Chloroethane	4.93	64	1148775	34.01	ug/L		99
7) Trichlorofluoromethane	5.54	101	3961033	37.72	ug/L		99
8) 1,1-Dichloroethene	6.67	96	2527689	40.18	ug/L		98
9) Methylene chloride	7.69	84	2133222	33.92	ug/L		98
10) trans-1,2-Dichloroethene	8.23	96	2898883	40.34	ug/L		98
12) 1,1-Dichloroethane	9.02	63	5317393	39.39	ug/L		99
13) 2,2-Dichloropropane	10.07	77	4286098	38.00	ug/L		99
14) cis-1,2-Dichloroethene	10.09	96	2752262	38.97	ug/L		98
16) Bromochloromethane	10.52	128	1075806	35.14	ug/L		96
17) Chloroform	10.66	83	4712224	37.79	ug/L		100
18) 1,1,1-Trichloroethane	10.97	97	4809583	39.84	ug/L		99
19) Carbon tetrachloride	11.27	117	4454103	39.03	ug/L		99
20) 1,1-Dichloropropene	11.26	75	4466516	39.67	ug/L		99
21) Benzene	11.61	78	8993183	38.90	ug/L		100
22) 1,2-Dichloroethane	11.64	62	1749723	33.79	ug/L		96
23) Trichloroethene	12.71	95	3767691	39.30	ug/L		99
24) 1,2-Dichloropropane	13.08	63	3024057	37.68	ug/L		99
25) Dibromomethane	13.29	93	1227344	34.87	ug/L		95
26) Bromodichloromethane	13.56	83	3743643	36.03	ug/L		98
27) cis-1,3-Dichloropropene	14.30	75	3392954	36.23	ug/L		99
28) Toluene	14.88	92	6516098	39.96	ug/L		100
29) trans-1,3-Dichloropropene	15.24	75	2247586	34.77	ug/L		99
30) 1,1,2-Trichloroethane	15.56	83	1201692	34.63	ug/L		98
31) Tetrachloroethene	15.83	166	4420107	38.21	ug/L		98
32) 1,3-Dichloropropane	15.85	76	2266167	34.49	ug/L		100
33) Dibromochloromethane	16.25	129	2386589	34.55	ug/L		99
34) 1,2-Dibromoethane	16.45	107	1712137	33.85	ug/L		99
35) Chlorobenzene	17.30	112	7040420	37.46	ug/L	m	0
36) 1,1,1,2-Tetrachloroethane .	17.44	131	2894177	37.06	ug/L		99
37) Ethylbenzene	17.49	91	13196176	39.38	ug/L		99
38) Xylene (para & meta)	17.69	106	9951484	78.50	ug/L		96
39) Xylene (Ortho)	18.39	106	4510500	38.76	ug/L		96
40) Styrene	18.41	104	6772604	37.92	ug/L		100

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

Quantitation Report

Data File : d:\hpchem\1\data\c0615.d
Acq On : 18 Dec 95 7:10 pm
Sample : 40 PPB STANDARD
Misc : 25 ML 524.2 INITIAL CALIBRATION
Quant Time: Dec 19 13:31 1995

Vial: 6
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Dec 19 13:49:27 1995
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
41) Bromoform	18.75	173	1291562	34.11 ug/L	99
42) Isopropylbenzene	19.04	105	12938843	39.95 ug/L	97
44) Bromobenzene	19.61	156	2999030	35.74 ug/L	100
45) 1,1,2,2-Tetrachloroethane	19.57	83	1533825	36.09 ug/L	99
46) 1,2,3-Trichloropropane	19.65	75	1448800	33.20 ug/L m	1
47) n-Propylbenzene	19.79	91	17739162	40.12 ug/L	99
48) 2-Chlorotoluene	19.96	91	10134696	39.21 ug/L m	100
49) 4-Chlorotoluene	20.15	91	10939409	37.99 ug/L	100
50) 1,3,5-Trimethylbenzene	20.10	105	10924965	38.89 ug/L	99
51) tert-Butylbenzene	20.69	119	11106671	35.20 ug/L m	100
52) 1,2,4-Trimethylbenzene	20.79	105	10547838	37.57 ug/L	99
53) sec-Butylbenzene	21.09	105	17163941	40.06 ug/L	99
54) 1,3-Dichlorobenzene	21.31	146	5867148	35.33 ug/L	99
55) 4-Isopropyltoluene	21.35	119	13520952	39.26 ug/L	99
56) 1,4-Dichlorobenzene	21.48	146	5658632	34.77 ug/L	100
58) 1,2-Dichlorobenzene	22.16	146	4429755	33.73 ug/L	97
59) n-Butylbenzene	22.11	91	14000701	40.05 ug/L	100
60) 1,2-Dibromo-3-chloropropan	23.58	75	283978	31.64 ug/L	98
61) 1,2,4-Trichlorobenzene	25.13	180	3682422	34.62 ug/L	99
62) Hexachlorobutadiene	25.45	225	3421695	37.03 ug/L m	83
63) Naphthalene	25.59	128	3527603	34.33 ug/L	100
64) 1,2,3-Trichlorobenzene	26.07	180	2654417	34.24 ug/L	100
65) Methyl-tert butyl ether	8.28	73	2797003	34.39 ug/L	98
66) tert-Butyl Alcohol	8.08	59	84092	70.21 ug/L m	100

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

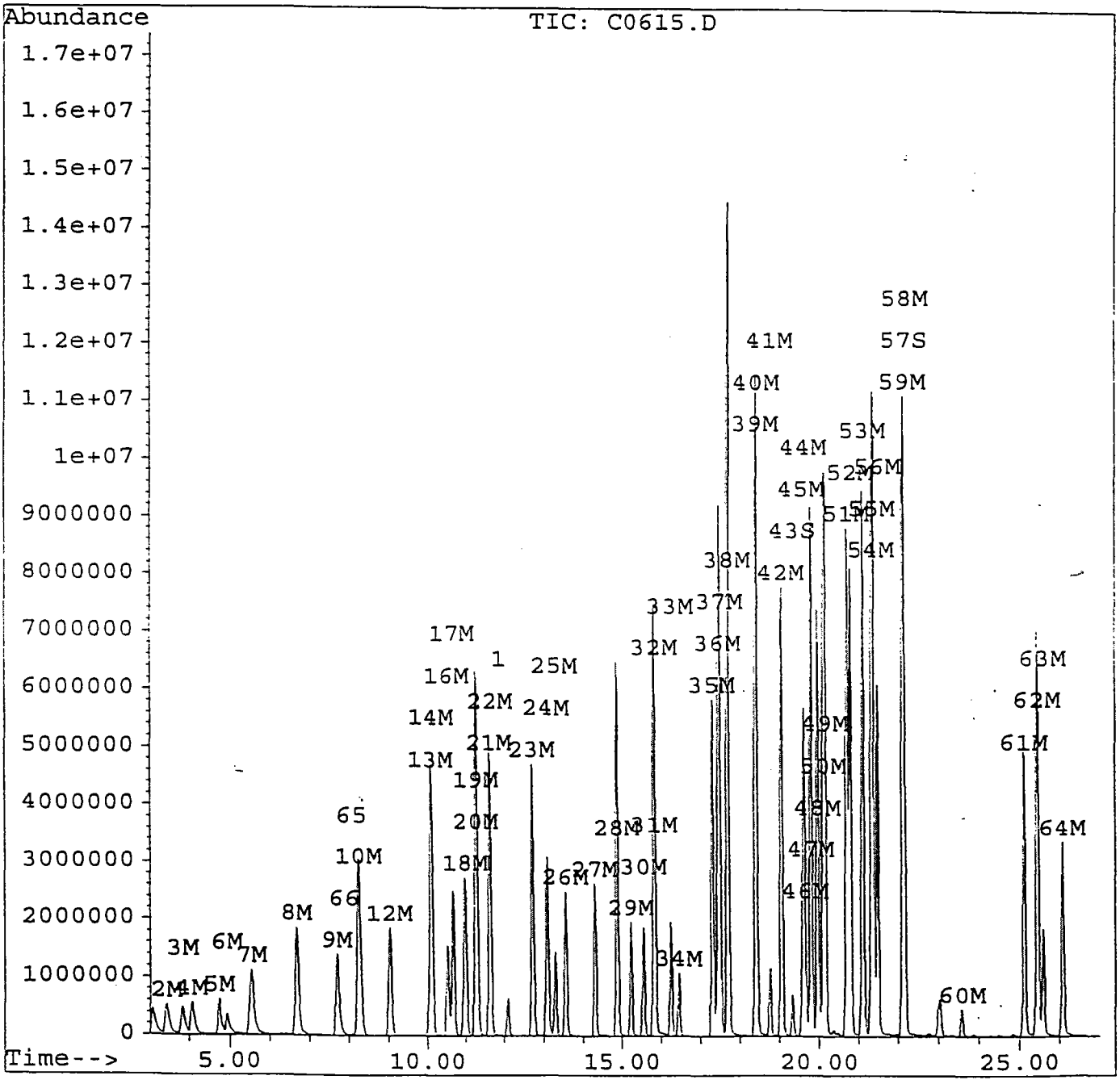
Quantitation Report

054

Data File : d:\hpchem\1\data\c0615.d
Acq On : 18 Dec 95 7:10 pm
Sample : 40 PPB STANDARD
Misc : 25 ML 524.2 INITIAL CALIBRATION
Quant Time: Dec 19 13:31 1995

Vial: 6
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Dec 19 13:49:27 1995
Response via : Multiple Level Calibration



5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

055

Lab Name : EMSL ANALYTICAL Contract: _____

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

Lab File ID: C0695.D BFB Injection Date: 12/26/95

Instrument ID: 5972-INSTRUMENT 1 BFB Injection Time: 1653

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	18.1
75	30.0 - 66.0% of mass 95	42.1
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	64.9
175	4.0 - 9.0% of mass 174	4.7 (7.2)1
176	93.0 - 101.0% of mass 174	63.9 (98.5)1
177	5.0 - 9.0% of mass 176	4.0 (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:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD010	10 STND	C0696.D	12/26/95	1706
02	VBLK01	M. BLANK	C0697.D	12/26/95	1741
03	9557856V	9557856V	C0698.D	12/26/95	1815
04	9557857V	9557857V	C0699.D	12/26/95	1850
05	9558188V	9558188V	C0700.D	12/26/95	1924
06	9558189V	9558189V	C0701.D	12/26/95	1958
07	9558190V	9558190V	C0702.D	12/26/95	2032
08	9558191V	9558191V	C0703.D	12/26/95	2107
09	9558192V	9558192V	C0704.D	12/26/95	2141
10	9558196V	9558196V	C0705.D	12/26/95	2215
11	9558197V	9558197V	C0706.D	12/26/95	2250
12	9558195V	9558195V	C0707.D	12/26/95	2324
13	9557856MS	57856MS	C0708.D	12/26/95	2358
14	9557856MSD	57856MSD	C0709.D	12/27/95	0032
15	10 QCS	10 QCS	C0710.D	12/27/95	0107
16	1 STND	1 STND	C0711.D	12/27/95	0141
17					
18					
19					
20					
21					
22					

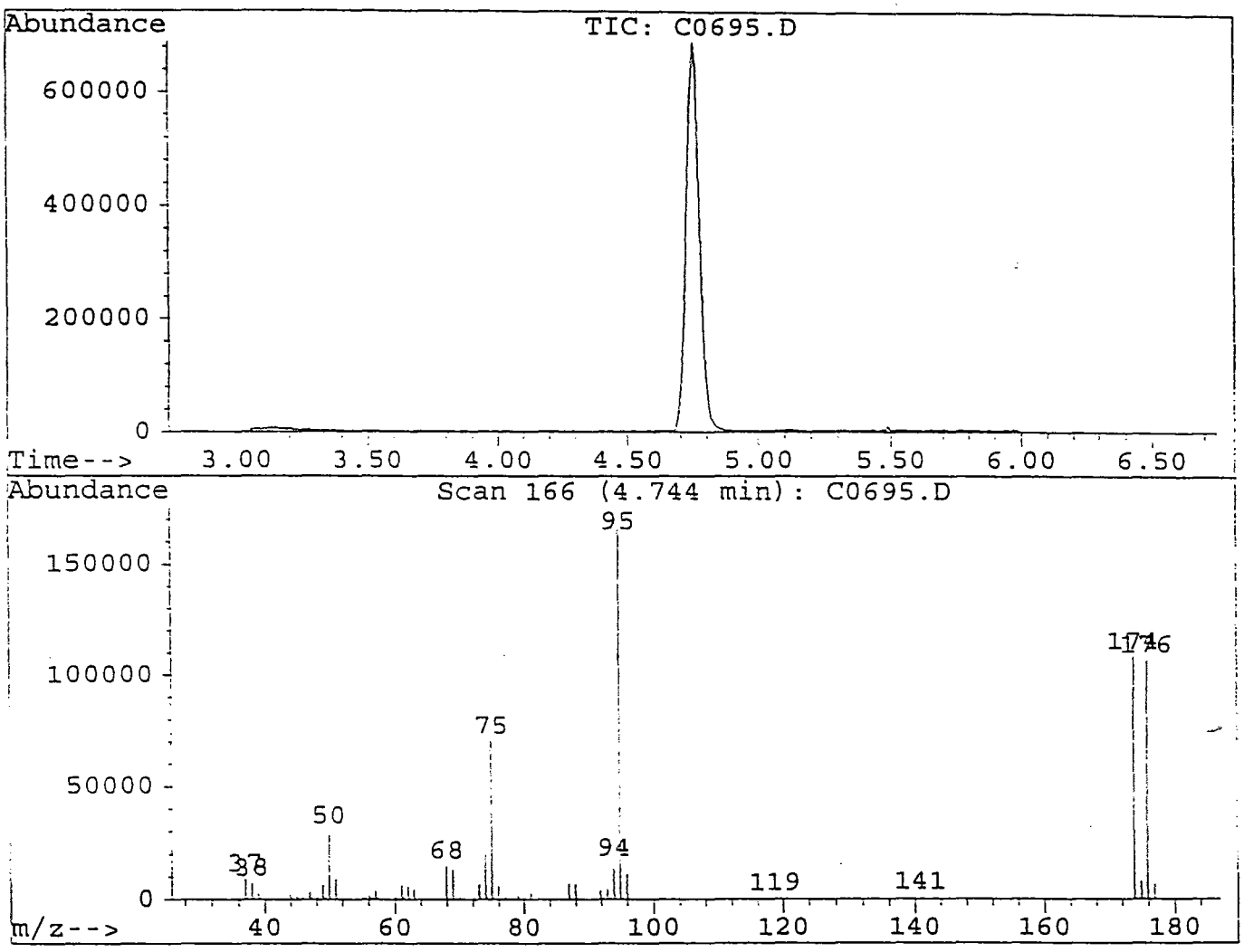
CLPBFB

056

Data File : D:\HPCHEM\1\DATA\C0695.D
Acq On : 26 Dec 95 4:53 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: 166

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.1	30208	PASS
75	95	30	80	42.1	70408	PASS
95	95	100	100	100.0	167168	PASS
96	95	5	9	6.8	11321	PASS
173	174	0	2	0.0	0	PASS
174	95	50	100	64.9	108464	PASS
175	174	5	9	7.2	7852	PASS
176	174	95	101	98.5	106816	PASS
177	176	5	9	6.3	6723	PASS

Scan 166 (4.744 min): C0695.D
BFB TUNE

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.10	2075	51.05	8964	72.05	879	87.00	6983
37.10	9106	55.05	634	73.05	6510	88.05	6954
38.10	7359	56.10	1741	74.05	20264	91.05	593
39.10	2709	57.10	3765	75.05	70408	91.95	3884
40.00	840	60.00	1615	76.05	6088	93.05	4447
44.00	2129	61.10	6353	77.00	1019	94.05	15855
45.00	1351	62.10	5874	78.00	686	95.05	167168
47.05	3168	63.00	4585	79.00	1970	96.05	11321
48.05	964	68.05	14864	79.90	859	118.80	530
49.05	6323	69.05	13479	81.00	2637	140.90	1017
50.05	30208	70.05	981	82.00	642	143.00	873

Scan 166 (4.744 min): C0695.D
BFB TUNE

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
173.95	108464						
174.95	7852						
175.95	106816						
176.95	6723						

7A

VOLATILE CONTINUING CALIBRATION CHECK

058

Lab Name: EMSL ANALYTICAL Contract: _____

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

Instrument ID: 5972-INSTRUMENT 1 Calibration Date: 12/26/95 Time: 1706

Lab File ID: C0696.D Init. Calib. Date(s): 12/18/95 _____

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	0.205	0.176		14.1	30.0
Chloromethane	0.202	0.173		14.4	30.0
Vinyl chloride	0.214	0.205		4.2	30.0
Bromomethane	0.121	0.132		-9.1	30.0
Chloroethane	0.130	0.137		-5.4	30.0
Trichlorofluoromethane	0.376	0.368		2.1	30.0
1,1-Dichloroethene	0.234	0.234		0.0	30.0
Methylene chloride	0.220	0.238		-8.2	30.0
trans-1,2-Dichloroethene	0.267	0.270		-1.1	30.0
1,1-Dichloroethane	0.497	0.500		-0.6	30.0
2,2-Dichloropropane	0.407	0.412		-1.2	30.0
cis-1,2-Dichloroethene	0.254	0.258		-1.6	30.0
Bromochloromethane	0.098	0.101		-3.1	30.0
Chloroform	0.439	0.439		0.0	30.0
1,1,1-Trichloroethane	0.447	0.444		0.7	30.0
Carbon tetrachloride	0.404	0.411		-1.7	30.0
1,1-Dichloropropene	0.416	0.422		-1.4	30.0
Benzene	0.857	0.869		-1.4	30.0
1,2-Dichloroethane	0.163	0.167		-2.5	30.0
Trichloroethene	0.348	0.355		-2.0	30.0
1,2-Dichloropropane	0.285	0.289		-1.4	30.0
Dibromomethane	0.113	0.118		-4.4	30.0
Bromodichloromethane	0.341	0.351		-2.9	30.0
cis-1,3-Dichloropropene	0.313	0.323		-3.2	30.0
Toluene	0.624	0.619		0.8	30.0
trans-1,3-Dichloropropene	0.206	0.213		-3.4	30.0
1,1,2-Trichloroethane	0.110	0.115		-4.5	30.0
Tetrachloroethene	0.410	0.419		-2.2	30.0
1,3-Dichloropropane	0.213	0.218		-2.3	30.0
Dibromochloromethane	0.215	0.226		-5.1	30.0
1,2-Dibromoethane	0.000	0.000			30.0
Chlorobenzene	0.660	0.682		-3.3	30.0
1,1,1,2-Tetrachloroethane	0.265	0.274		-3.4	30.0
Ethylbenzene	1.241	1.268		-2.2	30.0
Xylene (para & meta)	0.473	0.484		-2.3	30.0
Xylene (Ortho)	0.424	0.436		-2.8	30.0

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EMSL ANALYTICAL Contract: _____

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

Instrument ID: 5972-INSTRUMENT 1 Calibration Date: 12/26/95 Time: 1706

Lab File ID: C0696.D Init. Calib. Date(s): 12/18/95 _____

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	0.626	0.654		-4.5	30.0
Bromoform	0.119	0.120		-0.8	30.0
Isopropylbenzene	1.210	1.237		-2.2	30.0
Bromobenzene	0.276	0.286		-3.6	30.0
1,1,2,2-Tetrachloroethane	0.141	0.147		-4.3	30.0
1,2,3-Trichloropropane	0.135	0.133		1.5	30.0
n-Propylbenzene	1.672	1.715		-2.6	30.0
2-Chlorotoluene	0.967	0.981		-1.4	30.0
4-Chlorotoluene	1.035	1.077		-4.1	30.0
1,3,5-Trimethylbenzene	1.023	1.058		-3.4	30.0
tert-Butylbenzene	1.078	1.204		-11.7	30.0
1,2,4-Trimethylbenzene	0.993	1.033		-4.0	30.0
sec-Butylbenzene	1.621	1.682		-3.8	30.0
1,3-Dichlorobenzene	0.553	0.578		-4.5	30.0
4-Isopropyltoluene	1.277	1.334		-4.5	30.0
1,4-Dichlorobenzene	0.536	0.558		-4.1	30.0
1,2-Dichlorobenzene	0.421	0.442		-5.0	30.0
n-Butylbenzene	1.320	1.378		-4.4	30.0
1,2-Dibromo-3-chloropropane	0.027	0.027		0.0	30.0
1,2,4-Trichlorobenzene	0.341	0.351		-2.9	30.0
Hexachlorobutadiene	0.316	0.324		-2.5	30.0
Naphthalene	0.338	0.311		8.0	30.0
1,2,3-Trichlorobenzene	0.248	0.258		-4.0	30.0
4-Bromofluorobenzene	0.472	0.486		-3.0	30.0
1,2-Dichlorobenzene-d4	0.278	0.290		-4.3	30.0

Evaluate Continuing Calibration Report

060

Data File : D:\HPCHEM\1\DATA\C0696.D
Acq On : 26 Dec 95 5:06 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 Dec 26 17:40:31 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	98	0.00
2	M	Dichlorodifluoromethane	0.205	0.176	14.3	79	0.00
3	M	Chloromethane	0.202	0.173	14.0	80	0.00
4	M	Vinyl chloride	0.214	0.205	4.6	87	0.00
5	M	Bromomethane	0.121	0.132	-9.2	108	0.00
6	M	Chloroethane	0.130	0.137	-5.5	91	0.00
7	M	Trichlorofluoromethane	0.376	0.368	2.3	91	0.00
8	M	1,1-Dichloroethene	0.234	0.234	0.1	94	0.00
9	M	Methylene chloride	0.220	0.238	-8.3	92	0.00
10	M	trans-1,2-Dichloroethene	0.267	0.270	-1.1	96	0.00
11		Hexane	0.000	0.000#	0.0	0#	-8.89#
12	M	1,1-Dichloroethane	0.497	0.500	-0.5	95	0.00
13	M	2,2-Dichloropropane	0.407	0.412	-1.2	95	0.00
14	M	cis-1,2-Dichloroethene	0.254	0.258	-1.6	96	0.00
15		2-Butanone	0.000	0.000#	0.0	0#	-11.21#
16	M	Bromochloromethane	0.098	0.101	-2.7	100	0.00
17	M	Chloroform	0.439	0.439	-0.1	96	0.00
18	M	1,1,1-Trichloroethane	0.447	0.444	0.7	94	0.00
19	M	Carbon tetrachloride	0.404	0.411	-1.7	95	0.00
20	M	1,1-Dichloropropene	0.416	0.422	-1.7	95	0.00
21	M	Benzene	0.857	0.869	-1.5	98	0.00
22	M	1,2-Dichloroethane	0.163	0.167	-3.0	98	0.00
23	M	Trichloroethene	0.348	0.355	-1.9	97	0.00
24	M	1,2-Dichloropropane	0.285	0.289	-1.5	96	0.00
25	M	Dibromomethane	0.113	0.118	-4.5	100	0.00
26	M	Bromodichloromethane	0.341	0.351	-3.1	98	0.00
27	M	cis-1,3-Dichloropropene	0.313	0.323	-3.2	98	0.00
28	M	Toluene	0.624	0.619	0.8	97	0.00
29	M	trans-1,3-Dichloropropene	0.206	0.213	-3.3	98	0.00
30	M	1,1,2-Trichloroethane	0.110	0.115	-4.7	100	0.00
31	M	Tetrachloroethene	0.410	0.419	-2.4	98	0.00
32	M	1,3-Dichloropropane	0.213	0.218	-2.4	99	0.00
33	M	Dibromochloromethane	0.215	0.226	-4.9	101	0.00
34	M	1,2-Dibromoethane	0.156	0.162	-3.8	100	0.00
35	M	Chlorobenzene	0.660	0.682	-3.5	98	0.00
36	M	1,1,1,2-Tetrachloroethane	0.265	0.274	-3.4	99	0.00
37	M	Ethylbenzene	1.241	1.268	-2.2	96	0.00
38	M	Xylene (para & meta)	0.473	0.484	-2.4	95	0.00
39	M	Xylene (Ortho)	0.424	0.436	-2.8	97	0.00
40	M	Styrene	0.626	0.654	-4.4	97	0.00
41	M	Bromoform	0.119	0.120	-0.5	102	0.00
42	M	Isopropylbenzene	1.210	1.237	-2.2	96	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

061

Data File : D:\HPCHEM\1\DATA\C0696.D
Acq On : 26 Dec 95 5:06 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 Dec 26 17:40:31 1995
Response via : Multiple Level Calibration

Min. RRF : 0.001 Min. Rel. Area : 50% Max. R.T. Dev 0.30min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
43	S	4-Bromofluorobenzene	0.472	0.486	-3.0	101	0.00
44	M	Bromobenzene	0.276	0.286	-3.6	98	0.00
45	M	1,1,2,2-Tetrachloroethane	0.141	0.147	-3.8	99	0.00
46	M	1,2,3-Trichloropropane	0.135	0.133	1.4	99	0.00
47	M	n-Propylbenzene	1.672	1.715	-2.6	96	0.00
48	M	2-Chlorotoluene	0.967	0.981	-1.5	95	0.00
49	M	4-Chlorotoluene	1.035	1.077	-4.0	97	0.00
50	M	1,3,5-Trimethylbenzene	1.023	1.058	-3.4	97	0.00
51	M	tert-Butylbenzene	1.078	1.204	-11.7	108	0.00
52	M	1,2,4-Trimethylbenzene	0.993	1.033	-3.9	97	0.00
53	M	sec-Butylbenzene	1.621	1.682	-3.8	97	0.00
54	M	1,3-Dichlorobenzene	0.553	0.578	-4.6	98	0.00
55	M	4-Isopropyltoluene	1.277	1.334	-4.4	96	0.00
56	M	1,4-Dichlorobenzene	0.536	0.558	-4.2	98	0.00
57	S	1,2-Dichlorobenzene-d4	0.278	0.290	-4.4	101	0.00
58	M	1,2-Dichlorobenzene	0.421	0.442	-5.2	100	0.00
59	M	n-Butylbenzene	1.320	1.378	-4.4	96	0.00
60	M	1,2-Dibromo-3-chloropropane	0.027	0.027	-2.4	102	0.00
61	M	1,2,4-Trichlorobenzene	0.341	0.351	-2.9	98	0.00
62	M	Hexachlorobutadiene	0.316	0.324	-2.4	96	0.00
63	M	Naphthalene	0.338	0.311	8.1	90	0.00
64	M	1,2,3-Trichlorobenzene	0.248	0.258	-3.9	98	0.00
5		Methyl-tert butyl ether	0.266	0.266	-0.0	98	0.00
66		tert-Butyl Alcohol	0.004	0.004	-6.8	108	0.00

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

Quantitation Report

062

Data File : d:\hpchem\1\data\c0696.d
Acq On : 26 Dec 95 5:06 pm
Sample : 10 PPB CHK STANDARD
Misc :
Quant Time: Dec 26 17:39 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 Dec 26 17:40:31 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	12.14	96	1403167	5.00	ug/L	0.06
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.38	95	681508	5.15	ug/L	102.97%
57) 1,2-Dichlorobenzene-d4	22.17	152	406430	5.22	ug/L	104.38%
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.48	85	493270	8.57	ug/L	100
3) Chloromethane	3.88	50	486572	8.60	ug/L	99
4) Vinyl chloride	4.11	62	574012	9.54	ug/L	99
5) Bromomethane	4.80	94	371292	10.92	ug/L	98
6) Chloroethane	5.04	64	385254	10.55	ug/L	99
7) Trichlorofluoromethane	5.63	101	1032052	9.77	ug/L	98
8) 1,1-Dichloroethene	6.75	96	657202	9.99	ug/L	98
9) Methylene chloride	7.76	84	667534	10.83	ug/L	98
10) trans-1,2-Dichloroethene	8.28	96	757969	10.11	ug/L	99
12) 1,1-Dichloroethane	9.09	63	1402366	10.05	ug/L	100
13) 2,2-Dichloropropane	10.13	77	1155122	10.12	ug/L	99
14) cis-1,2-Dichloroethene	10.14	96	723498	10.16	ug/L	98
16) Bromochloromethane	10.57	128	283928	10.27	ug/L	97
17) Chloroform	10.71	83	1231987	10.01	ug/L	99
18) 1,1,1-Trichloroethane	11.02	97	1244672	9.93	ug/L	100
19) Carbon tetrachloride	11.32	117	1152683	10.17	ug/L	99
20) 1,1-Dichloropropene	11.31	75	1185490	10.17	ug/L	99
21) Benzene	11.66	78	2439835	10.15	ug/L	99
22) 1,2-Dichloroethane	11.69	62	469768	10.30	ug/L	97
23) Trichloroethene	12.77	95	996628	10.19	ug/L	99
24) 1,2-Dichloropropane	13.14	63	811439	10.15	ug/L	99
25) Dibromomethane	13.34	93	330426	10.45	ug/L	94
26) Bromodichloromethane	13.60	83	985527	10.31	ug/L	98
27) cis-1,3-Dichloropropene	14.35	75	905453	10.32	ug/L	99
28) Toluene	14.93	92	1737580	9.92	ug/L	100
29) trans-1,3-Dichloropropene	15.29	75	598212	10.33	ug/L	100
30) 1,1,2-Trichloroethane	15.61	83	322323	10.47	ug/L	97
31) Tetrachloroethene	15.88	166	1177161	10.24	ug/L	98
32) 1,3-Dichloropropane	15.90	76	613056	10.24	ug/L	99
33) Dibromochloromethane	16.30	129	632972	10.49	ug/L	99
34) 1,2-Dibromoethane	16.50	107	453900	10.38	ug/L	98
35) Chlorobenzene	17.35	112	1915273	10.35	ug/L	98
36) 1,1,1,2-Tetrachloroethane	17.49	131	767856	10.34	ug/L	98
37) Ethylbenzene	17.53	91	3559197	10.22	ug/L	99
38) Xylene (para & meta)	17.74	106	2718543	20.47	ug/L	95
39) Xylene (Ortho)	18.45	106	1224575	10.28	ug/L	96
40) Styrene	18.47	104	1834733	10.44	ug/L	98

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

Quantitation Report

Data File : d:\hpchem\1\data\c0696.d
Acq On : 26 Dec 95 5:06 pm
Sample : 10 PPB CHK STANDARD
Misc :
Quant Time: Dec 26 17:39 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 Dec 26 17:40:31 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
41)	Bromoform	18.81	173	336954	10.05 ug/L		97
42)	Isopropylbenzene	19.10	105	3470125	10.22 ug/L	m	0
44)	Bromobenzene	19.66	156	803870	10.36 ug/L		100
45)	1,1,2,2-Tetrachloroethane	19.61	83	411922	10.38 ug/L		100
46)	1,2,3-Trichloropropane	19.71	75	373657	9.86 ug/L	m	1
47)	n-Propylbenzene	19.83	91	4813508	10.26 ug/L	m	81
48)	2-Chlorotoluene	20.00	91	2752454	10.15 ug/L	m	99
49)	4-Chlorotoluene	20.19	91	3021831	10.40 ug/L		100
50)	1,3,5-Trimethylbenzene	20.15	105	2968321	10.34 ug/L		99
51)	tert-Butylbenzene	20.74	119	3378863	11.17 ug/L		99
52)	1,2,4-Trimethylbenzene	20.83	105	2897883	10.39 ug/L		100
53)	sec-Butylbenzene	21.14	105	4719391	10.38 ug/L		98
54)	1,3-Dichlorobenzene	21.36	146	1623019	10.46 ug/L		99
55)	4-Isopropyltoluene	21.40	119	3743600	10.44 ug/L		99
56)	1,4-Dichlorobenzene	21.52	146	1566399	10.42 ug/L		99
58)	1,2-Dichlorobenzene	22.20	146	1241775	10.52 ug/L	m	0
59)	n-Butylbenzene	22.15	91	3866192	10.44 ug/L		98
60)	1,2-Dibromo-3-chloropropan	23.62	75	76499	10.24 ug/L		99
61)	1,2,4-Trichlorobenzene	25.17	180	984670	10.29 ug/L		99
62)	Hexachlorobutadiene	25.49	225	909531	10.24 ug/L		100
63)	Naphthalene	25.63	128	872343	9.19 ug/L		100
64)	1,2,3-Trichlorobenzene	26.13	180	722817	10.39 ug/L		99
65)	Methyl-tert butyl ether	8.32	73	746983	10.00 ug/L		99
66)	tert-Butyl Alcohol	8.09	59	24090	21.36 ug/L	m	100

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

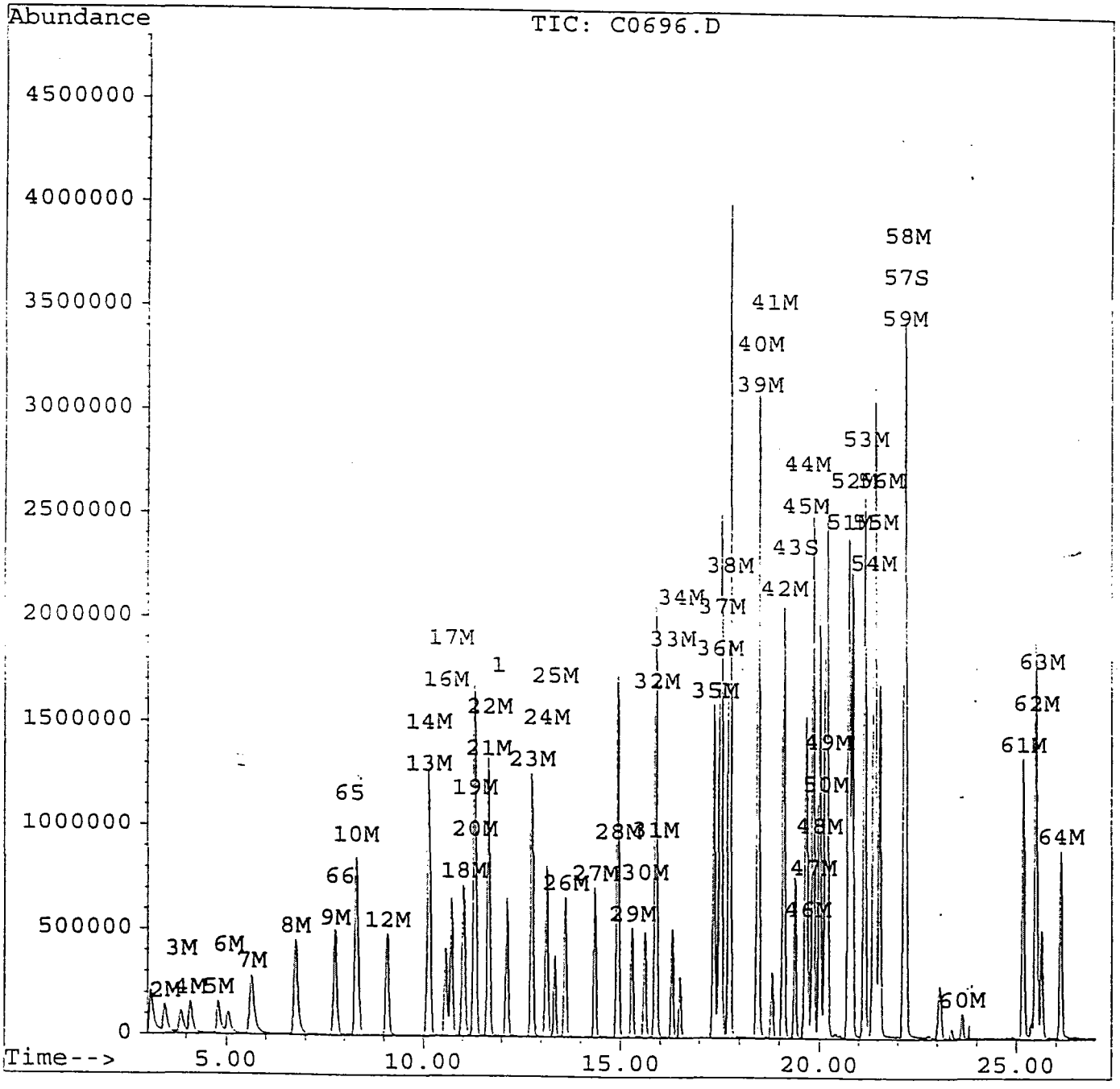
Quantitation Report

064

Data File : d:\hpchem\1\data\c0696.d
Acq On : 26 Dec 95 5:06 pm
Sample : 10 PPB CHK STANDARD
Misc :
Quant Time: Dec 26 17:39 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 Dec 26 17:40:31 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : d:\hpchem\1\data\c0710.d
Acq On : 27 Dec 95 1:07 am
Sample : 10 QCS
Misc : 25 ML
Quant Time: Dec 27 14:32 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 Dec 26 17:40:31 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	12.13	96	1346351	5.00	ug/L	0.00
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.37	95	630557	4.96	ug/L	99.29%
57) 1,2-Dichlorobenzene-d4	22.17	152	376006	5.03	ug/L	100.64%
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.47	85	697975	12.63	ug/L	99
3) Chloromethane	3.89	50	474412	8.74	ug/L	100
4) Vinyl chloride	4.11	62	613036	10.62	ug/L	99
5) Bromomethane	4.79	94	409447	12.55	ug/L	97
6) Chloroethane	5.04	64	371470	10.60	ug/L	100
7) Trichlorofluoromethane	5.64	101	1142891	11.27	ug/L	100
8) 1,1-Dichloroethene	6.75	96	733451	11.62	ug/L	94
9) Methylene chloride	7.75	84	658917	11.14	ug/L	97
10) trans-1,2-Dichloroethene	8.29	96	792597	11.02	ug/L	98
12) 1,1-Dichloroethane	9.08	63	1445364	10.80	ug/L	99
13) 2,2-Dichloropropane	10.13	77	1000156	9.13	ug/L	99
14) cis-1,2-Dichloroethene	10.15	96	742214	10.87	ug/L	97
16) Bromochloromethane	10.57	128	283743	10.70	ug/L	98
17) Chloroform	10.71	83	1242003	10.51	ug/L	100
18) 1,1,1-Trichloroethane	11.02	97	1267712	10.54	ug/L	99
19) Carbon tetrachloride	11.32	117	1188851	10.93	ug/L	99
20) 1,1-Dichloropropene	11.31	75	1273460	11.38	ug/L	98
21) Benzene	11.67	78	2324175	10.08	ug/L	98
22) 1,2-Dichloroethane	11.69	62	470311	10.75	ug/L	100
23) Trichloroethene	12.76	95	1016714	10.83	ug/L	99
24) 1,2-Dichloropropane	13.14	63	804755	10.50	ug/L	99
25) Dibromomethane	13.34	93	315172	10.39	ug/L	98
26) Bromodichloromethane	13.61	83	978994	10.67	ug/L	98
27) cis-1,3-Dichloropropene	14.35	75	927183	11.01	ug/L	100
28) Toluene	14.93	92	1638728	9.75	ug/L	99
29) trans-1,3-Dichloropropene	15.29	75	587053	10.56	ug/L	100
30) 1,1,2-Trichloroethane	15.60	83	317654	10.75	ug/L	97
31) Tetrachloroethene	15.88	166	1181411	10.71	ug/L	99
32) 1,3-Dichloropropane	15.90	76	606123	10.55	ug/L	99
33) Dibromochloromethane	16.30	129	609925	10.53	ug/L	95
34) 1,2-Dibromoethane	16.51	107	439984	10.49	ug/L	99
35) Chlorobenzene	17.35	112	1845640	10.39	ug/L	98
36) 1,1,1,2-Tetrachloroethane	17.49	131	764607	10.73	ug/L	96
37) Ethylbenzene	17.53	91	3377097	10.11	ug/L	99
38) Xylene (para & meta)	17.73	106	2607690	20.47	ug/L	98
39) Xylene (Ortho)	18.44	106	1183670	10.36	ug/L	99
40) Styrene	18.47	104	1756129	10.41	ug/L	100

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

Quantitation Report

066

Data File : d:\hpchem\1\data\c0710.d
Acq On : 27 Dec 95 1:07 am
Sample : 10 QCS
Misc : 25 ML
Quant Time: Dec 27 14:32 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 Dec 26 17:40:31 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.81	173	321494	9.99	ug/L		98
42)	Isopropylbenzene	19.09	105	3659960	11.24	ug/L	m	0
44)	Bromobenzene	19.66	156	757636	10.18	ug/L		99
45)	1,1,2,2-Tetrachloroethane	19.62	83	399660	10.50	ug/L		100
46)	1,2,3-Trichloropropane	19.70	75	384258	10.57	ug/L	#	2
47)	n-Propylbenzene	19.84	91	4658830	10.35	ug/L		94
48)	2-Chlorotoluene	20.00	91	2514798	9.66	ug/L		93
49)	4-Chlorotoluene	20.20	91	2843147	10.20	ug/L		98
50)	1,3,5-Trimethylbenzene	20.15	105	2780359	10.10	ug/L		100
51)	tert-Butylbenzene	20.74	119	3290800	11.34	ug/L		98
52)	1,2,4-Trimethylbenzene	20.83	105	2655809	9.93	ug/L		100
53)	sec-Butylbenzene	21.15	105	4617600	10.58	ug/L		99
54)	1,3-Dichlorobenzene	21.36	146	1566352	10.52	ug/L		99
55)	4-Isopropyltoluene	21.40	119	3609010	10.49	ug/L		99
56)	1,4-Dichlorobenzene	21.52	146	1516321	10.52	ug/L		98
58)	1,2-Dichlorobenzene	22.21	146	1196636	10.56	ug/L		97
59)	n-Butylbenzene	22.16	91	3604256	10.14	ug/L		99
60)	1,2-Dibromo-3-chloropropan	23.63	75	72502	10.12	ug/L		99
61)	1,2,4-Trichlorobenzene	25.17	180	917640	9.99	ug/L		99
62)	Hexachlorobutadiene	25.50	225	893852	10.49	ug/L		100
63)	Naphthalene	25.64	128	906990	9.96	ug/L		100
64)	1,2,3-Trichlorobenzene	26.13	180	678490	10.16	ug/L		98

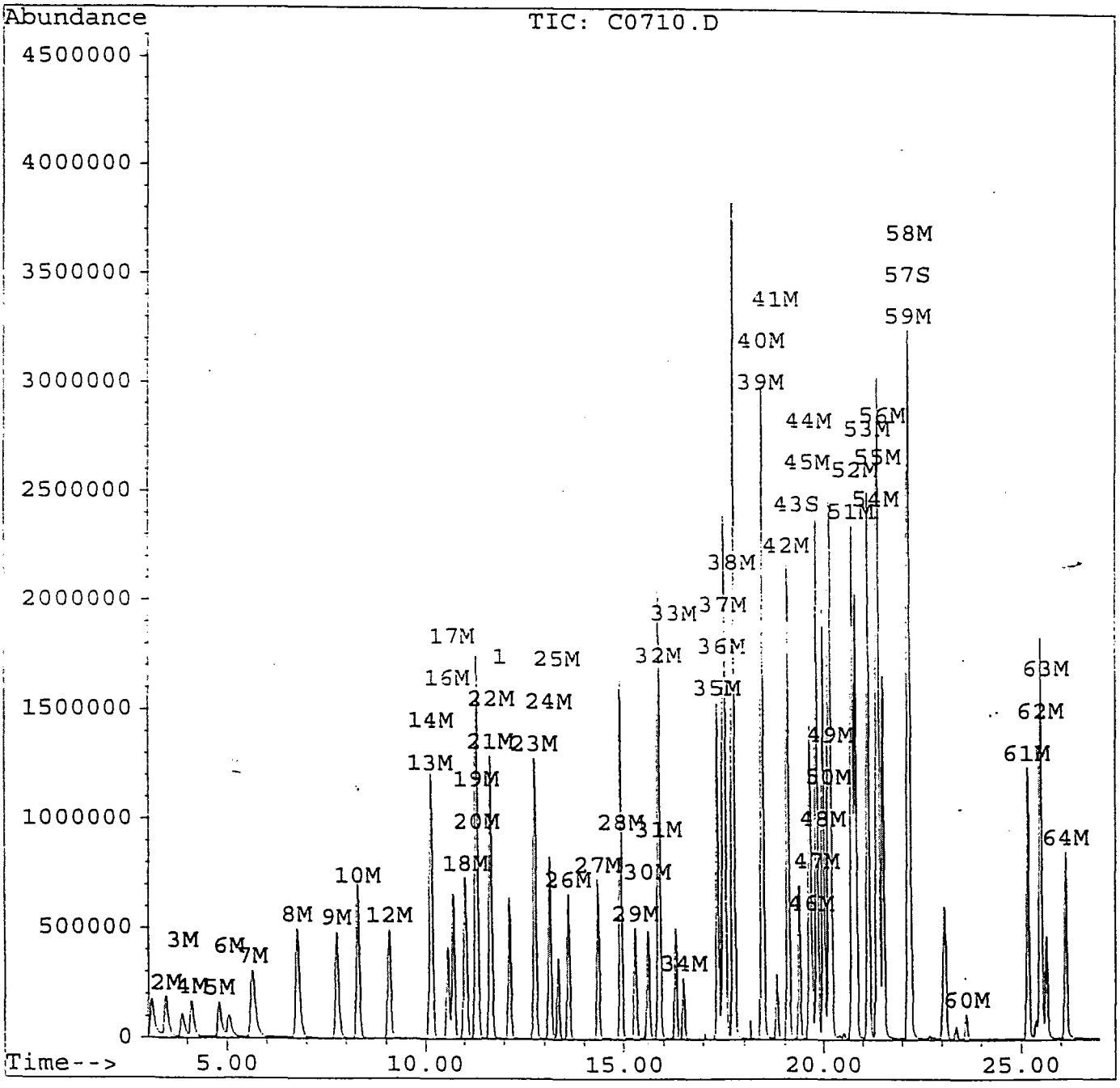
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c0710.d
Acq On : 27 Dec 95 1:07 am
Sample : 10 QCS
Misc : 25 ML
Quant Time: Dec 27 14:32 1995

Vial: 16 0067
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Dec 26 17:40:31 1995
Response via : Multiple Level Calibration



Quantitation Report

008

Data File : d:\hpchem\1\data\c0711.d
Acq On : 27 Dec 95 1:41 am
Sample : 1 STND
Misc : 25 ML
Quant Time: Dec 27 2:09 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 Dec 26 17:40:31 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	12.14	96	1286016	5.00	ug/L		0.00
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.38	95	615296	5.07	ug/L		101.43%
57) 1,2-Dichlorobenzene-d4	22.17	152	375132	5.26	ug/L		105.12%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.48	85	58817	1.11	ug/L		96
3) Chloromethane	3.87	50	47430	0.92	ug/L		96
4) Vinyl chloride	4.11	62	55981	1.02	ug/L		95
5) Bromomethane	4.81	94	42701	1.37	ug/L		91
6) Chloroethane	5.07	64	38809	1.16	ug/L		95
7) Trichlorofluoromethane	5.64	101	100026	1.03	ug/L		95
8) 1,1-Dichloroethene	6.76	96	63986	1.06	ug/L	#	87
9) Methylene chloride	7.75	84	177797	3.15	ug/L		99
10) trans-1,2-Dichloroethene	8.28	96	71755	1.04	ug/L		96
12) 1,1-Dichloroethane	9.08	63	136476	1.07	ug/L		94
13) 2,2-Dichloropropane	10.14	77	94898	0.91	ug/L		100
14) cis-1,2-Dichloroethene	10.14	96	73425	1.13	ug/L		93
16) Bromochloromethane	10.57	128	28778	1.14	ug/L		91
17) Chloroform	10.72	83	123482	1.09	ug/L		98
18) 1,1,1-Trichloroethane	11.03	97	119544	1.04	ug/L		98
19) Carbon tetrachloride	11.32	117	110881	1.07	ug/L		99
20) 1,1-Dichloropropene	11.31	75	115092	1.08	ug/L		93
21) Benzene	11.66	78	246277	1.12	ug/L		100
22) 1,2-Dichloroethane	11.69	62	46307	1.11	ug/L		91
23) Trichloroethene	12.77	95	98588	1.10	ug/L		98
24) 1,2-Dichloropropane	13.14	63	81397	1.11	ug/L		98
25) Dibromomethane	13.34	93	32772	1.13	ug/L		93
26) Bromodichloromethane	13.61	83	96933	1.11	ug/L		94
27) cis-1,3-Dichloropropene	14.35	75	86538	1.08	ug/L		98
28) Toluene	14.92	92	176365	1.10	ug/L		96
29) trans-1,3-Dichloropropene	15.29	75	58753	1.11	ug/L		94
30) 1,1,2-Trichloroethane	15.61	83	32109	1.14	ug/L		98
31) Tetrachloroethene	15.88	166	114827	1.09	ug/L		96
32) 1,3-Dichloropropane	15.90	76	62646	1.14	ug/L		96
33) Dibromochloromethane	16.30	129	59804	1.08	ug/L		94
34) 1,2-Dibromoethane	16.50	107	44592	1.11	ug/L		91
35) Chlorobenzene	17.36	112	191225	1.13	ug/L		98
36) 1,1,1,2-Tetrachloroethane	17.49	131	76472	1.12	ug/L		94
37) Ethylbenzene	17.53	91	352270	1.10	ug/L		100
38) Xylene (para & meta)	17.74	106	270164	2.22	ug/L		100
39) Xylene (Ortho)	18.44	106	124211	1.14	ug/L		91
40) Styrene	18.46	104	176351	1.09	ug/L		96

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

Quantitation Report

069

Data File : d:\hpchem\1\data\c0711.d
Acq On. : 27 Dec 95 1:41 am
Sample : 1 STND
Misc : 25 ML
Quant Time: Dec 27 2:09 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 Dec 26 17:40:31 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.82	173	30664	1.00	ug/L		98
42)	Isopropylbenzene	19.10	105	345163	1.11	ug/L		99
44)	Bromobenzene	19.66	156	82706	1.16	ug/L		96
45)	1,1,2,2-Tetrachloroethane	19.62	83	41214	1.13	ug/L		98
46)	1,2,3-Trichloropropane	19.71	75	43515	1.25	ug/L	#	1
47)	n-Propylbenzene	19.83	91	477540	1.11	ug/L		93
48)	2-Chlorotoluene	20.00	91	283866	1.14	ug/L		92
49)	4-Chlorotoluene	20.19	91	313563	1.18	ug/L		99
50)	1,3,5-Trimethylbenzene	20.15	105	296756	1.13	ug/L		99
51)	tert-Butylbenzene	20.75	119	342119	1.23	ug/L		97
52)	1,2,4-Trimethylbenzene	20.83	105	309306	1.21	ug/L		97
53)	sec-Butylbenzene	21.14	105	469641	1.13	ug/L		98
54)	1,3-Dichlorobenzene	21.36	146	167641	1.18	ug/L		99
55)	4-Isopropyltoluene	21.40	119	374661	1.14	ug/L		99
56)	1,4-Dichlorobenzene	21.52	146	159716	1.16	ug/L		97
58)	1,2-Dichlorobenzene	22.20	146	130322	1.20	ug/L		96
59)	n-Butylbenzene	22.16	91	394240	1.16	ug/L		99
60)	1,2-Dibromo-3-chloropropan	23.63	75	7870	1.15	ug/L		84
61)	1,2,4-Trichlorobenzene	25.18	180	102936	1.17	ug/L		97
62)	Hexachlorobutadiene	25.50	225	89378	1.10	ug/L		99
63)	Naphthalene	25.64	128	122191	1.41	ug/L		100
64)	1,2,3-Trichlorobenzene	26.14	180	77999	1.22	ug/L		92
65)	Methyl-tert butyl ether	8.32	73	75918	1.11	ug/L		98

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

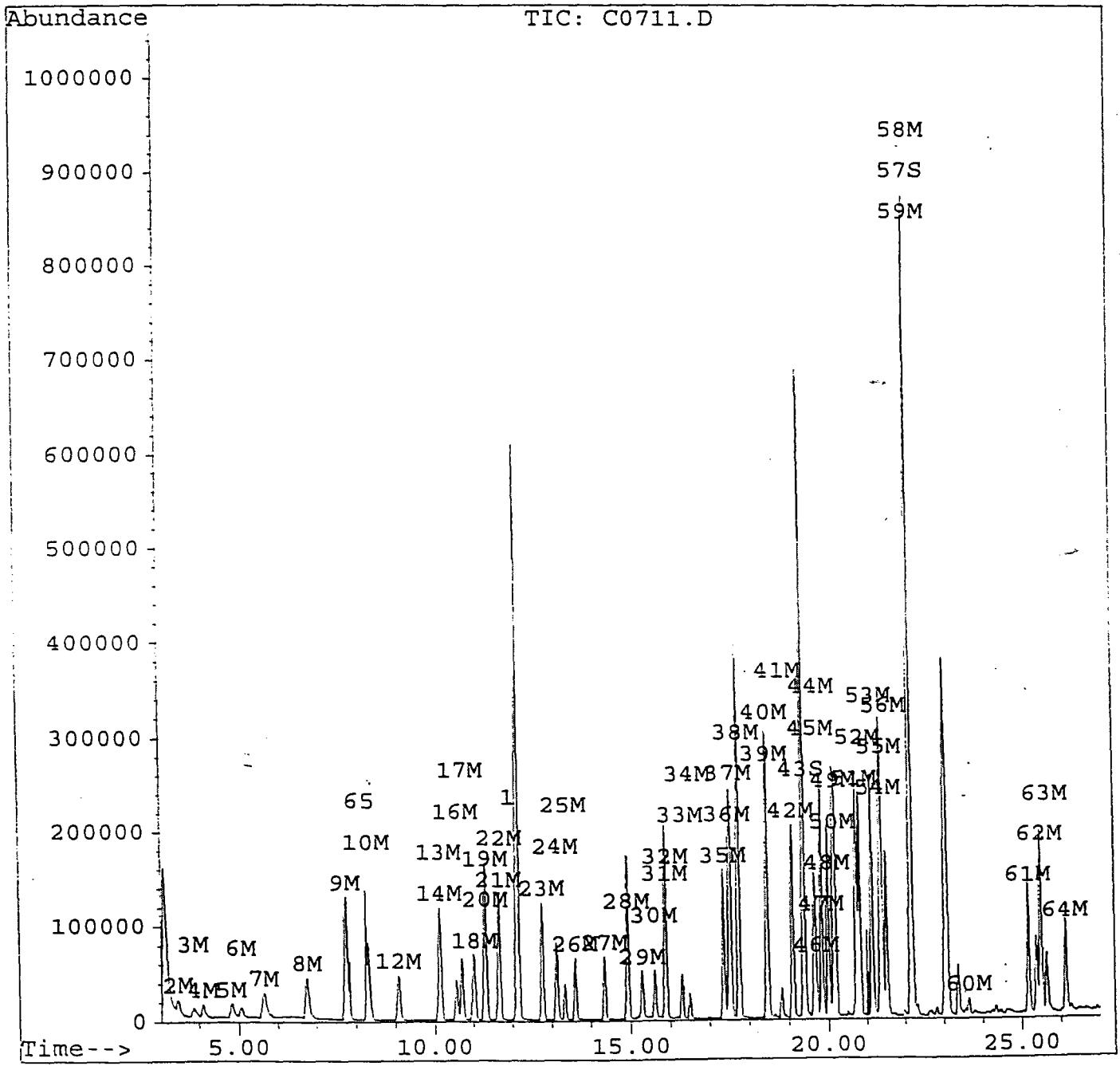
Quantitation Report

070

Data File : d:\hpchem\1\data\c0711.d
Acq On : 27 Dec 95 1:41 am
Sample : 1 STND
Misc : 25 ML
Quant Time: Dec 27 2:09 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 Dec 26 17:40:31 1995
Response via : Multiple Level Calibration



5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name : EMSL ANALYTICAL Contract: _____

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

Lab File ID: C0776.D BFB Injection Date: 12/29/95

Instrument ID: 5972-INSTRUMENT 1 BFB Injection Time: 0733

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	43.6
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.0
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	63.4
175	4.0 - 9.0% of mass 174	4.5 (7.1)1
176	93.0 - 101.0% of mass 174	61.9 (97.7)1
177	5.0 - 9.0% of mass 176	4.2 (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	C0777.D	12/29/95	0746
02	VBLK01	M. BLANK	C0778.D	12/29/95	0821
03	9558500V	9558500V	C0779.D	12/29/95	0856
04	9558501V	9558501V	C0780.D	12/29/95	0931
05	9558191V	9558191V	C0781.D	12/29/95	1005
06	9558192V	9558192V	C0782.D	12/29/95	1040
07	9558312V	9558312V	C0783.D	12/29/95	1114
08	9558313V	9558313V	C0784.D	12/29/95	1149
09	9558311V	9558311V	C0785.D	12/29/95	1223
10	9558314V	9558314V	C0786.D	12/29/95	1257
11	9558315V	9558315V	C0787.D	12/29/95	1332
12	9558316V	9558316V	C0788.D	12/29/95	1406
13	9558317V	9558317V	C0789.D	12/29/96	1440
14	9559346V	9559346V	C0790.D	12/29/95	1514
15	9558196V	9558196V	C0791.D	12/29/95	1549
16	1 STND	1 STND	C0792.D	12/29/95	1623
17					
18					
19					
20					
21					
22					

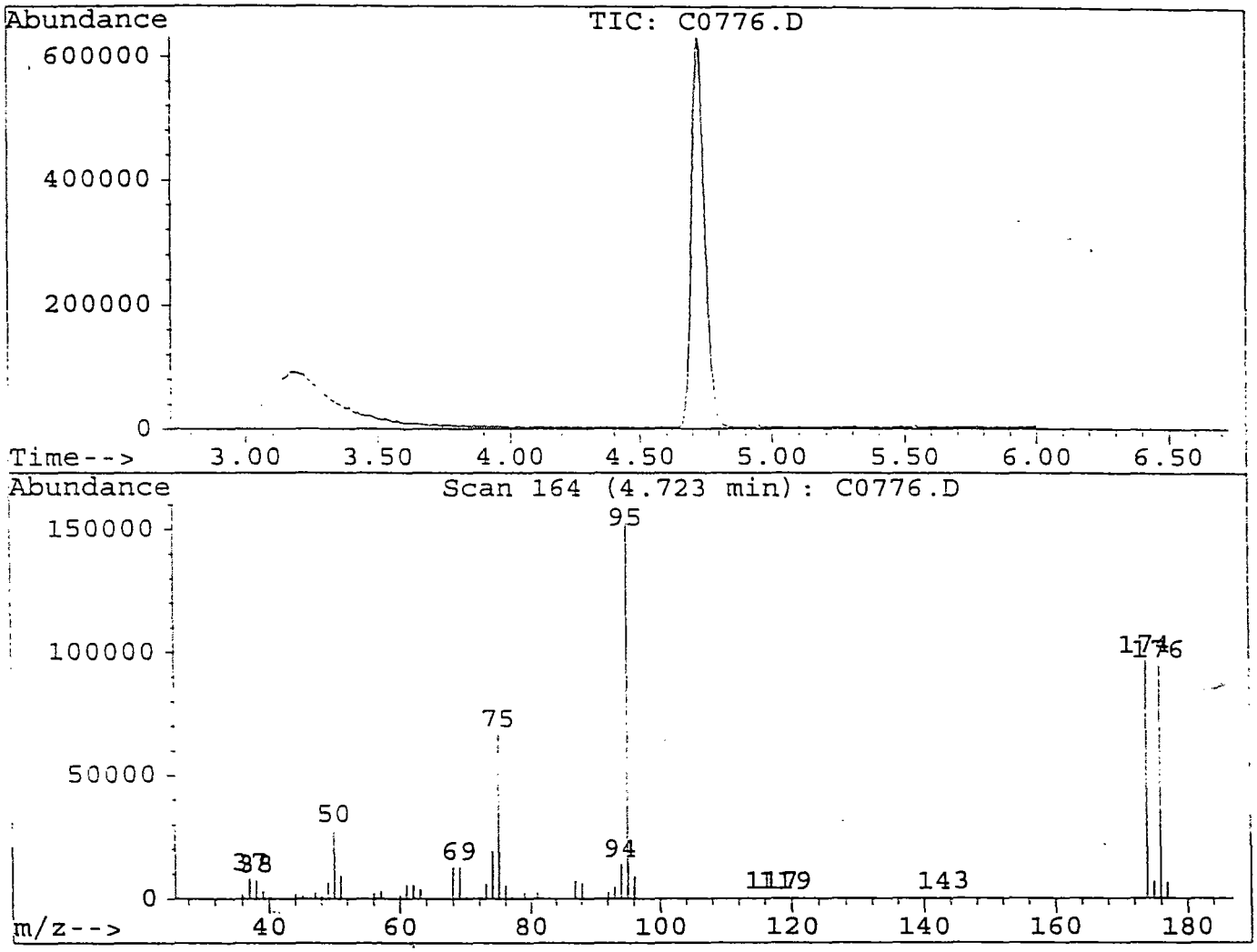
CLPBFB

072

Data File : D:\HPCHEM\1\DATA\C0776.D
Acq On : 29 Dec 95 7:33 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: 164

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.2	27864	PASS
75	95	30	80	43.6	66584	PASS
95	95	100	100	100.0	152832	PASS
96	95	5	9	6.0	9121	PASS
173	174	0	2	0.0	0	PASS
174	95	50	100	63.4	96824	PASS
175	174	5	9	7.1	6856	PASS
176	174	95	101	97.7	94624	PASS
177	176	5	9	6.7	6361	PASS

Scan 164 (4.723 min): C0776.D
BFB TUNE

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	2026	51.05	9257	71.95	757	88.05	6414
37.10	8219	52.05	587	73.05	5943	91.15	512
38.10	7476	56.10	2305	74.05	19512	92.05	2739
39.10	3027	57.10	3201	75.05	66584	93.05	4872
40.00	1005	60.00	1430	76.05	5474	94.05	13820
44.00	2200	61.00	5803	77.00	1174	95.05	152832
45.10	1467	62.00	5570	78.00	797	96.05	9121
47.05	2516	63.10	4215	79.00	2387	116.95	556
48.05	1132	68.05	12727	80.00	663	119.00	543
49.05	6670	69.05	12898	81.00	2496	141.00	547
50.05	27864	70.05	1269	87.00	7325	143.00	608

Scan 164 (4.723 min): C0776.D
BFB TUNE

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
173.95	96824						
174.95	6856						
175.95	94624						
176.95	6361						

7A

VOLATILE CONTINUING CALIBRATION CHECK

074

Lab Name: EMSL ANALYTICAL Contract: _____

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

Instrument ID: 5972-INSTRUMENT 1 Calibration Date: 12/29/95 Time: 0746

Lab File ID: C0777.D Init. Calib. Date(s): 12/18/96 _____

Heated Purge: (Y/N) _____ Init. Calib. Times: _____ _____

GC Column: DB-624 X 7 ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF10	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.205	0.150		26.8	30.0
Chloromethane	0.202	0.168		16.8	30.0
Vinyl chloride	0.214	0.201		6.1	30.0
Bromomethane	0.121	0.127		-5.0	30.0
Chloroethane	0.130	0.136		-4.6	30.0
Trichlorofluoromethane	0.376	0.380		-1.1	30.0
1,1-Dichloroethene	0.234	0.233		0.4	30.0
Methylene chloride	0.220	0.275		-25.0	30.0
trans-1,2-Dichloroethene	0.267	0.269		-0.7	30.0
1,1-Dichloroethane	0.497	0.512		-3.0	30.0
2,2-Dichloropropane	0.407	0.434		-6.6	30.0
cis-1,2-Dichloroethene	0.254	0.264		-3.9	30.0
Bromochloromethane	0.098	0.102		-4.1	30.0
Chloroform	0.439	0.457		-4.1	30.0
1,1,1-Trichloroethane	0.447	0.463		-3.6	30.0
Carbon tetrachloride	0.404	0.426		-5.4	30.0
1,1-Dichloropropene	0.416	0.431		-3.6	30.0
Benzene	0.857	0.883		-3.0	30.0
1,2-Dichloroethane	0.163	0.179		-9.8	30.0
Trichloroethene	0.348	0.363		-4.3	30.0
1,2-Dichloropropane	0.285	0.303		-6.3	30.0
Dibromomethane	0.113	0.122		-8.0	30.0
Bromodichloromethane	0.341	0.370		-8.5	30.0
cis-1,3-Dichloropropene	0.313	0.335		-7.0	30.0
Toluene	0.624	0.638		-2.2	30.0
trans-1,3-Dichloropropene	0.206	0.225		-9.2	30.0
1,1,2-Trichloroethane	0.110	0.119		-8.2	30.0
Tetrachloroethene	0.410	0.420		-2.4	30.0
1,3-Dichloropropane	0.213	0.230		-8.0	30.0
Dibromochloromethane	0.215	0.233		-8.4	30.0
1,2-Dibromoethane	0.000	0.000			30.0
Chlorobenzene	0.660	0.697		-5.6	30.0
1,1,1,2-Tetrachloroethane	0.265	0.283		-6.8	30.0
Ethylbenzene	1.241	1.290		-3.9	30.0
Xylene (para & meta)	0.473	0.495		-4.7	30.0
Xylene (Ortho)	0.424	0.449		-5.9	30.0

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EMSL ANALYTICAL Contract: _____

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

Instrument ID: 5972-INSTRUMENT 1 Calibration Date: 12/29/95 Time: 0746

Lab File ID: C0777.D Init. Calib. Date(s): 12/18/96 _____

Heated Purge: (Y/N) _____ Init. Calib. Times: _____ _____

GC Column: DB-624 X 7 ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF10	MIN RRF	%D	MAX %D
Styrene	0.626	0.669		-6.9	30.0
Bromoform	0.119	0.123		-3.4	30.0
Isopropylbenzene	1.210	1.280		-5.8	30.0
Bromobenzene	0.276	0.292		-5.8	30.0
1,1,2,2-Tetrachloroethane	0.141	0.154		-9.2	30.0
1,2,3-Trichloropropane	0.135	0.152		-12.6	30.0
n-Propylbenzene	1.672	1.756		-5.0	30.0
2-Chlorotoluene	0.967	0.936		3.2	30.0
4-Chlorotoluene	1.035	1.115		-7.7	30.0
1,3,5-Trimethylbenzene	1.023	1.085		-6.1	30.0
tert-Butylbenzene	1.078	1.223		-13.5	30.0
1,2,4-Trimethylbenzene	0.993	1.051		-5.8	30.0
sec-Butylbenzene	1.621	1.722		-6.2	30.0
1,3-Dichlorobenzene	0.553	0.591		-6.9	30.0
4-Isopropyltoluene	1.277	1.368		-7.1	30.0
1,4-Dichlorobenzene	0.536	0.593		-10.6	30.0
1,2-Dichlorobenzene	0.421	0.454		-7.8	30.0
n-Butylbenzene	1.320	1.405		-6.4	30.0
1,2-Dibromo-3-chloropropane	0.027	0.029		-7.4	30.0
1,2,4-Trichlorobenzene	0.341	0.363		-6.5	30.0
Hexachlorobutadiene	0.316	0.328		-3.8	30.0
Naphthalene	0.338	0.357		-5.6	30.0
1,2,3-Trichlorobenzene	0.248	0.269		-8.5	30.0
4-Bromofluorobenzene	0.472	0.491		-4.0	30.0
1,2-Dichlorobenzene-d4	0.278	0.290		-4.3	30.0

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\C0777.D
Acq On : 29 Dec 95 7:46 am
Sample : 10 PPB CHK STANDARD
Misc : 25 ML

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 Dec 26 17:40:31 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	98	-0.08
2	M	Dichlorodifluoromethane	0.205	0.150	27.0	67	-0.06
3	M	Chloromethane	0.202	0.168	16.9	77	-0.06
4	M	Vinyl chloride	0.214	0.201	6.4	85	-0.06
5	M	Bromomethane	0.121	0.127	-5.0	104	-0.07
6	M	Chloroethane	0.130	0.136	-4.8	90	-0.08
7	M	Trichlorofluoromethane	0.376	0.380	-0.9	94	-0.07
8	M	1,1-Dichloroethene	0.234	0.233	0.7	93	-0.08
9	M	Methylene chloride	0.220	0.275	-25.3	106	-0.09
10	M	trans-1,2-Dichloroethene	0.267	0.269	-0.9	95	-0.08
11		Hexane	0.000	0.000#	0.0	0#	-0.17
2	M	1,1-Dichloroethane	0.497	0.512	-2.9	97	-0.09
13	M	2,2-Dichloropropane	0.407	0.434	-6.6	100	-0.08
14	M	cis-1,2-Dichloroethene	0.254	0.264	-4.0	99	-0.08
5		2-Butanone	0.000	0.000#	0.0	0#	-11.21#
6	M	Bromochloromethane	0.098	0.102	-3.5	101	-0.08
17	M	Chloroform	0.439	0.457	-4.1	100	-0.08
8	M	1,1,1-Trichloroethane	0.447	0.463	-3.5	98	-0.08
9	M	Carbon tetrachloride	0.404	0.426	-5.4	99	-0.09
20	M	1,1-Dichloropropene	0.416	0.431	-3.8	97	-0.08
21	M	Benzene	0.857	0.883	-3.1	99	-0.08
2	M	1,2-Dichloroethane	0.163	0.179	-10.0	104	-0.08
23	M	Trichloroethene	0.348	0.363	-4.2	99	-0.08
24	M	1,2-Dichloropropane	0.285	0.303	-6.4	101	-0.08
5	M	Dibromomethane	0.113	0.122	-8.3	104	-0.08
6	M	Bromodichloromethane	0.341	0.370	-8.5	103	-0.07
27	M	cis-1,3-Dichloropropene	0.313	0.335	-7.2	102	-0.07
8	M	Toluene	0.624	0.638	-2.2	99	-0.08
9	M	trans-1,3-Dichloropropene	0.206	0.225	-9.0	103	-0.08
30	M	1,1,2-Trichloroethane	0.110	0.119	-8.7	104	-0.08
31	M	Tetrachloroethene	0.410	0.420	-2.6	98	-0.07
2	M	1,3-Dichloropropane	0.213	0.230	-7.8	104	-0.08
33	M	Dibromochloromethane	0.215	0.233	-8.6	105	-0.08
34	M	1,2-Dibromoethane	0.156	0.169	-8.2	104	-0.07
5	M	Chlorobenzene	0.660	0.697	-5.7	100	-0.07
6	M	1,1,1,2-Tetrachloroethane	0.265	0.283	-6.9	102	-0.07
37	M	Ethylbenzene	1.241	1.290	-4.0	98	-0.07
8	M	Xylene (para & meta)	0.473	0.495	-4.5	97	-0.07
9	M	Xylene (Ortho)	0.424	0.449	-5.8	100	-0.07
40	M	Styrene	0.626	0.669	-6.8	100	-0.07
41	M	Bromoform	0.119	0.123	-2.6	104	-0.07
2	M	Isopropylbenzene	1.210	1.280	-5.8	100	-0.07

(#) = Out of Range

Evaluate Continuing Calibration Report

077

Data File : D:\HPCHEM\1\DATA\C0777.D
Acq On : 29 Dec 95 7:46 am
Sample : 10 PPB CHK STANDARD
Misc : 25 ML

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 Dec 26 17:40:31 1995
Response via : Multiple Level Calibration

Min. RRF : 0.001 Min. Rel. Area : 50% Max. R.T. Dev 0.30min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
43	S	4-Bromofluorobenzene	0.472	0.491	-4.1	102	-0.07
44	M	Bromobenzene	0.276	0.292	-5.7	100	-0.07
45	M	1,1,2,2-Tetrachloroethane	0.141	0.154	-9.2	104	-0.06
46	M	1,2,3-Trichloropropane	0.135	0.152	-12.4	113	-0.07
47	M	n-Propylbenzene	1.672	1.756	-5.0	99	-0.06
48	M	2-Chlorotoluene	0.967	0.936	3.2	91	-0.07
49	M	4-Chlorotoluene	1.035	1.115	-7.7	100	-0.06
50	M	1,3,5-Trimethylbenzene	1.023	1.085	-6.1	99	-0.07
51	M	tert-Butylbenzene	1.078	1.223	-13.5	110	-0.06
52	M	1,2,4-Trimethylbenzene	0.993	1.051	-5.8	99	-0.06
53	M	sec-Butylbenzene	1.621	1.722	-6.3	99	-0.06
54	M	1,3-Dichlorobenzene	0.553	0.591	-6.8	100	-0.06
55	M	4-Isopropyltoluene	1.277	1.368	-7.1	99	-0.06
56	M	1,4-Dichlorobenzene	0.536	0.593	-10.7	104	-0.23
57	S	1,2-Dichlorobenzene-d4	0.278	0.290	-4.6	101	-0.07
58	M	1,2-Dichlorobenzene	0.421	0.454	-7.9	102	-0.06
59	M	n-Butylbenzene	1.320	1.405	-6.4	98	-0.06
60	M	1,2-Dibromo-3-chloropropane	0.027	0.029	-7.4	107	-0.06
61	M	1,2,4-Trichlorobenzene	0.341	0.363	-6.4	101	-0.06
62	M	Hexachlorobutadiene	0.316	0.328	-3.7	97	-0.06
63	M	Naphthalene	0.338	0.357	-5.7	104	-0.06
64	M	1,2,3-Trichlorobenzene	0.248	0.269	-8.6	102	-0.07
65		Methyl-tert butyl ether	0.266	0.277	-4.0	102	-0.08
66		tert-Butyl Alcohol	0.004	0.005	-12.7	115	-0.08

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

Quantitation Report

078

Data File : D:\HPCHEM\1\DATA\C0777.D
Acq On : 29 Dec 95 7:46 am
Sample : 10 PPB CHK STANDARD
Misc : 25 ML
Quant Time: Dec 31 8:26 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 Dec 26 17:40:31 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	12.05	96	1403737	5.00 ug/L	-0.08
System Monitoring Compounds					%Recovery
43) 4-Bromofluorobenzene	19.30	95	689126	5.20 ug/L	104.07%
57) 1,2-Dichlorobenzene-d4	22.10	152	407547	5.23 ug/L	104.62%
Target Compounds					Qvalue
2) Dichlorodifluoromethane	3.41	85	420323	7.30 ug/L m	97
3) Chloromethane	3.81	50	470415	8.31 ug/L	96
4) Vinyl chloride	4.04	62	563448	9.36 ug/L	97
5) Bromomethane	4.72	94	357192	10.50 ug/L	97
6) Chloroethane	4.96	64	382958	10.48 ug/L	99
7) Trichlorofluoromethane	5.56	101	1065960	10.09 ug/L	98
8) 1,1-Dichloroethene	6.66	96	653428	9.93 ug/L	97
9) Methylene chloride	7.66	84	772588	12.53 ug/L	91
10) trans-1,2-Dichloroethene	8.20	96	756408	10.09 ug/L	98
12) 1,1-Dichloroethane	8.99	63	1436112	10.29 ug/L	98
13) 2,2-Dichloropropane	10.04	77	1217287	10.66 ug/L	99
14) cis-1,2-Dichloroethene	10.05	96	740911	10.40 ug/L	99
16) Bromochloromethane	10.49	128	286299	10.35 ug/L	94
17) Chloroform	10.63	83	1282270	10.41 ug/L	98
18) 1,1,1-Trichloroethane	10.94	97	1298457	10.35 ug/L	99
19) Carbon tetrachloride	11.23	117	1195063	10.54 ug/L	97
20) 1,1-Dichloropropene	11.23	75	1211035	10.38 ug/L	99
21) Benzene	11.58	78	2478794	10.31 ug/L	100
22) 1,2-Dichloroethane	11.61	62	501697	11.00 ug/L	99
23) Trichloroethene	12.68	95	1019469	10.42 ug/L	98
24) 1,2-Dichloropropane	13.05	63	850519	10.64 ug/L	99
25) Dibromomethane	13.26	93	342666	10.83 ug/L	99
26) Bromodichloromethane	13.53	83	1037841	10.85 ug/L	99
27) cis-1,3-Dichloropropene	14.28	75	940934	10.72 ug/L	99
28) Toluene	14.85	92	1789813	10.22 ug/L	100
29) trans-1,3-Dichloropropene	15.21	75	631839	10.90 ug/L	98
30) 1,1,2-Trichloroethane	15.53	83	334915	10.87 ug/L	96
31) Tetrachloroethene	15.81	166	1179355	10.26 ug/L	99
32) 1,3-Dichloropropane	15.82	76	645267	10.78 ug/L	97
33) Dibromochloromethane	16.22	129	655503	10.86 ug/L	99
34) 1,2-Dibromoethane	16.42	107	473135	10.82 ug/L	99
35) Chlorobenzene	17.28	112	1957735	10.57 ug/L	99
36) 1,1,1,2-Tetrachloroethane	17.41	131	794514	10.69 ug/L	97
37) Ethylbenzene	17.46	91	3622160	10.40 ug/L	98
38) Xylene (para & meta)	17.66	106	2777346	20.91 ug/L	98
39) Xylene (Ortho)	18.37	106	1260897	10.58 ug/L	99
40) Styrene	18.39	104	1877436	10.68 ug/L	98

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

Quantitation Report

Data File : D:\HPCHEM\1\DATA\C0777.D
Acq On : 29 Dec 95 7:46 am
Sample : 10 PPB CHK STANDARD
Misc : 25 ML
Quant Time: Dec 31 8:26 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 Dec 26 17:40:31 1995
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41) Bromoform	18.73	173	344258	10.26	ug/L		98
42) Isopropylbenzene	19.02	105	3592947	10.58	ug/L	m	0
44) Bromobenzene	19.59	156	820454	10.57	ug/L		96
45) 1,1,2,2-Tetrachloroethane	19.55	83	433507	10.92	ug/L		100
46) 1,2,3-Trichloropropane	19.63	75	426033	11.24	ug/L	#	1
47) n-Propylbenzene	19.77	91	4928524	10.50	ug/L		94
48) 2-Chlorotoluene	19.93	91	2627469	9.68	ug/L		91
49) 4-Chlorotoluene	20.13	91	3129531	10.77	ug/L	m	98
50) 1,3,5-Trimethylbenzene	20.07	105	3046871	10.61	ug/L		99
51) tert-Butylbenzene	20.67	119	3433009	11.35	ug/L		99
52) 1,2,4-Trimethylbenzene	20.77	105	2949983	10.58	ug/L		99
53) sec-Butylbenzene	21.07	105	4835697	10.63	ug/L		99
54) 1,3-Dichlorobenzene	21.29	146	1657965	10.68	ug/L		99
55) 4-Isopropyltoluene	21.33	119	3840282	10.71	ug/L		99
56) 1,4-Dichlorobenzene	21.29	146	1664041	11.07	ug/L		98
58) 1,2-Dichlorobenzene	22.14	146	1274288	10.79	ug/L	m	0
59) n-Butylbenzene	22.08	91	3944214	10.64	ug/L		100
60) 1,2-Dibromo-3-chloropropan	23.56	75	80247	10.74	ug/L		98
61) 1,2,4-Trichlorobenzene	25.11	180	1019076	10.64	ug/L		98
62) Hexachlorobutadiene	25.43	225	921032	10.37	ug/L		99
63) Naphthalene	25.57	128	1003114	10.57	ug/L		100
64) 1,2,3-Trichlorobenzene	26.05	180	755755	10.86	ug/L	m	0
65) Methyl-tert butyl ether	8.24	73	776819	10.40	ug/L		99
66) tert-Butyl Alcohol	8.00	59	25434	22.54	ug/L		100

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

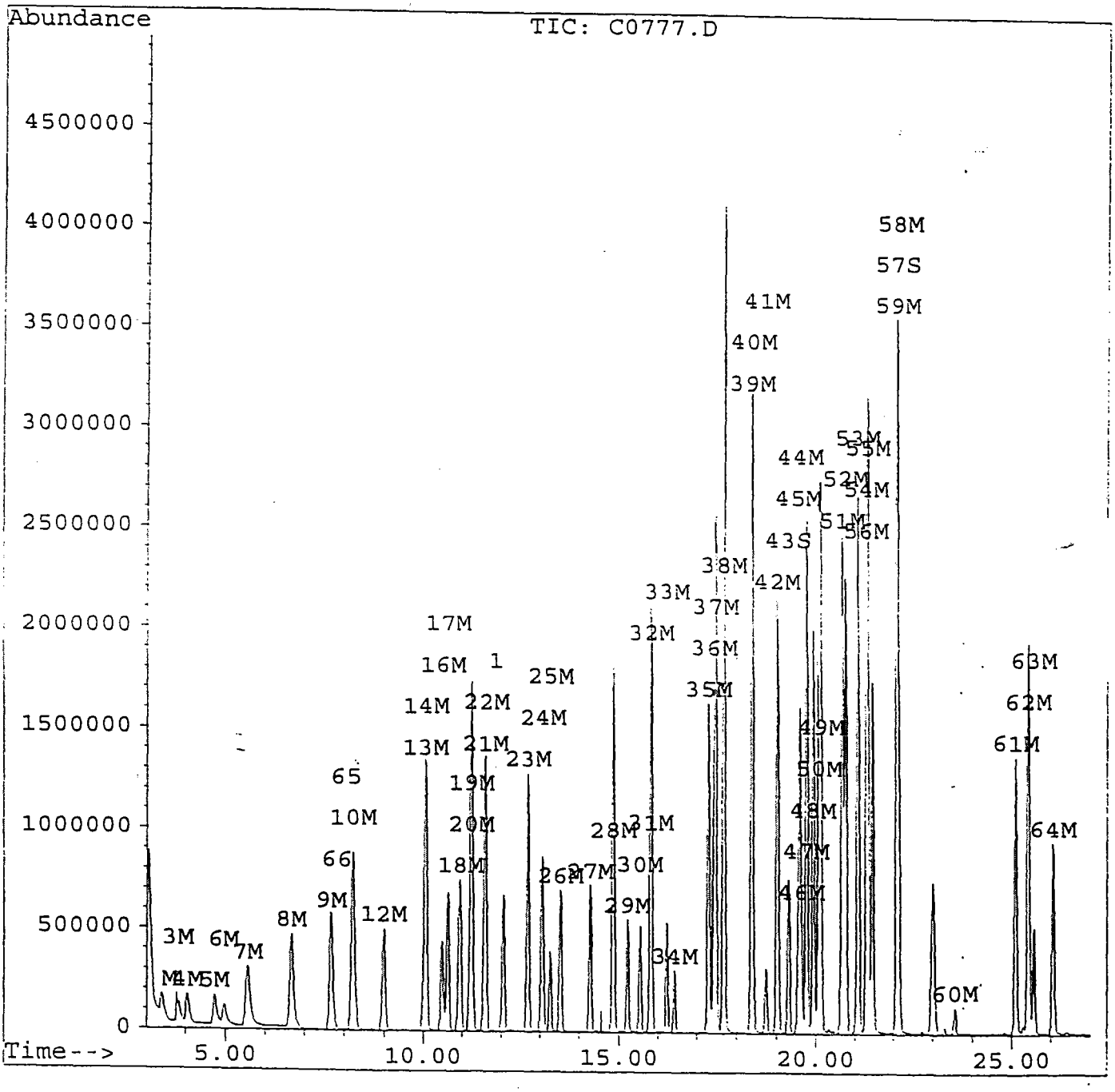
080

Quantitation Report

Data File : D:\HPCHEM\1\DATA\C0777.D
Acq On : 29 Dec 95 7:46 am
Sample : 10 PPB CHK STANDARD
Misc : 25 ML
Quant Time: Dec 31 8:26 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 Dec 26 17:40:31 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : d:\hpchem\1\data\c0792.d
Acq On : 29 Dec 95 4:23 pm
Sample : 1 PPB QCS
Misc : 25 ML
Quant Time: Dec 31 8:51 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 Dec 26 17:40:31 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	12.06	96	1245852	5.00	ug/L	-0.07
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.31	95	608759	5.18	ug/L	103.59%
57) 1,2-Dichlorobenzene-d4	22.11	152	367326	5.31	ug/L	106.25%
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.42	85	73513	1.44	ug/L	96
3) Chloromethane	3.82	50	45628	0.91	ug/L	96
4) Vinyl chloride	4.04	62	60363	1.13	ug/L	99
5) Bromomethane	4.74	94	39672	1.31	ug/L	92
6) Chloroethane	4.99	64	36277	1.12	ug/L	95
7) Trichlorofluoromethane	5.56	101	110248	1.18	ug/L	100
8) 1,1-Dichloroethene	6.67	96	69402	1.19	ug/L	92
9) Methylene chloride	7.67	84	265494	4.85	ug/L	97
10) trans-1,2-Dichloroethene	8.21	96	78322	1.18	ug/L	99
12) 1,1-Dichloroethane	8.99	63	141759	1.14	ug/L	96
13) 2,2-Dichloropropane	10.05	77	96082	0.95	ug/L	93
14) cis-1,2-Dichloroethene	10.06	96	74213	1.17	ug/L	91
16) Bromochloromethane	10.48	128	26621	1.08	ug/L	95
17) Chloroform	10.64	83	126263	1.15	ug/L	98
18) 1,1,1-Trichloroethane	10.95	97	123661	1.11	ug/L	99
19) Carbon tetrachloride	11.25	117	114843	1.14	ug/L	93
20) 1,1-Dichloropropene	11.24	75	124205	1.20	ug/L	98
21) Benzene	11.59	78	234798	1.10	ug/L	100
22) 1,2-Dichloroethane	11.62	62	47810	1.18	ug/L	96
23) Trichloroethene	12.69	95	101687	1.17	ug/L	98
24) 1,2-Dichloropropane	13.06	63	85312	1.20	ug/L	98
25) Dibromomethane	13.27	93	33705	1.20	ug/L	97
26) Bromodichloromethane	13.53	83	104647	1.23	ug/L	99
27) cis-1,3-Dichloropropene	14.28	75	98548	1.26	ug/L	96
28) Toluene	14.86	92	194990	1.25	ug/L	99
29) trans-1,3-Dichloropropene	15.22	75	63438	1.23	ug/L	97
30) 1,1,2-Trichloroethane	15.53	83	35546	1.30	ug/L	93
31) Tetrachloroethene	15.81	166	121492	1.19	ug/L	93
32) 1,3-Dichloropropane	15.83	76	67532	1.27	ug/L	97
33) Dibromochloromethane	16.23	129	68315	1.27	ug/L	99
34) 1,2-Dibromoethane	16.43	107	48371	1.25	ug/L	97
35) Chlorobenzene	17.28	112	197486	1.20	ug/L	100
36) 1,1,1,2-Tetrachloroethane	17.43	131	86621	1.31	ug/L	98
37) Ethylbenzene	17.47	91	359249	1.16	ug/L	100
38) Xylene (para & meta)	17.67	106	278071	2.36	ug/L	98
39) Xylene (Ortho)	18.37	106	127821	1.21	ug/L	97
40) Styrene	18.40	104	186037	1.19	ug/L	94

(#) = qualifier out of range (m)

Quantitation Report

Data File : d:\hpchem\1\data\c0792.d
Acq On : 29 Dec 95 4:23 pm
Sample : 1 PPB QCS
Misc : 25 ML
Quant Time: Dec 31 8:51 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 Dec 26 17:40:31 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.75	173	35649	1.20	ug/L		98
42)	Isopropylbenzene	19.02	105	394176	1.31	ug/L		98
44)	Bromobenzene	19.59	156	84542	1.23	ug/L		98
45)	1,1,2,2-Tetrachloroethane	19.55	83	48726	1.38	ug/L		97
46)	1,2,3-Trichloropropane	19.64	75	48400	1.44	ug/L	#	1
47)	n-Propylbenzene	19.77	91	505226	1.21	ug/L		93
48)	2-Chlorotoluene	19.94	91	303009	1.26	ug/L		91
49)	4-Chlorotoluene	20.13	91	324807	1.26	ug/L	m	99
50)	1,3,5-Trimethylbenzene	20.09	105	305207	1.20	ug/L		99
51)	tert-Butylbenzene	20.68	119	365194	1.36	ug/L		100
52)	1,2,4-Trimethylbenzene	20.77	105	307969	1.24	ug/L		97
53)	sec-Butylbenzene	21.08	105	511494	1.27	ug/L		98
54)	1,3-Dichlorobenzene	21.30	146	181354	1.32	ug/L		97
55)	4-Isopropyltoluene	21.34	119	392196	1.23	ug/L		97
56)	1,4-Dichlorobenzene	21.46	146	176198	1.32	ug/L		96
58)	1,2-Dichlorobenzene	22.15	146	142686	1.36	ug/L	m	0
59)	n-Butylbenzene	22.09	91	390177	1.19	ug/L		99
60)	1,2-Dibromo-3-chloropropan	23.57	75	8536	1.29	ug/L		92
61)	1,2,4-Trichlorobenzene	25.11	180	99855	1.17	ug/L		95
62)	Hexachlorobutadiene	25.43	225	92085	1.17	ug/L		99
63)	Naphthalene	25.57	128	106006	1.26	ug/L		100
64)	1,2,3-Trichlorobenzene	26.07	180	74405	1.20	ug/L		99

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

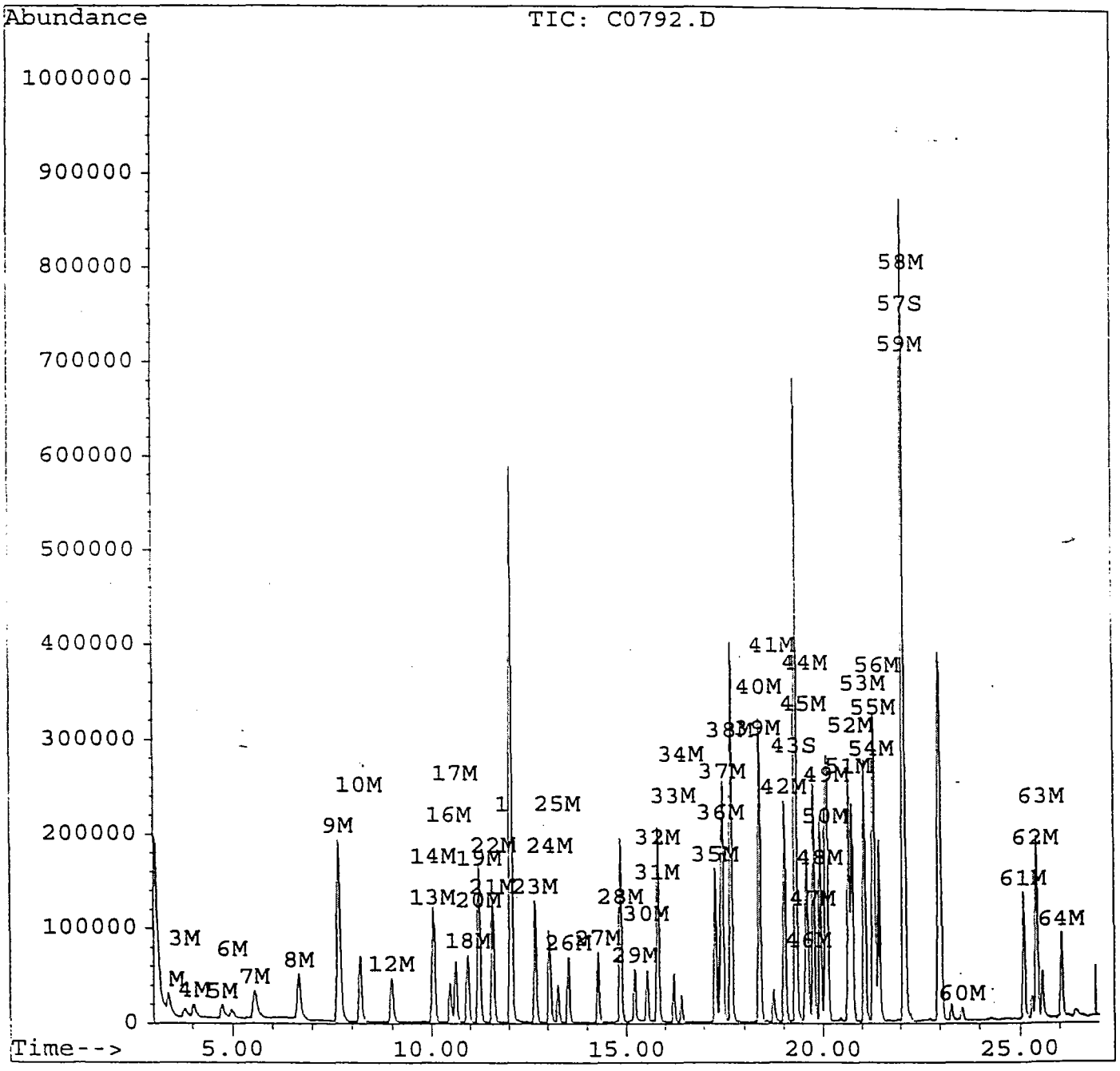
Quantitation Report

083

Data File : d:\hpchem\1\data\c0792.d
Acq On : 29 Dec 95 4:23 pm
Sample : 1 PPB QCS
Misc : 25 ML
Quant Time: Dec 31 8:51 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 Dec 26 17:40:31 1995
Response via : Multiple Level Calibration



5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

084

Lab Name : EMSL ANALYTICAL Contract: _____

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

Lab File ID: C0880.D BFB Injection Date: 1/4/96

Instrument ID: 5972-INSTRUMENT 1 BFB Injection Time: 1832

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	17.6
75	30.0 - 66.0% of mass 95	42.4
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.0
173	Less than 2.0% of mass 174	0.7 (1.0)1
174	50.0 - 120.0% of mass 95	66.4
175	4.0 - 9.0% of mass 174	5.1 (7.6)1
176	93.0 - 101.0% of mass 174	64.8 (97.7)1
177	5.0 - 9.0% of mass 176	4.2 (6.5)2

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

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

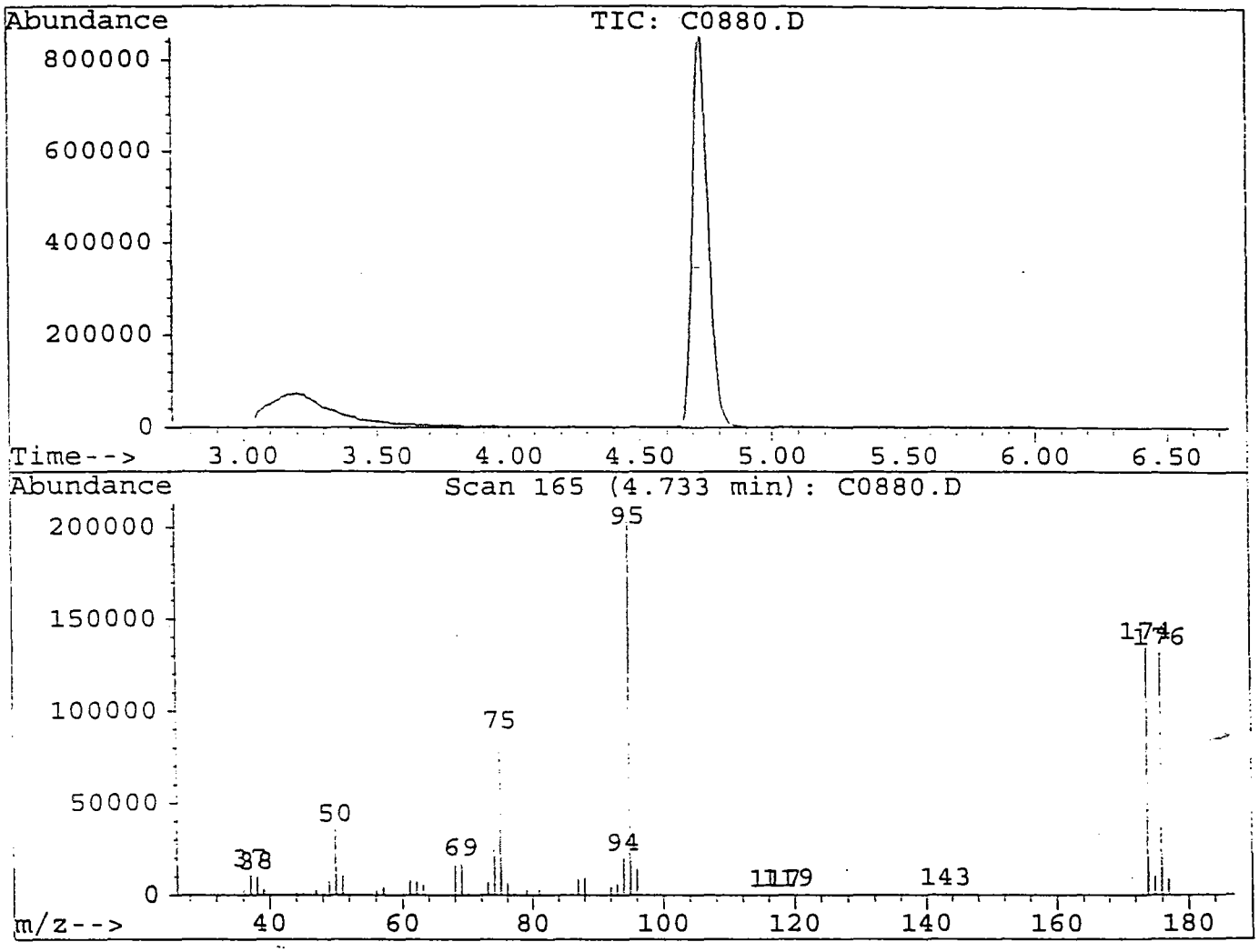
	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD010	10 STND	C0881.D	1/4/96	1846
02	VBLK01	M. BLANK	C0882.D	1/4/96	1920
03	9558761V	9558761V	C0883.D	1/4/96	1954
04	9558762V	9558762V	C0884.D	1/4/96	2028
05	9558763V	9558763V	C0885.D	1/4/96	2102
06	9558764V	9558764V	C0886.D	1/4/96	2137
07	9558196V	9558196V	C0887.D	1/4/96	2211
08	9558315V	9558315V	C0888.D	1/4/96	2245
09	10 QCS	10 QCS	C0895.D	1/5/96	0244
10	1 STND	1 STND	C0896.D	1/5/96	0317
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

CLPBFB

Data File : D:\HPCHEM\1\DATA\C0880.D
Acq On : 4 Jan 96 6:32 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: 165

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.6	35808	PASS
75	95	30	80	42.4	86336	PASS
95	95	100	100	100.0	203776	PASS
96	95	5	9	7.0	14295	PASS
173	174	0	2	1.0	1346	PASS
174	95	50	100	66.4	135232	PASS
175	174	5	9	7.6	10312	PASS
176	174	95	101	97.7	132096	PASS
177	176	5	9	6.5	8602	PASS

C0880.D VOA524.M Tue Jan 09 15:32:44 1996 VOA

Scan 165 (4.733 min): C0880.D
BFB TUNE

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.10	2463	51.05	10783	69.05	17312	81.00	3276
37.10	11324	52.05	534	70.05	1243	82.00	930
38.10	9663	54.95	659	72.05	1030	87.00	8621
39.10	3389	56.10	2570	73.05	6901	88.05	9151
40.10	726	57.10	4608	74.05	25352	91.05	614
44.00	1899	60.10	1527	75.05	86336	92.05	4403
45.00	1788	61.10	7855	76.05	6455	93.05	5793
47.05	2939	62.10	7210	77.00	1185	94.05	20072
48.05	1120	63.10	5938	78.10	1028	95.05	203776
49.05	7729	67.15	558	79.00	2675	96.05	14295
50.05	35808	68.05	16382	80.00	1047	116.95	551

Scan 165 (4.733 min): C0880.D
BFB TUNE

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
119.00	673						
127.90	533						
141.00	957						
143.00	1092						
173.05	1346						
173.95	135232						
174.95	10312						
175.95	132096						
176.95	8602						

7A

VOLATILE CONTINUING CALIBRATION CHECK

087

Lab Name: EMSL ANALYTICAL Contract: _____

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

Instrument ID: 5972-INSTRUMENT 1 Calibration Date: 1/4/96 Time: 1846

Lab File ID: C0881.D Init. Calib. Date(s): 12/18/96 _____

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	0.205	0.225		-9.8	30.0
Chloromethane	0.202	0.205		-1.5	30.0
Vinyl chloride	0.214	0.235		-9.8	30.0
Bromomethane	0.121	0.144		-19.0	30.0
Chloroethane	0.130	0.148		-13.8	30.0
Trichlorofluoromethane	0.376	0.419		-11.4	30.0
1,1-Dichloroethene	0.234	0.247		-5.6	30.0
Methylene chloride	0.220	0.250		-13.6	30.0
trans-1,2-Dichloroethene	0.267	0.279		-4.5	30.0
1,1-Dichloroethane	0.497	0.502		-1.0	30.0
2,2-Dichloropropane	0.407	0.433		-6.4	30.0
cis-1,2-Dichloroethene	0.254	0.262		-3.1	30.0
Bromochloromethane	0.098	0.103		-5.1	30.0
Chloroform	0.439	0.452		-3.0	30.0
1,1,1-Trichloroethane	0.447	0.461		-3.1	30.0
Carbon tetrachloride	0.404	0.432		-6.9	30.0
1,1-Dichloropropene	0.416	0.430		-3.4	30.0
Benzene	0.857	0.865		-0.9	30.0
1,2-Dichloroethane	0.163	0.173		-6.1	30.0
Trichloroethene	0.348	0.364		-4.6	30.0
1,2-Dichloropropane	0.285	0.284		0.4	30.0
Dibromomethane	0.113	0.118		-4.4	30.0
Bromodichloromethane	0.341	0.362		-6.2	30.0
cis-1,3-Dichloropropene	0.313	0.326		-4.2	30.0
Toluene	0.624	0.616		1.3	30.0
trans-1,3-Dichloropropene	0.206	0.217		-5.3	30.0
1,1,2-Trichloroethane	0.110	0.115		-4.5	30.0
Tetrachloroethene	0.410	0.430		-4.9	30.0
1,3-Dichloropropane	0.213	0.221		-3.8	30.0
Dibromochloromethane	0.215	0.232		-7.9	30.0
1,2-Dibromoethane	0.000	0.000			30.0
Chlorobenzene	0.660	0.691		-4.7	30.0
1,1,1,2-Tetrachloroethane	0.265	0.285		-7.5	30.0
Ethylbenzene	1.241	1.280		-3.1	30.0
Xylene (para & meta)	0.473	0.489		-3.4	30.0
Xylene (Ortho)	0.424	0.441		-4.0	30.0

7A

VOLATILE CONTINUING CALIBRATION CHECK

088

Lab Name: EMSL ANALYTICAL Contract: _____

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

Instrument ID: 5972-INSTRUMENT 1 Calibration Date: 1/4/96 Time: 1846

Lab File ID: C0881.D Init. Calib. Date(s): 12/18/96 _____

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	0.626	0.659		-5.3	30.0
Bromoform	0.119	0.125		-5.0	30.0
Isopropylbenzene	1.210	1.264		-4.5	30.0
Bromobenzene	0.276	0.296		-7.2	30.0
1,1,2,2-Tetrachloroethane	0.141	0.148		-5.0	30.0
1,2,3-Trichloropropane	0.135	0.146		-8.1	30.0
n-Propylbenzene	1.672	1.727		-3.3	30.0
2-Chlorotoluene	0.967	0.937		3.1	30.0
4-Chlorotoluene	1.035	1.115		-7.7	30.0
1,3,5-Trimethylbenzene	1.023	1.080		-5.6	30.0
tert-Butylbenzene	1.078	1.224		-13.5	30.0
1,2,4-Trimethylbenzene	0.993	1.054		-6.1	30.0
sec-Butylbenzene	1.621	1.703		-5.1	30.0
1,3-Dichlorobenzene	0.553	0.596		-7.8	30.0
4-Isopropyltoluene	1.277	1.355		-6.1	30.0
1,4-Dichlorobenzene	0.536	0.581		-8.4	30.0
1,2-Dichlorobenzene	0.421	0.457		-8.6	30.0
n-Butylbenzene	1.320	1.386		-5.0	30.0
1,2-Dibromo-3-chloropropane	0.027	0.028		-3.7	30.0
1,2,4-Trichlorobenzene	0.341	0.363		-6.5	30.0
Hexachlorobutadiene	0.316	0.332		-5.1	30.0
Naphthalene	0.338	0.363		-7.4	30.0
1,2,3-Trichlorobenzene	0.248	0.267		-7.7	30.0
4-Bromofluorobenzene	0.472	0.486		-3.0	30.0
1,2-Dichlorobenzene-d4	0.278	0.292		-5.0	30.0

All other compounds must meet a minimum RRF of 0.010.

Evaluate Continuing Calibration Report

089

Data File : D:\HPCHEM\1\DATA\C0881.D
Acq On : 4 Jan 96 6:46 pm
Sample : 10 PPB STANDARD
Misc :

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 Dec 26 17:40:31 1995
Response via : Multiple Level Calibration

Min. RRF : 0.001 Min. Rel. Area : 50% Max. R.T. Dev 0.30min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1		Fluorobenzene	1.000	1.000	0.0	92	-0.07
2	M	Dichlorodifluoromethane	0.205	0.225	-9.7	95	-0.06
3	M	Chloromethane	0.202	0.205	-1.7	89	-0.07
4	M	Vinyl chloride	0.214	0.235	-9.7	94	-0.06
5	M	Bromomethane	0.121	0.144	-19.2	111	-0.08
6	M	Chloroethane	0.130	0.148	-13.4	91	-0.07
7	M	Trichlorofluoromethane	0.376	0.419	-11.3	97	-0.07
8	M	1,1-Dichloroethene	0.234	0.247	-5.5	93	-0.07
9	M	Methylene chloride	0.220	0.250	-13.7	91	-0.08
10	M	trans-1,2-Dichloroethene	0.267	0.279	-4.6	93	-0.07
11		Hexane	0.000	0.000#	0.0	0#	-0.63#
12	M	1,1-Dichloroethane	0.497	0.502	-1.0	89	-0.08
13	M	2,2-Dichloropropane	0.407	0.433	-6.4	93	-0.07
14	M	cis-1,2-Dichloroethene	0.254	0.262	-3.1	92	-0.07
15		2-Butanone	0.000	0.000#	0.0	0#	-11.21#
16	M	Bromochloromethane	0.098	0.103	-5.1	96	-0.07
17	M	Chloroform	0.439	0.452	-3.1	93	-0.07
18	M	1,1,1-Trichloroethane	0.447	0.461	-3.3	92	-0.07
19	M	Carbon tetrachloride	0.404	0.432	-6.8	94	-0.07
20	M	1,1-Dichloropropene	0.416	0.430	-3.4	91	-0.07
21	M	Benzene	0.857	0.865	-0.9	91	-0.07
22	M	1,2-Dichloroethane	0.163	0.173	-6.5	95	-0.07
23	M	Trichloroethene	0.348	0.364	-4.5	93	-0.07
24	M	1,2-Dichloropropane	0.285	0.284	0.3	89	-0.07
25	M	Dibromomethane	0.113	0.118	-4.8	94	-0.07
26	M	Bromodichloromethane	0.341	0.362	-6.2	95	-0.06
27	M	cis-1,3-Dichloropropene	0.313	0.326	-4.2	93	-0.07
28	M	Toluene	0.624	0.616	1.3	90	-0.07
29	M	trans-1,3-Dichloropropene	0.206	0.217	-5.2	93	-0.07
30	M	1,1,2-Trichloroethane	0.110	0.115	-4.8	94	-0.07
31	M	Tetrachloroethene	0.410	0.430	-5.0	94	-0.07
32	M	1,3-Dichloropropane	0.213	0.221	-3.7	94	-0.07
33	M	Dibromochloromethane	0.215	0.232	-8.0	98	-0.07
34	M	1,2-Dibromoethane	0.156	0.166	-6.6	96	-0.06
35	M	Chlorobenzene	0.660	0.691	-4.8	93	-0.06
36	M	1,1,1,2-Tetrachloroethane	0.265	0.285	-7.7	97	-0.06
37	M	Ethylbenzene	1.241	1.280	-3.2	91	-0.06
38	M	Xylene (para & meta)	0.473	0.489	-3.3	90	-0.06
39	M	Xylene (Ortho)	0.424	0.441	-3.8	92	-0.07
40	M	Styrene	0.626	0.659	-5.2	92	-0.07
41	M	Bromoform	0.119	0.125	-4.9	100	-0.06
42	M	Isopropylbenzene	1.210	1.264	-4.5	92	-0.07

(#) = Out of Range

Evaluate Continuing Calibration Report

090

Data File : D:\HPCHEM\1\DATA\C0881.D
Acq On : 4 Jan 96 6:46 pm
Sample : 10 PPB STANDARD
Misc :

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 Dec 26 17:40:31 1995
Response via : Multiple Level Calibration

Min. RRF : 0.001 Min. Rel. Area : 50% Max. R.T. Dev 0.30min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
43	S	4-Bromofluorobenzene	0.472	0.486	-3.0	95	-0.06
44	M	Bromobenzene	0.276	0.296	-7.1	95	-0.07
45	M	1,1,2,2-Tetrachloroethane	0.141	0.148	-4.6	93	-0.06
46	M	1,2,3-Trichloropropane	0.135	0.146	-8.3	102	-0.06
47	M	n-Propylbenzene	1.672	1.727	-3.3	91	-0.06
48	M	2-Chlorotoluene	0.967	0.937	3.0	85	-0.06
49	M	4-Chlorotoluene	1.035	1.115	-7.7	94	-0.06
50	M	1,3,5-Trimethylbenzene	1.023	1.080	-5.6	93	-0.06
51	M	tert-Butylbenzene	1.078	1.224	-13.6	103	-0.06
52	M	1,2,4-Trimethylbenzene	0.993	1.054	-6.1	93	-0.06
53	M	sec-Butylbenzene	1.621	1.703	-5.1	92	-0.06
54	M	1,3-Dichlorobenzene	0.553	0.596	-7.8	95	-0.05
55	M	4-Isopropyltoluene	1.277	1.355	-6.1	92	-0.05
56	M	1,4-Dichlorobenzene	0.536	0.581	-8.5	96	-0.06
57	S	1,2-Dichlorobenzene-d4	0.278	0.292	-5.1	95	-0.06
58	M	1,2-Dichlorobenzene	0.421	0.457	-8.5	97	-0.06
59	M	n-Butylbenzene	1.320	1.386	-5.0	91	-0.06
60	M	1,2-Dibromo-3-chloropropane	0.027	0.028	-6.8	100	-0.06
61	M	1,2,4-Trichlorobenzene	0.341	0.363	-6.4	95	-0.06
62	M	Hexachlorobutadiene	0.316	0.332	-5.0	92	-0.06
63	M	Naphthalene	0.338	0.363	-7.3	99	-0.05
64	M	1,2,3-Trichlorobenzene	0.248	0.267	-7.8	95	-0.06
65		Methyl-tert butyl ether	0.266	0.269	-0.9	93	-0.07
66		tert-Butyl Alcohol	0.004	0.004	-5.1	100	-0.09

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

Quantitation Report

091

Data File : d:\hpchem\1\data\c0881.d
Acq On : 4 Jan 96 6:46 pm
Sample : 10 PPB STANDARD
Misc :
Quant Time: Jan 9 15:05 1996

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 Dec 26 17:40:31 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	12.07	96	1317845	5.00	ug/L	-0.07
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.32	95	640355	5.15	ug/L	103.01%
57) 1,2-Dichlorobenzene-d4	22.11	152	384267	5.25	ug/L	105.07%
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.42	85	593034	10.97	ug/L m	100
3) Chloromethane	3.81	50	540279	10.17	ug/L	98
4) Vinyl chloride	4.05	62	619429	10.97	ug/L	97
5) Bromomethane	4.72	94	380618	11.92	ug/L	97
6) Chloroethane	4.98	64	389126	11.34	ug/L	97
7) Trichlorofluoromethane	5.57	101	1104643	11.13	ug/L	98
8) 1,1-Dichloroethene	6.68	96	651954	10.55	ug/L	96
9) Methylene chloride	7.68	84	658063	11.37	ug/L	98
10) trans-1,2-Dichloroethene	8.22	96	736356	10.46	ug/L	98
12) 1,1-Dichloroethane	9.01	63	1323164	10.10	ug/L	99
13) 2,2-Dichloropropane	10.06	77	1140222	10.64	ug/L	100
14) cis-1,2-Dichloroethene	10.07	96	689508	10.31	ug/L	98
16) Bromochloromethane	10.50	128	272786	10.51	ug/L	95
17) Chloroform	10.65	83	1192581	10.31	ug/L	99
18) 1,1,1-Trichloroethane	10.96	97	1215680	10.33	ug/L	98
19) Carbon tetrachloride	11.26	117	1137443	10.68	ug/L	99
20) 1,1-Dichloropropene	11.25	75	1132794	10.34	ug/L	98
21) Benzene	11.60	78	2278831	10.09	ug/L	100
22) 1,2-Dichloroethane	11.63	62	456380	10.65	ug/L	100
23) Trichloroethene	12.70	95	959754	10.45	ug/L	99
24) 1,2-Dichloropropane	13.07	63	748364	9.97	ug/L	98
25) Dibromomethane	13.28	93	311249	10.48	ug/L	97
26) Bromodichloromethane	13.55	83	953769	10.62	ug/L	99
27) cis-1,3-Dichloropropene	14.29	75	858714	10.42	ug/L	98
28) Toluene	14.87	92	1623628	9.87	ug/L	99
29) trans-1,3-Dichloropropene	15.23	75	572130	10.52	ug/L	100
30) 1,1,2-Trichloroethane	15.55	83	303043	10.48	ug/L	98
31) Tetrachloroethene	15.81	166	1133919	10.50	ug/L	99
32) 1,3-Dichloropropane	15.84	76	582997	10.37	ug/L	99
33) Dibromochloromethane	16.24	129	612313	10.80	ug/L	96
34) 1,2-Dibromoethane	16.44	107	437633	10.66	ug/L	99
35) Chlorobenzene	17.30	112	1821842	10.48	ug/L	99
36) 1,1,1,2-Tetrachloroethane	17.43	131	751287	10.77	ug/L	97
37) Ethylbenzene	17.47	91	3374897	10.32	ug/L	99
38) Xylene (para & meta)	17.68	106	2576680	20.66	ug/L	98
39) Xylene (Ortho)	18.38	106	1161467	10.38	ug/L	99
40) Styrene	18.40	104	1736887	10.52	ug/L	95

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

Quantitation Report

Data File : d:\hpchem\1\data\c0881.d
Acq On : 4 Jan 96 6:46 pm
Sample : 10 PPB STANDARD
Misc :
Quant Time: Jan 9 15:05 1996

Vial: 12 092
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Dec 26 17:40:31 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.75	173	330376	10.49	ug/L		99
42)	Isopropylbenzene	19.03	105	3331839	10.45	ug/L	m	0
44)	Bromobenzene	19.60	156	780715	10.71	ug/L		96
45)	1,1,2,2-Tetrachloroethane	19.56	83	389975	10.46	ug/L		98
46)	1,2,3-Trichloropropane	19.65	75	385395	10.83	ug/L	#	1
47)	n-Propylbenzene	19.77	91	4551501	10.33	ug/L		93
48)	2-Chlorotoluene	19.95	91	2470170	9.70	ug/L		93
49)	4-Chlorotoluene	20.13	91	2938028	10.77	ug/L	m	97
50)	1,3,5-Trimethylbenzene	20.09	105	2846106	10.56	ug/L		100
51)	tert-Butylbenzene	20.68	119	3227305	11.36	ug/L		99
52)	1,2,4-Trimethylbenzene	20.77	105	2777715	10.61	ug/L		99
53)	sec-Butylbenzene	21.08	105	4488078	10.51	ug/L		99
54)	1,3-Dichlorobenzene	21.31	146	1571597	10.78	ug/L		99
55)	4-Isopropyltoluene	21.35	119	3571663	10.61	ug/L		99
56)	1,4-Dichlorobenzene	21.46	146	1531200	10.85	ug/L		100
58)	1,2-Dichlorobenzene	22.15	146	1203762	10.85	ug/L		98
59)	n-Butylbenzene	22.09	91	3653882	10.50	ug/L		100
60)	1,2-Dibromo-3-chloropropan	23.57	75	74925	10.68	ug/L		94
61)	1,2,4-Trichlorobenzene	25.11	180	956664	10.64	ug/L		99
62)	Hexachlorobutadiene	25.43	225	875550	10.50	ug/L		97
63)	Naphthalene	25.59	128	956354	10.73	ug/L		100
64)	1,2,3-Trichlorobenzene	26.07	180	704278	10.78	ug/L		98
65)	Methyl-tert butyl ether	8.26	73	707855	10.09	ug/L		100
66)	tert-Butyl Alcohol	8.00	59	22272	21.03	ug/L		100

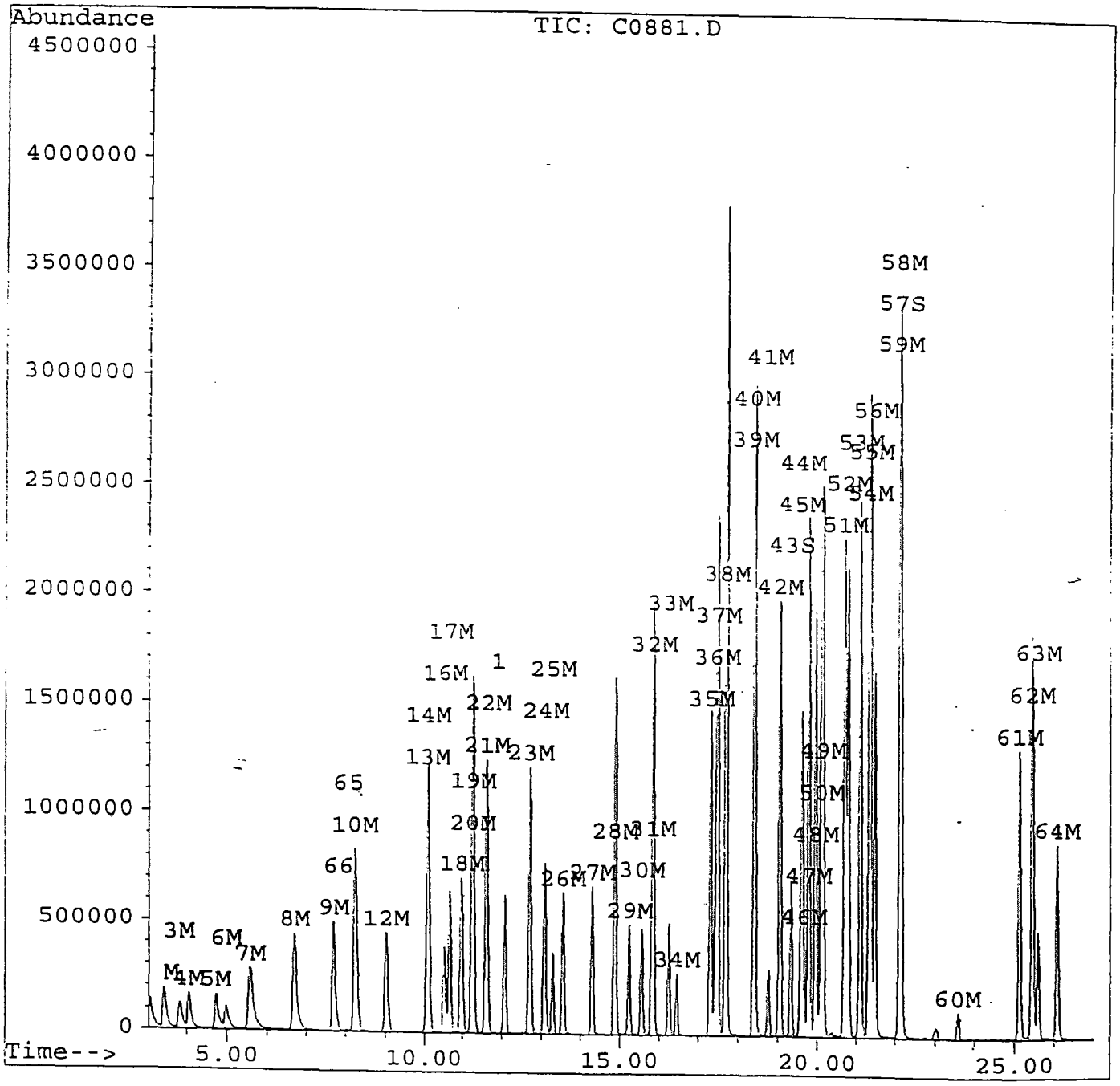
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c0881.d
Acq On : 4 Jan 96 6:46 pm
Sample : 10 PPB STANDARD
Misc :
Quant Time: Jan 9 15:05 1996

Vial: 12 093
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Dec 26 17:40:31 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : d:\hpchem\1\data\c0895.d
Acq On : 5 Jan 96 2:44 am
Sample : 10 PPB QCS
Misc : 25 ML
Quant Time: Jan 9 15:30 1996

Vial: 27 094
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Dec 26 17:40:31 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	12.07	96	1190012	5.00	ug/L		-0.07
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.31	95	572553	5.10	ug/L		102.00%
57) 1,2-Dichlorobenzene-d4	22.11	152	342503	5.19	ug/L		103.72%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.42	85	544215	11.15	ug/L	m	97
3) Chloromethane	3.82	50	409533	8.54	ug/L		98
4) Vinyl chloride	4.04	62	545490	10.69	ug/L		100
5) Bromomethane	4.71	94	318884	11.06	ug/L	m	97
6) Chloroethane	4.97	64	321033	10.36	ug/L		98
7) Trichlorofluoromethane	5.56	101	911779	10.18	ug/L	m	99
8) 1,1-Dichloroethene	6.67	96	655666	11.75	ug/L		94
9) Methylene chloride	7.67	84	630353	12.06	ug/L		95
10) trans-1,2-Dichloroethene	8.21	96	706477	11.11	ug/L		95
12) 1,1-Dichloroethane	9.00	63	1237499	10.46	ug/L		98
13) 2,2-Dichloropropane	10.05	77	919875	9.50	ug/L		98
14) cis-1,2-Dichloroethene	10.07	96	652178	10.80	ug/L		94
16) Bromochloromethane	10.49	128	255263	10.89	ug/L		91
17) Chloroform	10.63	83	1117316	10.70	ug/L		99
18) 1,1,1-Trichloroethane	10.95	97	1170173	11.01	ug/L		99
19) Carbon tetrachloride	11.24	117	1106852	11.51	ug/L		98
20) 1,1-Dichloropropene	11.23	75	1125615	11.38	ug/L		99
21) Benzene	11.59	78	2008020	9.85	ug/L		99
22) 1,2-Dichloroethane	11.61	62	423706	10.95	ug/L		99
23) Trichloroethene	12.69	95	917625	11.06	ug/L		98
24) 1,2-Dichloropropane	13.07	63	686408	10.13	ug/L		99
25) Dibromomethane	13.27	93	283404	10.57	ug/L		95
26) Bromodichloromethane	13.53	83	893868	11.03	ug/L		99
27) cis-1,3-Dichloropropene	14.28	75	820178	11.02	ug/L		99
28) Toluene	14.86	92	1431863	9.64	ug/L		98
29) trans-1,3-Dichloropropene	15.22	75	523853	10.66	ug/L		99
30) 1,1,2-Trichloroethane	15.54	83	278999	10.68	ug/L		100
31) Tetrachloroethene	15.81	166	1083695	11.12	ug/L		99
32) 1,3-Dichloropropane	15.83	76	527699	10.40	ug/L		99
33) Dibromochloromethane	16.23	129	578571	11.30	ug/L		97
34) 1,2-Dibromoethane	16.44	107	397452	10.72	ug/L		98
35) Chlorobenzene	17.28	112	1648598	10.50	ug/L		99
36) 1,1,1,2-Tetrachloroethane	17.42	131	687753	10.92	ug/L	m	96
37) Ethylbenzene	17.47	91	2969166	10.06	ug/L		99
38) Xylene (para & meta)	17.67	106	2290829	20.34	ug/L		98
39) Xylene (Ortho)	18.38	106	1050699	10.40	ug/L		98
40) Styrene	18.40	104	1609916	10.80	ug/L		97

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

Quantitation Report

095

Data File : d:\hpchem\1\data\c0895.d
Acq On : 5 Jan 96 2:44 am
Sample : 10 PPB QCS
Misc : 25 ML
Quant Time: Jan 9 15:30 1996

Vial: 27
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Dec 26 17:40:31 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.75	173	302845	10.65	ug/L		98
42)	Isopropylbenzene	19.03	105	3294331	11.44	ug/L	m	0
44)	Bromobenzene	19.59	156	686125	10.43	ug/L		99
45)	1,1,2,2-Tetrachloroethane	19.55	83	347002	10.31	ug/L		99
46)	1,2,3-Trichloropropane	19.63	75	337670	10.50	ug/L	#	14
47)	n-Propylbenzene	19.77	91	4162485	10.46	ug/L		93
48)	2-Chlorotoluene	19.93	91	2247252	9.77	ug/L		91
49)	4-Chlorotoluene	20.13	91	2638552	10.71	ug/L	m	100
50)	1,3,5-Trimethylbenzene	20.09	105	2514400	10.33	ug/L		99
51)	tert-Butylbenzene	20.67	119	3000381	11.70	ug/L		99
52)	1,2,4-Trimethylbenzene	20.77	105	2398567	10.14	ug/L		99
53)	sec-Butylbenzene	21.08	105	4185233	10.85	ug/L		99
54)	1,3-Dichlorobenzene	21.29	146	1423710	10.81	ug/L		100
55)	4-Isopropyltoluene	21.33	119	3294204	10.83	ug/L		99
56)	1,4-Dichlorobenzene	21.46	146	1379824	10.83	ug/L		99
58)	1,2-Dichlorobenzene	22.14	146	1092740	10.91	ug/L	m	0
59)	n-Butylbenzene	22.09	91	3266779	10.40	ug/L		99
60)	1,2-Dibromo-3-chloropropan	23.56	75	66044	10.43	ug/L		100
61)	1,2,4-Trichlorobenzene	25.11	180	827533	10.19	ug/L		99
62)	Hexachlorobutadiene	25.43	225	851127	11.30	ug/L		98
63)	Naphthalene	25.57	128	807941	10.04	ug/L		100
64)	1,2,3-Trichlorobenzene	26.06	180	610917	10.35	ug/L		98

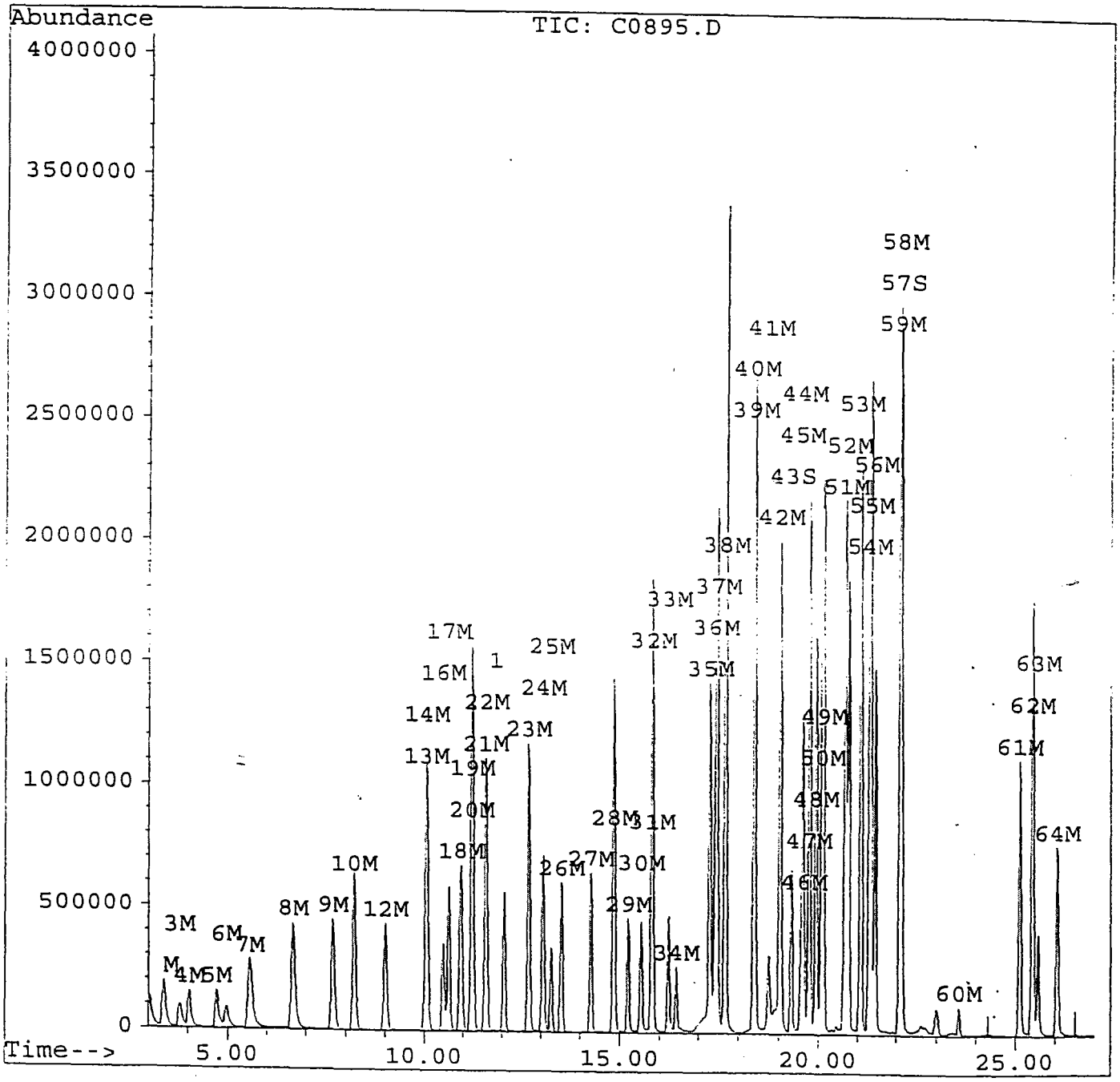
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c0895.d
Acq On : 5 Jan 96 2:44 am
Sample : 10 PPB QCS
Misc : 25 ML
Quant Time: Jan 9 15:30 1996

Vial: 27 096
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Dec 26 17:40:31 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : d:\hpchem\1\data\c0896.d
Acq On : 5 Jan 96 3:17 am
Sample : 1 PPB STANDARD
Misc : 25 ML
Quant Time: Jan 5 3:45 1996

Vial: 28 097
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Dec 26 17:40:31 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	12.06	96	1147652	5.00	ug/L		-0.07
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.32	95	562734	5.20	ug/L		103.95%
57) 1,2-Dichlorobenzene-d4	22.11	152	340525	5.35	ug/L		106.92%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.41	85	70100	1.49	ug/L		92
3) Chloromethane	3.81	50	50608	1.09	ug/L		96
4) Vinyl chloride	4.04	62	56283	1.14	ug/L		95
5) Bromomethane	4.74	94	41980	1.51	ug/L		97
6) Chloroethane	4.99	64	35216	1.18	ug/L		97
7) Trichlorofluoromethane	5.58	101	101969	1.18	ug/L		98
8) 1,1-Dichloroethene	6.68	96	61651	1.15	ug/L		89
9) Methylene chloride	7.67	84	211022	4.19	ug/L		92
10) trans-1,2-Dichloroethene	8.22	96	67098	1.09	ug/L		98
12) 1,1-Dichloroethane	9.00	63	122871	1.08	ug/L		100
13) 2,2-Dichloropropane	10.06	77	89639	0.96	ug/L		98
14) cis-1,2-Dichloroethene	10.07	96	66788	1.15	ug/L		96
16) Bromochloromethane	10.50	128	24883	1.10	ug/L	#	91
17) Chloroform	10.64	83	114881	1.14	ug/L		94
18) 1,1,1-Trichloroethane	10.95	97	115716	1.13	ug/L		98
19) Carbon tetrachloride	11.25	117	107955	1.16	ug/L		97
20) 1,1-Dichloropropene	11.24	75	107721	1.13	ug/L		96
21) Benzene	11.59	78	215252	1.09	ug/L		100
22) 1,2-Dichloroethane	11.61	62	41945	1.12	ug/L		99
23) Trichloroethene	12.70	95	91895	1.15	ug/L		97
24) 1,2-Dichloropropane	13.06	63	71779	1.10	ug/L		99
25) Dibromomethane	13.27	93	29131	1.13	ug/L		93
26) Bromodichloromethane	13.54	83	89227	1.14	ug/L		96
27) cis-1,3-Dichloropropene	14.29	75	76844	1.07	ug/L		99
28) Toluene	14.87	92	161153	1.13	ug/L		99
29) trans-1,3-Dichloropropene	15.22	75	51142	1.08	ug/L		99
30) 1,1,2-Trichloroethane	15.55	83	28878	1.15	ug/L		97
31) Tetrachloroethene	15.82	166	109785	1.17	ug/L		95
32) 1,3-Dichloropropane	15.83	76	56096	1.15	ug/L		100
33) Dibromochloromethane	16.23	129	57694	1.17	ug/L		99
34) 1,2-Dibromoethane	16.43	107	42088	1.18	ug/L		93
35) Chlorobenzene	17.29	112	177667	1.17	ug/L		99
36) 1,1,1,2-Tetrachloroethane	17.42	131	74452	1.23	ug/L		96
37) Ethylbenzene	17.48	91	330015	1.16	ug/L		98
38) Xylene (para & meta)	17.67	106	245920	2.26	ug/L		98
39) Xylene (Ortho)	18.38	106	113117	1.16	ug/L		97
40) Styrene	18.40	104	163918	1.14	ug/L		97

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

Quantitation Report

Data File : d:\hpchem\1\data\c0896.d
Acq On : 5 Jan 96 3:17 am
Sample : 1 PPB STANDARD
Misc : 25 ML
Quant Time: Jan 5 3:45 1996

Vial: 28 096
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Dec 26 17:40:31 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
41)	Bromoform	18.74	173	31217	1.14 ug/L	94
42)	Isopropylbenzene	19.03	105	329715	1.19 ug/L	99
44)	Bromobenzene	19.60	156	80508	1.27 ug/L	97
45)	1,1,2,2-Tetrachloroethane	19.56	83	40604	1.25 ug/L	98
46)	1,2,3-Trichloropropane	19.64	75	40416	1.30 ug/L #	1
47)	n-Propylbenzene	19.77	91	449513	1.17 ug/L	94
48)	2-Chlorotoluene	19.94	91	265414	1.20 ug/L	88
49)	4-Chlorotoluene	20.14	91	294093	1.24 ug/L	99
50)	1,3,5-Trimethylbenzene	20.08	105	283747	1.21 ug/L	98
51)	tert-Butylbenzene	20.68	119	330865	1.34 ug/L	99
52)	1,2,4-Trimethylbenzene	20.78	105	285202	1.25 ug/L	100
53)	sec-Butylbenzene	21.08	105	459584	1.24 ug/L	98
54)	1,3-Dichlorobenzene	21.30	146	164583	1.30 ug/L	99
55)	4-Isopropyltoluene	21.34	119	361380	1.23 ug/L	98
56)	1,4-Dichlorobenzene	21.46	146	158392	1.29 ug/L	96
58)	1,2-Dichlorobenzene	22.15	146	129569	1.34 ug/L	97
59)	n-Butylbenzene	22.09	91	371572	1.23 ug/L	99
60)	1,2-Dibromo-3-chloropropan	23.58	75	7575	1.24 ug/L	90
61)	1,2,4-Trichlorobenzene	25.12	180	100632	1.29 ug/L	100
62)	Hexachlorobutadiene	25.44	225	91599	1.26 ug/L	95
63)	Naphthalene	25.58	128	110624	1.43 ug/L	100
64)	1,2,3-Trichlorobenzene	26.06	180	75968	1.33 ug/L	97
65)	Methyl-tert butyl ether	8.25	73	63630	1.04 ug/L	94
66)	tert-Butyl Alcohol	8.21	59	1336	1.45 ug/L	100

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

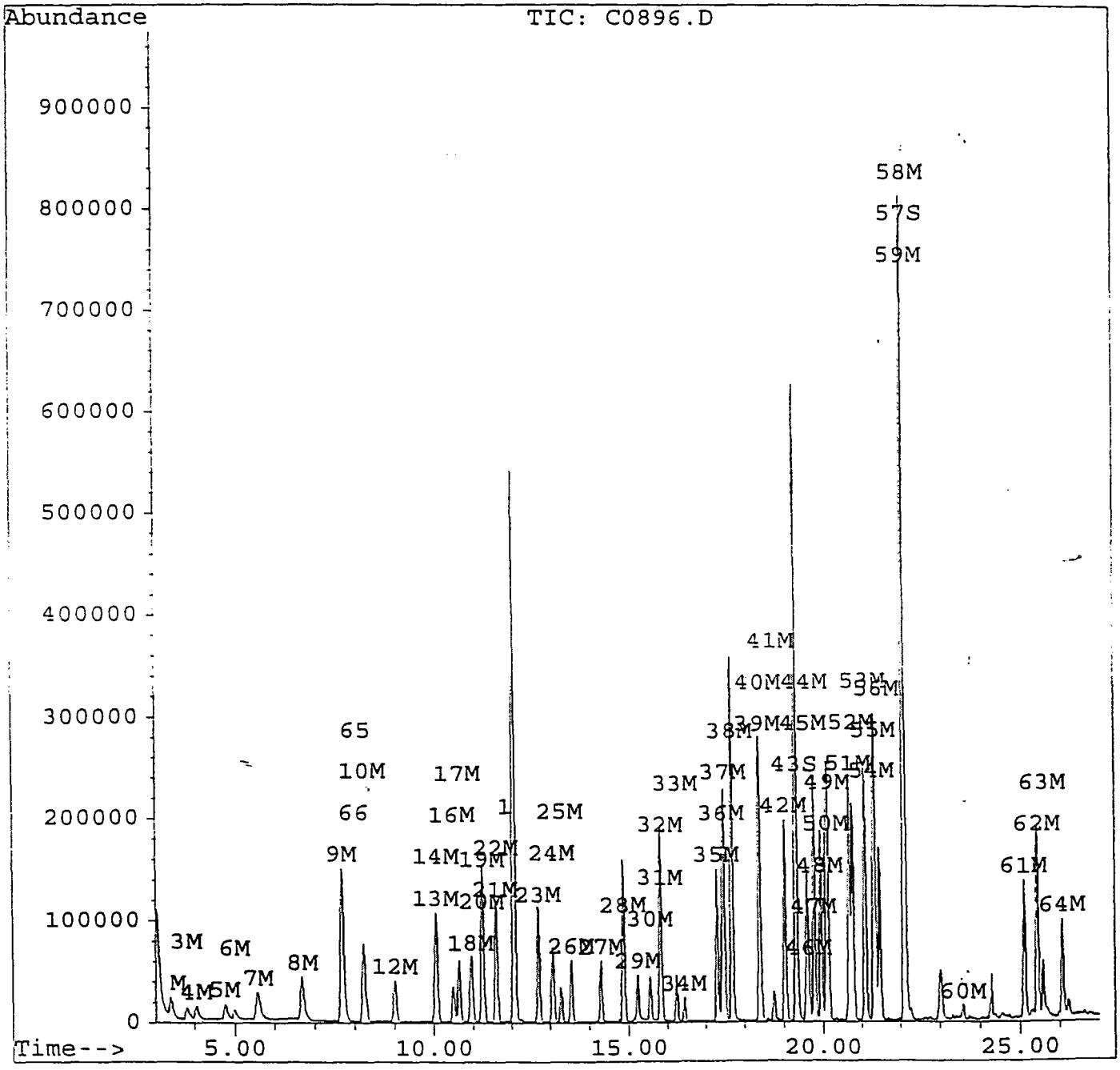
Quantitation Report

099

Data File : d:\hpchem\1\data\c0896.d
Acq On : 5 Jan 96 3:17 am
Sample : 1 PPB STANDARD
Misc : 25 ML
Quant Time: Jan 5 3:45 1996

Vial: 28
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Dec 26 17:40:31 1995
Response via : Multiple Level Calibration



8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

100

Lab Name: EMSL ANALYTICAL Contract: _____

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

Lab File ID (Standard): C0696.D Date Analyzed: 12/26/95

Instrument ID: 5972-INSTRUMENT 1 Time Analyzed: 1706

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	1403167	12.14				
	UPPER LIMIT	1824117	12.64				
	LOWER LIMIT	982217	11.64				
	SAMPLE NO.						
01	VBLK01	1394456	12.14				
02	9557856V	1410488	12.13				
03	9557857V	1389985	12.14				
04	9558188V	1331918	12.13				
05	9558189V	1315325	12.14				
06	9558190V	1269155	12.13				
07	9558191V	1252384	12.14				
08	9558192V	1346572	12.13				
09	9558196V	1326650	12.14				
10	9558197V	1334639	12.15				
11	9558195V	1398582	12.14				
12	9557856MS	1289903	12.14				
13	9557856MSD	1165721	12.12				
14	10 QCS	1346351	12.13				
15	1 STND	1286016	12.14				
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

Lab Name: EMSL ANALYTICAL Contract: _____

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

Lab File ID (Standard): C0777.D Date Analyzed: 12/29/95

Instrument ID: 5972-INSTRUMENT 1 Time Analyzed: 0746

GC Column: DB-624 X 75M ID: 0.53 (mm) Heated Purge (Y/N) ___

		IS1 (FBZ) AREA #	RT #	AREA #	RT #	AREA #	RT #
	8 HOUR STD	1403737	12.05				
	UPPER LIMIT	1824858	12.55				
	LOWER LIMIT	982616	11.55				
	SAMPLE NO.						
01	VBLK01	1420918	12.06				
02	9558500V	1402153	12.07				
03	9558501V	1394848	12.08				
04	9558191V	1320567	12.08				
05	9558192V	1349002	12.08				
06	9558312V	1322876	12.07				
07	9558313V	1334653	12.07				
08	9558311V	1342950	12.07				
09	9558314V	1339570	12.06				
10	9558315V	1257455	12.07				
11	9558316V	1340207	12.06				
12	9558317V	1252968	12.07				
13	9559346V	1142560	12.06				
14	9558196V	1293768	12.05				
15	1 STND	1245852	12.06				
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

102

Lab Name: EMSL ANALYTICAL Contract: _____

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

Lab File ID (Standard): C0881.D Date Analyzed: 1/4/96

Instrument ID: 5972-INSTRUMENT 1 Time Analyzed: 1846

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	1317845	12.07				
	UPPER LIMIT	1713198	12.57				
	LOWER LIMIT	922492	11.57				
	SAMPLE NO.						
01	VBLK01	1297763	12.08				
02	9558761V	1290362	12.08				
03	9558762V	1262416	12.08				
04	9558763V	1279654	12.08				
05	9558764V	1258145	12.08				
06	9558196V	1230079	12.07				
07	9558315V	1269298	12.08				
08	10 QCS	1190012	12.07				
09	1 STND	1147652	12.06				
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.

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL#

165

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: NJDEP MW#: TB

Matrix: (soil/water) WATER Lab Sample ID: 9558312V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0783.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. NA Date Analyzed: 12/29/96

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 1.0

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	.50	U
74-87-3	Chloromethane	.50	U
75-01-4	Vinyl chloride	.50	U
74-83-9	Bromomethane	.50	U
75-00-3	Chloroethane	.50	U
75-69-4	Trichlorofluoromethane	.50	U
75-35-4	1,1-Dichloroethene	.50	U
75-09-2	Methylene chloride	1.4	B
156-60-65	trans-1,2-Dichloroethene	.50	U
75-34-3	1,1-Dichloroethane	.50	U
594-20-7	2,2-Dichloropropane	.50	U
156-59-2	cis-1,2-Dichloroethene	.50	U
74-97-1	Bromochloromethane	.50	U
67-66-3	Chloroform	.50	U
71-55-6	1,1,1-Trichloroethane	.50	U
56-23-1	Carbon tetrachloride	.50	U
563-58-6	1,1-Dichloropropene	.50	U
71-43-2	Benzene	.50	U
107-06-2	1,2-Dichloroethane	.50	U
79-01-6	Trichloroethene	.50	U
78-87-1	1,2-Dichloropropane	.50	U
74-95-3	Dibromomethane	.50	U
75-27-4	Bromodichloromethane	.50	U
10061-01-1	cis-1,3-Dichloropropene	.50	U
108-88-3	Toluene	.50	U
10061-02-6	trans-1,3-Dichloropropene	.50	U
79-00-1	1,1,2-Trichloroethane	.50	U
127-18-4	Tetrachloroethene	.50	U
142-28-9	1,3-Dichloropropane	.50	U
124-48-1	Dibromochloromethane	.50	U
106-93-4	1,2-Dibromomethane	.50	U
108-90-7	Chlorobenzene	.50	U
630-20-6	1,1,1,2-Tetrachloroethane	.50	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 104

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: 290 NJDEP MW#: TB

Matrix: (soil/water) WATER Lab Sample ID: 9558312V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0783.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. NA Date Analyzed: 12/29/96

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
100-41-4	Ethylbenzene	.50	U
1330-29-7	Xylene (total)	.50	U
100-42-1	Styrene	.50	U
75-25-2	Bromoform	.50	U
98-82-8	Isopropylbenzene	.50	U
108-86-1	Bromobenzene	.50	U
79-34-1	1,1,2,2-Tetrachloroethane	.50	U
96-18-4	1,2,3-Trichloropropane	.50	U
103-65-1	n-Propylbenzene	.50	U
95-49-8	2-Chlorotoluene	.50	U
106-43-4	4-Chlorotoluene	.50	U
108-67-8	1,3,5-Trimethylbenzene	.50	U
98-06-6	tert-Butylbenzene	.50	U
95-63-6	1,2,4-Trimethylbenzene	.50	U
135-98-8	sec-Butylbenzene	.50	U
541-73-1	1,3-Dichlorobenzene	.50	U
99-87-6	4-Isopropyltoluene	.50	U
106-46-7	1,4-Dichlorobenzene	.50	U
95-50-1	1,2-Dichlorobenzene	.50	U
104-51-8	n-Butylbenzene	.50	U
96-12-8	1,2-Dibromo-3-chloropropane	.50	U
120-82-1	1,2,4-Trichlorobenzene	.50	U
87-68-3	Hexachlorobutadiene	.50	U
91-20-3	Naphthalene	.50	U
87-61-6	1,2,3-Trichlorobenzene	.50	U
1634-04-4	Methy-tertiary butyl ether	.50	U
75-65-0	tertiary-Butyl alcohol	2.0	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FMETL#

10

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No. FT. MONMOUTH NJ Bldg#: NJDEP MW#: TB

Matrix: (soil/water) WATER Lab Sample ID: 9558312V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0783.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. NA Date Analyzed: 12/29/95

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

CAS Number	Compound Name	RT	Est. Conc.	Q
1. 109-99-9	Furan, tetrahydro-	10.61	2	J
2.	Column Bleed	19.62	2	J
3.	Column Bleed	23.00	1	J
4.				
5.				
6.				
7.				
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Quantitation Report

Data File : d:\hpchem\1\data\c0783.d
Acq On : 29 Dec 95 11:14 am
Sample : 9558312 TB
Misc : 25 ML
Quant Time: Dec 31 8:35 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 Dec 26 17:40:31 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	12.07	96	1322876	5.00	ug/L	-0.06
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.32	95	643966	5.16	ug/L	103.20%
57) 1,2-Dichlorobenzene-d4	22.11	152	380637	5.18	ug/L	103.69%
Target Compounds						Qvalue
9) Methylene chloride	7.67	84	81198	1.40	ug/L	95

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

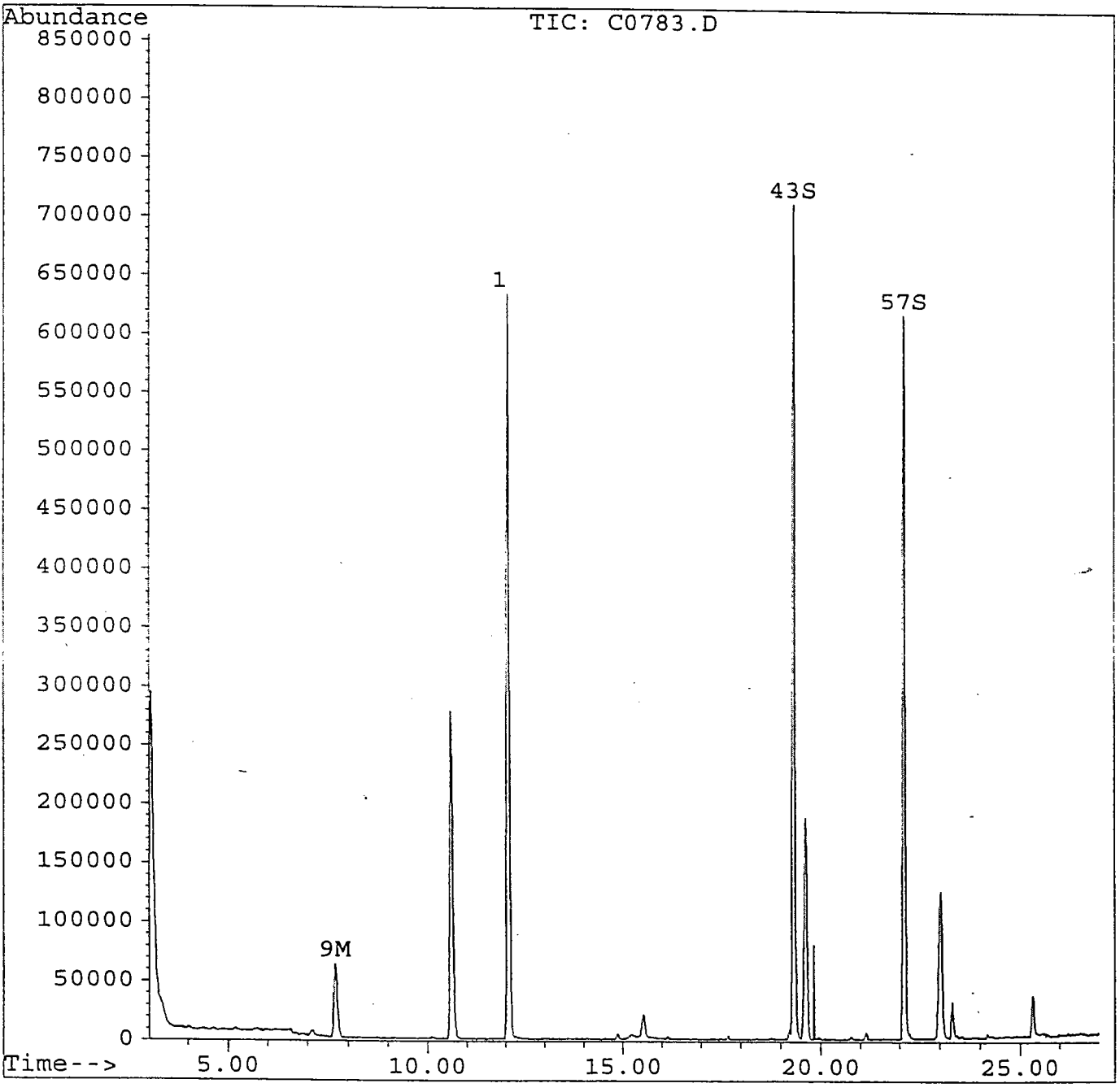
Quantitation Report

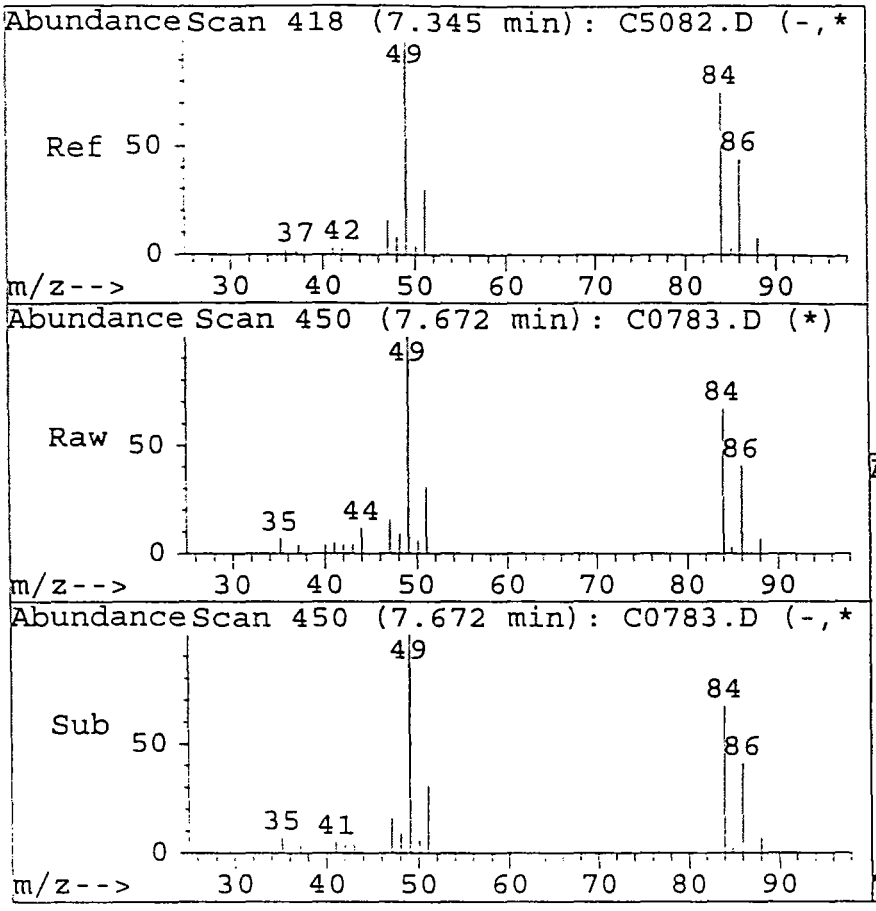
Data File : d:\hpchem\1\data\c0783.d
Acq On : 29 Dec 95 11:14 am
Sample : 9558312 TB
Misc : 25 ML
Quant Time: Dec 31 8:35 1995

Vial: 8
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

107

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Dec 26 17:40:31 1995
Response via : Multiple Level Calibration

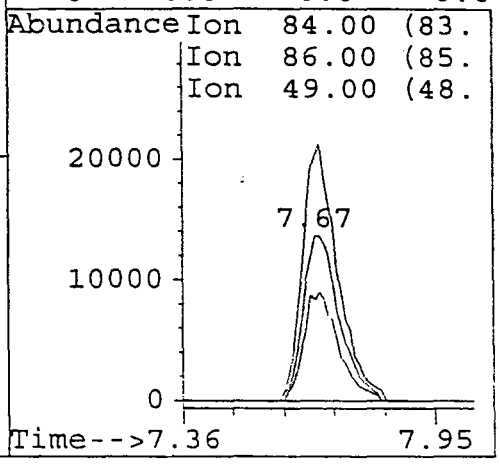




#9
Methylene chloride
Concen: 1.40 ug/L
RT: 7.67 min Scan# 450
Delta R.T. -0.08 min
Lab File: c0783.d
Acq: 29 Dec 95 11:14 am

Tgt Ion:84 Resp: 81198

Ion	Ratio	Lower	Upper
84	100		
86	60.9	41.4	81.4
49	148.7	120.0	160.0
0	0.0	0.0	0.0



Library Search Compound Report

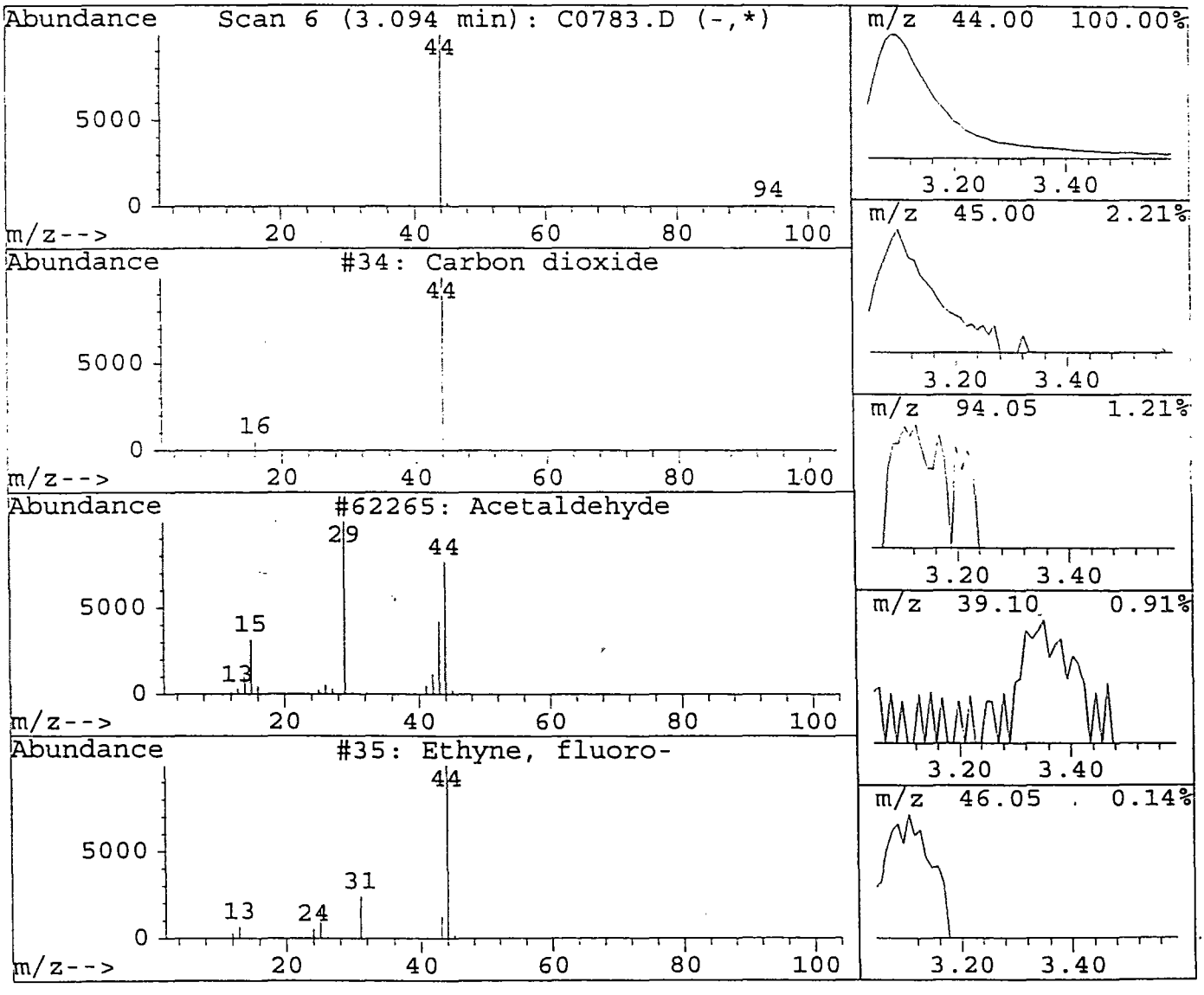
Data File : d:\hpchem\1\data\c0783.d
Acq On : 29 Dec 95 11:14 am
Sample : 9558312 TB
Misc : 25 ML

Vial: 8
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Library : C:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
3.09	3.38 ug/L	1890229	Fluorobenzene	12.07

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Carbon dioxide	34	000124-38-9	3
2	Acetaldehyde	62265	000075-07-0	3
3	Ethyne, fluoro-	35	002713-09-9	3
4	Ethylene oxide	37	000075-21-8	3
5	Propane	62269	000074-98-6	2



Library Search Compound Report

110

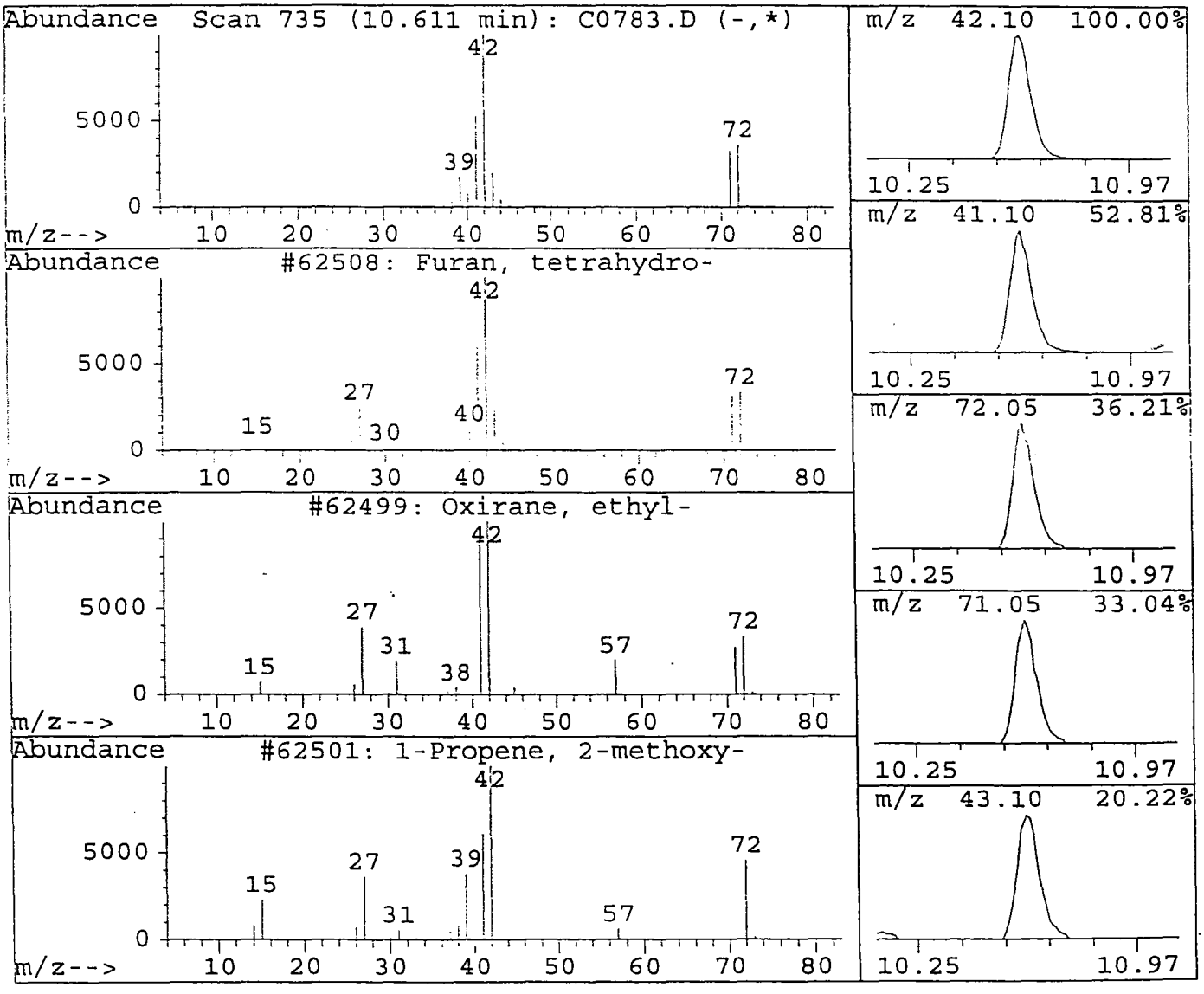
Data File : d:\hpchem\1\data\c0783.d
Acq On : 29 Dec 95 11:14 am
Sample : 9558312 TB
Misc : 25 ML

Vial: 8
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Library : C:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
10.61	2.48 ug/L	1383277	Fluorobenzene	12.07

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Furan, tetrahydro-	62508	000109-99-9	90
2	Oxirane, ethyl-	62499	000106-88-7	40
3	1-Propene, 2-methoxy-	62501	000116-11-0	38
4	Azetidine, 1-methyl-	246	004923-79-9	4
5	Oxirane, 2,2-dimethyl-	62511	000558-30-5	9



Library Search Compound Report

111

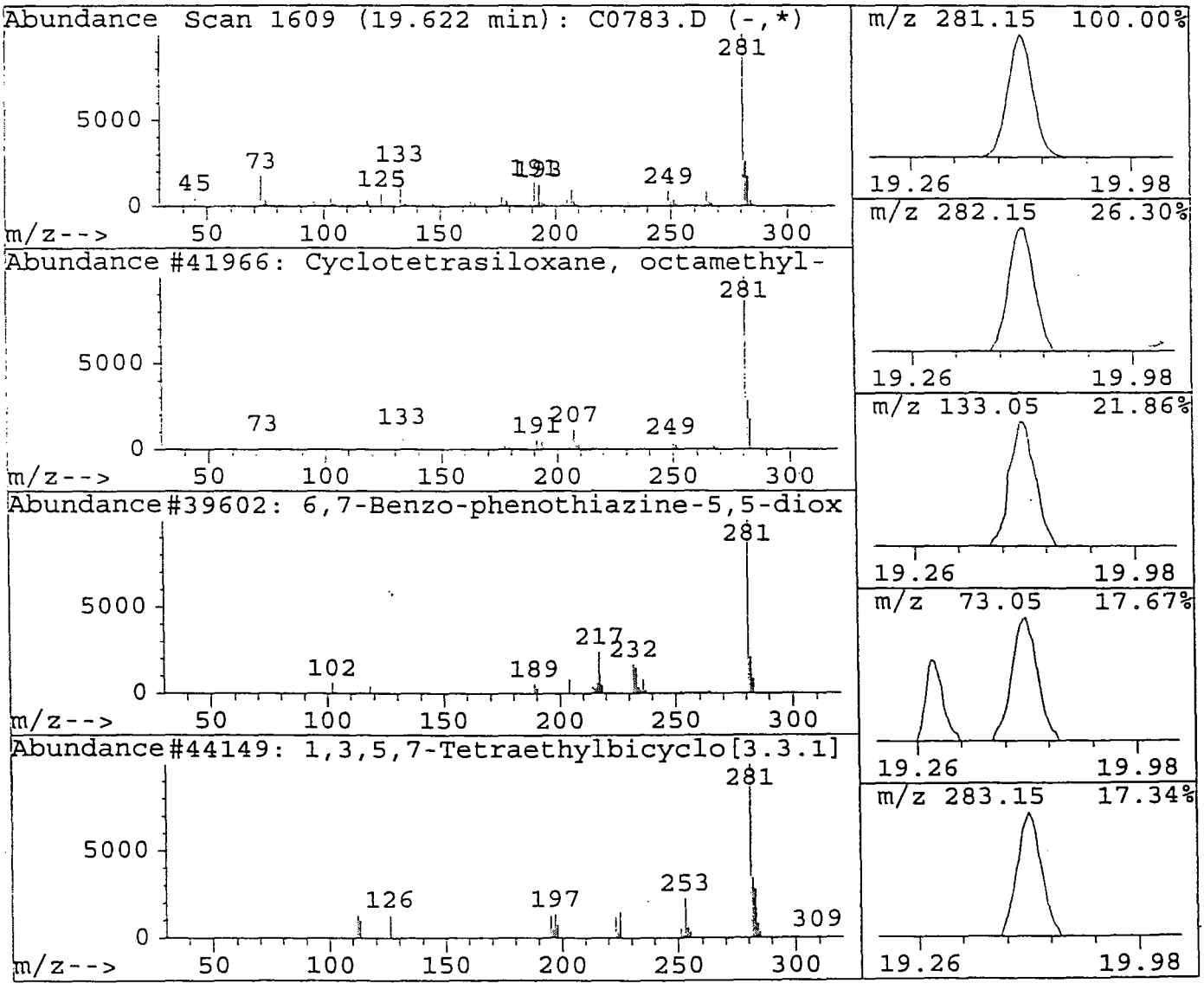
Data File : d:\hpchem\1\data\c0783.d
Acq On : 29 Dec 95 11:14 am
Sample : 9558312 TB
Misc : 25 ML

Vial: 8
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Library : C:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
19.62	1.62 ug/L	902532	Fluorobenzene	12.07

Hit# of 17	Tentative ID	Ref#	CAS#	Qual
1	Cyclotetrasiloxane, octamethyl-	41966	000556-67-2	72
2	6,7-Benzo-phenothiazine-5,5-dioxide	39602	000000-00-0	9
3	1,3,5,7-Tetraethylbicyclo[3.3.1]tet	44149	073420-21-0	9
4	4-(1-Benzimidazyl)-7-nitro-2,1,3-ox	39560	091485-32-4	9
5	Benzene, 1-phenyl-4-(2-cyano-2-phen	39643	027869-56-3	47



Library Search Compound Report

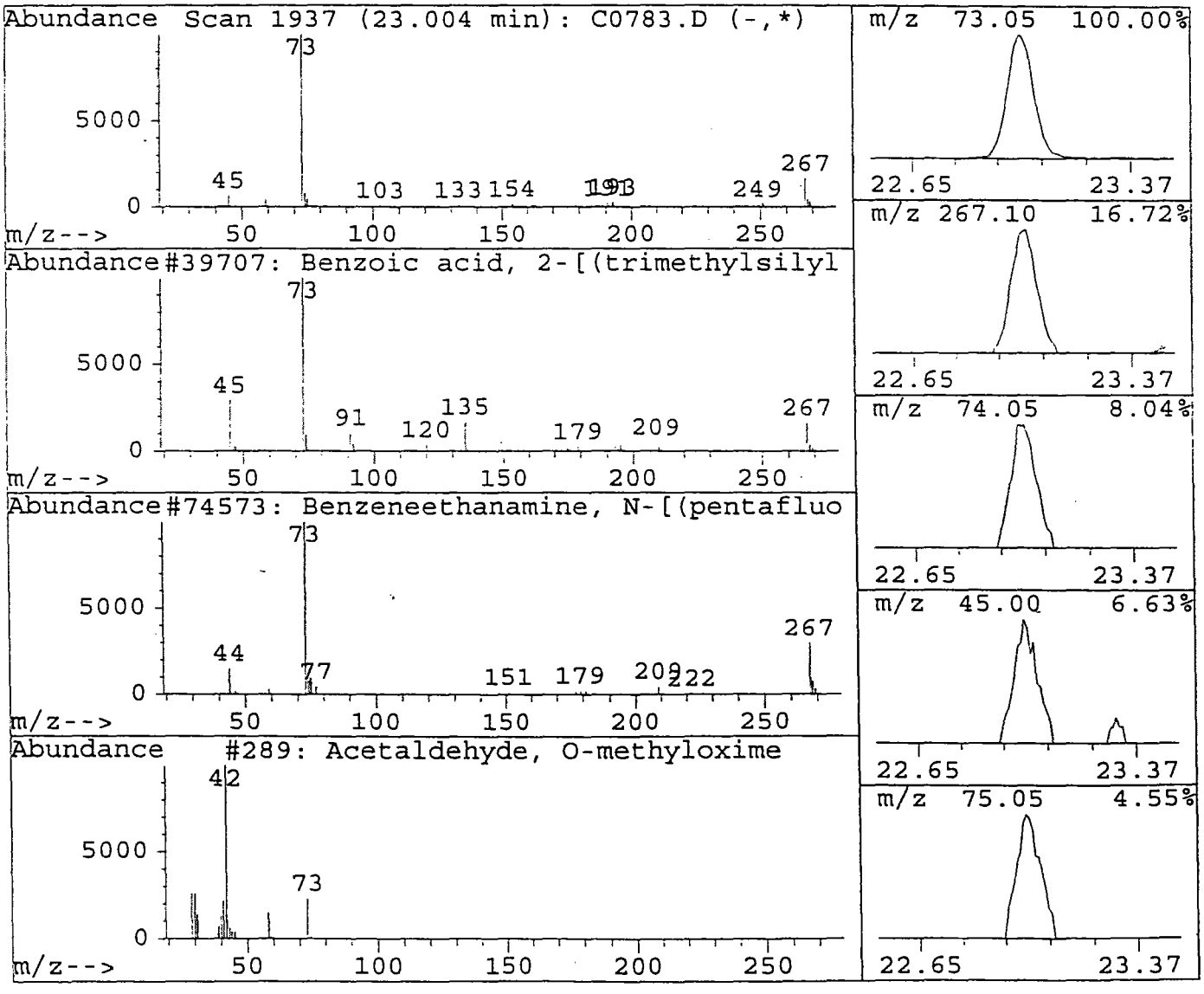
Data File : d:\hpchem\1\data\c0783.d
Acq On : 29 Dec 95 11:14 am
Sample : 9558312 TB
Misc : 25 ML

Vial: 8
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Library : C:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
23.00	1.10 ug/L	615108	Fluorobenzene	12.07

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzoic acid, 2-[(trimethylsilyl)ox	39707	003789-85-3	36
2	Benzeneethanamine, N-[(pentafluorop	74573	055429-85-1	9
3	Acetaldehyde, O-methyloxime	289	033581-43-0	4
4	Trimethylsilyl ether of glycerol	43898	006787-10-6	2
5	N-Ethylformamide	292	000627-45-2	3



1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL#

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: NJDEP MW#: FB

Matrix: (soil/water) WATER Lab Sample ID: 9558313V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0784.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. NA Date Analyzed: 12/29/96

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 1.0

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	.50	U
74-87-3	Chloromethane	.50	U
75-01-4	Vinyl chloride	.50	U
74-83-9	Bromomethane	.50	U
75-00-3	Chloroethane	.50	U
75-69-4	Trichlorofluoromethane	.50	U
75-35-4	1,1-Dichloroethene	.50	U
75-09-2	Methylene chloride	1.4	B
156-60-65	trans-1,2-Dichloroethene	.50	U
75-34-3	1,1-Dichloroethane	.50	U
594-20-7	2,2-Dichloropropane	.50	U
156-59-2	cis-1,2-Dichloroethene	.50	U
74-97-1	Bromochloromethane	.50	U
67-66-3	Chloroform	.50	U
71-55-6	1,1,1-Trichloroethane	.50	U
56-23-1	Carbon tetrachloride	.50	U
563-58-6	1,1-Dichloropropene	.50	U
71-43-2	Benzene	.50	U
107-06-2	1,2-Dichloroethane	.50	U
79-01-6	Trichloroethene	.50	U
78-87-1	1,2-Dichloropropane	.50	U
74-95-3	Dibromomethane	.50	U
75-27-4	Bromodichloromethane	.50	U
10061-01-1	cis-1,3-Dichloropropene	.50	U
108-88-3	Toluene	.50	U
10061-02-6	trans-1,3-Dichloropropene	.50	U
79-00-1	1,1,2-Trichloroethane	.50	U
127-18-4	Tetrachloroethene	.50	U
142-28-9	1,3-Dichloropropane	.50	U
124-48-1	Dibromochloromethane	.50	U
106-93-4	1,2-Dibromomethane	.50	U
108-90-7	Chlorobenzene	.50	U
630-20-6	1,1,1,2-Tetrachloroethane	.50	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 114

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: 290 NJDEP MW#: FB

Matrix: (soil/water) WATER Lab Sample ID: 9558313V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0784.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. NA Date Analyzed: 12/29/96

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 1.0

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
100-41-4	Ethylbenzene	.50	U
1330-29-7	Xylene (total)	.50	U
100-42-1	Styrene	.50	U
75-25-2	Bromoform	.50	U
98-82-8	Isopropylbenzene	.50	U
108-86-1	Bromobenzene	.50	U
79-34-1	1,1,2,2-Tetrachloroethane	.50	U
96-18-4	1,2,3-Trichloropropane	.50	U
103-65-1	n-Propylbenzene	.50	U
95-49-8	2-Chlorotoluene	.50	U
106-43-4	4-Chlorotoluene	.50	U
108-67-8	1,3,5-Trimethylbenzene	.50	U
98-06-6	tert-Butylbenzene	.50	U
95-63-6	1,2,4-Trimethylbenzene	.50	U
135-98-8	sec-Butylbenzene	.50	U
541-73-1	1,3-Dichlorobenzene	.50	U
99-87-6	4-Isopropyltoluene	.50	U
106-46-7	1,4-Dichlorobenzene	.50	U
95-50-1	1,2-Dichlorobenzene	.50	U
104-51-8	n-Butylbenzene	.50	U
96-12-8	1,2-Dibromo-3-chloropropane	.50	U
120-82-1	1,2,4-Trichlorobenzene	.50	U
87-68-3	Hexachlorobutadiene	.50	U
91-20-3	Naphthalene	.50	U
87-61-6	1,2,3-Trichlorobenzene	.50	U
1634-04-4	Methy-tertiary butyl ether	.50	U
75-65-0	tertiary-Butyl alcohol	2.0	U

1E

FMETL#

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

11

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No. FT. MONMOUTH NJ Bldg#: NJDEP MW#: FB

Matrix: (soil/water) WATER Lab Sample ID: 9558313V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0784.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. NA Date Analyzed: 12/29/95

GC Column: DB-624 X 75M ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Concentration Units:

Number TICs found: 2 (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1. 109-99-9	Furan, tetrahydro-	10.60	2	J
2.	Column Bleed	19.61	1	J
3.				
4.				
5.				
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Quantitation Report

Data File : d:\hpchem\1\data\c0784.d
Acq On : 29 Dec 95 11:49 am
Sample : 9558313 FB
Misc : 25 ML
Quant Time: Dec 31 8:36 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 Dec 26 17:40:31 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	12.07	96	1334653	5.00	ug/L	-0.07
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.31	95	648486	5.15	ug/L	103.01%
57) 1,2-Dichlorobenzene-d4	22.11	152	383609	5.18	ug/L	103.57%
Target Compounds						Qvalue
9) Methylene chloride	7.67	84	84415	1.44	ug/L	98

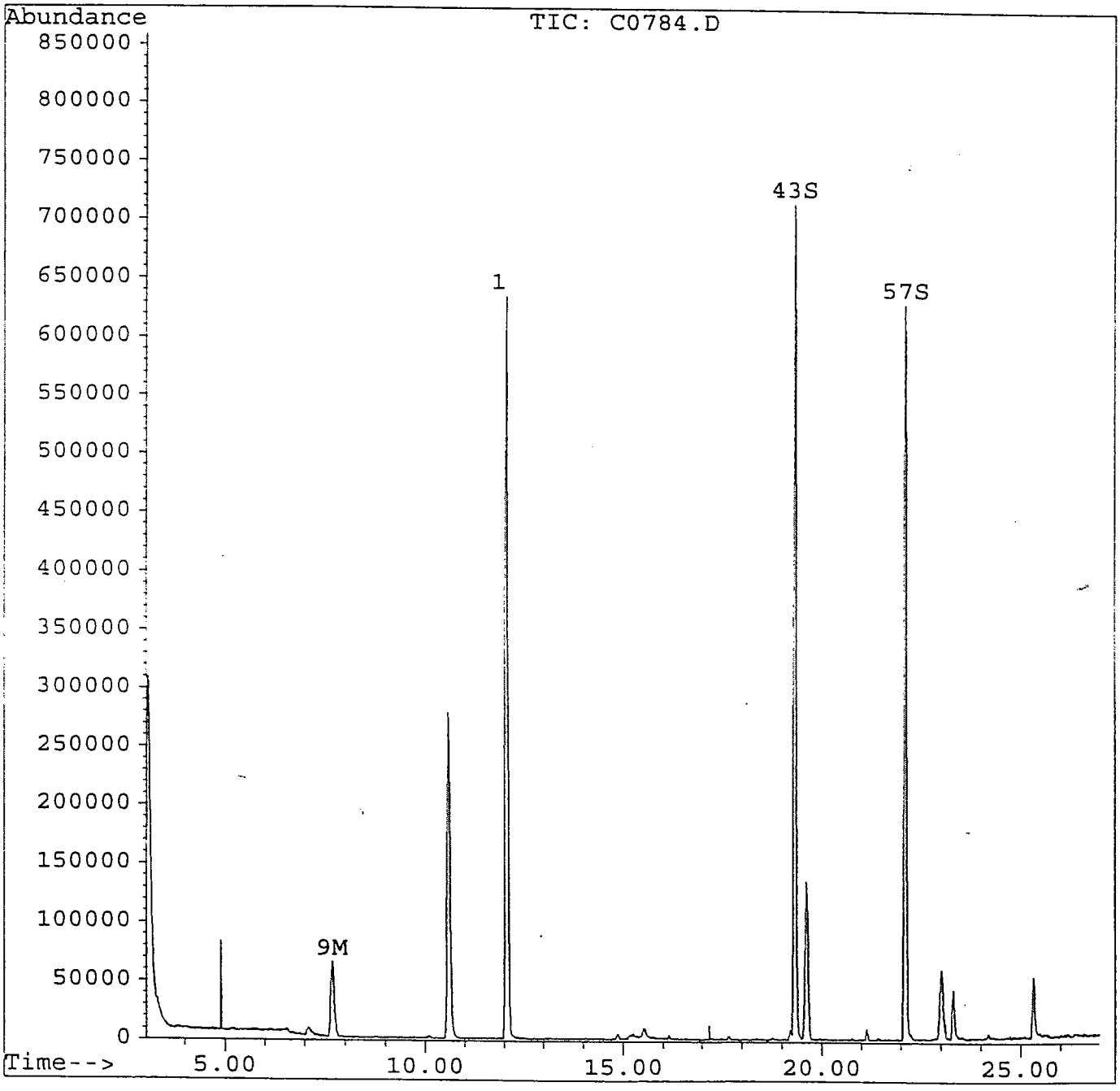
(#) = qualifier out of range (m) = manual integration

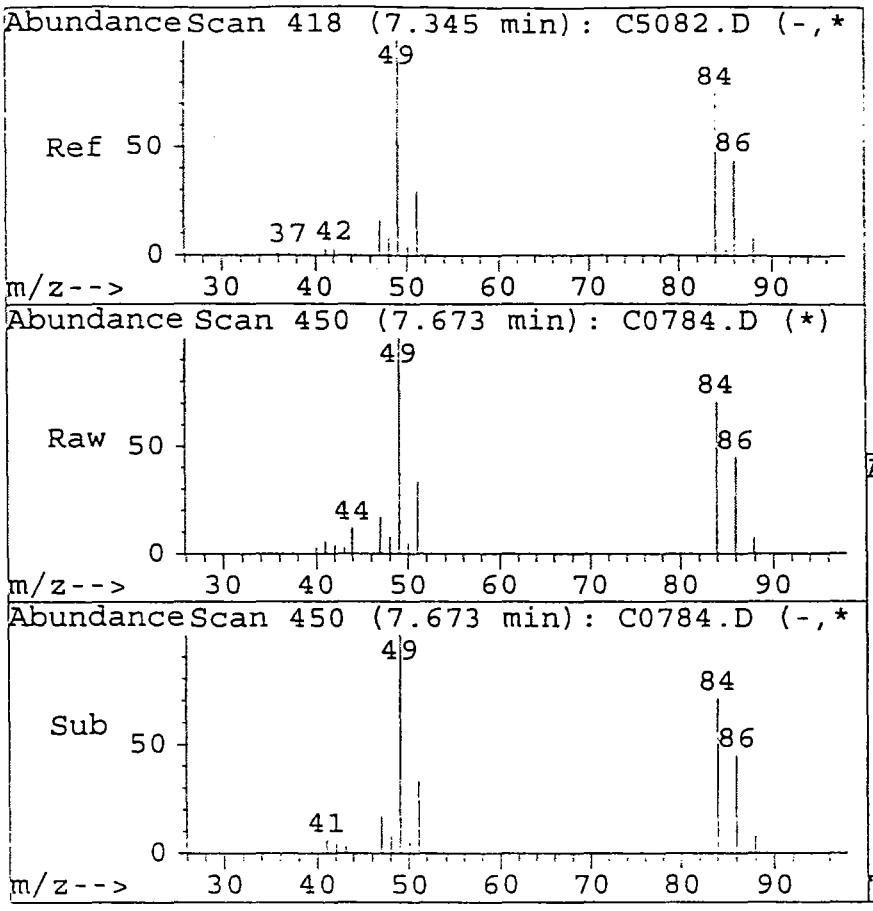
Quantitation Report

Data File : d:\hpchem\1\data\c0784.d
Acq On : 29 Dec 95 11:49 am
Sample : 9558313 FB
Misc : 25 ML
Quant Time: Dec 31 8:36 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 Dec 26 17:40:31 1995
Response via : Multiple Level Calibration

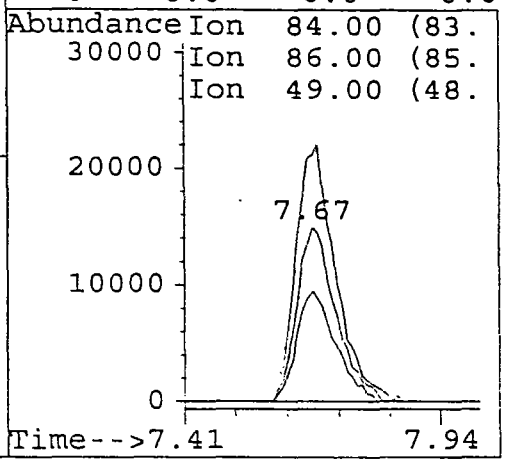




#9
Methylene chloride
Concen: 1.44 ug/L
RT: 7.67 min Scan# 450
Delta R.T. -0.08 min
Lab File: c0784.d
Acq: 29 Dec 95 11:49 am

Tgt Ion:84 Resp: 84415

Ion	Ratio	Lower	Upper
84	100		
86	63.4	41.4	81.4
49	141.8	120.0	160.0
0	0.0	0.0	0.0



Library Search Compound Report

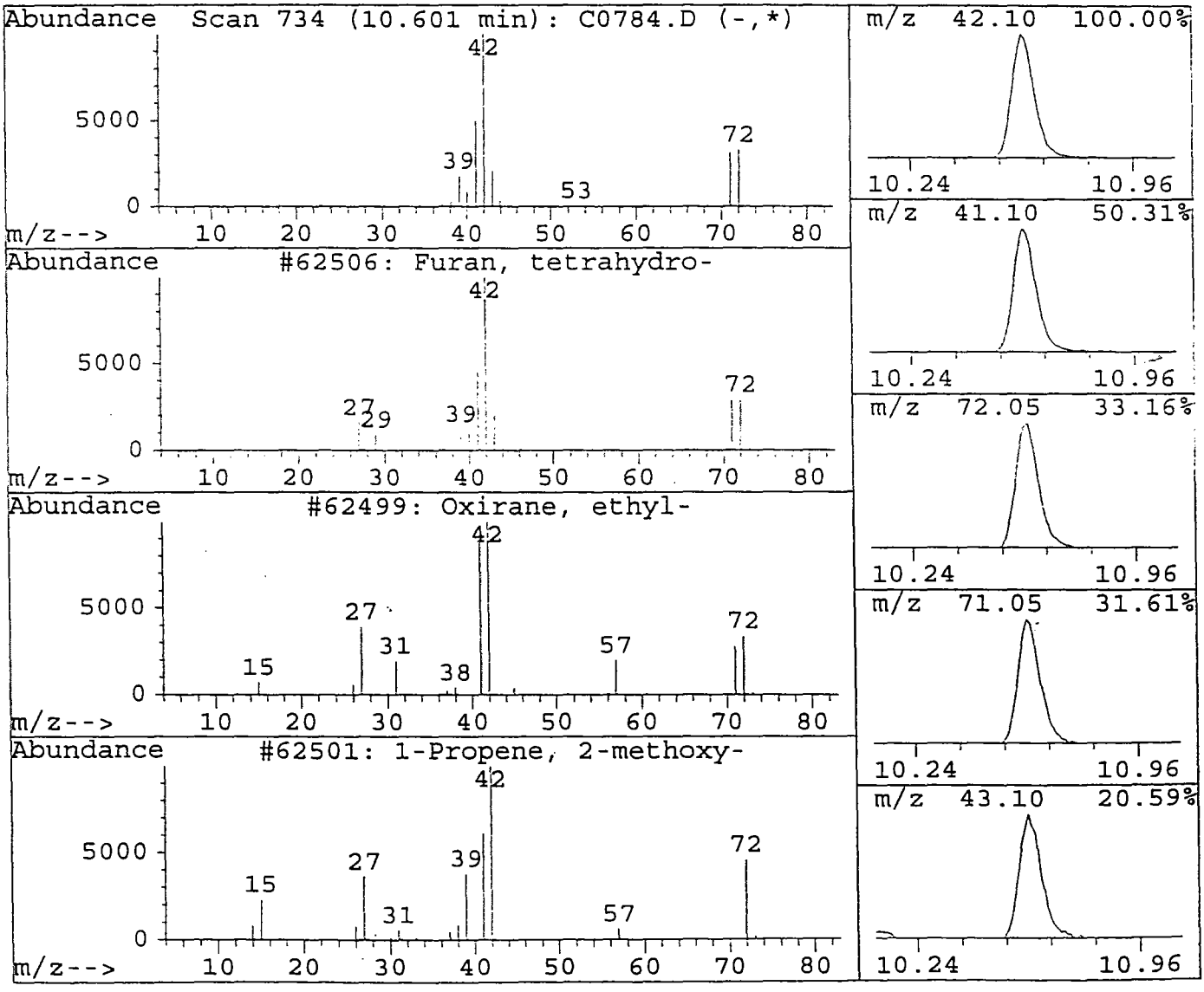
Data File : d:\hpchem\1\data\c0784.d
Acq On : 29 Dec 95 11:49 am
Sample : 9558313 FB
Misc : 25 ML

Vial: 9
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Library : C:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
10.60	2.48 ug/L	1398893	Fluorobenzene	12.07

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Furan, tetrahydro-	62506	000109-99-9	90
2	Oxirane, ethyl-	62499	000106-88-7	40
3	1-Propene, 2-methoxy-	62501	000116-11-0	38
4	Oxirane, 2,2-dimethyl-	62511	000558-30-5	43
5	Formaldehyde, dimethylhydrazone	257	002035-89-4	4



Library Search Compound Report

120

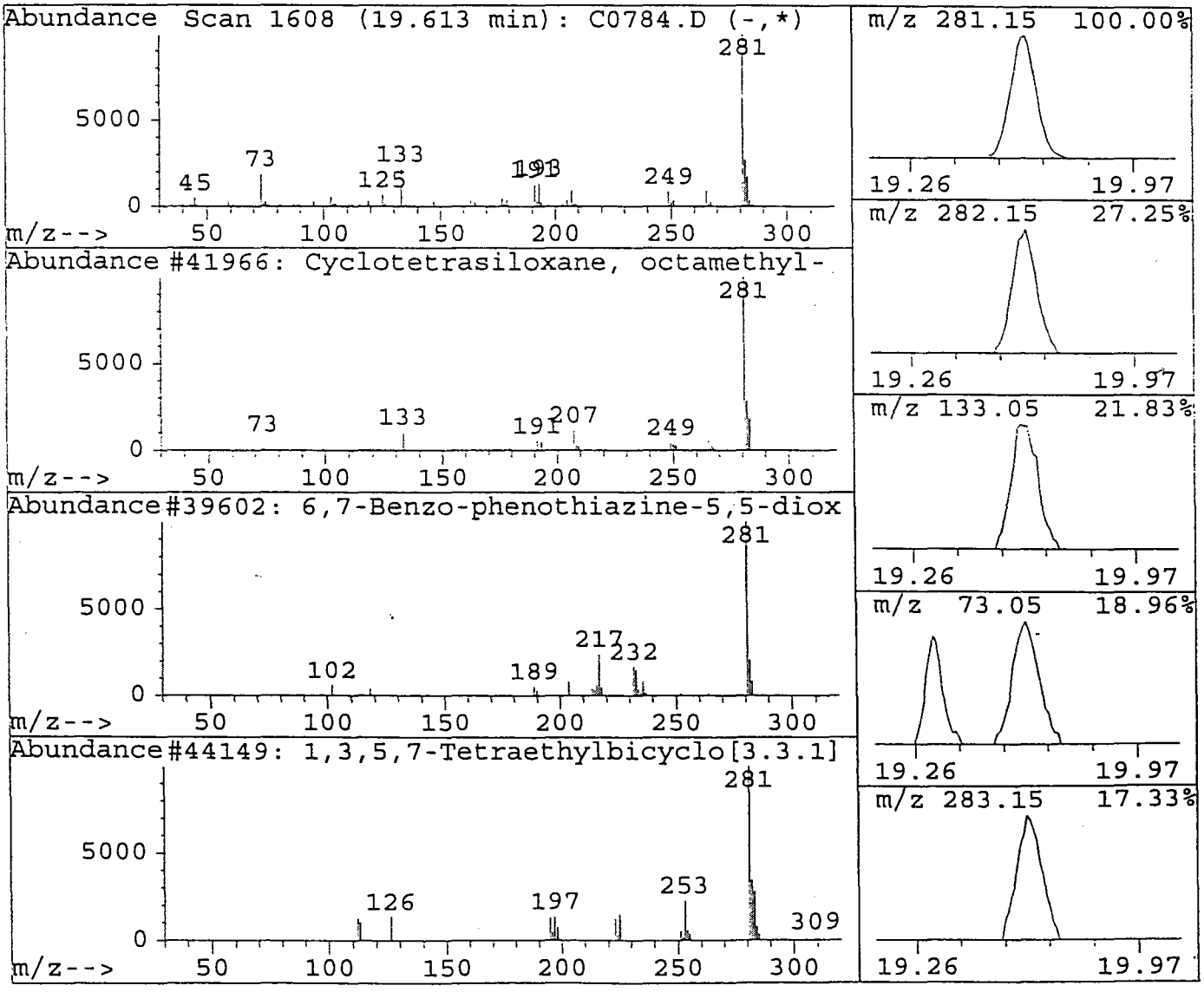
Data File : d:\hpchem\1\data\c0784.d
Acq On : 29 Dec 95 11:49 am
Sample : 9558313 FB
Misc : 25 ML

Vial: 9
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Library : C:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
19.61	1.05 ug/L	594136	Fluorobenzene	12.07

Hit# of 18	Tentative ID	Ref#	CAS#	Qual
1	Cyclotetrasiloxane, octamethyl-	41966	000556-67-2	10
2	6,7-Benzo-phenothiazine-5,5-dioxide	39602	000000-00-0	9
3	1,3,5,7-Tetraethylbicyclo[3.3.1]tet	44149	073420-21-0	4
4	4-(1-Benzimidazyl)-7-nitro-2,1,3-ox	39560	091485-32-4	5
5	Benzene, 1-phenyl-4-(2-cyano-2-phen	39643	027869-56-3	47



1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL#

121

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: 2018 NJDEP MW#: 1

Matrix: (soil/water) WATER Lab Sample ID: 9558315V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0888.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. NA Date Analyzed: 1/4/96

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	.50	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	31	
71-55-6	1,1,1-Trichloroethane	.50	U
56-23-1	Carbon tetrachloride	.50	U
563-58-6	1,1-Dichloropropene	.50	U
71-43-2	Benzene	.50	U
107-06-2	1,2-Dichloroethane	.50	U
79-01-6	Trichloroethene	.50	U
78-87-1	1,2-Dichloropropane	.50	U
74-95-3	Dibromomethane	.50	U
75-27-4	Bromodichloromethane	.50	U
10061-01-1	cis-1,3-Dichloropropene	.50	U
108-88-3	Toluene	.50	U
10061-02-6	trans-1,3-Dichloropropene	.50	U
79-00-1	1,1,2-Trichloroethane	.50	U
127-18-4	Tetrachloroethene	.50	U
142-28-9	1,3-Dichloropropane	.50	U
124-48-1	Dibromochloromethane	.50	U
106-93-4	1,2-Dibromomethane	.50	U
108-90-7	Chlorobenzene	.50	U
630-20-6	1,1,1,2-Tetrachloroethane	.50	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL#

123

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: 2018 NJDEP MW#: 1

Matrix: (soil/water) WATER Lab Sample ID: 9558315V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0888.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. NA Date Analyzed: 1/4/96

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
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	2.7	
87-61-6	1,2,3-Trichlorobenzene	.50	U
1634-04-4	Methy-tertiary butyl ether	.50	U
75-65-0	tertiary-Butyl alcohol	2.0	U

1E

FMETL# 123

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No. FT. MONMOUTH NJ BLDG#: 2018 NJDEP MW#: 1

Matrix: (soil/water) WATER Lab Sample ID: 9558315V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0888.D

Level: (low/med) LOW Date Received: NA

% Moisture: not dec. NA Date Analyzed: 1/4/96

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

CAS Number	Compound Name	RT	Est. Conc.	Q
1. 526-73-8	Benzene, 1,2,3-trimethyl-	21.55	1	J
2.	Column Bleed	23.01	2	J
3. 99-87-6	Benzene, 1-methyl-4-(1-methy	24.37	1	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 : d:\hpchem\1\data\c0888.d
Acq On : 4 Jan 96 10:45 pm
Sample : 9558315 BLDG 2018 MW-1
Misc : 25 ML
Quant Time: Jan 9 15:15 1996

Vial: 20
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Dec 26 17:40:31 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	12.08	96	1269298	5.00	ug/L	-0.06
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.32	95	616223	5.15	ug/L	102.92%
57) 1,2-Dichlorobenzene-d4	22.12	152	366995	5.21	ug/L	104.19%
Target Compounds						Qvalue
9) Methylene chloride	7.69	84	29530	0.53	ug/L	94
17) Chloroform	10.65	83	3468040	31.14	ug/L	99
63) Naphthalene	25.58	128	228333	2.66	ug/L	100

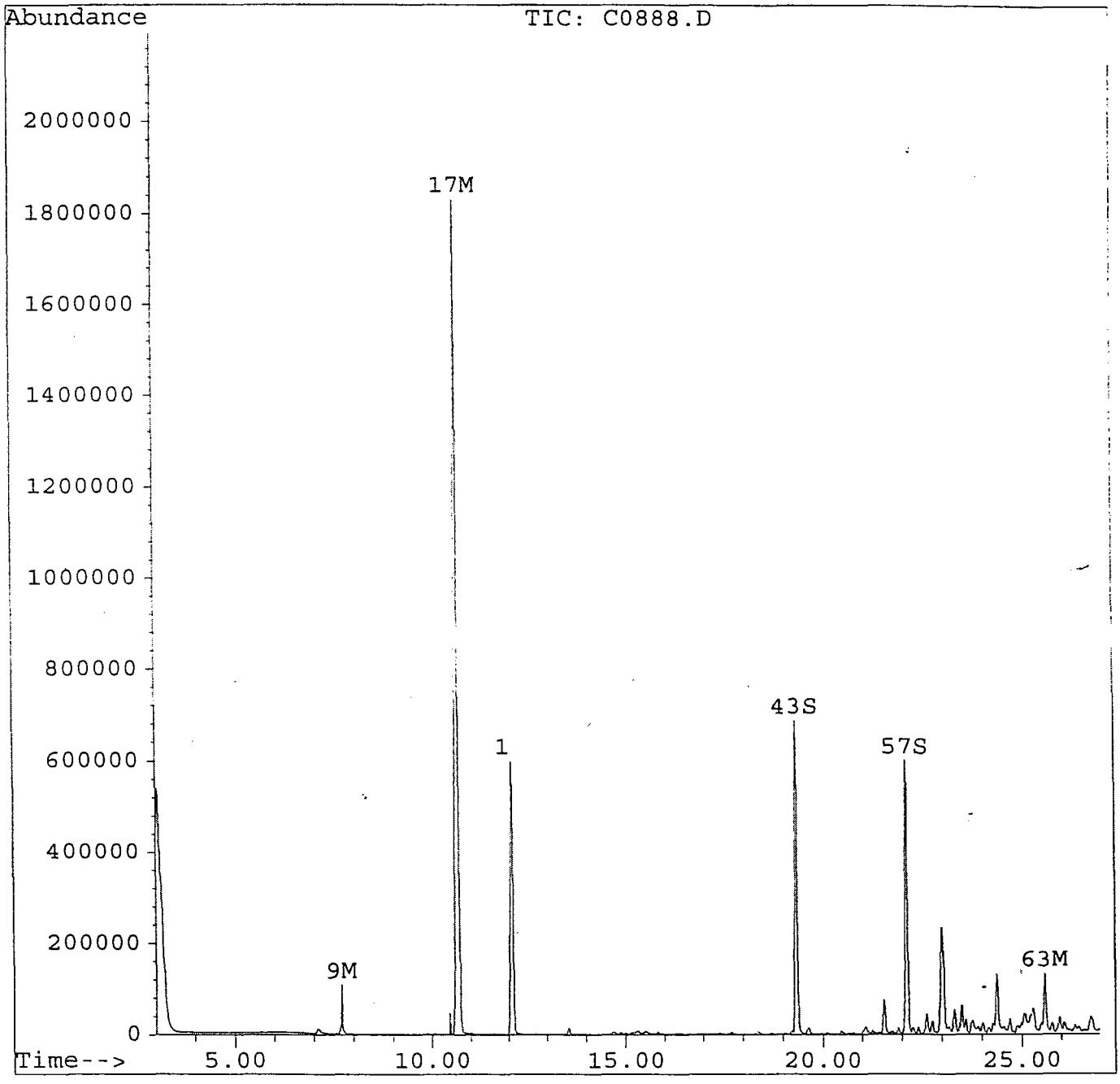
(#) = qualifier out of range (m) = manual integration

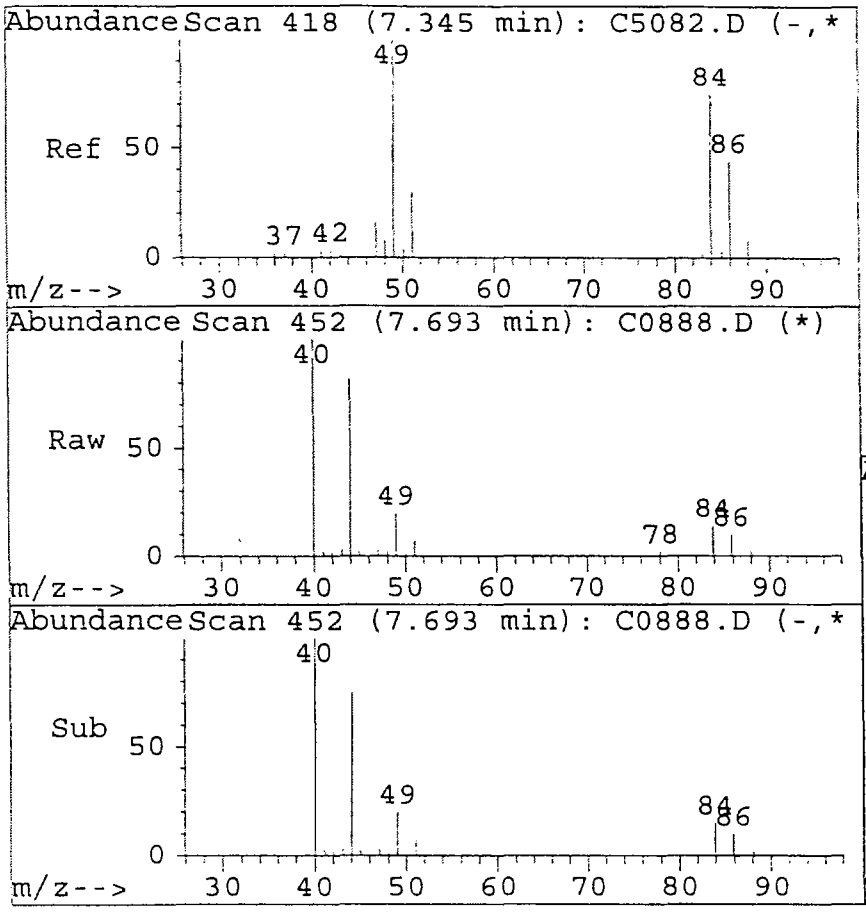
Quantitation Report

Data File : d:\hpchem\1\data\c0888.d
Acq On : 4 Jan 96 10:45 pm
Sample : 9558315 BLDG 2018 MW-1
Misc : 25 ML
Quant Time: Jan 9 15:15 1996

Vial: 20 125
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Dec 26 17:40:31 1995
Response via : Multiple Level Calibration

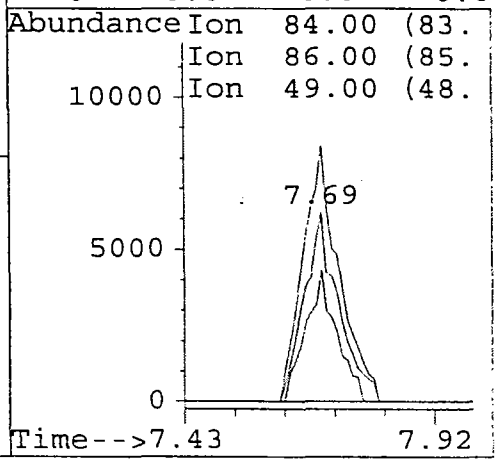


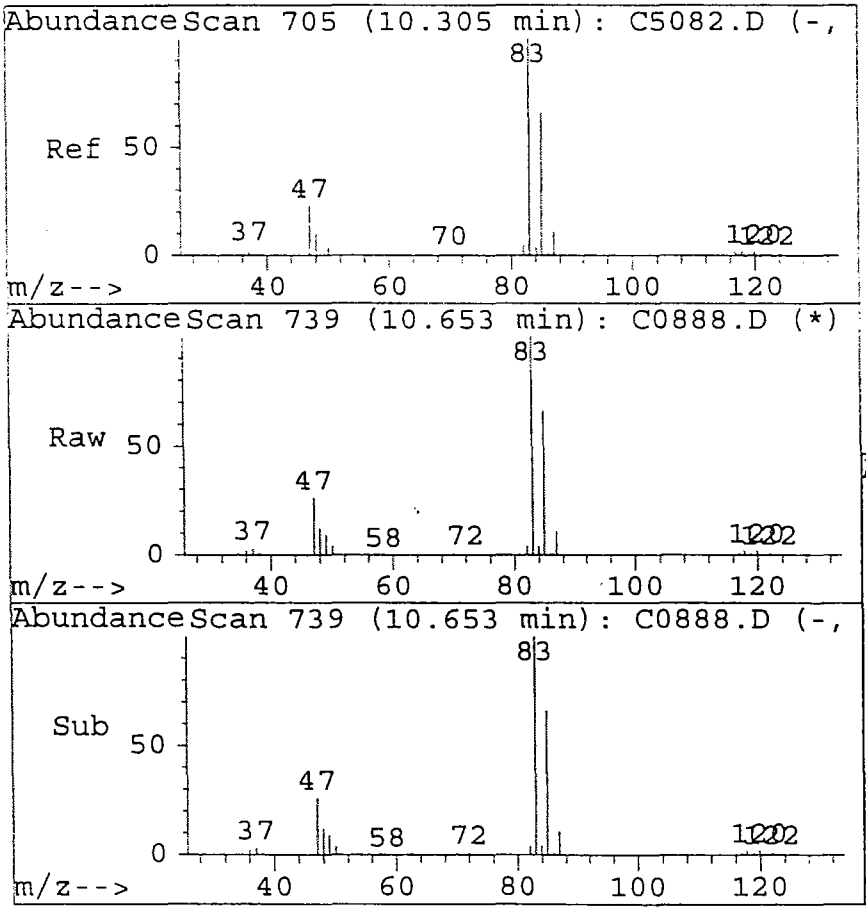


#9
Methylene chloride
Concen: 0.53 ug/L
RT: 7.69 min Scan# 452
Delta R.T. -0.06 min
Lab File: c0888.d
Acq: 4 Jan 96 10:45 pm

Tgt Ion:84 Resp: 29530

Ion	Ratio	Lower	Upper
84	100		
86	69.4	41.4	81.4
49	135.7	120.0	160.0
0	0.0	0.0	0.0

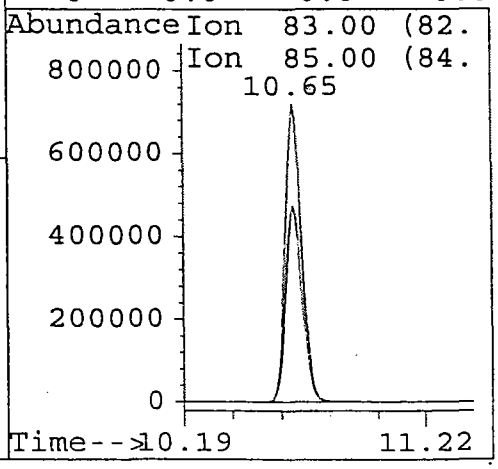


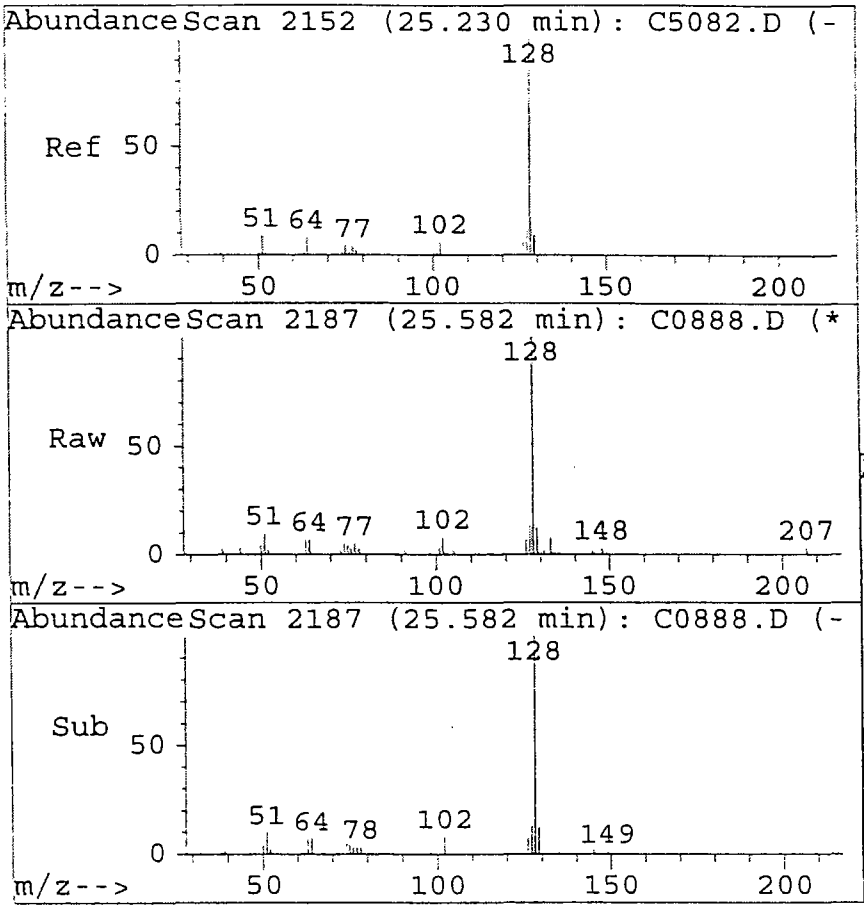


#17
Chloroform
Concen: 31.14 ug/L
RT: 10.65 min Scan# 739
Delta R.T. -0.06 min
Lab File: c0888.d
Acq: 4 Jan 96 10:45 pm

Tgt Ion:83 Resp: 3468040

Ion	Ratio	Lower	Upper
83	100		
85	66.0	46.6	86.6
0	0.0	0.0	0.0
0	0.0	0.0	0.0

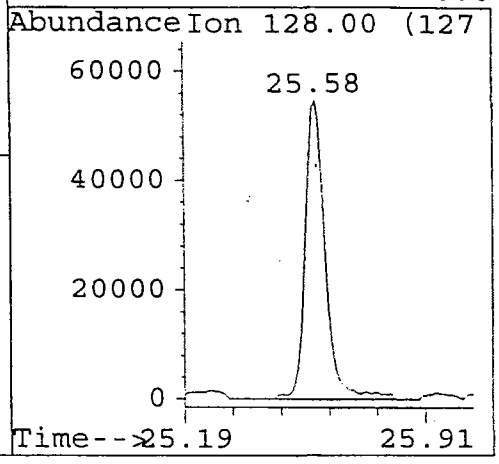




#63
Naphthalene
Concen: 2.66 ug/L
RT: 25.58 min Scan# 2187
Delta R.T. -0.05 min
Lab File: c0888.d
Acq: 4 Jan 96 10:45 pm

Tgt Ion:128 Resp: 228333

Ion	Ratio	Lower	Upper
128	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

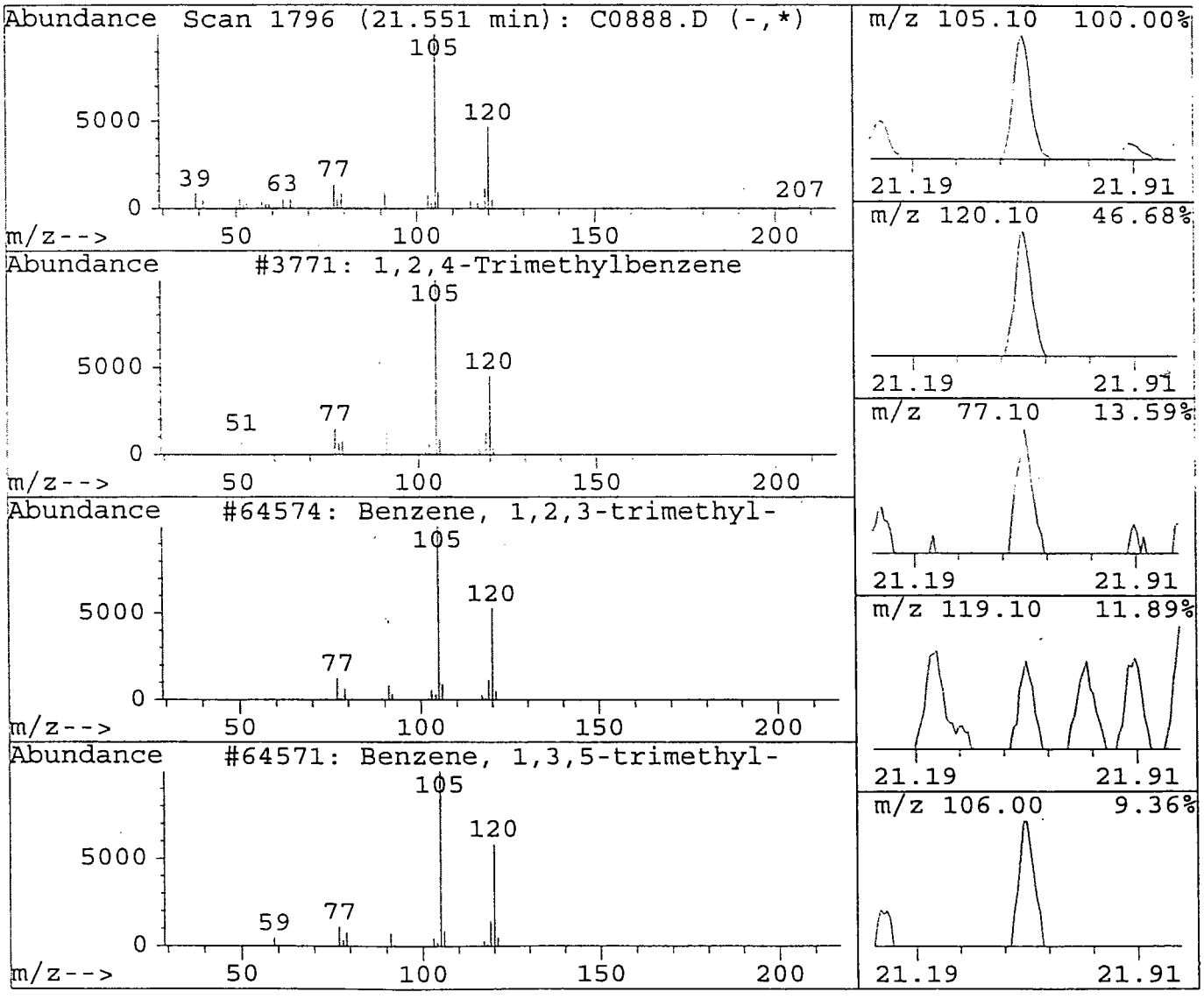
Data File : d:\hpchem\1\data\c0888.d
Acq On : 4 Jan 96 10:45 pm
Sample : 9558315 BLDG 2018 MW-1
Misc : 25 ML

Vial: 20
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.
21.55	0.52 ug/L	273046	Fluorobenzene	12.08

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1,2,4-Trimethylbenzene	3771	000095-36-3	78
2	Benzene, 1,2,3-trimethyl-	64574	000526-73-8	90
3	Benzene, 1,3,5-trimethyl-	64571	000108-67-8	72
4	Benzene, 1-ethyl-3-methyl-	64564	000620-14-4	87
5	Benzene, 1,2,4-trimethyl-	64578	000095-63-6	72



Library Search Compound Report

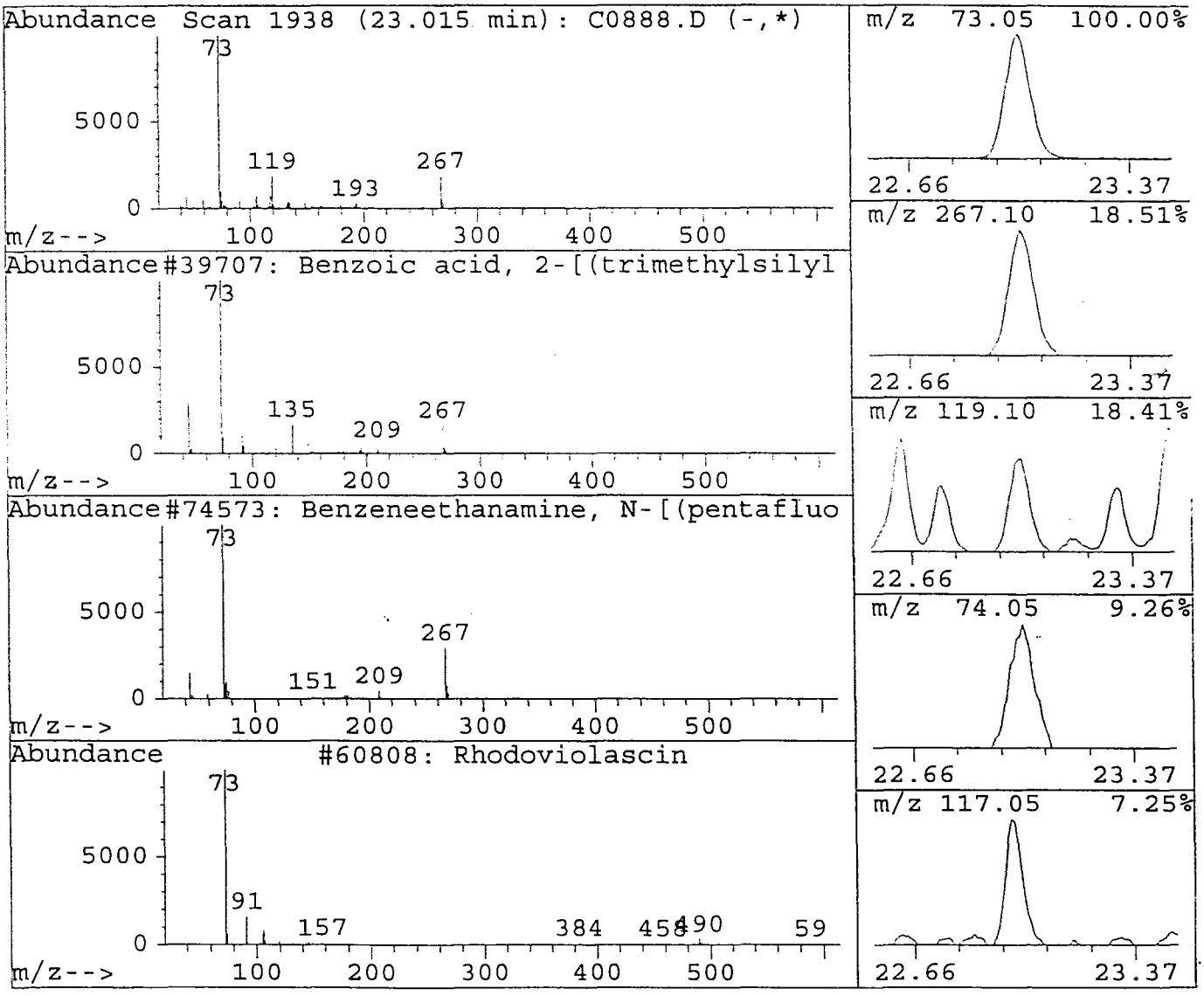
Data File : d:\hpchem\1\data\c0888.d
Acq On : 4 Jan 96 10:45 pm
Sample : 9558315 BLDG 2018 MW-1
Misc : 25 ML

Vial: 20
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.
23.01	2.01 ug/L	1061453	Fluorobenzene	12.08

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzoic acid, 2-[(trimethylsilyl)ox	39707	003789-85-3	28
2	Benzeneethanamine, N-[(pentafluorop	74573	055429-85-1	9
3	Rhodoviolascin	60808	034255-08-8	4
4	2-Phenyl-1,2-bis(trimethylsilyloxy)	42034	000000-00-0	4
5	Silane, 9H-fluoren-9-yltrimethyl-	31629	007385-10-6	9



Library Search Compound Report

130

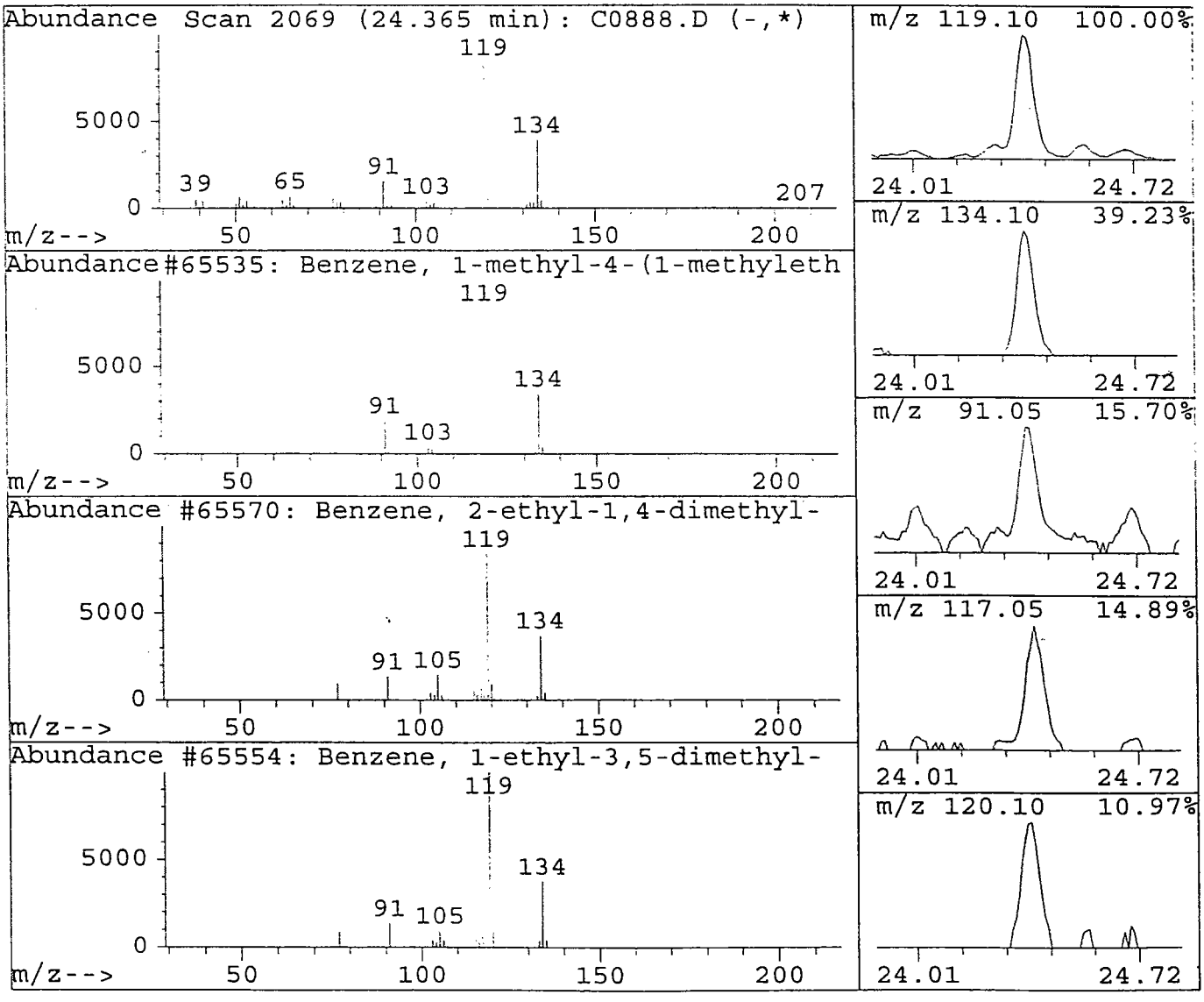
Data File : d:\hpchem\1\data\c0888.d
Acq On : 4 Jan 96 10:45 pm
Sample : 9558315 BLDG 2018 MW-1
Misc : 25 ML

Vial: 20
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.
24.37	0.78 ug/L	411842	Fluorobenzene	12.08

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1-methyl-4-(1-methylethyl)	65535	000099-87-6	94
2	Benzene, 2-ethyl-1,4-dimethyl-	65570	001758-88-9	90
3	Benzene, 1-ethyl-3,5-dimethyl-	65554	000934-74-7	90
4	Benzene, 1-ethyl-2,3-dimethyl-	6211	000933-98-2	90
5	Benzene, 4-ethyl-1,2-dimethyl-	65567	000934-80-5	90



Quantitation Report

Data File : d:\hpchem\1\data\c0787.d
Acq On : 29 Dec 95 1:32 pm
Sample : 9558315 BLDG.2018 MW-1
Misc : 25 ML
Quant Time: Dec 31 8:40 1995

Vial: 12
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

131

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Dec 26 17:40:31 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	12.07	96	1257455	5.00	ug/L	-0.06
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.31	95	625926	5.28	ug/L	105.53%
57) 1,2-Dichlorobenzene-d4	22.11	152	373917	5.36	ug/L	107.15%
Target Compounds						Qvalue
9) Methylene chloride	7.67	84	51236	0.93	ug/L	96
17) Chloroform	10.64	83	3439925	31.17	ug/L	97
63) Naphthalene	25.58	128	349006	4.10	ug/L	100

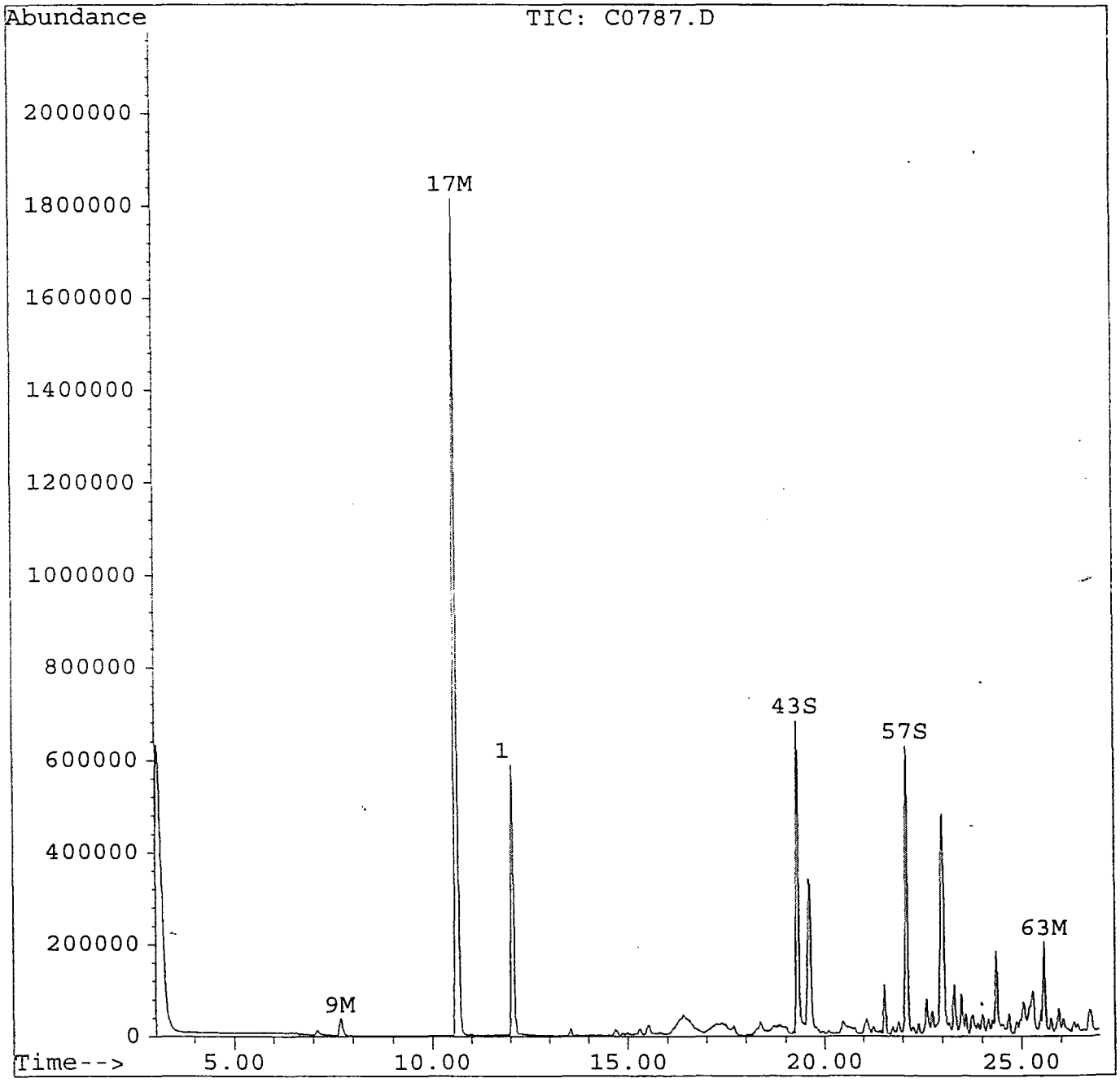
(#) = qualifier out of range (m) = manual integration

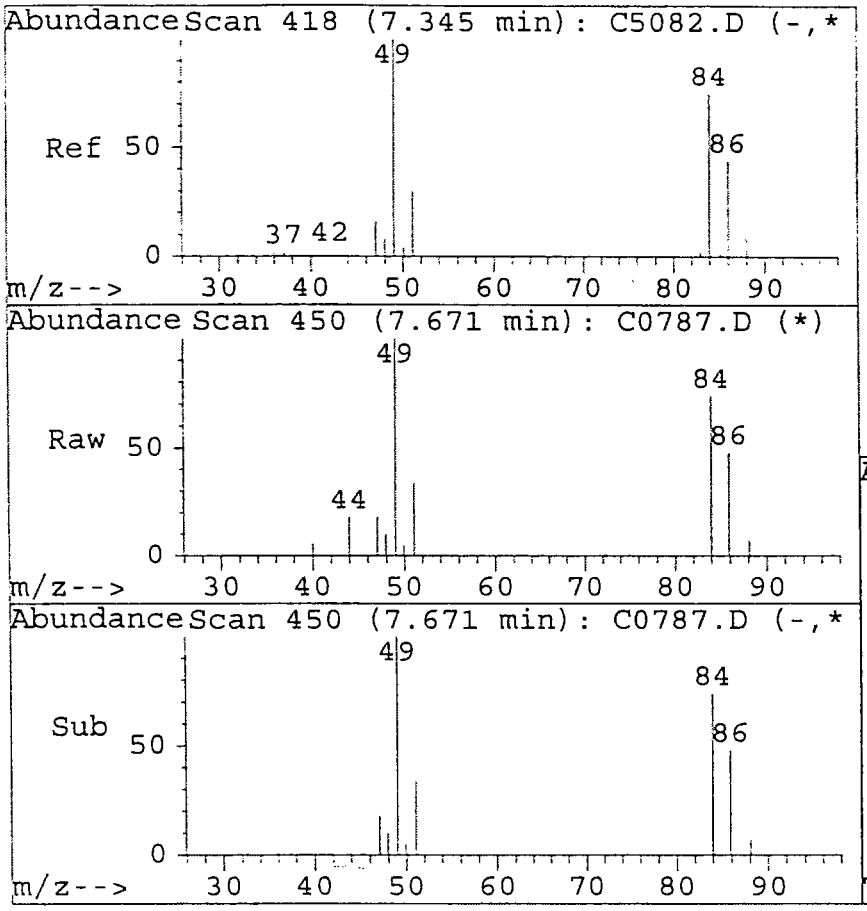
Quantitation Report

Data File : d:\hpchem\1\data\c0787.d
Acq On : 29 Dec 95 1:32 pm
Sample : 9558315 BLDG.2018 MW-1
Misc : 25 ML
Quant Time: Dec 31 8:40 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 Dec 26 17:40:31 1995
Response via : Multiple Level Calibration

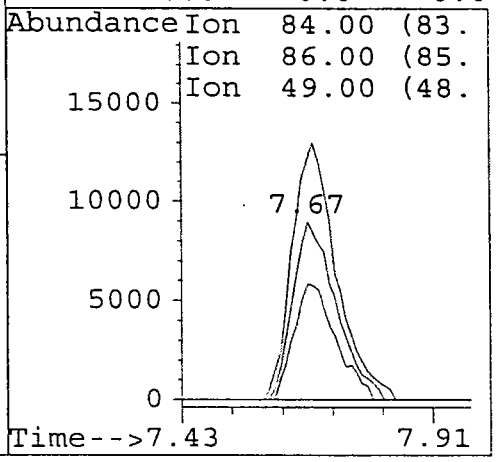


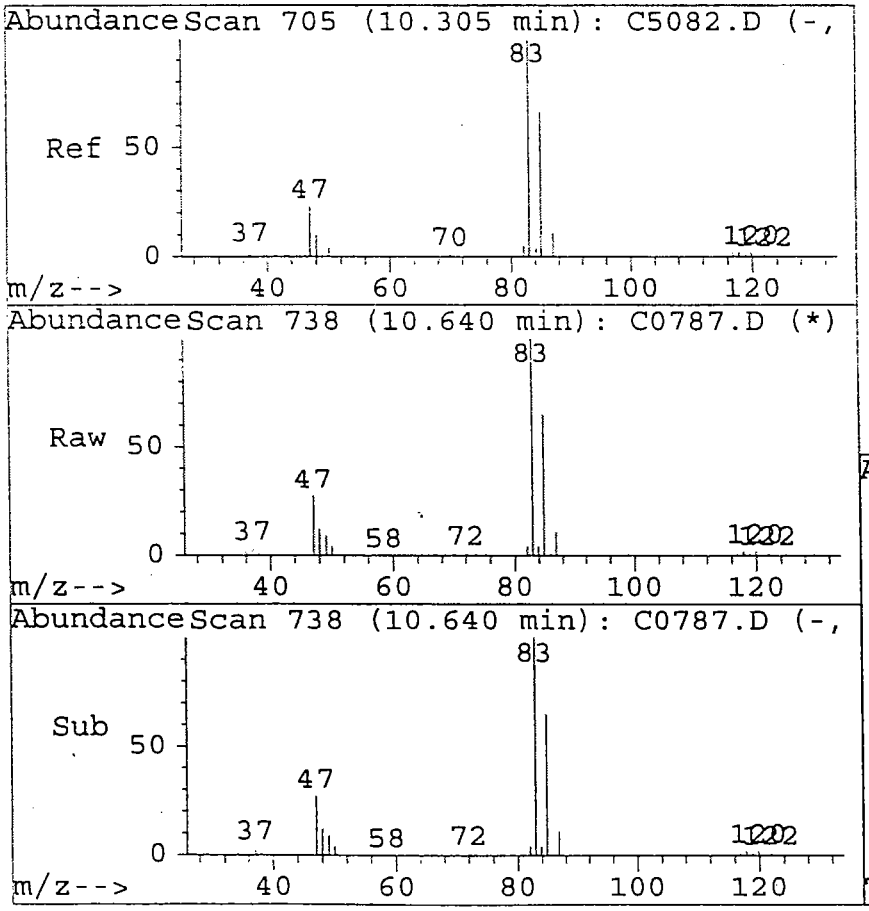


#9
Methylene chloride
Concen: 0.93 ug/L
RT: 7.67 min Scan# 450
Delta R.T. -0.08 min
Lab File: c0787.d
Acq: 29 Dec 95 1:32 pm

Tgt Ion:84 Resp: 51236

Ion	Ratio	Lower	Upper
84	100		
86	65.0	41.4	81.4
49	135.3	120.0	160.0
0	0.0	0.0	0.0

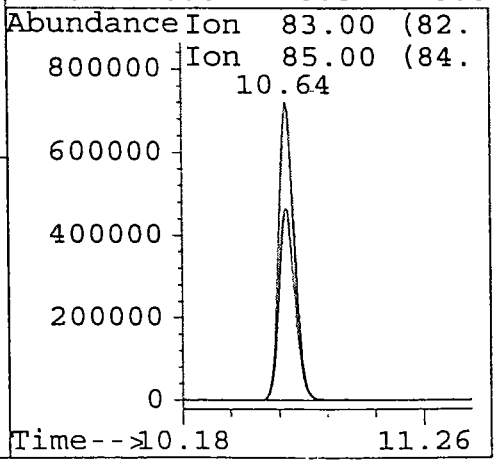


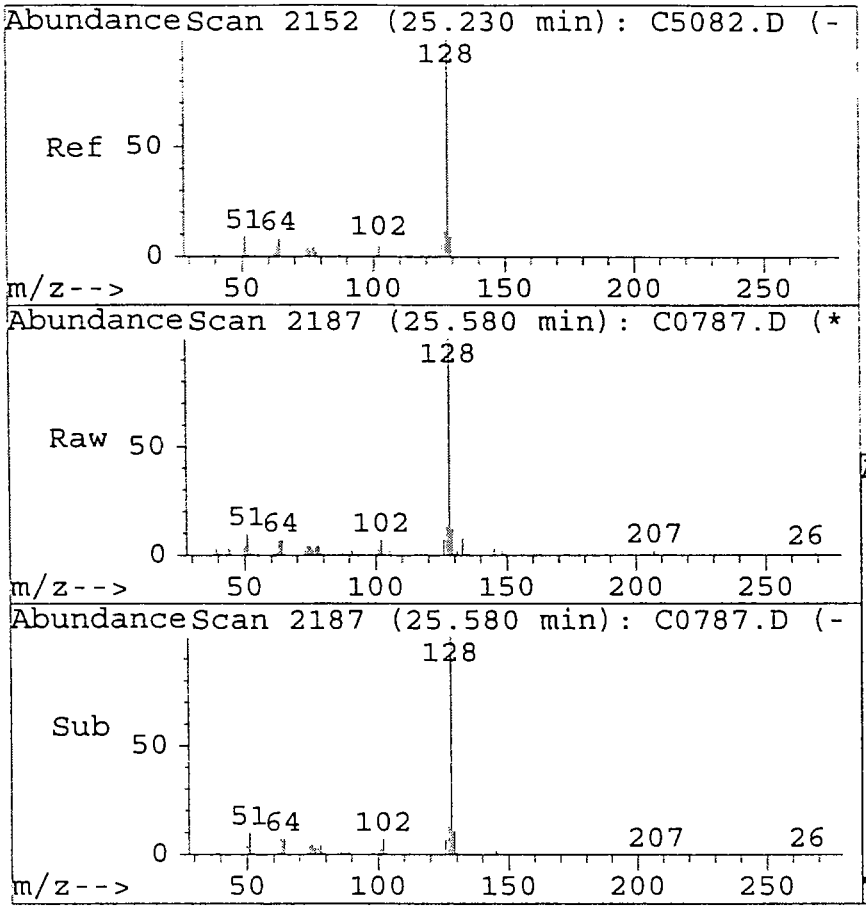


#17
Chloroform
Concen: 31.17 ug/L
RT: 10.64 min Scan# 738
Delta R.T. -0.07 min
Lab File: c0787.d
Acq: 29 Dec 95 1:32 pm

Tgt Ion:83 Resp: 3439925

Ion	Ratio	Lower	Upper
83	100		
85	64.6	46.6	86.6
0	0.0	0.0	0.0
0	0.0	0.0	0.0





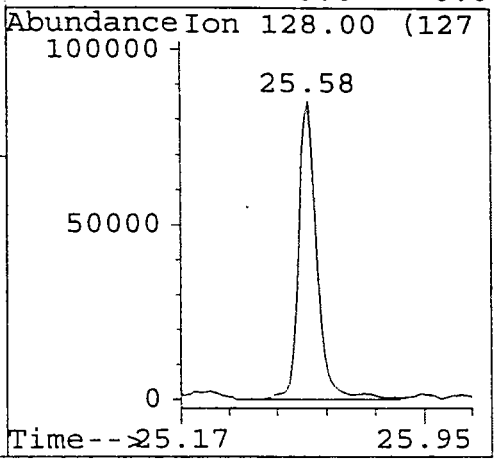
#63
Naphthalene

134

Concen: 4.10 ug/L
RT: 25.58 min Scan# 2187
Delta R.T. -0.05 min
Lab File: c0787.d
Acq: 29 Dec 95 1:32 pm

Tgt Ion:128 Resp: 349006

Ion	Ratio	Lower	Upper
128	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

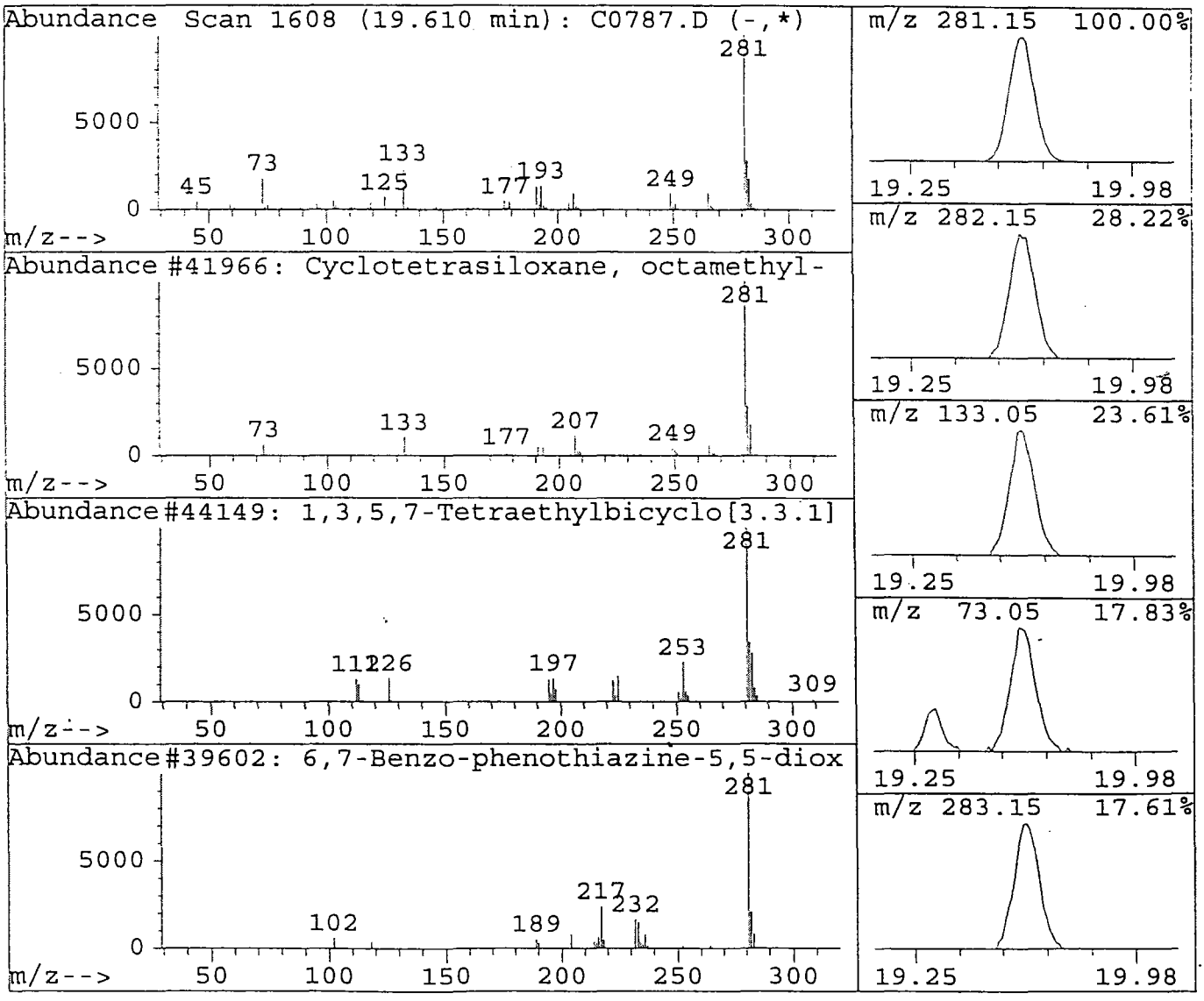
Data File : d:\hpchem\1\data\c0787.d
Acq On : 29 Dec 95 1:32 pm
Sample : 9558315 BLDG.2018 MW-1
Misc : 25 ML

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.
19.61	0.76 ug/L	397312	Fluorobenzene	12.07

Hit# of 17	Tentative ID	Ref#	CAS#	Qual
1	Cyclotetrasiloxane, octamethyl-	41966	000556-67-2	64
2	1,3,5,7-Tetraethylbicyclo[3.3.1]tet	44149	073420-21-0	4
3	6,7-Benzo-phenothiazine-5,5-dioxide	39602	000000-00-0	9
4	4-(1-Benzimidazyl)-7-nitro-2,1,3-ox	39560	091485-32-4	5
5	Benzene, 1-phenyl-4-(2-cyano-2-phen	39643	027869-56-3	47



Library Search Compound Report

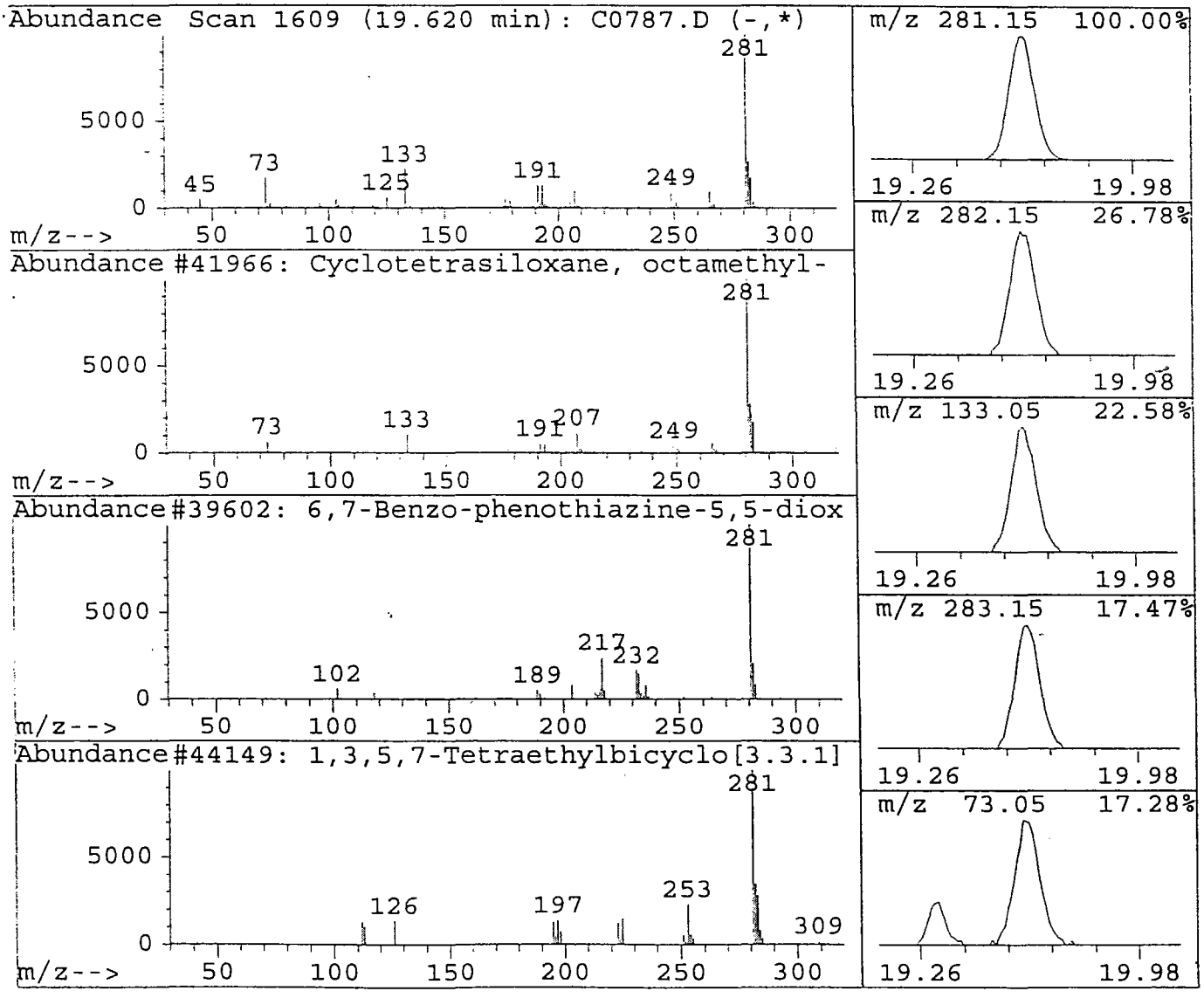
Data File : d:\hpchem\1\data\c0787.d
Acq On : 29 Dec 95 1:32 pm
Sample : 9558315 BLDG.2018 MW-1
Misc : 25 ML

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.
19.62	2.76 ug/L	1449627	Fluorobenzene	12.07

Hit# of 17	Tentative ID	Ref#	CAS#	Qual
1	Cyclotetrasiloxane, octamethyl-	41966	000556-67-2	50
2	6,7-Benzo-phenothiazine-5,5-dioxide	39602	000000-00-0	9
3	1,3,5,7-Tetraethylbicyclo[3.3.1]tet	44149	073420-21-0	4
4	Benzene, 1-phenyl-4-(2-cyano-2-phen	39643	027869-56-3	47
5	4-(1-Benzimidazyl)-7-nitro-2,1,3-ox	39560	091485-32-4	9



Library Search Compound Report

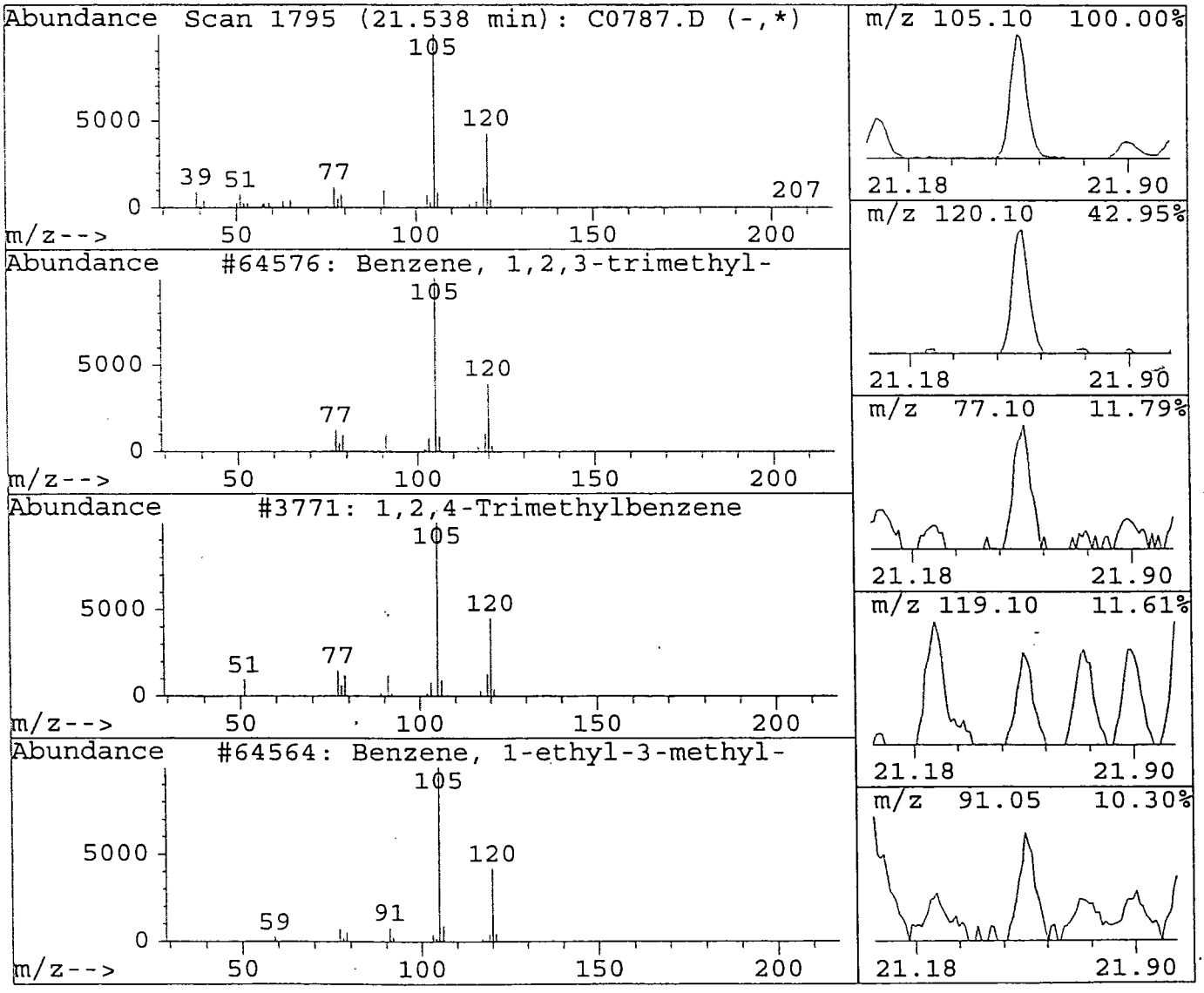
Data File : d:\hpchem\1\data\c0787.d
Acq On : 29 Dec 95 1:32 pm
Sample : 9558315 BLDG.2018 MW-1
Misc : 25 ML

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.
21.54	0.75 ug/L	396683	Fluorobenzene	12.07

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1,2,3-trimethyl-	64576	000526-73-8	91
2	1,2,4-Trimethylbenzene	3771	000095-36-3	87
3	Benzene, 1-ethyl-3-methyl-	64564	000620-14-4	90
4	Benzene, 1,2,4-trimethyl-	3775	000095-63-6	91
5	Benzene, 1,3,5-trimethyl-	64571	000108-67-8	83



Library Search Compound Report

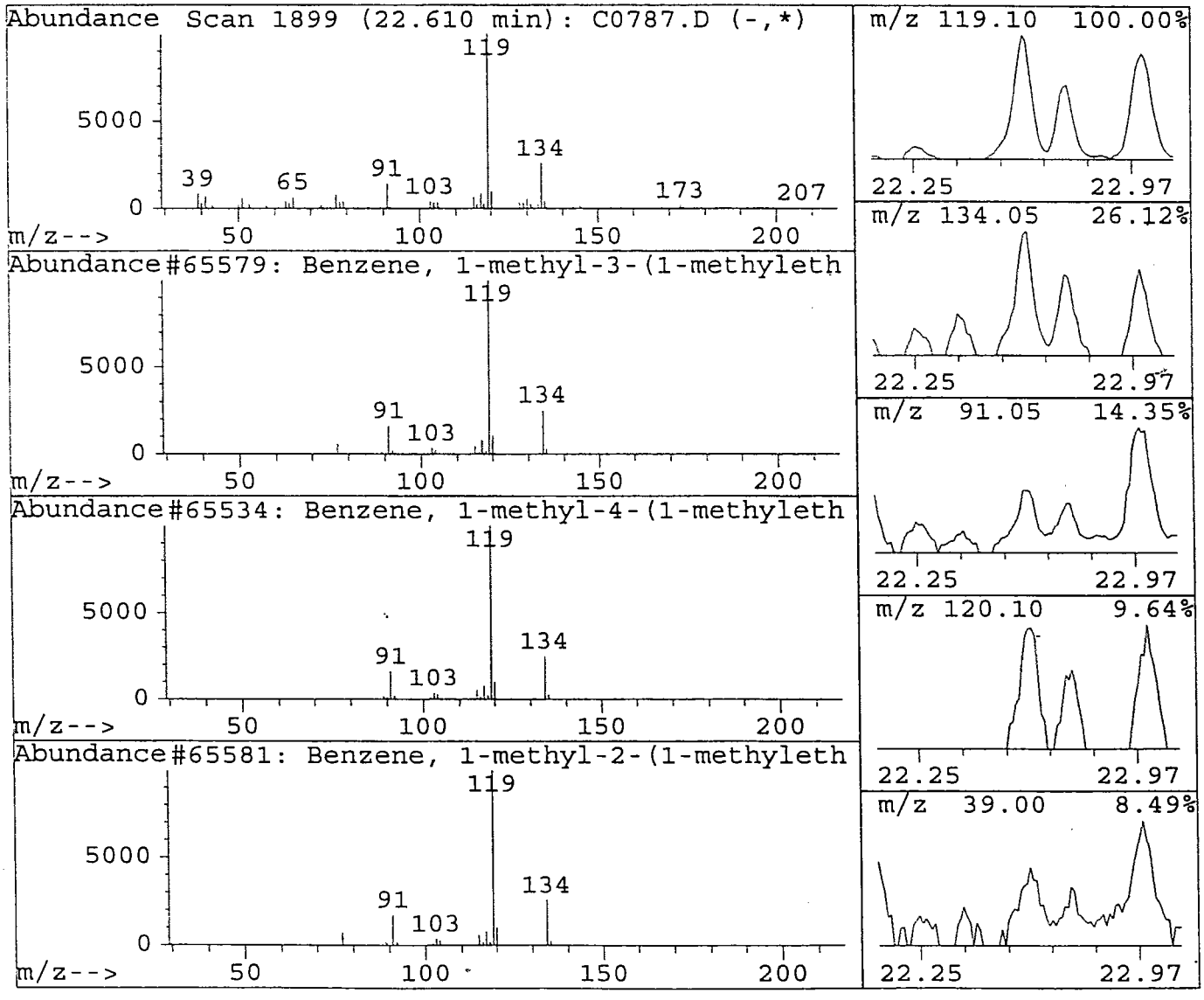
Data File : d:\hpchem\1\data\c0787.d
Acq On : 29 Dec 95 1:32 pm
Sample : 9558315 BLDG.2018 MW-1
Misc : 25 ML

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.
22.61	0.64 ug/L	334407	Fluorobenzene	12.07

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1-methyl-3-(1-methylethyl)	65579	000535-77-3	90
2	Benzene, 1-methyl-4-(1-methylethyl)	65534	000099-87-6	90
3	Benzene, 1-methyl-2-(1-methylethyl)	65581	000527-84-4	90
4	Benzene, 4-ethyl-1,2-dimethyl-	6218	000934-80-5	90
5	Benzene, 2-ethyl-1,3-dimethyl-	6200	002870-04-4	90



Library Search Compound Report

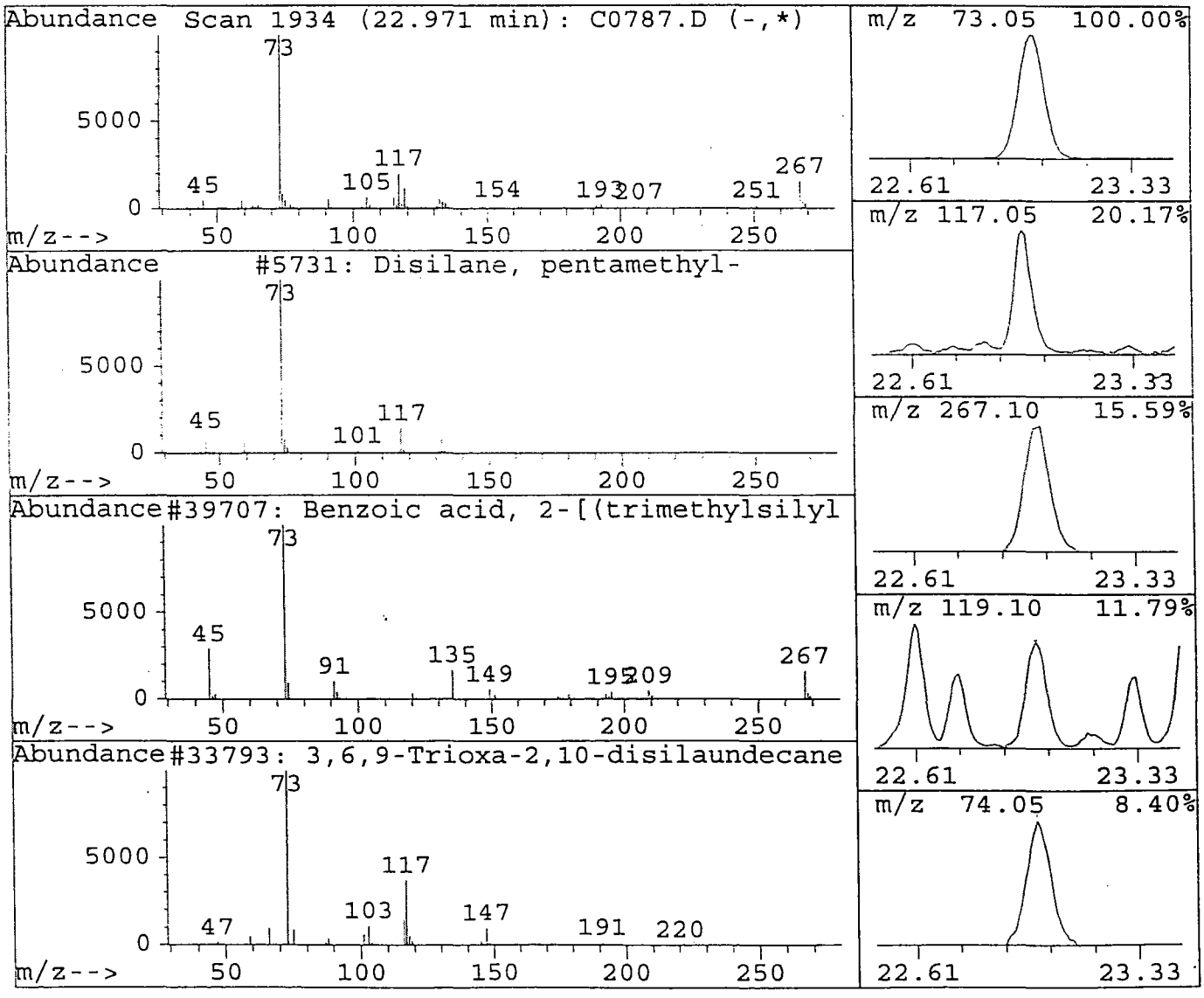
Data File : d:\hpchem\1\data\c0787.d
Acq On : 29 Dec 95 1:32 pm
Sample : 9558315 BLDG.2018 MW-1
Misc : 25 ML

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.
22.97	0.53 ug/L	280977	Fluorobenzene	12.07

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Disilane, pentamethyl-	5731	000812-15-7	23
2	Benzoic acid, 2-[(trimethylsilyl)ox	39707	003789-85-3	8
3	3,6,9-Trioxa-2,10-disilaundecane, 2	33793	016654-74-3	17
4	Benzeneethanamine, N-[(pentafluorop	74573	055429-85-1	14
5	3,6,9,12-Tetraoxa-2,13-disilatetrad	41695	062185-58-4	9



Library Search Compound Report

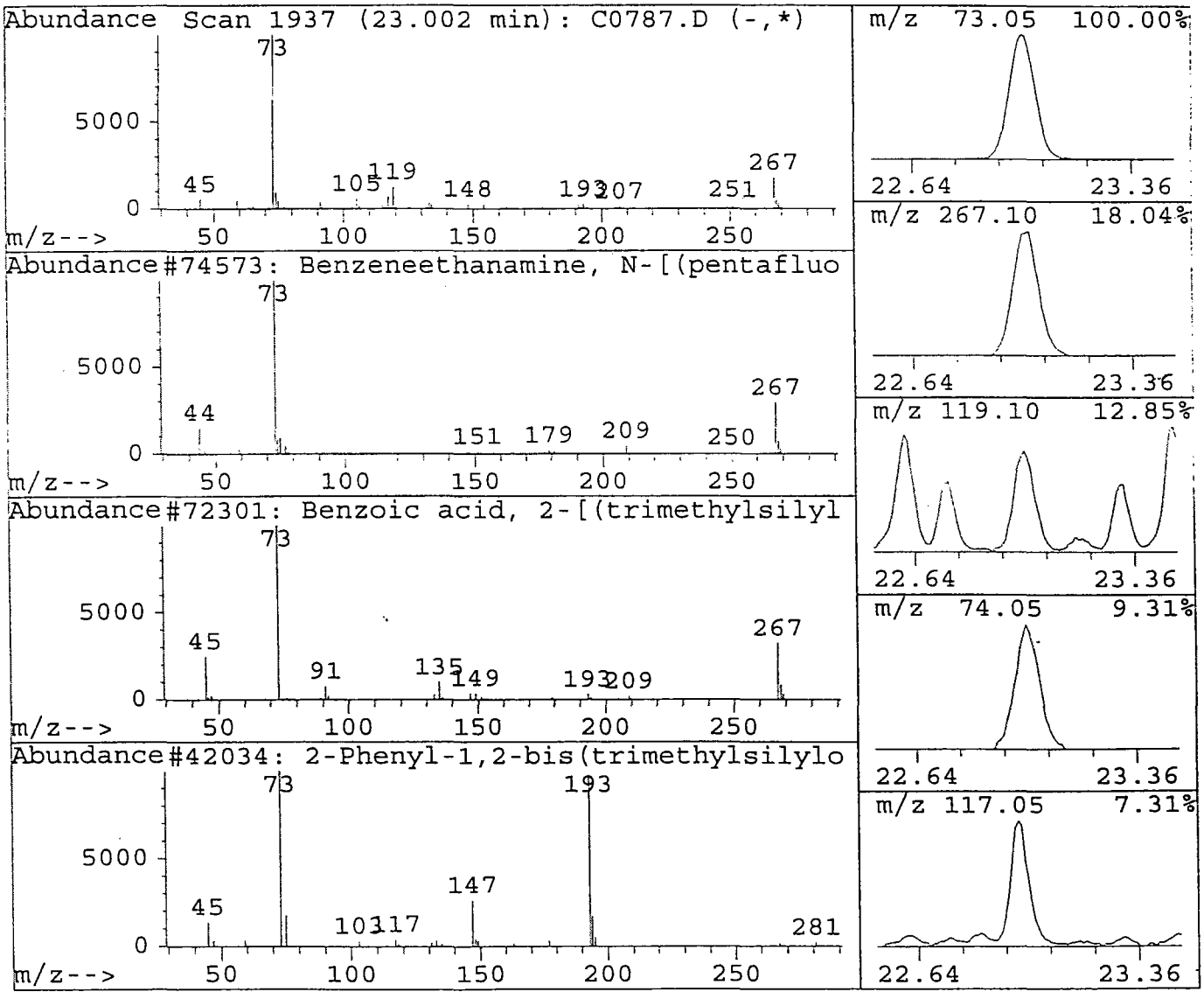
Data File : d:\hpchem\1\data\c0787.d
Acq On : 29 Dec 95 1:32 pm
Sample : 9558315 BLDG.2018 MW-1
Misc : 25 ML

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.
23.00	3.69 ug/L	1942894	Fluorobenzene	12.07

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzeneethanamine, N-[(pentafluorop	74573	055429-85-1	32
2	Benzoic acid, 2-[(trimethylsilyl)ox	72301	003789-85-3	9
3	2-Phenyl-1,2-bis(trimethylsilyloxy)	42034	000000-00-0	4
4	Rhodoviolascin	60808	034255-08-8	4
5	Silane, 9H-fluoren-9-yltrimethyl-	31629	007385-10-6	4



Library Search Compound Report

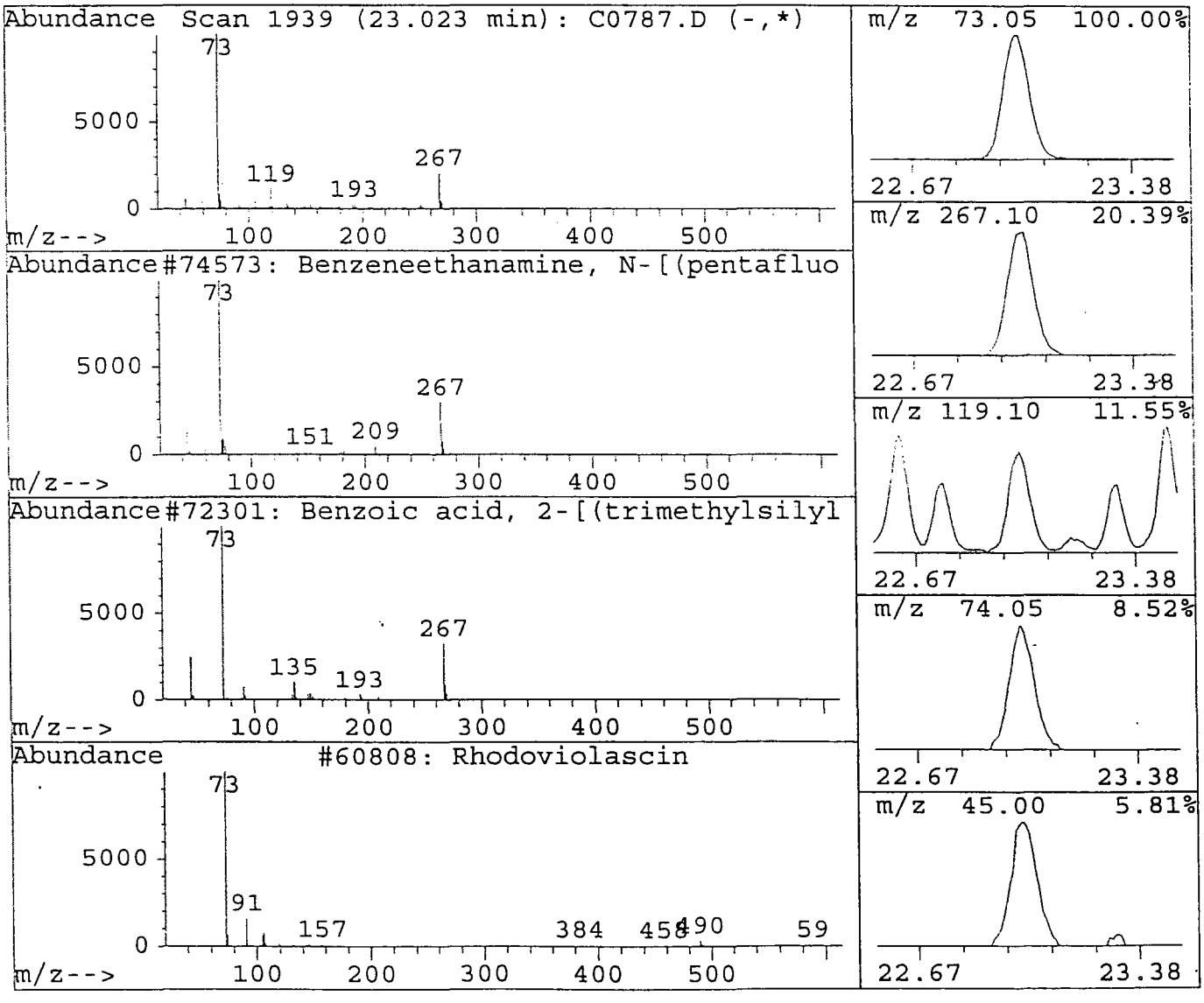
Data File : d:\hpchem\1\data\c0787.d
Acq On : 29 Dec 95 1:32 pm
Sample : 9558315 BLDG.2018 MW-1
Misc : 25 ML

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.
23.02	0.68 ug/L	355799	Fluorobenzene	12.07

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzeneethanamine, N-[(pentafluorop	74573	055429-85-1	37
2	Benzoic acid, 2-[(trimethylsilyl)ox	72301	003789-85-3	23
3	Rhodoviolascin	60808	034255-08-8	4
4	Benzeneacetic acid, trimethylsilyl	70091	002078-18-4	9
5	1,3-Dioxolane, 2-(1-methylethyl)-	64281	000822-83-3	4



Library Search Compound Report

142

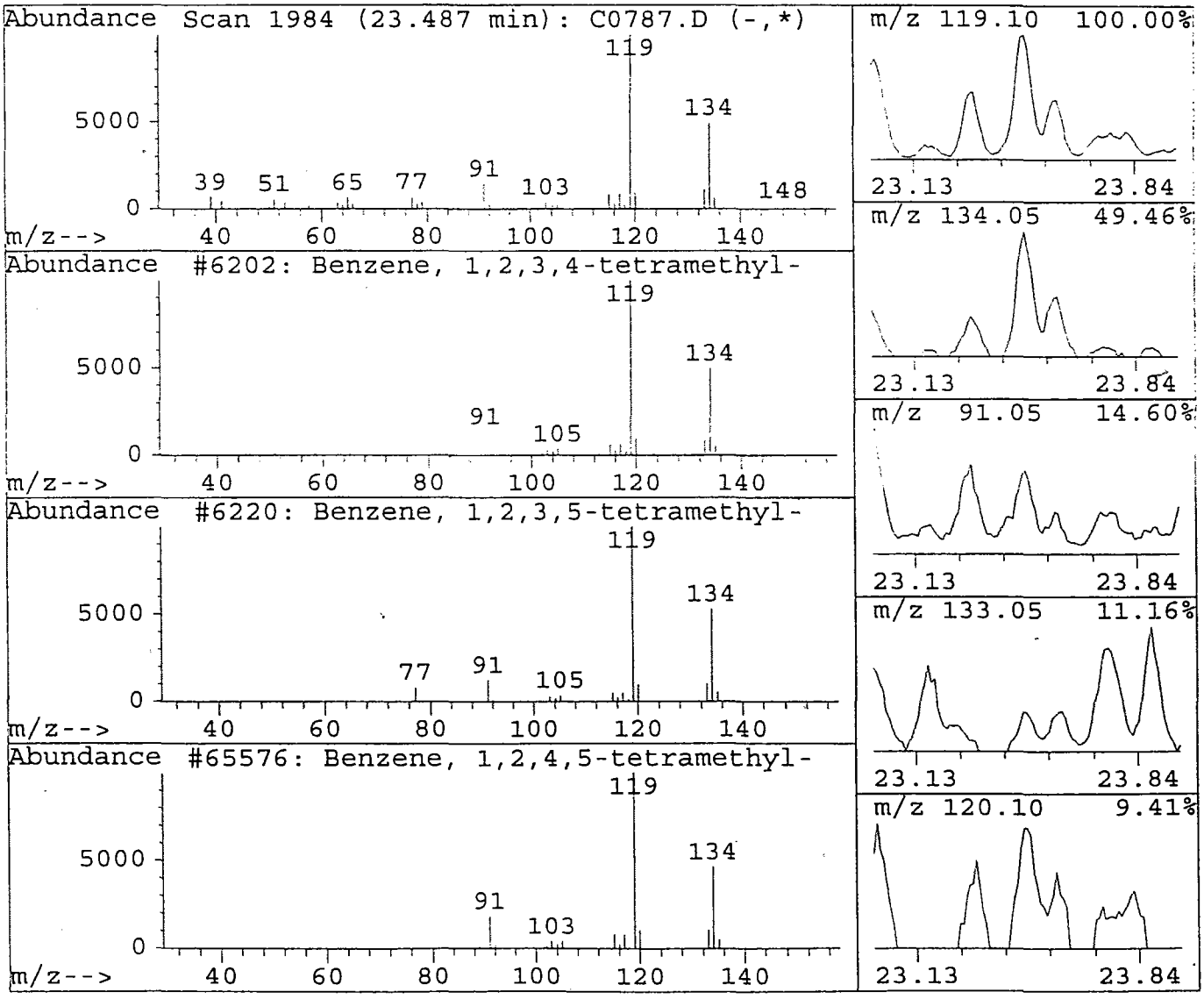
Data File : d:\hpchem\1\data\c0787.d
Acq On : 29 Dec 95 1:32 pm
Sample : 9558315 BLDG.2018 MW-1
Misc : 25 ML

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.
23.49	0.59 ug/L	312980	Fluorobenzene	12.07

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1,2,3,4-tetramethyl-	6202	000488-23-3	94
2	Benzene, 1,2,3,5-tetramethyl-	6220	000527-53-7	94
3	Benzene, 1,2,4,5-tetramethyl-	65576	000095-93-2	90
4	Benzene, 1-ethyl-3,5-dimethyl-	65554	000934-74-7	91
5	Benzene, 2-ethyl-1,4-dimethyl-	65570	001758-88-9	91



Library Search Compound Report

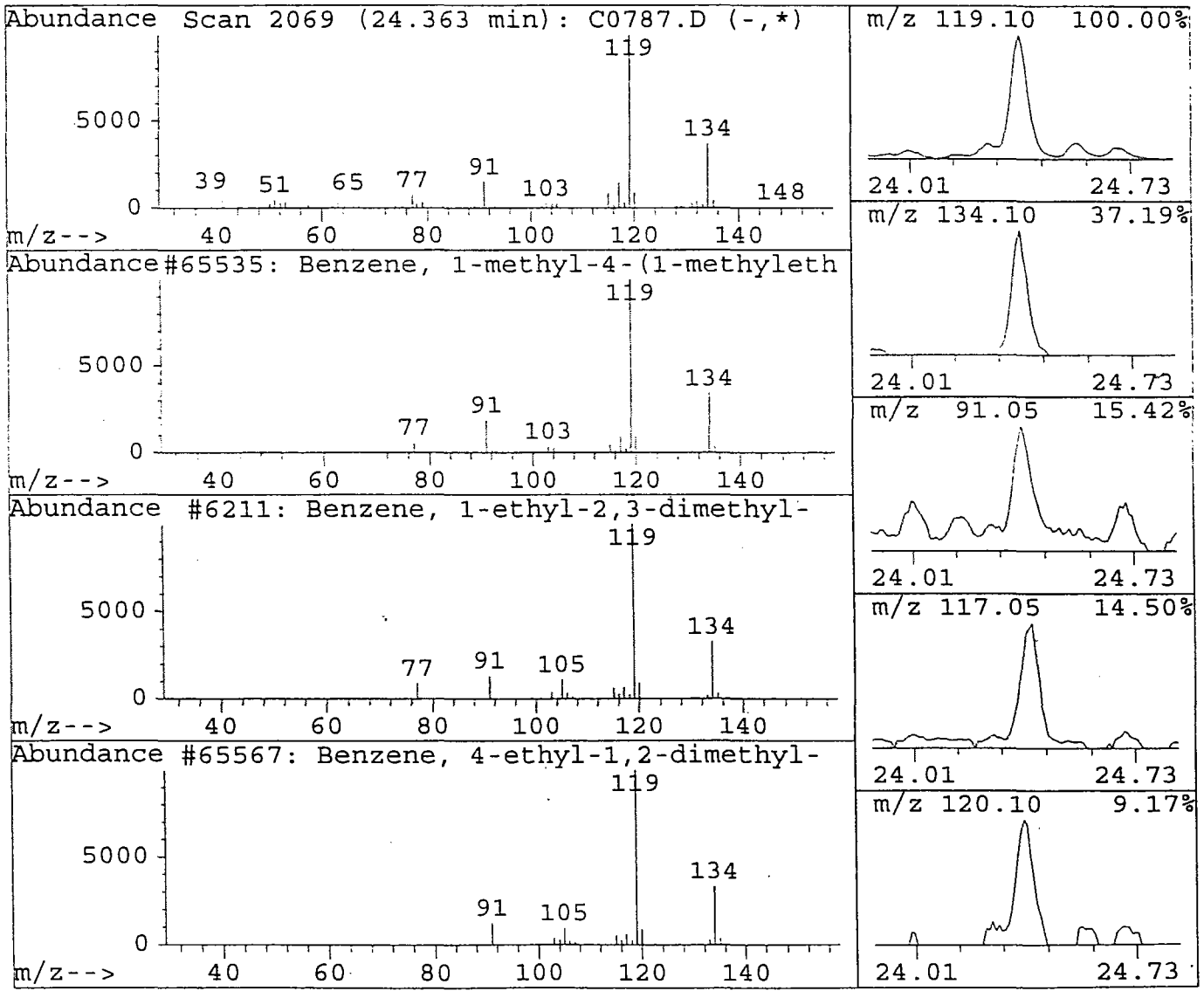
Data File : d:\hpchem\1\data\c0787.d
Acq On : 29 Dec 95 1:32 pm
Sample : 9558315 BLDG.2018 MW-1
Misc : 25 ML

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.
24.36	1.07 ug/L	562903	Fluorobenzene	12.07

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1-methyl-4-(1-methylethyl)	65535	000099-87-6	93
2	Benzene, 1-ethyl-2,3-dimethyl-	6211	000933-98-2	86
3	Benzene, 4-ethyl-1,2-dimethyl-	65567	000934-80-5	86
4	Benzene, 2-ethyl-1,4-dimethyl-	6219	001758-88-9	86
5	Benzene, 1-ethyl-3,5-dimethyl-	6210	000934-74-7	80



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	VBLK01	104	105			
02	9557856V	103	105			
03	9557857V	102	104			
04	9558188V	108	107			
05	9558189V	103	105			
06	9558190V	105	107			
07	9558191V	100	103			
08	9558192V	100	102			
09	9558196V	101	105			
10	9558197V	102	105			
11	9558195V	103	105			
12	9557856MS	102	105			
13	9557856MSD	102	104			
14	10 QCS	99	101			
15	1 STND	101	105			
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	VBLK01	102	104			
02	9558500V	104	106			
03	9558501V	104	104			
04	9558191V	105	108			
05	9558192V	103	105			
06	9558312V	103	104			
07	9558313V	103	104			
08	9558311V	104	103			
09	9558314V	111	103			
10	9558315V	106	107			
11	9558316V	101	104			
12	9558317V	112	110			
13	9559346V	118	107			
14	9558196V	102	105			
15	1 STND	104	106			
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	VBLK01	104	106			
02	9558761V	101	103			
03	9558762V	104	108			
04	9558763V	104	110			
05	9558764V	103	107			
06	9558196V	103	105			
07	.9558315V	103	104			
08	10 QCS	102	104			
09	1 STND	104	107			
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
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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

SAMPLE NO.

VOLATILE METHOD BLANK SUMMARY

VBLK01

Lab Name: EMSL ANALYTICAL Contract:

Project No.: Site: Location: Group:

Lab File ID: C0697.D Lab Sample ID: M. BLANK

Date Analyzed: 12/26/95 Time Analyzed: 1741

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	9557856V	9557856V	C0698.D	1815
02	9557857V	9557857V	C0699.D	1850
03	9558188V	9558188V	C0700.D	1924
04	9558189V	9558189V	C0701.D	1958
05	9558190V	9558190V	C0702.D	2032
06	9558191V	9558191V	C0703.D	2107
07	9558192V	9558192V	C0704.D	2141
08	9558196V	9558196V	C0705.D	2215
09	9558197V	9558197V	C0706.D	2250
10	9558195V	9558195V	C0707.D	2324
11	9557856MS	57856MS	C0708.D	2358
12	9557856MSD	57856MSD	C0709.D	0032
13	10 QCS	10 QCS	C0710.D	0107
14	1 STND	1 STND	C0711.D	0141
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS:

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO. 146

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: C0697.D

Level: (low/med) LOW Date Received: NA

% Moisture: not dec. NA Date Analyzed: 12/26/95

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
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	.50	U
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-Dibromoethane	.50	U
108-90-7	Chlorobenzene	.50	U
630-20-6	1,1,1,2-Tetrachloroethane	.50	U

SAMPLE NO. 143

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: C0697.D

Level: (low/med) LOW Date Received: NA

% Moisture: not dec. NA Date Analyzed: 12/26/95

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
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

SAMPLE NO. 150

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

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: C0697.D

Level: (low/med) LOW Date Received: NA

% Moisture: not dec. NA Date Analyzed: 12/26/95

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.				
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Quantitation Report

Data File : d:\hpchem\1\data\c0697.d
Acq On : 26 Dec 95 5:41 pm
Sample : METHOD BLANK
Misc : 25 ML
Quant Time: Dec 27 13:36 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 Dec 26 17:40:31 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	12.14	96	1394456	5.00	ug/L	0.00
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.37	95	683004	5.19	ug/L	103.84%
57) 1,2-Dichlorobenzene-d4	22.17	152	407809	5.27	ug/L	105.39%
Target Compounds						Qvalue

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

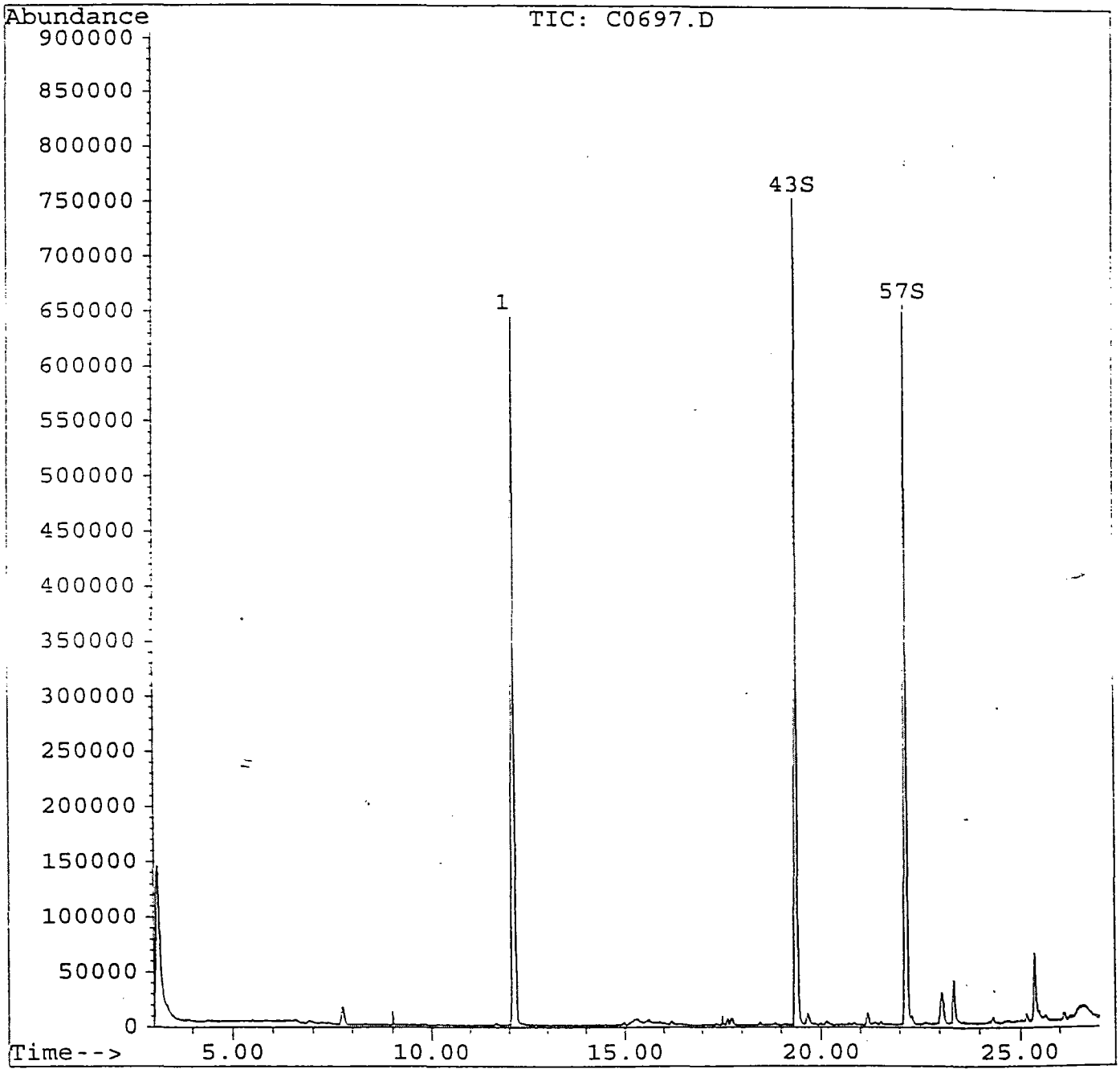
Quantitation Report

152

Data File : d:\hpchem\1\data\c0697.d
Acq On : 26 Dec 95 5:41 pm
Sample : METHOD BLANK
Misc : 25 ML
Quant Time: Dec 27 13:36 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 Dec 26 17:40:31 1995
Response via : Multiple Level Calibration



Library Search Compound Report

153

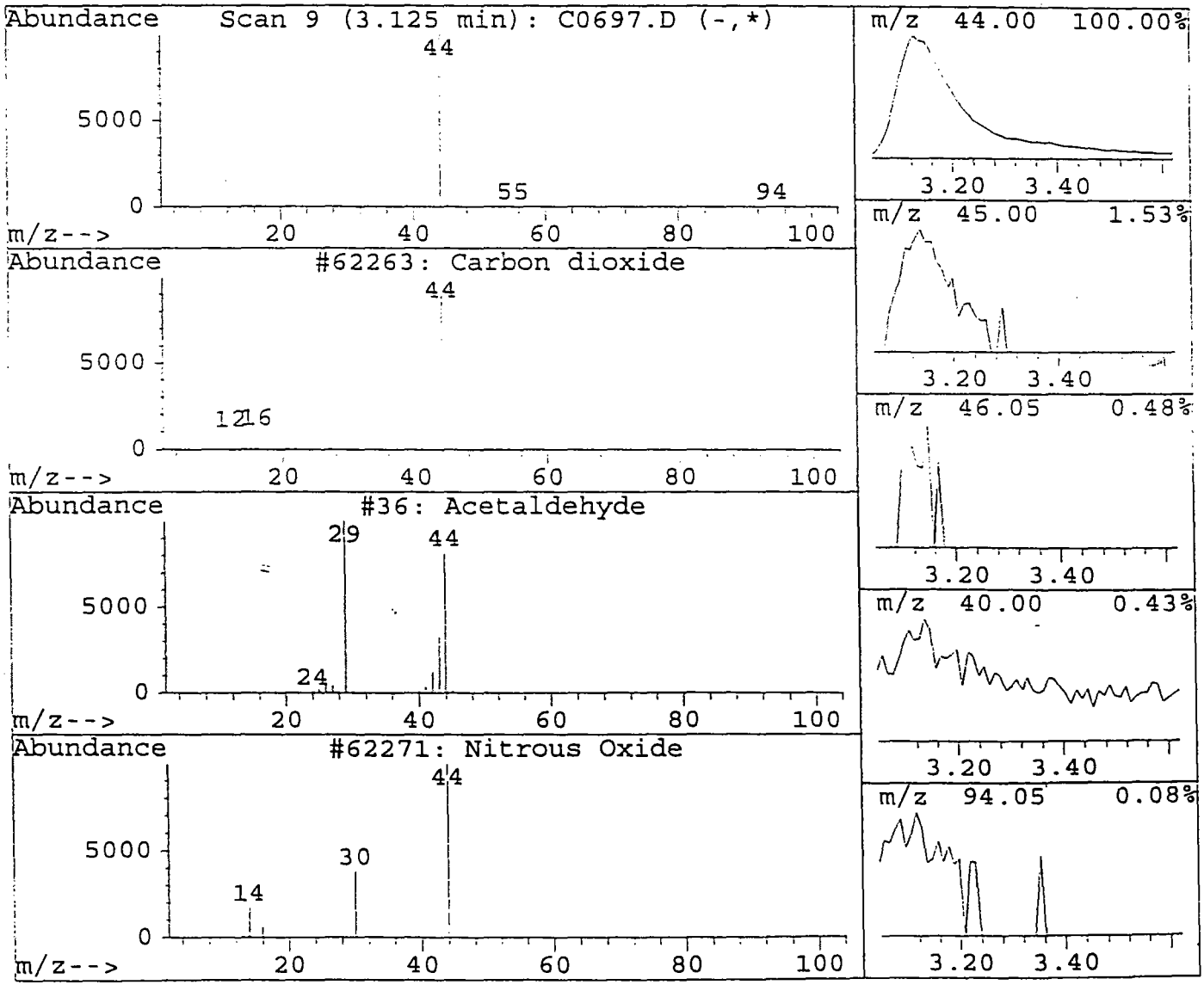
Data File : d:\hpchem\1\data\c0697.d
Acq On : 26 Dec 95 5:41 pm
Sample : METHOD BLANK
Misc : 25 ML

Vial: 3
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.
3.13	1.49 ug/L	861401	Fluorobenzene	12.14

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Carbon dioxide	62263	000124-38-9	4
2	Acetaldehyde	36	000075-07-0	3
3	Nitrous Oxide	62271	010024-97-2	3
4	Ethyne, fluoro-	35	002713-09-9	2
5	Cyclopropane, 1,1-dibromo-2-chloro-	33732	024071-57-6	2



4A

VOLATILE METHOD BLANK SUMMARY

SAMPLE NO.

VBLK01

Lab Name: EMSL ANALYTICAL Contract: _____

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

Lab File ID: C0778.D Lab Sample ID: M. BLANK

Date Analyzed: 12/29/95 Time Analyzed: 0821

GC Column: DB-624 X 75M ID: 0.53 (mm) Heated Purge: (Y/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	9558500V	9558500V	C0779.D	0856
02	9558501V	9558501V	C0780.D	0931
03	9558191V	9558191V	C0781.D	1005
04	9558192V	9558192V	C0782.D	1040
05	9558312V	9558312V	C0783.D	1114
06	9558313V	9558313V	C0784.D	1149
07	9558311V	9558311V	C0785.D	1223
08	9558314V	9558314V	C0786.D	1257
09	9558315V	9558315V	C0787.D	1332
10	9558316V	9558316V	C0788.D	1406
11	9558317V	9558317V	C0789.D	1440
12	9559346V	9559346V	C0790.D	1514
13	9558196V	9558196V	C0791.D	1549
14	1 STND	1 STND	C0792.D	1623
15				
16				
17				
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COMMENTS:

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO. 153

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: C0778.D

Level: (low/med) LOW Date Received: NA

% Moisture: not dec. NA Date Analyzed: 12/29/96

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS No.	Compound		Q
75-71-8	Dichlorodifluoromethane	.50	U
74-87-3	Chloromethane	.50	U
75-01-4	Vinyl chloride	.50	U
74-83-9	Bromomethane	.50	U
75-00-3	Chloroethane	.50	U
75-69-4	Trichlorofluoromethane	.50	U
75-35-4	1,1-Dichloroethene	.50	U
75-09-2	Methylene chloride	.90	
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-Dibromoethane	.50	U
108-90-7	Chlorobenzene	.50	U
630-20-6	1,1,1,2-Tetrachloroethane	.50	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO. 156

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: C0778.D

Level: (low/med) LOW Date Received: NA

% Moisture: not dec. NA Date Analyzed: 12/29/96

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 1.0

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
100-41-4	Ethylbenzene	.50	U
1330-29-7	Xylene (total)	.50	U
100-42-1	Styrene	.50	U
75-25-2	Bromoform	.50	U
98-82-8	Isopropylbenzene	.50	U
108-86-1	Bromobenzene	.50	U
79-34-1	1,1,2,2-Tetrachloroethane	.50	U
96-18-4	1,2,3-Trichloropropane	.50	U
103-65-1	n-Propylbenzene	.50	U
95-49-8	2-Chlorotoluene	.50	U
106-43-4	4-Chlorotoluene	.50	U
108-67-8	1,3,5-Trimethylbenzene	.50	U
98-06-6	tert-Butylbenzene	.50	U
95-63-6	1,2,4-Trimethylbenzene	.50	U
135-98-8	sec-Butylbenzene	.50	U
541-73-1	1,3-Dichlorobenzene	.50	U
99-87-6	4-Isopropyltoluene	.50	U
106-46-7	1,4-Dichlorobenzene	.50	U
95-50-1	1,2-Dichlorobenzene	.50	U
104-51-8	n-Butylbenzene	.50	U
96-12-8	1,2-Dibromo-3-chloropropane	.50	U
120-82-1	1,2,4-Trichlorobenzene	.50	U
87-68-3	Hexachlorobutadiene	.50	U
91-20-3	Naphthalene	.50	U
87-61-6	1,2,3-Trichlorobenzene	.50	U
1634-04-4	Methy-tertiary butyl ether	.50	U
75-65-0	tertiary-Butyl alcohol	2.0	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO. 157

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: C0778.D

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. NA Date Analyzed: 12/29/95

GC Column: DB-624 X 75M ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units:

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

CAS Number	Compound Name	RT	Est. Conc.	Q
1.	NONE FOUND			
2.				
3.				
4.				
5.				
6.				
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Quantitation Report

Data File : d:\hpchem\1\data\c0778.d
Acq On : 29 Dec 95 8:21 am
Sample : METHOD BLANK
Misc : 25 ML
Quant Time: Dec 31 8:27 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 Dec 26 17:40:31 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	12.06	96	1420918	5.00 ug/L	-0.07
System Monitoring Compounds					%Recovery
43) 4-Bromofluorobenzene	19.31	95	683281	5.10 ug/L	101.94%
57) 1,2-Dichlorobenzene-d4	22.11	152	408458	5.18 ug/L	103.59%
Target Compounds					Qvalue
9) Methylene chloride	7.67	84	58341	0.93 ug/L	99

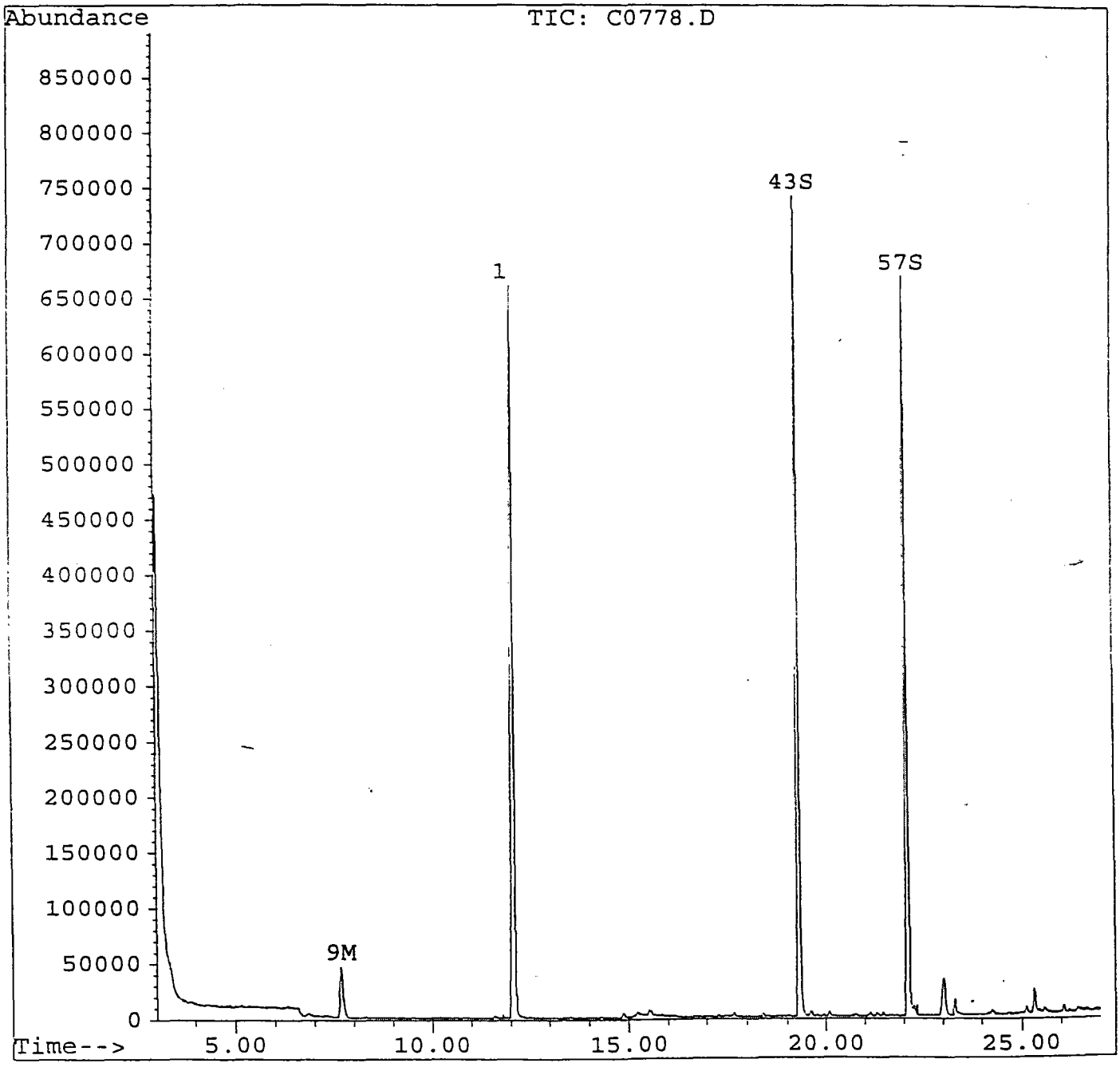
(#) = qualifier out of range (m) = manual integration

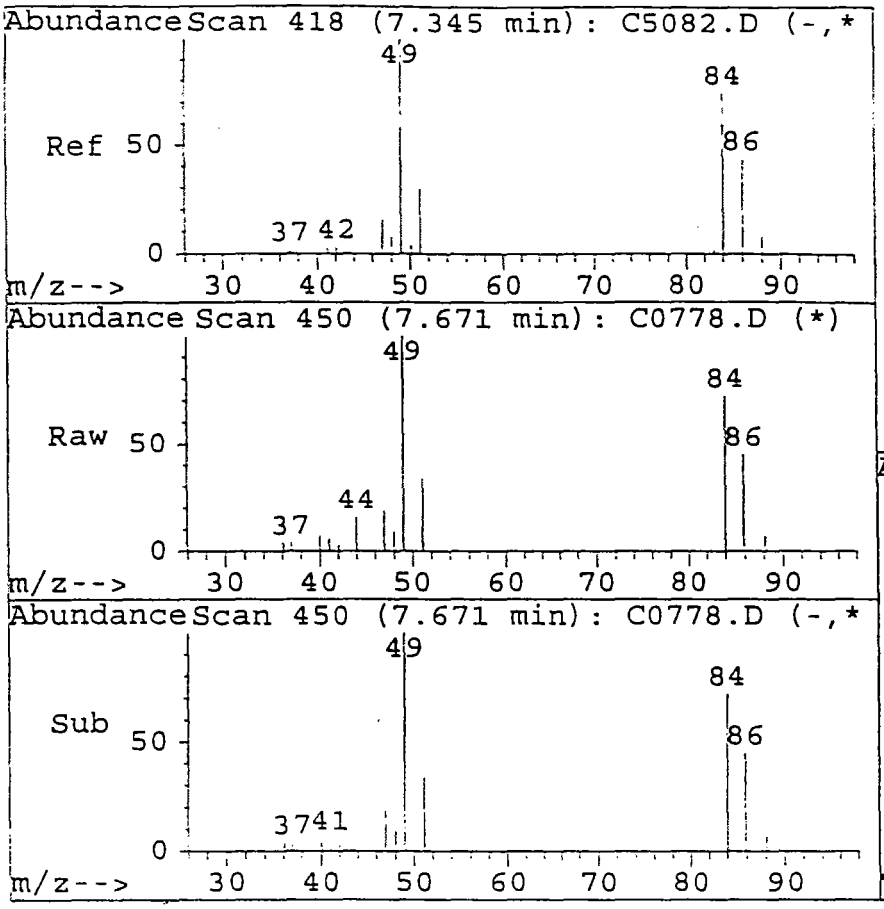
Quantitation Report

Data File : d:\hpchem\1\data\c0778.d
Acq On : 29 Dec 95 8:21 am
Sample : METHOD BLANK
Misc : 25 ML
Quant Time: Dec 31 8:27 1995

Vial: 3 159
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Dec 26 17:40:31 1995
Response via : Multiple Level Calibration

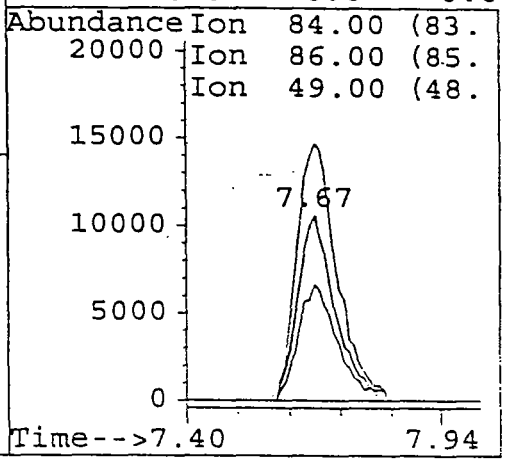




#9
Methylene chloride
Concen: 0.93 ug/L
RT: 7.67 min Scan# 450
Delta R.T. -0.08 min
Lab File: c0778.d
Acq: 29 Dec 95 8:21 am

Tgt Ion:84 Resp: 58341

Ion	Ratio	Lower	Upper
84	100		
86	62.6	41.4	81.4
49	138.4	120.0	160.0
0	0.0	0.0	0.0



Library Search Compound Report

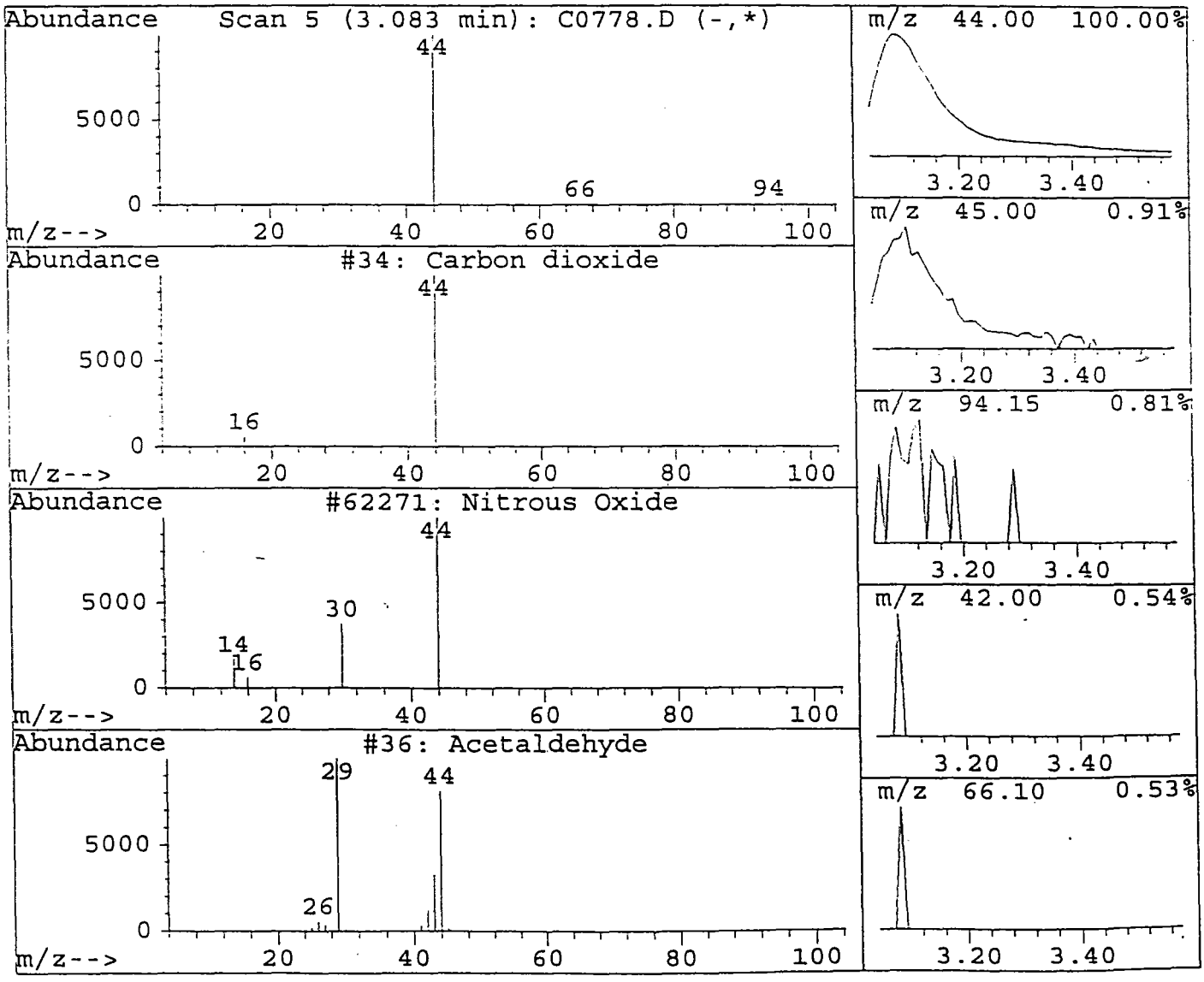
Data File : d:\hpchem\1\data\c0778.d
Acq On : 29 Dec 95 8:21 am
Sample : METHOD BLANK
Misc : 25 ML

Vial: 3
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.
3.08	4.26 ug/L	2533529	Fluorobenzene	12.06

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Carbon dioxide	34	000124-38-9	4
2	Nitrous Oxide	62271	010024-97-2	3
3	Acetaldehyde	36	000075-07-0	2
4	Carbamic acid, monoammonium salt	391	001111-78-0	2
5	Cyclopropane, 1,1-dibromo-2-chloro-	33732	024071-57-6	2



SAMPLE NO. 102

VOLATILE METHOD BLANK SUMMARY

VBLK01

Lab Name: EMSL ANALYTICAL Contract: _____

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

Lab File ID: C0882.D Lab Sample ID: M. BLANK

Date Analyzed: 1/4/96 Time Analyzed: 1920

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	9558761V	9558761V	C0883.D	1954
02	9558762V	9558762V	C0884.D	2028
03	9558763V	9558763V	C0885.D	2102
04	9558764V	9558764V	C0886.D	2137
05	9558196V	9558196V	C0887.D	2211
06	9558315V	9558315V	C0888.D	2245
07	10 QCS	10 QCS	C0895.D	0244
08	1 STND	1 STND	C0896.D	0317
09				
10				
11				
12				
13				
14				
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COMMENTS:

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO. 103

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: C0882.D

Level: (low/med) LOW Date Received: NA

% Moisture: not dec. NA Date Analyzed: 12/29/96

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	.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	.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-Dibromoethane	.50	U
108-90-7	Chlorobenzene	.50	U
630-20-6	1,1,1,2-Tetrachloroethane	.50	U

SAMPLE NO. 164

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: C0882.D

Level: (low/med) LOW Date Received: NA

% Moisture: not dec. NA Date Analyzed: 12/29/96

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 1.0

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
100-41-4	Ethylbenzene	.50	U
1330-29-7	Xylene (total)	.50	U
100-42-1	Styrene	.50	U
75-25-2	Bromoform	.50	U
98-82-8	Isopropylbenzene	.50	U
108-86-1	Bromobenzene	.50	U
79-34-1	1,1,2,2-Tetrachloroethane	.50	U
96-18-4	1,2,3-Trichloropropane	.50	U
103-65-1	n-Propylbenzene	.50	U
95-49-8	2-Chlorotoluene	.50	U
106-43-4	4-Chlorotoluene	.50	U
108-67-8	1,3,5-Trimethylbenzene	.50	U
98-06-6	tert-Butylbenzene	.50	U
95-63-6	1,2,4-Trimethylbenzene	.50	U
135-98-8	sec-Butylbenzene	.50	U
541-73-1	1,3-Dichlorobenzene	.50	U
99-87-6	4-Isopropyltoluene	.50	U
106-46-7	1,4-Dichlorobenzene	.50	U
95-50-1	1,2-Dichlorobenzene	.50	U
104-51-8	n-Butylbenzene	.50	U
96-12-8	1,2-Dibromo-3-chloropropane	.50	U
120-82-1	1,2,4-Trichlorobenzene	.50	U
87-68-3	Hexachlorobutadiene	.50	U
91-20-3	Naphthalene	.50	U
87-61-6	1,2,3-Trichlorobenzene	.50	U
1634-04-4	Methy-tertiary butyl ether	.50	U
75-65-0	tertiary-Butyl alcohol	2.0	U

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: C0882.D

Level: (low/med) LOW Date Received: NA

% Moisture: not dec. NA Date Analyzed: 1/4/96

GC Column: DB-624 X 75M ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units:

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

CAS Number	Compound Name	RT	Est. Conc.	Q
1.	NONE FOUND			
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
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16.				
17.				
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21.				
22.				
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24.				
25.				
26.				
27.				
28.				
29.				
30.				

Quantitation Report

106

Data File : d:\hpchem\1\data\c0882.d
Acq On : 4 Jan 96 7:20 pm
Sample : METHOD BLANK
Misc : 25 ML
Quant Time: Jan 9 15:06 1996

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 Dec 26 17:40:31 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	12.08	96	1297763	5.00 ug/L	-0.06
System Monitoring Compounds					%Recovery
43) 4-Bromofluorobenzene	19.32	95	634902	5.19 ug/L	103.72%
57) 1,2-Dichlorobenzene-d4	22.12	152	381913	5.30 ug/L	106.05%
Target Compounds					Qvalue
9) Methylene chloride	7.68	84	42734	0.75 ug/L	93

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

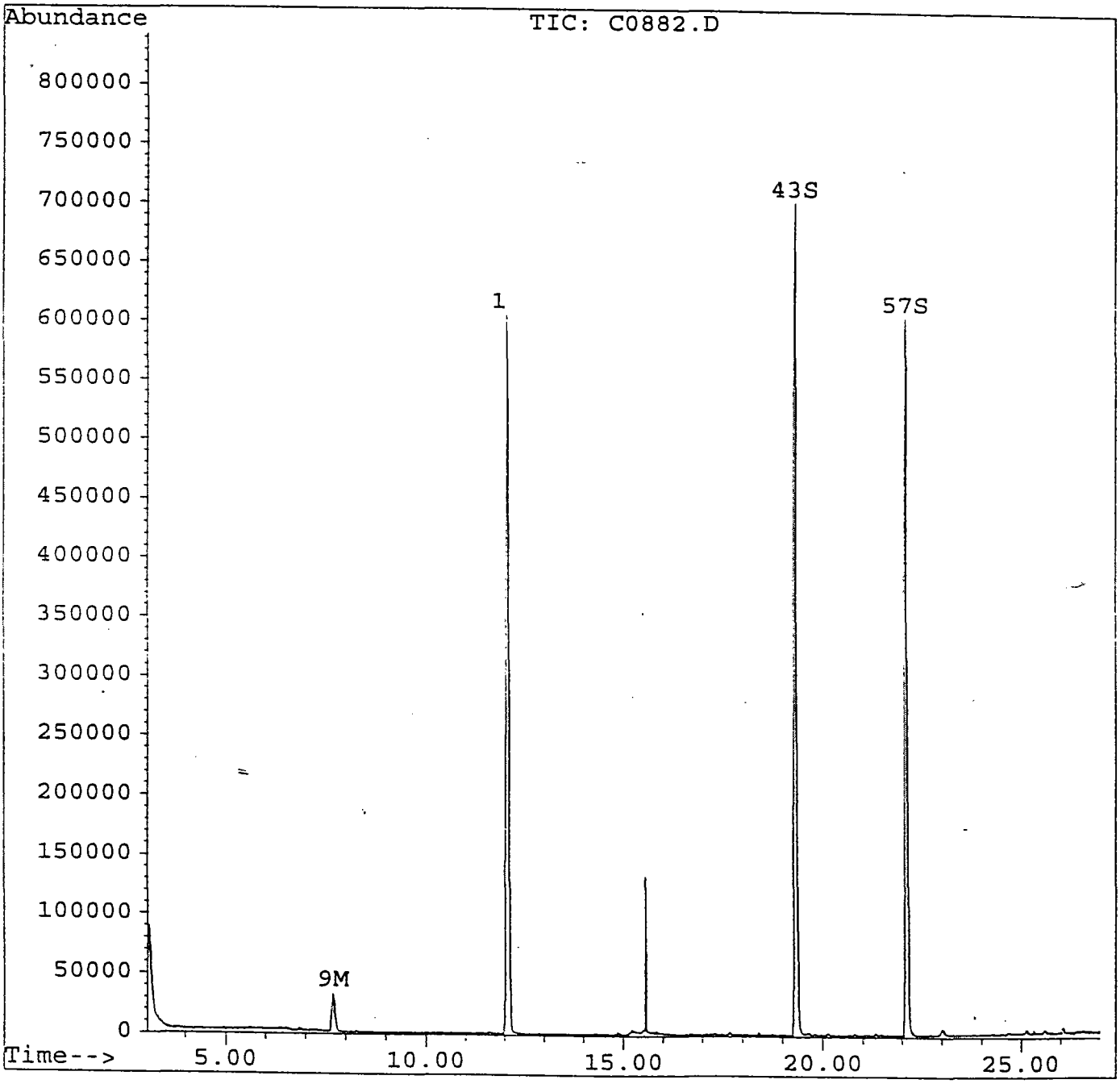
Quantitation Report

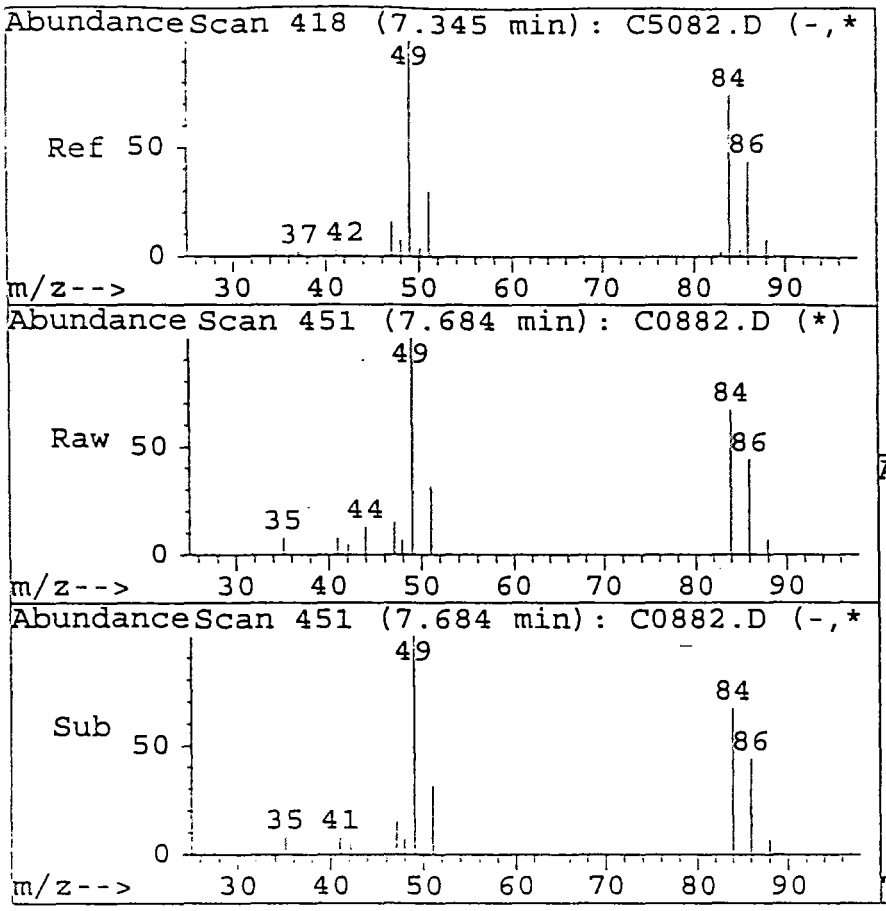
Data File : d:\hpchem\1\data\c0882.d
Acq On : 4 Jan 96 7:20 pm
Sample : METHOD BLANK
Misc : 25 ML
Quant Time: Jan 9 15:06 1996

Vial: 14
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

167

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Dec 26 17:40:31 1995
Response via : Multiple Level Calibration

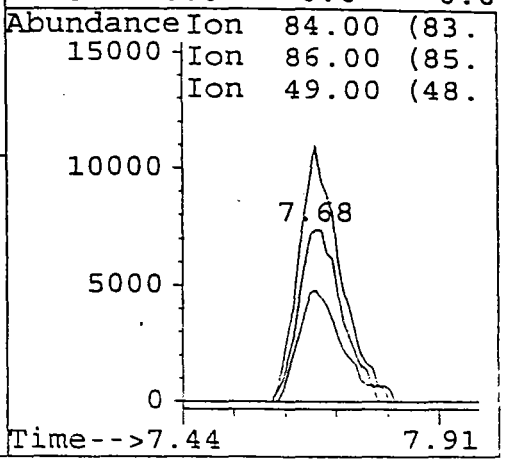




#9
Methylene chloride 103
Concen: 0.75 ug/L
RT: 7.68 min Scan# 451
Delta R.T. -0.07 min
Lab File: c0882.d
Acq: 4 Jan 96 7:20 pm

Tgt Ion:84 Resp: 42734

Ion	Ratio	Lower	Upper
84	100		
86	65.0	41.4	81.4
49	149.0	120.0	160.0
0	0.0	0.0	0.0



Library Search Compound Report

Data File : d:\hpchem\1\data\c0882.d
Acq On : 4 Jan 96 7:20 pm
Sample : METHOD BLANK
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 : 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 Dec 26 17:40:31 1995
Response via : Initial Calibration

Non-Spiked Sample: C0698.D

	Spike Sample	Spike Duplicate Sample
File ID :	C0708.D	C0709.D
Sample :	9557856 MS	9557856 MSD
Acq Time:	26 Dec 95 11:58 pm	27 Dec 95 12:32 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	8	85	82	3	25	80-120
Chloromethane	0.0	10	8	8	84	84	0	25	80-120
Vinyl chloride	0.0	10	10	9	95	92	3	25	80-120
Bromomethane	0.0	10	11	12	111	119	7	25	80-120
Chloroethane	0.0	10	11	11	108	105	3	25	80-120
Trichlorofluorometha	0.0	10	10	10	97	97	0	25	80-120
1,1-Dichloroethene	0.0	10	10	10	99	98	1	25	80-120
Methylene chloride	0.6	10	9	9	86	85	2	25	80-120
trans-1,2-Dichloroet	0.0	10	10	10	101	101	0	25	80-120
1,1-Dichloroethane	0.0	10	10	10	102	101	1	25	80-120
2,2-Dichloropropane	0.0	10	9	9	90	89	2	25	80-120
cis-1,2-Dichloroethe	0.0	10	10	10	104	104	0	25	80-120
Bromochloromethane	0.0	10	10	10	104	104	0	25	80-120
Chloroform	0.0	10	10	10	102	102	0	25	80-120
1,1,1-Trichloroethan	0.0	10	10	10	100	99	1	25	80-120
Carbon tetrachloride	0.0	10	10	10	101	101	0	25	80-120
1,1-Dichloropropene	0.0	10	10	10	100	98	3	25	80-120
Benzene	0.0	10	10	10	102	102	0	25	80-120
1,2-Dichloroethane	0.0	10	11	11	107	105	1	25	80-120
Trichloroethene	0.0	10	10	10	102	102	1	25	80-120
1,2-Dichloropropane	0.0	10	10	10	104	104	1	25	80-120
Dibromomethane	0.0	10	10	10	104	102	2	25	80-120
Bromodichloromethane	0.0	10	10	10	104	103	1	25	80-120
cis-1,3-Dichloroprop	0.0	10	10	10	103	101	2	25	80-120
Toluene	0.0	10	10	10	99	98	1	25	80-120
trans-1,3-Dichloropr	0.0	10	10	10	103	100	3	25	80-120
1,1,2-Trichloroethan	0.0	10	11	10	106	103	3	25	80-120
Tetrachloroethene	0.0	10	10	10	102	102	1	25	80-120
1,3-Dichloropropane	0.0	10	11	10	106	103	3	25	80-120
Dibromochloromethane	0.0	10	11	10	106	104	2	25	80-120
1,2-Dibromoethane	0.0	10	11	10	107	104	3	25	80-120
Chlorobenzene	0.0	10	10	11	105	106	1	25	80-120
1,1,1,2-Tetrachloroe	0.0	10	11	11	114	106	7	25	80-120
Ethylbenzene	0.0	10	10	10	100	99	1	25	80-120
Xylene (para & meta)	0.0	20	20	18	99	92	7	25	80-120
Xylene (Ortho)	0.0	10	10	9	101	93	7	25	80-120
Styrene	0.0	10	10	8	98	83	16	25	80-120
Bromoform	0.0	10	10	10	100	98	2	25	80-120
Isopropylbenzene	0.0	10	10	10	101	101	1	25	80-120
Bromobenzene	0.0	10	11	11	106	107	0	25	80-120
1,1,2,2-Tetrachloroe	0.0	10	11	10	106	104	2	25	80-120
1,2,3-Trichloropropa	0.0	10	11	11	108	106	1	25	80-120

2-Chlorotoluene	0.0	10	9	10	94	97	2	25	80-120
4-Chlorotoluene	0.0	10	10	10	103	102	1	25	80-120
1,3,5-Trimethylbenze	0.0	10	10	8	96	84	13	25	80-120
tert-Butylbenzene	0.0	10	11	11	111	110	1	25	80-120
1,2,4-Trimethylbenze	0.0	10	10	8	97	80	19	25	80-120
sec-Butylbenzene	0.0	10	10	10	102	101	0	25	80-120
1,3-Dichlorobenzene	0.0	10	11	11	105	106	1	25	80-120
4-Isopropyltoluene	0.0	10	10	10	101	96	5	25	80-120
1,4-Dichlorobenzene	0.0	10	10	11	104	109	4	25	80-120
1,2-Dichlorobenzene	0.0	10	11	11	107	106	0	25	80-120
n-Butylbenzene	0.0	10	10	10	102	100	1	25	80-120
1,2-Dibromo-3-chloro	0.0	10	10	10	101	99	2	25	80-120
1,2,4-Trichlorobenze	0.0	10	10	10	103	104	1	25	80-120
Hexachlorobutadiene	0.0	10	10	10	100	100	0	25	80-120
Naphthalene	0.9	10	12	12	108	107	1	25	80-120
1,2,3-Trichlorobenze	0.0	10	10	11	105	105	1	25	80-120

Quantitation Report

Data File : d:\hpchem\1\data\c0708.d
Acq On : 26 Dec 95 11:58 pm
Sample : 9557856 MS
Misc : 25 ML
Quant Time: Dec 27 14:28 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 Dec 26 17:40:31 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	12.14	96	1289903	5.00	ug/L	0.00
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.38	95	621347	5.11	ug/L	102.12%
57) 1,2-Dichlorobenzene-d4	22.17	152	377524	5.27	ug/L	105.47%
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.48	85	454768	8.59	ug/L	100
3) Chloromethane	3.89	50	436370	8.39	ug/L	97
4) Vinyl chloride	4.11	62	526351	9.52	ug/L	100
5) Bromomethane	4.79	94	346632	11.09	ug/L	96
6) Chloroethane	5.04	64	364082	10.84	ug/L	99
7) Trichlorofluoromethane	5.64	101	943265	9.71	ug/L	99
8) 1,1-Dichloroethene	6.76	96	598365	9.90	ug/L	95
9) Methylene chloride	7.76	84	524096	9.25	ug/L	95
10) trans-1,2-Dichloroethene	8.29	96	696270	10.10	ug/L	98
12) 1,1-Dichloroethane	9.08	63	1302738	10.16	ug/L	99
13) 2,2-Dichloropropane	10.14	77	951129	9.07	ug/L	98
14) cis-1,2-Dichloroethene	10.15	96	680168	10.39	ug/L	98
16) Bromochloromethane	10.57	128	263775	10.38	ug/L	97
17) Chloroform	10.71	83	1152833	10.18	ug/L	100
18) 1,1,1-Trichloroethane	11.02	97	1152279	10.00	ug/L	99
19) Carbon tetrachloride	11.32	117	1056508	10.14	ug/L	99
20) 1,1-Dichloropropene	11.31	75	1072549	10.01	ug/L	99
21) Benzene	11.66	78	2267277	10.26	ug/L	99
22) 1,2-Dichloroethane	11.69	62	446648	10.65	ug/L	100
23) Trichloroethene	12.77	95	914222	10.17	ug/L	99
24) 1,2-Dichloropropane	13.14	63	766848	10.44	ug/L	99
25) Dibromomethane	13.34	93	303491	10.44	ug/L	98
26) Bromodichloromethane	13.60	83	915060	10.41	ug/L	97
27) cis-1,3-Dichloropropene	14.35	75	831476	10.31	ug/L	100
28) Toluene	14.93	92	1595567	9.91	ug/L	99
29) trans-1,3-Dichloropropene	15.29	75	550786	10.34	ug/L	100
30) 1,1,2-Trichloroethane	15.61	83	301325	10.64	ug/L	97
31) Tetrachloroethene	15.88	166	1074633	10.17	ug/L	98
32) 1,3-Dichloropropane	15.90	76	583576	10.61	ug/L	100
33) Dibromochloromethane	16.30	129	590105	10.64	ug/L	97
34) 1,2-Dibromoethane	16.51	107	431194	10.73	ug/L	99
35) Chlorobenzene	17.35	112	1781113	10.47	ug/L	99
36) 1,1,1,2-Tetrachloroethane	17.50	131	778509	11.40	ug/L	97
37) Ethylbenzene	17.54	91	3222686	10.07	ug/L	100
38) Xylene (para & meta)	17.74	106	2410170	19.74	ug/L	98
39) Xylene (Ortho)	18.45	106	1102810	10.07	ug/L	97
40) Styrene	18.47	104	1585439	9.81	ug/L	100

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

Quantitation Report

Data File : d:\hpchem\1\data\c0708.d
Acq On : 26 Dec 95 11:58 pm
Sample : 9557856 MS
Misc : 25 ML
Quant Time: Dec 27 14:28 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 Dec 26 17:40:31 1995
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
41) Bromoform	18.81	173	308571	10.01 ug/L	98
42) Isopropylbenzene	19.10	105	3153419	10.11 ug/L m	0
44) Bromobenzene	19.66	156	757517	10.62 ug/L	99
45) 1,1,2,2-Tetrachloroethane	19.62	83	387323	10.62 ug/L	98
46) 1,2,3-Trichloropropane	19.69	75	380382	10.92 ug/L #	39
47) n-Propylbenzene	19.83	91	4308873	9.99 ug/L	93
48) 2-Chlorotoluene	20.00	91	2358529	9.46 ug/L	92
49) 4-Chlorotoluene	20.19	91	2755759	10.32 ug/L	99
50) 1,3,5-Trimethylbenzene	20.15	105	2528574	9.58 ug/L	99
51) tert-Butylbenzene	20.75	119	3090275	11.12 ug/L	99
52) 1,2,4-Trimethylbenzene	20.83	105	2499382	9.75 ug/L	99
53) sec-Butylbenzene	21.14	105	4256632	10.18 ug/L	99
54) 1,3-Dichlorobenzene	21.37	146	1498472	10.50 ug/L	98
55) 4-Isopropyltoluene	21.41	119	3342037	10.14 ug/L	99
56) 1,4-Dichlorobenzene	21.52	146	1441758	10.44 ug/L	99
58) 1,2-Dichlorobenzene	22.21	146	1156268	10.65 ug/L	97
59) n-Butylbenzene	22.15	91	3476871	10.21 ug/L	100
60) 1,2-Dibromo-3-chloropropan	23.62	75	69586	10.13 ug/L	96
61) 1,2,4-Trichlorobenzene	25.17	180	908930	10.33 ug/L	100
62) Hexachlorobutadiene	25.49	225	816995	10.01 ug/L	96
63) Naphthalene	25.64	128	1023095	11.73 ug/L	100
64) 1,2,3-Trichlorobenzene	26.13	180	669440	10.47 ug/L	99
65) Methyl-tert butyl ether	8.33	73	703704	10.25 ug/L	96
66) tert-Butyl Alcohol	8.09	59	24056	23.20 ug/L	100

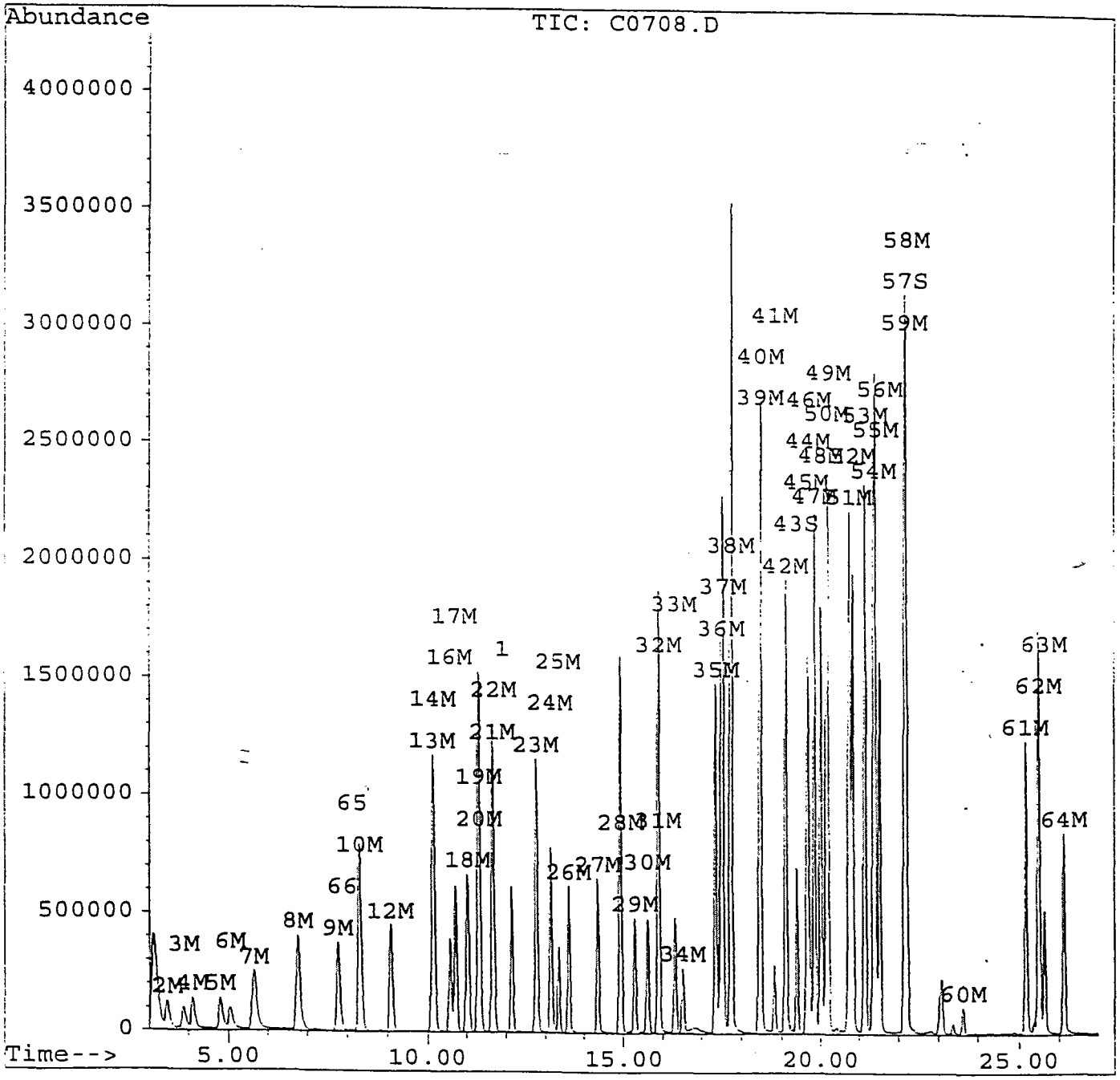
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c0708.d
Acq On : 26 Dec 95 11:58 pm
Sample : 9557856 MS
Misc : 25 ML
Quant Time: Dec 27 14:28 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 Dec 26 17:40:31 1995
Response via : Multiple Level Calibration



Quantitation Report

175

Data File : d:\hpchem\1\data\c0709.d
Acq On : 27 Dec 95 12:32 am
Sample : 9557856 MSD
Misc : 25 ML
Quant Time: Dec 27 14:31 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 Dec 26 17:40:31 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	12.12	96	1165721	5.00	ug/L	-0.01
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.37	95	558836	5.08	ug/L	101.63%
57) 1,2-Dichlorobenzene-d4	22.17	152	336903	5.21	ug/L	104.15%
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.43	85	398790	8.34	ug/L	99
3) Chloromethane	3.82	50	393812	8.38	ug/L	100
4) Vinyl chloride	4.06	62	461378	9.23	ug/L	99
5) Bromomethane	4.75	94	335508	11.87	ug/L	98
6) Chloroethane	5.00	64	318893	10.51	ug/L	99
7) Trichlorofluoromethane	5.59	101	849039	9.67	ug/L	98
8) 1,1-Dichloroethene	6.71	96	536093	9.81	ug/L	98
9) Methylene chloride	7.72	84	464154	9.07	ug/L	96
10) trans-1,2-Dichloroethene	8.27	96	628599	10.09	ug/L	98
12) 1,1-Dichloroethane	9.06	63	1169142	10.09	ug/L	98
13) 2,2-Dichloropropane	10.11	77	846833	8.93	ug/L	97
14) cis-1,2-Dichloroethene	10.13	96	615188	10.40	ug/L	95
16) Bromochloromethane	10.56	128	238044	10.37	ug/L	99
17) Chloroform	10.70	83	1038510	10.15	ug/L	100
18) 1,1,1-Trichloroethane	11.01	97	1034493	9.93	ug/L	99
19) Carbon tetrachloride	11.30	117	952154	10.11	ug/L	98
20) 1,1-Dichloropropene	11.30	75	944871	9.75	ug/L	100
21) Benzene	11.66	78	2041839	10.22	ug/L	98
22) 1,2-Dichloroethane	11.68	62	397980	10.50	ug/L	99
23) Trichloroethene	12.75	95	831010	10.23	ug/L	99
24) 1,2-Dichloropropane	13.12	63	688416	10.37	ug/L	100
25) Dibromomethane	13.33	93	269038	10.24	ug/L	96
26) Bromodichloromethane	13.60	83	820724	10.33	ug/L	100
27) cis-1,3-Dichloropropene	14.35	75	734963	10.08	ug/L	100
28) Toluene	14.92	92	1426913	9.81	ug/L	99
29) trans-1,3-Dichloropropene	15.28	75	483118	10.04	ug/L	100
30) 1,1,2-Trichloroethane	15.60	83	264644	10.34	ug/L	99
31) Tetrachloroethene	15.88	166	976963	10.23	ug/L	99
32) 1,3-Dichloropropane	15.89	76	513145	10.32	ug/L	99
33) Dibromochloromethane	16.30	129	521342	10.40	ug/L	97
34) 1,2-Dibromoethane	16.50	107	379373	10.45	ug/L	99
35) Chlorobenzene	17.35	112	1625906	10.57	ug/L	99
36) 1,1,1,2-Tetrachloroethane	17.49	131	653312	10.59	ug/L	99
37) Ethylbenzene	17.53	91	2874005	9.94	ug/L	99
38) Xylene (para & meta)	17.73	106	2025997	18.36	ug/L	99
39) Xylene (Ortho)	18.44	106	925083	9.35	ug/L	100
40) Styrene	18.46	104	1221539	8.36	ug/L m	98

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

Quantitation Report

Data File : d:\hpchem\1\data\c0709.d
Acq On : 27 Dec 95 12:32 am
Sample : 9557856 MSD
Misc : 25 ML
Quant Time: Dec 27 14:31 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 Dec 26 17:40:31 1995
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41) Bromoform	18.81	173	272756	9.79	ug/L		99
42) Isopropylbenzene	19.09	105	2834796	10.05	ug/L	m	0
44) Bromobenzene	19.66	156	687913	10.67	ug/L		99
45) 1,1,2,2-Tetrachloroethane	19.62	83	341913	10.37	ug/L		99
46) 1,2,3-Trichloropropane	19.69	75	339785	10.79	ug/L	#	55
47) n-Propylbenzene	19.84	91	3875450	9.94	ug/L		94
48) 2-Chlorotoluene	20.00	91	2181447	9.68	ug/L		90
49) 4-Chlorotoluene	20.20	91	2471632	10.24	ug/L		100
50) 1,3,5-Trimethylbenzene	20.15	105	2001607	8.39	ug/L	m	98
51) tert-Butylbenzene	20.74	119	2766504	11.01	ug/L		98
52) 1,2,4-Trimethylbenzene	20.83	105	1874573	8.09	ug/L		98
53) sec-Butylbenzene	21.15	105	3846072	10.18	ug/L		99
54) 1,3-Dichlorobenzene	21.36	146	1366502	10.60	ug/L		98
55) 4-Isopropyltoluene	21.40	119	2875318	9.65	ug/L		100
56) 1,4-Dichlorobenzene	21.52	146	1357652	10.87	ug/L		99
58) 1,2-Dichlorobenzene	22.21	146	1041982	10.62	ug/L		97
59) n-Butylbenzene	22.16	91	3101072	10.08	ug/L		99
60) 1,2-Dibromo-3-chloropropan	23.62	75	61392	9.89	ug/L		88
61) 1,2,4-Trichlorobenzene	25.17	180	828685	10.42	ug/L		100
62) Hexachlorobutadiene	25.50	225	739015	10.02	ug/L		99
63) Naphthalene	25.64	128	914925	11.61	ug/L		100
64) 1,2,3-Trichlorobenzene	26.13	180	608513	10.53	ug/L		99
65) Methyl-tert butyl ether	8.31	73	615540	9.92	ug/L		100
66) tert-Butyl Alcohol	8.07	59	20790	22.19	ug/L		100

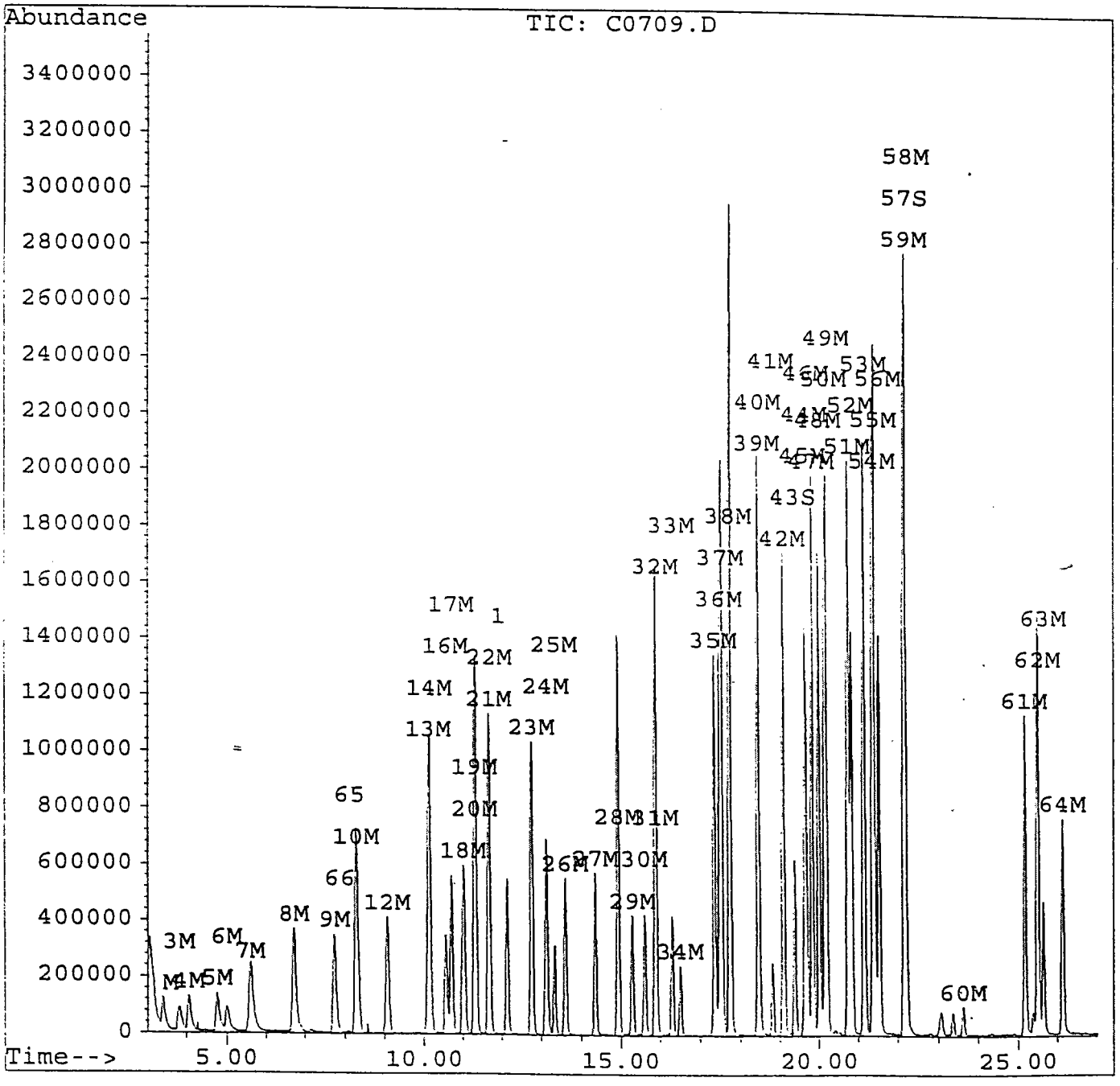
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c0709.d
Acq On : 27 Dec 95 12:32 am
Sample : 9557856 MSD
Misc : 25 ML
Quant Time: Dec 27 14:31 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 Dec 26 17:40:31 1995
Response via : Multiple Level Calibration



GC/MS SEMIVOLATILE DATA PACKAGE

58

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Nam EMSL Analytical Contract: _____

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

Lab File ID: B8951.D DFTPP Injection Date: 10/22/95

Instrument ID: ABNA DFTPP Injection Time: 1620

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE		
51	30.0 - 80.0% of mass 198	58.1		
68	Less than 2.0% of mass 69	0.0	0.0	)1
69	Mass 69 relative abundance	82.8		
70	Less than 2.0% of mass 69	0.2	0.3	)1
127	25.0 - 75.0% of mass 198	44.6		
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	6.7		
275	10.0 - 30.0% of mass 198	20.2		
365	Greater than 0.75% of mass 198	2.5		
441	Present, but less than mass 443	10.3		
442	40.0 - 110.0% of mass 198	72.0		
443	15.0 - 24.0% of mass 442	13.9	19.2	)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	B8952.D	10/22/95	1658
#		50 STANDARD	B8953.D	10/22/95	1749
#		80 STANDARD	B8954.D	10/22/95	1842
#		120 STANDARD	B8955.D	10/22/95	1933
#		160 STANDARD	B8956.D	10/22/95	2024
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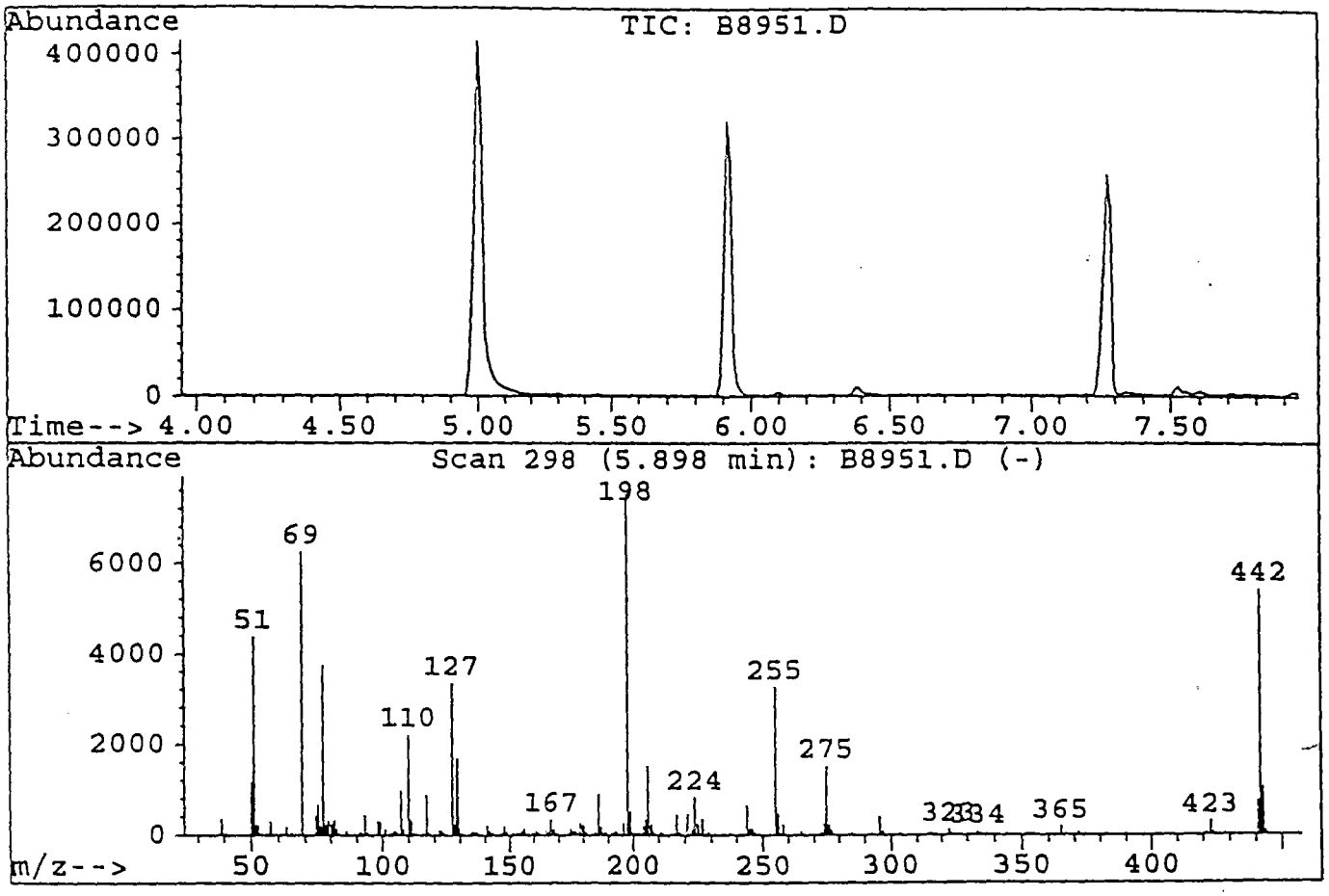
DFTPP

Data File : C:\HPCHEM\1\DATA2\B8951.D
Acq On : 22 Oct 95 4:20 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: 303

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	58.1	4393	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	82.8	6258	PASS
70	69	0	2	0.3	17	PASS
127	198	40	60	44.6	3367	PASS
197	198	0	1	0.0	0	PASS
198	198	100	100	100.0	7557	PASS
199	198	5	9	6.7	509	PASS
275	198	10	30	20.2	1529	PASS
365	198	1	100	2.5	192	PASS
441	443	0	100	74.6	781	PASS
442	198	40	100	72.0	5439	PASS
443	442	17	23	19.2	1047	PASS

B8951.D BNACLP.M

Scan 298 (5.898 min): B8951.D

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
38.10	48	53.20	32	66.25	16	81.05	330
39.10	377	55.15	21	69.05	6258	82.05	125
40.05	27	56.05	141	70.00	17	83.10	43
41.10	10	57.15	307	73.05	24	85.15	33
44.05	7	58.05	32	74.10	427	86.05	107
46.60	11	59.95	22	75.05	682	87.05	21
47.80	16	61.05	55	76.05	197	91.15	87
49.10	37	61.95	44	77.05	3745	92.00	60
50.10	1180	63.05	185	78.10	240	93.00	454
51.10	4393	64.15	16	79.05	321	94.00	50
52.15	214	65.10	64	80.15	246	97.10	3

Scan 298 (5.898 min): B8951.D

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
98.00	325	110.00	2222	122.95	109	137.05	74
99.00	281	111.00	317	124.10	52	140.95	229
100.10	5	112.00	46	125.05	31	141.95	94
100.95	139	113.10	20	127.00	3367	142.95	55
102.10	18	115.90	71	128.00	243	145.95	27
102.90	73	117.00	896	129.00	1693	147.00	82
104.00	105	117.90	36	129.90	141	148.00	203
105.00	92	118.10	58	130.95	51	148.95	66
105.90	39	119.00	20	134.00	53	151.05	39
107.00	988	120.00	31	134.95	101	151.85	31
108.00	125	122.00	109	136.05	69	152.05	32

Scan 298 (5.898 min): B8951.D

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
152.95	60	165.05	106	176.90	82	187.90	28
154.05	51	166.05	68	177.80	28	188.85	72
154.95	105	166.90	354	178.10	24	191.10	44
156.05	158	167.95	121	178.90	282	192.00	61
156.85	36	169.10	30	180.00	203	193.00	102
157.95	40	170.10	16	181.00	77	194.00	21
158.95	24	171.90	35	183.10	15	195.10	31
159.25	25	173.00	24	183.90	27	195.95	283
159.95	67	173.95	67	184.90	108	197.90	7557
160.95	104	175.00	148	186.00	914	198.90	509
161.75	45	175.90	65	186.95	185	200.00	46

Scan 298 (5.898 min): B8951.D

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
201.60	61	215.95	46	231.05	30	246.80	43
202.90	37	216.80	458	233.85	24	248.80	25
203.95	217	217.95	63	234.85	34	254.85	3269
204.95	357	220.95	493	236.95	39	255.90	462
205.95	1535	222.90	129	238.85	14	256.90	41
206.95	222	223.90	845	240.80	39	257.90	257
207.85	61	224.95	251	242.00	53	258.90	35
210.00	28	226.05	23	243.00	42	264.80	100
210.65	74	226.90	375	243.90	676	265.60	2
211.15	58	227.85	48	244.90	125	271.10	17
214.95	32	228.85	86	245.90	118	272.90	118

Scan 298 (5.898 min): B8951.D

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
273.95	258	303.05	54	340.80	21	382.75	22
274.90	1529	314.00	18	351.85	43	389.90	20
275.90	208	314.80	56	352.85	33	401.90	34
276.80	117	315.80	36	353.85	41	402.80	36
277.65	28	321.00	19	354.65	19	420.80	38
284.25	14	322.85	124	364.75	192	421.80	40
284.55	12	323.80	30	365.65	20	422.75	303
285.05	41	326.80	31	370.75	21	423.85	52
292.75	37	332.00	18	371.85	86	440.80	781
295.80	403	333.80	79	372.75	20	441.85	5439
296.85	79	334.90	23	372.95	20	442.85	1047

Scan 298 (5.898 min): B8951.D

Modified:subtracted

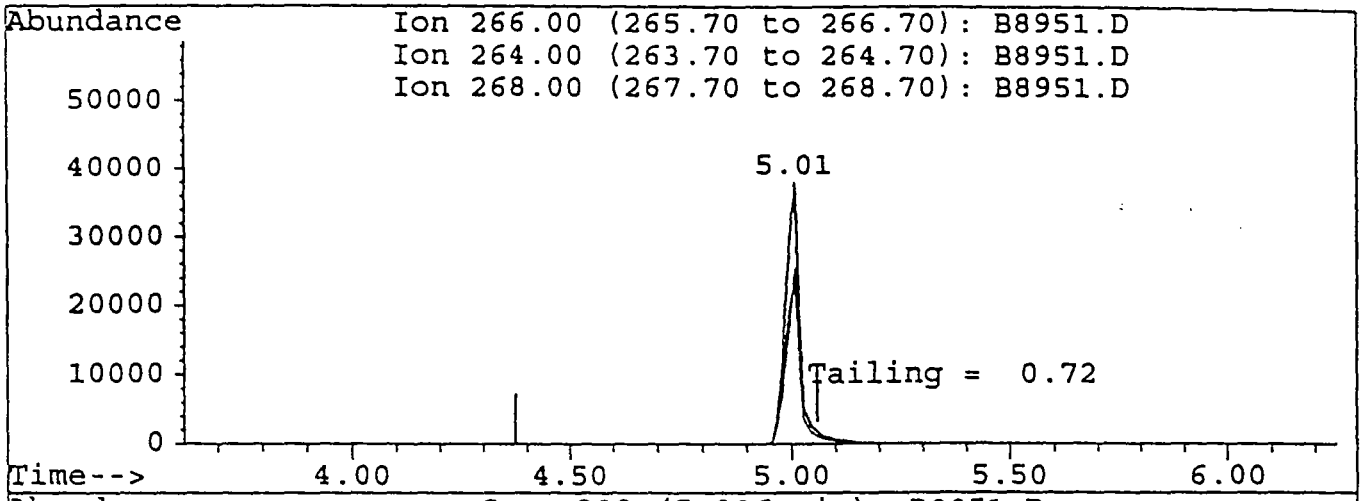
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
443.85	86						

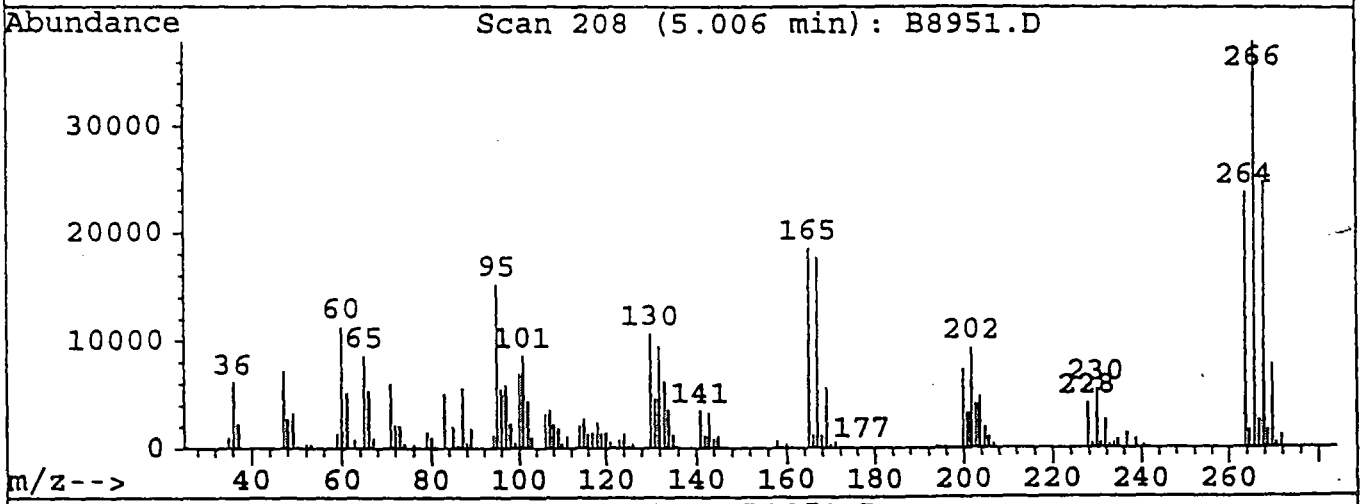
Quantitation Report

Data File : C:\HPCHEM\1\DATA2\B8951.D
Acq On : 22 Oct 95 4:20 pm
Sample : DFTPP ..... Converted from RTE d
Misc :
Quant Time: Oct 23 14:06 1995

Vial: 1
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Sep 21 12:47:27 1995
Response via : Multiple Level Calibration





TIC: B8951.D

(1) Pentachlorophenol (CM)

5.01min 266.46ug/mL

response 88011

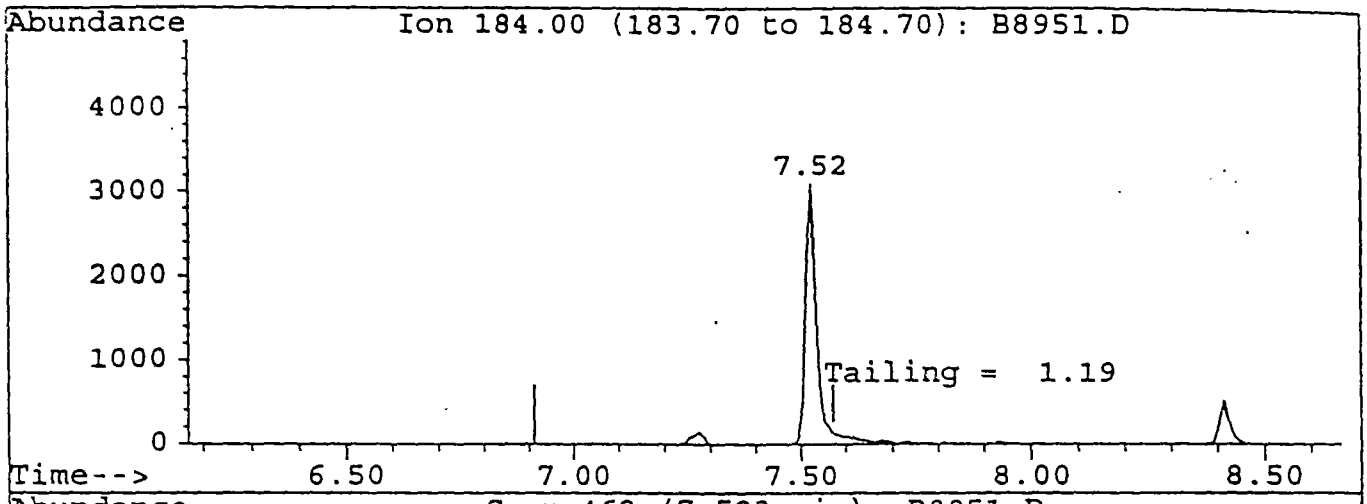
Ion	Exp%	Act%
266.00	100	100
264.00	64.30	67.02
268.00	64.70	64.58
0.00	0.00	0.00

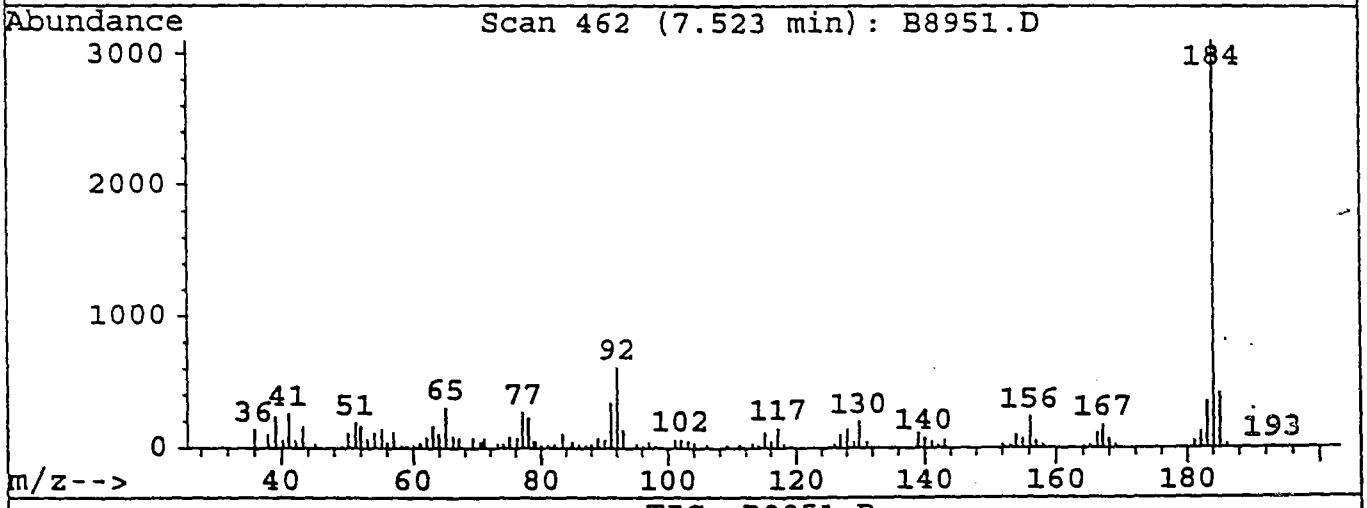
Quantitation Report

Data File : C:\HPCHEM\1\DATA2\B8951.D
Acq On : 22 Oct 95 4:20 pm
Sample : DFTPP ..... Converted from RTE d
Misc :
Quant Time: Oct 23 14:06 1995

Vial: 1
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Sep 21 12:47:27 1995
Response via : Multiple Level Calibration





TIC: B8951.D

(2) Benzidine
7.52min 18.09ug/ml
response 5556

Ion	Exp%	Act%
184.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Response Factor Report ABNA

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed Oct 25 10:15:01 1995
Response via : Initial Calibration

Calibration Files
160 =B8956.D 120 =B8955.D 80 =B8954.D
50 =B8953.D 20 =B8952.D

		Compound	160	120	80	50	20	Avg	%RSD
1)	I	1,4-Dichlorobenzene-d	----------ISTD----------						
2)	S	2-Fluorophenol	1.298	1.281	1.315	1.267	1.215	1.275	2.98
3)	S	Phenol-d5	2.193	2.110	2.121	2.008	1.912	2.069	5.30
4)	M	N-nitrosodimethylamin	0.949	0.938	0.778	0.886		0.887	8.80
5)		Pyridine	0.977	0.898	0.594	0.908	0.596	0.795	23.24
6)	CM	Phenol	2.058	1.866	1.941	1.876	1.963	1.941	4.00
7)	MT	bis(2-Chloroethyl)eth	2.339	2.271	2.478	2.298	2.478	2.373	4.17
8)	M	2-Chlorophenol	1.340	1.326	1.370	1.335	1.293	1.333	2.08
9)	MT	1,3-Dichlorobenzene	1.333	1.349	1.417	1.396	1.341	1.367	2.72
10)	CM	1,4-Dichlorobenzene	1.341	1.339	1.435	1.444	1.359	1.383	3.74
11)	M	1,2-Dichlorobenzene	1.327	1.309	1.391	1.387	1.322	1.347	2.88
12)	T	2-Methylphenol	1.282	1.266	1.246	1.281	1.320	1.279	2.15
13)	M	bis(2-chloroisopropyl	3.117	2.080	2.102	1.860	2.012	2.234	22.50
14)	T	4-Methylphenol	1.346	1.396	1.393	1.481	1.395	1.402	3.48
15)	PM	N-Nitroso-Di-n-propyl	1.635	1.504	1.491	1.495	1.515	1.528	3.97
16)	M	Hexachloroethane	0.866	0.842	0.908	0.877	0.847	0.868	3.04
17)	I	Naphthalene-d8	----------ISTD----------						
18)	S	Nitrobenzene-d5	0.536	0.548	0.540	0.529	0.557	0.542	2.00
19)	M	Nitrobenzene	0.665	0.462	0.486	0.489	0.494	0.519	15.90
20)	M	Isophorone	1.023	1.026	1.061	1.021	1.376	1.101	13.99
21)	MC	2-Nitrophenol	0.233	0.242	0.253	0.246	0.223	0.239	4.94
22)	M	2,4-Dimethylphenol	0.406	0.400	0.396	0.376	0.355	0.387	5.48
23)	M	bis(2-Chloroethoxy)me	0.594	0.586	0.623	0.583	0.629	0.603	3.57
24)	MC	2,4-Dichlorophenol	0.301	0.295	0.305	0.294	0.281	0.295	3.20
25)	M	1,2,4-Trichlorobenzen	0.299	0.303	0.314	0.309	0.297	0.304	2.24
26)	M	Naphthalene	0.999	1.022	0.994	1.016	0.985	1.003	1.53
27)	T	4-Chloroaniline	0.476	0.462	0.491	0.449	0.476	0.470	3.41
28)	MC	Hexachlorobutadiene	0.155	0.162	0.164	0.161	0.155	0.160	2.53
29)	MC	4-Chloro-3-methylphen	0.402	0.386	0.385	0.392	0.376	0.388	2.50
30)	M	2-Chloronaphthalene	0.643	0.619	0.649	0.634	0.627	0.634	1.88
31)	T	2-Methylnaphthalene	0.823	0.860	0.870	0.905	0.890	0.870	3.60
32)	I	Acenaphthene-d10	----------ISTD----------						
33)	P	Hexachlorocyclopentad	0.305	0.321	0.324	0.243	0.254	0.289	13.21
34)	MC	2,4,6-Trichlorophenol	0.491	0.481	0.415	0.404	0.339	0.426	14.61
35)	T	2,4,5-Trichlorophenol	0.271	0.293	0.373	0.403	0.396	0.347	17.62
36)	S	2-Fluorobiphenyl	1.238	1.248	1.189	1.241	1.184	1.220	2.53
37)	T	2-Nitroaniline	0.841	0.736	0.817	0.751	0.769	0.783	5.72
38)	M	Dimethylphthalate	1.333	1.293	1.362	1.377	1.474	1.368	4.92
39)	M	Acenaphthylene	1.777	1.826	1.858	1.846	1.697	1.801	3.66
40)	M	2,6-Dinitrotoluene	0.243	0.258	0.320	0.377	0.339	0.308	18.23
41)	T	3-Nitroaniline	0.298	0.316	0.358	0.366	0.372	0.342	9.62

(#) = Out of Range

Response Factor Report ABNA

188

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed Oct 25 10:15:01 1995
Response via : Initial Calibration

Calibration Files
160 =B8956.D 120 =B8955.D 80 =B8954.D
50 =B8953.D 20 =B8952.D

		Compound	160	120	80	50	20	Avg	%RSD
42)	CM	Acenaphthene	0.987	1.017	1.050	1.041	1.005	1.020	2.52
43)	MP	2,4-Dinitrophenol	0.242	0.217	0.207	0.173		0.210	13.59
44)	PM	4-Nitrophenol	0.243	0.224	0.225	0.220		0.228	4.42
45)	T	Dibenzofuran	1.535	1.581	1.527	1.568	1.461	1.534	3.05
46)	M	2,4-Dinitrotoluene	0.350	0.503	0.509	0.467	0.434	0.452	14.36
47)	M	Diethylphthalate	1.464	1.545	1.538	1.580	1.653	1.556	4.40
48)	M	Fluorene	1.177	1.197	1.128	1.203	1.132	1.167	3.03
49)	M	4-Chlorophenyl-phenyl	0.476	0.512	0.504	0.514	0.538	0.509	4.32
50)		Phenanthrene-d10	----------ISTD----------						
51)	T	4-Nitroaniline	0.201	0.219	0.237	0.246	0.248	0.230	8.80
52)	MC	4,6-Dinitro-2-methylp	0.143	0.147	0.146	0.157		0.148	4.25
53)	T	n-Nitrosodiphenylamin	0.502	0.521	0.559	0.565	0.566	0.543	5.37
54)	S	2,4,6-Tribromophenol	0.137	0.130	0.130	0.122	0.114	0.127	6.88
55)		1,2-Diphenylhydrazine	1.727	1.765	1.839	1.876	1.714	1.784	3.97
56)	M	4-Bromophenyl-phenyle	0.170	0.189	0.192	0.186	0.198	0.187	5.57
57)	M	Hexachlorobenzene	0.234	0.240	0.250	0.239	0.223	0.237	4.16
58)	CM	Pentachlorophenol	0.176	0.169	0.159	0.146		0.163	7.89
59)	M	Phenanthrene	1.052	1.101	1.091	1.128	1.062	1.087	2.81
60)	M	Anthracene	1.028	1.059	1.084	1.099	1.067	1.068	2.50
61)		Carbazole	1.073	1.102	1.155	1.045	0.948	1.065	7.19
62)	M	Di-n-butylphthalate	1.934	2.050	1.972	2.064	2.036	2.011	2.76
63)	MC	Fluoranthene	1.064	1.116	1.124	1.122	1.034	1.092	3.74
64)	I	Chrysene-d12	----------ISTD----------						
65)		Benzidine	0.292	0.287	0.271	0.235	0.282	0.274	8.41
66)	M	Pyrene	1.738	1.691	1.628	1.557	1.388	1.600	8.56
67)	S	Terphenyl-d14	1.136	1.078	0.983	0.913	0.857	0.994	11.56
68)	M	Butylbenzylphthalate	1.325	1.272	1.223	1.223	1.183	1.245	4.39
69)	M	Benzo[a]anthracene	1.452	1.523	1.454	1.486	1.231	1.429	8.01
70)	M	3,3'-Dichlorobenzidin	0.363	0.382	0.412	0.399	0.375	0.386	5.04
71)	M	Chrysene	0.772	0.885	0.894	0.868	0.865	0.857	5.70
72)	M	bis(2-Ethylhexyl)phth	1.753	1.891	1.767	1.774	1.738	1.785	3.42
73)	I	Perylene-d12	----------ISTD----------						
74)	MC	Di-n-octylphthalate	5.446	5.792	5.574	5.955		5.692	3.97
75)	M	Benzo[b]fluoranthene	1.854	2.099	1.614	2.424	1.772	1.952	16.21
76)	m	Benzo[k]fluoranthene	1.092	1.112	1.104	1.200	1.303	1.162	7.73
77)	mc	Benzo[a]pyrene	1.053	1.059	1.082	1.079	1.132	1.081	2.85
78)	m	Indeno[1,2,3-cd]pyren	0.593	0.636	0.621	0.586	0.371	0.561	19.33
79)	m	Dibenz[a,h]anthracene	0.600	0.602	0.587	0.572	0.382	0.549	17.12
80)	M	Benzo[g,h,i]perylene	0.552	0.576	0.573	0.534	0.312	0.510	21.93
81)		1-Methyl naphthalene						0.000#	-1.00
82)		7,12-Dimethylbenz(a)a						0.000#	-1.00

(#) = Out of Range

Response Factor Report ABNA

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed Oct 25 10:15:01 1995
Response via : Initial Calibration

Calibration Files
160 =B8956.D 120 =B8955.D 80 =B8954.D
50 =B8953.D 20 =B8952.D

	Compound	160	120	80	50	20	Avg	%RSD
83)	Quinoline						0.000#	-1.00
84)	Thiophenol						0.000#	-1.00
85)	4-Methyl chrysene						0.000#	-1.00
86)	Dibenz(a,j)acridine						0.000#	-1.00
87)	Indene						0.000#	-1.00
88)	Benzyl alcohol						0.000#	-1.00
89)	Benzoic acid						0.000#	-1.00

(#) = Out of Range

Quantitation Report

Data File : c:\hpchem\1\data2\b8952.d Vial: 2
Acq On : 22 Oct 95 4:58 pm Operator: SCOTTV
Sample : 20 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Oct 25 9:45 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Sep 21 12:47:27 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.69	152	29442	40.00	ug/mL	-0.33
17) Naphthalene-d8	12.41	136	115955	40.00	ug/mL	-0.35
32) Acenaphthene-d10	17.73	164	69183	40.00	ug/mL	-0.35
50) Phenanthrene-d10	22.20	188	103757	40.00	ug/ml	-0.38
64) Chrysene-d12	30.29	240	75851	40.00	ug/mL	-0.40
73) Perylene-d12	34.27	264	29259	40.00	ug/mL	-0.43
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.11	112	44724	46.49	ug/mL	46.49%
3) Phenol-d5	8.08	99	70383	45.87	ug/mL	45.87%
18) Nitrobenzene-d5	10.37	82	80764	52.70	ug/mL	52.70%
36) 2-Fluorobiphenyl	15.88	172	102384	48.24	ug/mL	48.24%
54) 2,4,6-Tribromophenol	20.14	330	14825	53.50	ug/mL	53.50%
67) Terphenyl-d14	27.36	244	81257	33.34	ug/mL	33.34%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	2.14	74	15448	25.20	ug/ml	100
6) Phenol	8.11	94	28900	20.59	ug/mL	100
7) bis(2-Chloroethyl)ether	12.10	93	36472	22.04	ug/mL	94
8) 2-Chlorophenol	8.09	128	19030	19.10	ug/mL#	81
9) 1,3-Dichlorobenzene	8.48	146	19737	19.33	ug/mL	96
10) 1,4-Dichlorobenzene	8.73	146	20003	19.12	ug/mL	96
11) 1,2-Dichlorobenzene	9.12	146	19457	19.34	ug/mL	97
12) 2-Methylphenol	9.81	108	19438	21.22	ug/mLm	100
13) bis(2-chloroisopropyl)ethe	9.79	45	29616	23.05	ug/mL#	40
14) 4-Methylphenol	10.31	108	20537	20.05	ug/mL	100
15) N-Nitroso-Di-n-propylamine	10.18	70	22300	21.23	ug/mL	94
16) Hexachloroethane	10.08	117	12474	20.33	ug/mL#	63
19) Nitrobenzene	10.43	77	28618	20.36	ug/mL	93
20) Isophorone	10.37	82	79753	25.72	ug/mL#	67
21) 2-Nitrophenol	11.37	139	12913	20.42	ug/mL#	86
22) 2,4-Dimethylphenol	11.83	107	20567	18.72	ug/mL#	100
23) bis(2-Chloroethoxy)methane	12.10	93	36472	21.56	ug/mL#	100
24) 2,4-Dichlorophenol	12.16	162	16269	19.83	ug/mL#	93
25) 1,2,4-Trichlorobenzene	12.32	180	17221	20.08	ug/mL	95
26) Naphthalene	12.47	128	57119	19.89	ug/mL	100
27) 4-Chloroaniline	12.84	127	27603	20.47	ug/mL	99
28) Hexachlorobutadiene	12.99	225	9013	20.60	ug/mL	95
29) 4-Chloro-3-methylphenol	14.57	107	21812	20.86	ug/mL	96
30) 2-Chloronaphthalene	16.05	162	36338	21.53	ug/ml#	100
31) 2-Methylnaphthalene	14.61	142	51624	30.41	ug/mL	95
33) Hexachlorocyclopentadiene	15.13	237	8772	19.27	ug/mL#	90
34) 2,4,6-Trichlorophenol	15.59	196	11710	15.31	ug/mL	96
35) 2,4,5-Trichlorophenol	15.69	196	13699	21.15	ug/mL	97

(#) = qualifier out of range (

Quantitation Report

Data File : c:\hpchem\1\data2\b8952.d Vial: 2 189
Acq On : 22 Oct 95 4:58 pm Operator: SCOTTV
Sample : 20 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Oct 25 9:45 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Sep 21 12:47:27 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37)	2-Nitroaniline	17.83	65	26617	23.54	ug/mL	72
38)	Dimethylphthalate	17.31	163	50983	22.95	ug/mL#	13
39)	Acenaphthylene	17.25	152	58691	19.03	ug/mL	98
40)	2,6-Dinitrotoluene	17.40	165	11726	19.95	ug/mL#	87
41)	3-Nitroaniline	19.68	138	12871	24.57	ug/mL#	87
42)	Acenaphthene	17.81	153	34778	18.65	ug/mL	99
43)	2,4-Dinitrophenol	18.15	184	4144	18.76	ug/mL#	66
44)	4-Nitrophenol	18.65	109	6336	21.77	ug/mL#	57
45)	Dibenzofuran	18.37	168	50539	19.77	ug/mL#	88
46)	2,4-Dinitrotoluene	18.56	165	15019	23.85	ug/mL#	1
47)	Diethylphthalate	19.54	149	57169	23.32	ug/mL	95
48)	Fluorene	19.39	166	39160	19.64	ug/mL	99
49)	4-Chlorophenyl-phenylether	19.60	204	18593	20.88	ug/mL	90
51)	4-Nitroaniline	19.68	138	12871	21.96	ug/mL	87
52)	4,6-Dinitro-2-methylphenol	19.77	198	6716	20.84	ug/mL	100
53)	n-Nitrosodiphenylamine	20.02	169	29360	21.36	ug/mL	95
55)	1,2-Diphenylhydrazine (as	20.08	77	88943	17.28	ug/ml	100
56)	4-Bromophenyl-phenylether	21.06	248	10252	18.11	ug/mL#	76
57)	Hexachlorobenzene	21.01	284	11578	18.19	ug/mL#	52
58)	Pentachlorophenol	21.74	266	5478	14.77	ug/mL	99
59)	Phenanthrene	22.28	178	55118	18.45	ug/mL	100
60)	Anthracene	22.41	178	55350	19.28	ug/mLm	100
61)	Carbazole	23.07	167	49203	17.84	ug/ml	97
62)	Di-n-butylphthalate	24.61	149	105600	19.26	ug/mL	99
63)	Fluoranthene	25.88	202	53632	19.37	ug/mL#	58
65)	Benzidine	26.57	184	10709	16.44	ug/ml	100
66)	Pyrene	26.50	202	52626	12.69	ug/mL#	75
68)	Butylbenzylphthalate	29.14	149	44863	17.91	ug/mL#	9
69)	Benzo[a]anthracene	30.26	228	46690	19.16	ug/mL	100
70)	3,3'-Dichlorobenzidine	30.43	252	14204	27.28	ug/mL#	88
71)	Chrysene	30.35	228	32814	17.31	ug/mLm	100
72)	bis(2-Ethylhexyl)phthalate	31.12	149	65904	18.81	ug/mL#	35
74)	Di-n-octylphthalate	33.03	149	94455	16.40	ug/mL#	100
75)	Benzo[b]fluoranthene	33.30	252	25924	16.54	ug/mL#	85
76)	Benzo[k]fluoranthene	33.38	252	19069	16.16	ug/mLm	85
77)	Benzo[a]pyrene	34.11	252	16555	19.26	ug/mLm	85
78)	Indeno[1,2,3-cd]pyrene	36.79	276	5424	14.32	ug/mL#	23
79)	Dibenz[a,h]anthracene	36.91	278	5588	18.32	ug/mL#	74
80)	Benzo[g,h,i]perylene	37.31	276	4565	14.10	ug/mLm	59

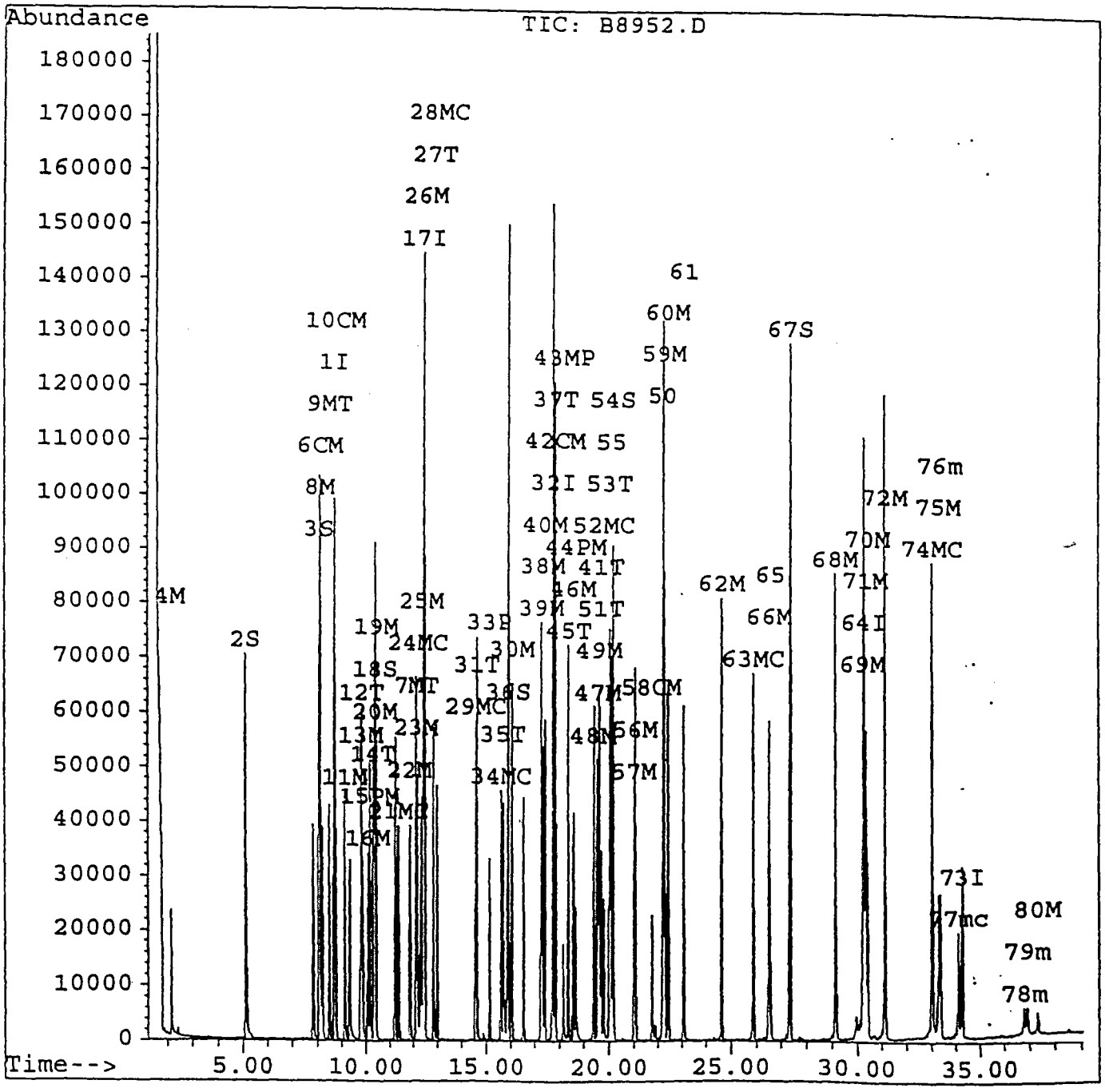
(#) = qualifier out of

Quantitation Report

Data File : c:\hpchem\1\data2\b8952.d
Acq On : 22 Oct 95 4:58 pm
Sample : 20 STD..... Converted from RTE d
Misc :
Quant Time: Oct 25 9:45 1995

Vial: 2
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Sep 21 12:47:27 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : c:\hpchem\1\data2\b8953.d Vial: 3
Acq On : 22 Oct 95 5:49 pm Operator: SCOTTV
Sample : 50 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Oct 25 9:46 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Sep 21 12:47:27 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.69	152	30029	40.00	ug/mL	-0.33
17) Naphthalene-d8	12.43	136	118447	40.00	ug/mL	-0.33
32) Acenaphthene-d10	17.73	164	66652	40.00	ug/mL	-0.35
50) Phenanthrene-d10	22.23	188	99018	40.00	ug/ml	-0.35
64) Chrysene-d12	30.29	240	71387	40.00	ug/mL	-0.41
73) Perylene-d12	34.24	264	29156	40.00	ug/mL	-0.45
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.11	112	47542	48.46	ug/mL	48.46%
3) Phenol-d5	8.09	99	75366	48.16	ug/mL	48.16%
18) Nitrobenzene-d5	10.39	82	78309	50.02	ug/mL	50.02%
36) 2-Fluorobiphenyl	15.90	172	103420	50.58	ug/mL	50.58%
54) 2,4,6-Tribromophenol	20.17	330	15101	57.11	ug/mL	57.11%
67) Terphenyl-d14	27.36	244	81512	35.53	ug/mL	35.53%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	2.14	74	33256	53.18	ug/ml	100
6) Phenol	8.13	94	70425	49.19	ug/mL	100
7) bis(2-Chloroethyl)ether	12.12	93	86266	51.11	ug/mL	97
8) 2-Chlorophenol	8.11	128	50107	49.31	ug/mL#	79
9) 1,3-Dichlorobenzene	8.48	146	52404	50.32	ug/mL	98
10) 1,4-Dichlorobenzene	8.75	146	54194	50.78	ug/mL	97
11) 1,2-Dichlorobenzene	9.14	146	52073	50.76	ug/mL	96
12) 2-Methylphenol	9.83	108	48095	51.48	ug/mLm	99
13) bis(2-chloroisopropyl)ethe	9.77	45	69800	53.26	ug/mL	98
14) 4-Methylphenol	10.35	108	55590	53.22	ug/mL	99
15) N-Nitroso-Di-n-propylamine	10.22	70	56128	52.39	ug/mL#	95
16) Hexachloroethane	10.08	117	32913	52.60	ug/mL#	72
19) Nitrobenzene	10.45	77	72432	50.46	ug/mL	88
20) Isophorone	11.28	82	151156	47.73	ug/mL	94
21) 2-Nitrophenol	11.39	139	36365	56.30	ug/mL#	87
22) 2,4-Dimethylphenol	11.87	107	55686	49.62	ug/mL#	100
23) bis(2-Chloroethoxy)methane	12.12	93	86266	49.92	ug/mL#	100
24) 2,4-Dichlorophenol	12.18	162	43494	51.90	ug/mL	93
25) 1,2,4-Trichlorobenzene	12.32	180	45688	52.14	ug/mL	95
26) Naphthalene	12.49	128	150500	51.30	ug/mL	98
27) 4-Chloroaniline	12.86	127	66405	48.20	ug/mL	99
28) Hexachlorobutadiene	12.99	225	23776	53.19	ug/mL	97
29) 4-Chloro-3-methylphenol	14.57	107	58006	54.32	ug/mL	87
30) 2-Chloronaphthalene	16.06	162	93821	54.43	ug/ml#	100
31) 2-Methylnaphthalene	14.63	142	133962	77.26	ug/mL	96
33) Hexachlorocyclopentadiene	15.13	237	20265	46.21	ug/mL	98
34) 2,4,6-Trichlorophenol	15.61	196	33685	45.73	ug/mL	96
35) 2,4,5-Trichlorophenol	15.69	196	33610	53.87	ug/mL	96

Quantitation Report

Data File : c:\hpchem\1\data2\b3953.d Vial: 3
Acq On : 22 Oct 95 5:49 pm Operator: SCOTTV
Sample : 50 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Oct 25 9:46 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Sep 21 12:47:27 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37)	2-Nitroaniline	17.85	65	62561	57.42	ug/mL	88
38)	Dimethylphthalate	17.35	163	114727	53.61	ug/mL#	12
39)	Acenaphthylene	17.27	152	153827	51.77	ug/mL	98
40)	2,6-Dinitrotoluene	17.43	165	31425	55.50	ug/mL#	99
41)	3-Nitroaniline	19.74	138	30489	60.41	ug/mL#	88
42)	Acenaphthene	17.83	153	86706	48.26	ug/mL	98
43)	2,4-Dinitrophenol	18.18	184	14425	67.78	ug/mL#	82
44)	4-Nitrophenol	18.66	109	18330	65.38	ug/mL#	60
45)	Dibenzofuran	18.39	168	130635	53.03	ug/mL#	88
46)	2,4-Dinitrotoluene	18.60	165	38874	64.08	ug/mL#	1
47)	Diethylphthalate	19.57	149	131625	55.73	ug/mL	94
48)	Fluorene	19.41	166	100228	52.18	ug/mL	98
49)	4-Chlorophenyl-phenylether	19.62	204	42840	49.93	ug/mL#	83
51)	4-Nitroaniline	19.74	138	30489	54.51	ug/mL	88
52)	4,6-Dinitro-2-methylphenol	19.82	198	19462	63.27	ug/mL	100
53)	n-Nitrosodiphenylamine	20.05	169	69895	53.29	ug/mL	94
55)	1,2-Diphenylhydrazine (as	20.09	77	232246	47.27	ug/ml	100
56)	4-Bromophenyl-phenylether	21.07	248	23079	42.71	ug/mL#	91
57)	Hexachlorobenzene	21.03	284	29529	48.61	ug/mL#	45
58)	Pentachlorophenol	21.77	266	18120	51.19	ug/mL	99
59)	Phenanthrene	22.29	178	139586	48.95	ug/mL	99
60)	Anthracene	22.44	178	136009	49.65	ug/mLm	99
61)	Carbazole	23.10	167	129337	49.15	ug/ml	97
62)	Di-n-butylphthalate	24.64	149	255450	48.81	ug/mL#	97
63)	Fluoranthene	26.53	202	138921	52.58	ug/mL#	56
65)	Benzidine	22.23	184	20957	34.19	ug/mlm	100
66)	Pyrene	26.53	202	138921	35.60	ug/mL#	69
68)	Butylbenzylphthalate	29.15	149	109116	46.28	ug/mL#	9
69)	Benzo[a]anthracene	30.27	228	132632	57.82	ug/mL	99
70)	3,3'-Dichlorobenzidine	30.42	252	35599	72.64	ug/mL#	92
71)	Chrysene	30.36	228	77428	43.39	ug/mLm	99
72)	bis(2-Ethylhexyl)phthalate	31.14	149	158269	47.99	ug/mL#	37
74)	Di-n-octylphthalate	33.04	149	217022	37.81	ug/mL#	100
75)	Benzo[b]fluoranthene	33.31	252	88341	56.55	ug/mLm	86
76)	Benzo[k]fluoranthene	33.39	252	43746	37.21	ug/mLm	86
77)	Benzo[a]pyrene	34.09	252	39340	45.93	ug/mLm	86
78)	Indeno[1,2,3-cd]pyrene	36.76	276	21346	56.57	ug/mL#	25
79)	Dibenz[a,h]anthracene	36.88	278	20854	68.60	ug/mL#	76
80)	Benzo[g,h,i]perylene	37.30	276	19464	60.33	ug/mLm	60

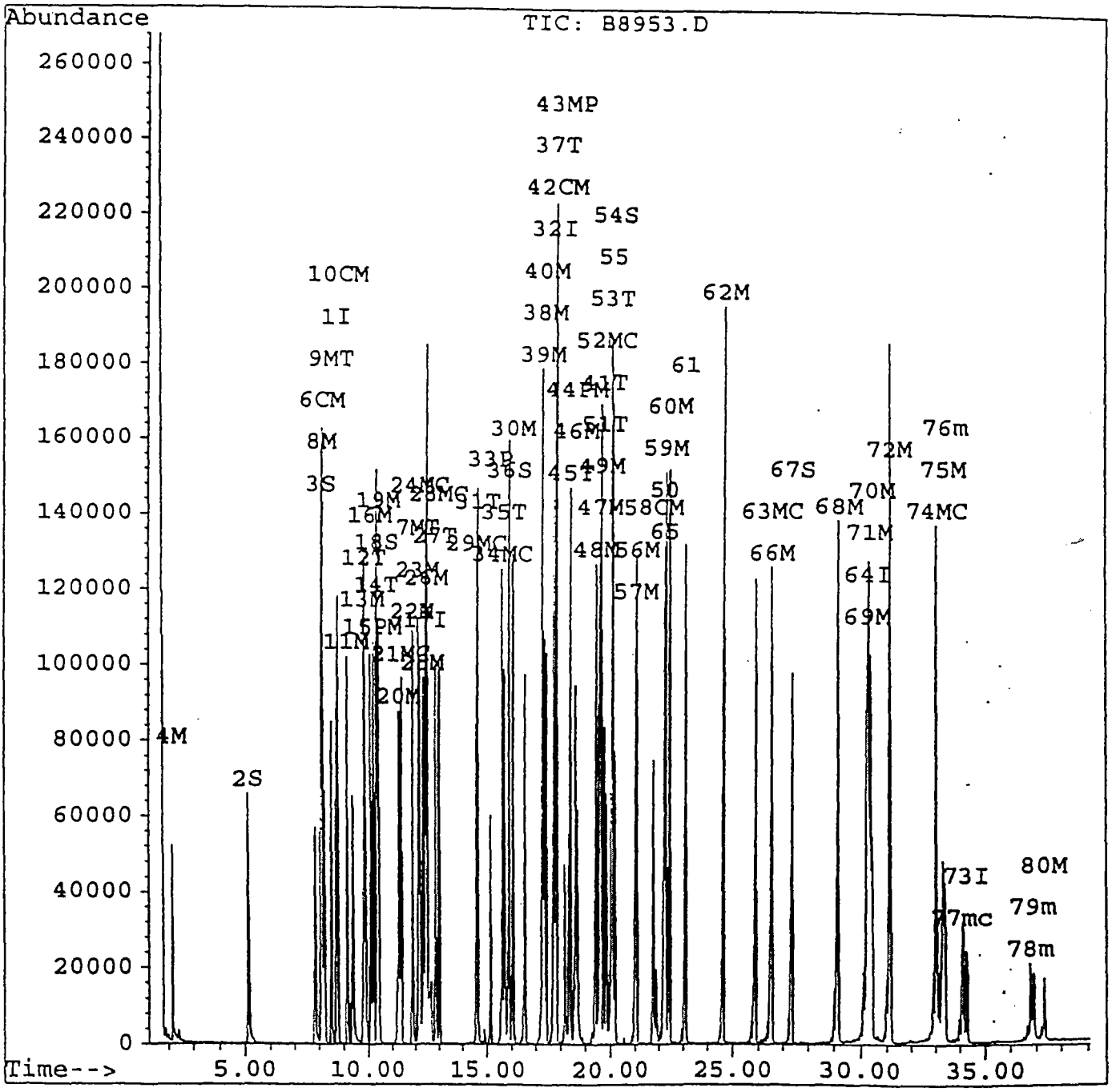
(#) = qualifier out of range (m) = manual integ

Quantitation Report

Data File : c:\hpchem\1\data2\b8953.d
Acq On : 22 Oct 95 5:49 pm
Sample : 50 STD..... Converted from RTE d
Misc :
Quant Time: Oct 25 9:46 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 Sep 21 12:47:27 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : c:\hpchem\1\data2\b8954.d
Acq On : 22 Oct 95 6:42 pm
Sample : 80 STD..... Converted from RTE d
Misc :
Quant Time: Oct 25 9:48 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 Sep 21 12:47:27 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.69	152	27758	40.00	ug/mL	-0.33
17) Naphthalene-d8	12.43	136	110409	40.00	ug/mL	-0.33
32) Acenaphthene-d10	17.74	164	64239	40.00	ug/mL	-0.34
50) Phenanthrene-d10	22.23	188	96790	40.00	ug/ml	-0.34
64) Chrysene-d12	30.31	240	65927	40.00	ug/mL	-0.38
73) Perylene-d12	34.25	264	27421	40.00	ug/mL	-0.45
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.11	112	45615	50.30	ug/mL	50.30%
3) Phenol-d5	8.11	99	73604	50.88	ug/mL	50.88%
18) Nitrobenzene-d5	10.41	82	74558	51.09	ug/mL	51.09%
36) 2-Fluorobiphenyl	15.90	172	95476	48.45	ug/mL	48.45%
54) 2,4,6-Tribromophenol	20.19	330	15745	60.91	ug/mL	60.91%
67) Terphenyl-d14	27.36	244	80989	38.23	ug/mL	38.23%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	2.14	74	43170	74.69	ug/ml	100
6) Phenol	8.15	94	107752	81.42	ug/mL	100
7) bis(2-Chloroethyl)ether	12.14	93	137545	88.16	ug/mL	93
8) 2-Chlorophenol	8.11	128	76031	80.94	ug/mL#	84
9) 1,3-Dichlorobenzene	8.50	146	78669	81.71	ug/mL	97
10) 1,4-Dichlorobenzene	8.75	146	79665	80.76	ug/mL	97
11) 1,2-Dichlorobenzene	9.14	146	77232	81.44	ug/mL	97
12) 2-Methylphenol	9.85	108	69148	80.08	ug/mLm	99
13) bis(2-chloroisopropyl)ethe	9.81	45	116703	96.34	ug/mL#	59
14) 4-Methylphenol	10.37	108	77308	80.07	ug/mL	99
15) N-Nitroso-Di-n-propylamine	10.24	70	82768	83.57	ug/mL	93
16) Hexachloroethane	10.08	117	50425	87.18	ug/mL#	78
19) Nitrobenzene	10.47	77	107228	80.13	ug/mL	91
20) Isophorone	11.31	82	234237	79.35	ug/mL	95
21) 2-Nitrophenol	11.39	139	55945	92.92	ug/mL#	92
22) 2,4-Dimethylphenol	11.89	107	87491	83.64	ug/mL#	100
23) bis(2-Chloroethoxy)methane	12.14	93	137545	85.38	ug/mL#	100
24) 2,4-Dichlorophenol	12.20	162	67435	86.32	ug/mL	93
25) 1,2,4-Trichlorobenzene	12.34	180	69245	84.78	ug/mL	94
26) Naphthalene	12.49	128	219568	80.29	ug/mL	100
27) 4-Chloroaniline	12.88	127	108351	84.37	ug/mL	100
28) Hexachlorobutadiene	13.01	225	36309	87.14	ug/mL	100
29) 4-Chloro-3-methylphenol	14.59	107	85056	85.45	ug/mL#	77
30) 2-Chloronaphthalene	16.08	162	143223	89.13	ug/ml#	100
31) 2-Methylnaphthalene	14.63	142	192207	118.92	ug/mL	96
33) Hexachlorocyclopentadiene	15.15	237	41659	98.56	ug/mL	98
34) 2,4,6-Trichlorophenol	15.63	196	53315	75.09	ug/mL	96
35) 2,4,5-Trichlorophenol	15.71	196	47946	79.73	ug/mL	97

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

Quantitation Report

Data File : c:\hpchem\1\data2\b8954.d
Acq On : 22 Oct 95 6:42 pm
Sample : 80 STD..... Converted from RTE d
Misc :
Quant Time: Oct 25 9:48 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 Sep 21 12:47:27 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37)	2-Nitroaniline	17.87	65	104963	99.96	ug/mL	87
38)	Dimethylphthalate	17.37	163	175032	84.87	ug/mL#	12
39)	Acenaphthylene	17.29	152	238659	83.33	ug/mL	97
40)	2,6-Dinitrotoluene	17.47	165	41143	75.39	ug/mL#	91
41)	3-Nitroaniline	19.76	138	45967	94.49	ug/mL	87
42)	Acenaphthene	17.85	153	134868	77.88	ug/mL	99
43)	2,4-Dinitrophenol	18.20	184	26551	129.44	ug/mL#	84
44)	4-Nitrophenol	18.70	109	28923	107.04	ug/mL#	53
45)	Dibenzofuran	18.39	168	196167	82.63	ug/mL	93
46)	2,4-Dinitrotoluene	18.62	165	65450	111.94	ug/mL#	1
47)	Diethylphthalate	19.59	149	197611	86.81	ug/mL	95
48)	Fluorene	19.43	166	144915	78.28	ug/mL	100
49)	4-Chlorophenyl-phenylether	19.63	204	64693	78.23	ug/mL#	85
51)	4-Nitroaniline	19.76	138	45967	84.07	ug/mL	87
52)	4,6-Dinitro-2-methylphenol	19.86	198	28218	93.85	ug/mL	100
53)	n-Nitrosodiphenylamine	20.07	169	108144	84.35	ug/mL	95
55)	1,2-Diphenylhydrazine (as	20.11	77	356011	74.13	ug/ml	100
56)	4-Bromophenyl-phenylether	21.08	248	37114	70.27	ug/mL	95
57)	Hexachlorobenzene	21.06	284	48488	81.66	ug/mL#	37
58)	Pentachlorophenol	21.77	266	30727	88.81	ug/mL	99
59)	Phenanthrene	22.31	178	211278	75.80	ug/mL	99
60)	Anthracene	22.47	178	209890	78.38	ug/mLm	99
61)	Carbazole	23.12	167	223505	86.89	ug/ml	97
62)	Di-n-butylphthalate	24.64	149	381823	74.63	ug/mL	98
63)	Fluoranthene	25.91	202	217602	84.25	ug/mL#	58
65)	Benzidine	26.59	184	35718	63.11	ug/ml	100
66)	Pyrene	26.53	202	214611	59.55	ug/mL#	71
68)	Butylbenzylphthalate	29.15	149	161233	74.04	ug/mL#	11
69)	Benzo[a]anthracene	30.27	228	191680	90.48	ug/mL	98
70)	3,3'-Dichlorobenzidine	30.41	252	54288	119.95	ug/mL#	91
71)	Chrysene	30.37	228	117879	71.53	ug/mLm	98
72)	bis(2-Ethylhexyl)phthalate	31.12	149	232983	76.50	ug/mL#	36
74)	Di-n-octylphthalate	33.03	149	305687	56.63	ug/mL#	100
75)	Benzo[b]fluoranthene	33.32	252	88515	60.24	ug/mL#	85
76)	Benzo[k]fluoranthene	33.38	252	60541	54.76	ug/mLm	85
77)	Benzo[a]pyrene	34.09	252	59358	73.68	ug/mLm	85
78)	Indeno[1,2,3-cd]pyrene	36.77	276	34042	95.92	ug/mL#	27
79)	Dibenz[a,h]anthracene	36.89	278	32174	112.54	ug/mL#	73
80)	Benzo[g,h,i]perylene	37.31	276	31449	103.65	ug/mLm	61

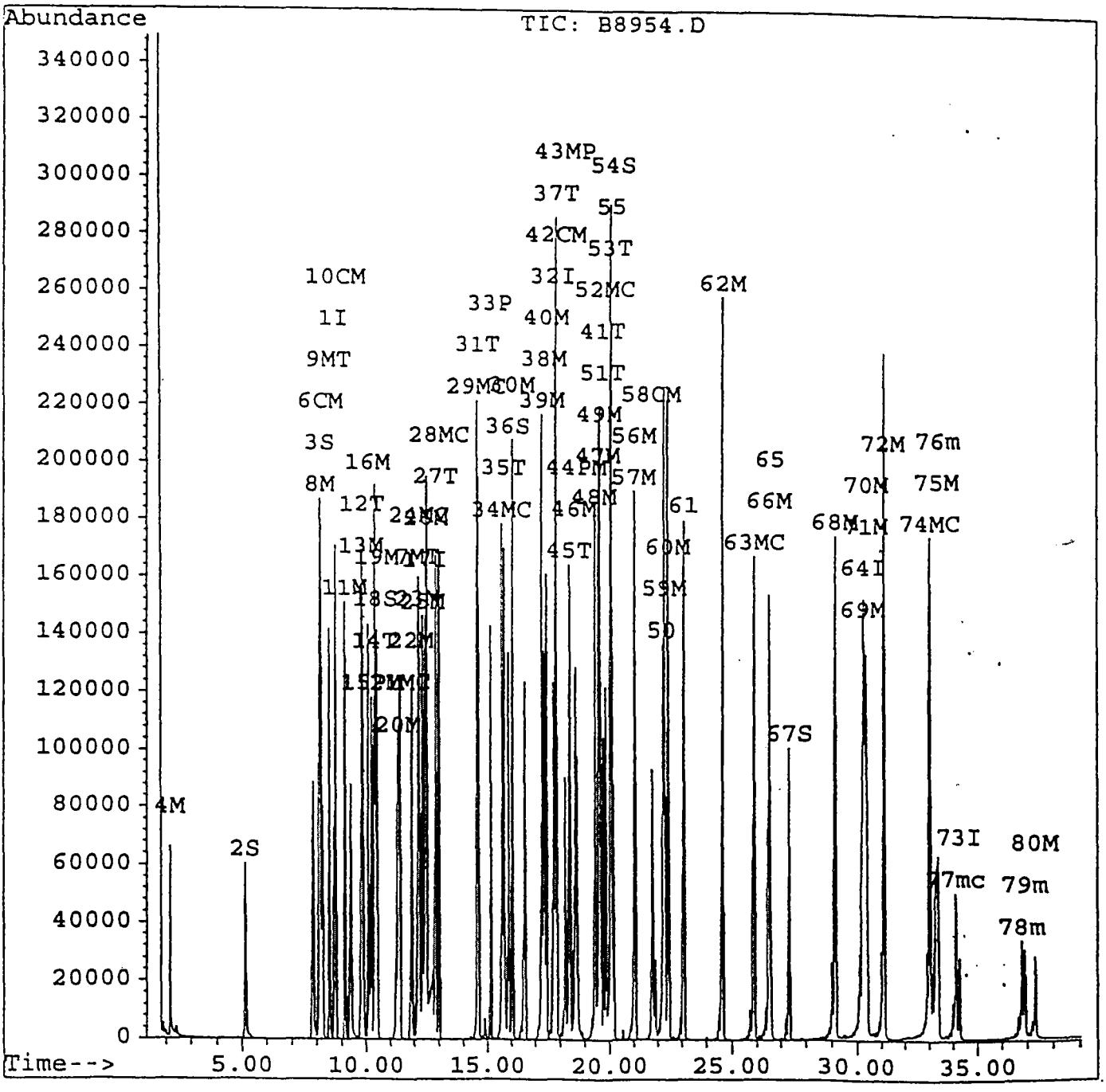
(#) = qualifier out of range (m)

Quantitation Report

Data File : c:\hpchem\1\data2\b8954.d
Acq On : 22 Oct 95 6:42 pm
Sample : 80 STD..... Converted from RTE d
Misc :
Quant Time: Oct 25 9:48 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 Sep 21 12:47:27 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : c:\hpchem\1\data2\b8955.d
Acq On : 22 Oct 95 7:33 pm
Sample : 120 STD..... Converted from RTE d
Misc :
Quant Time: Oct 25 10:18 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 Sep 21 12:47:27 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.70	152	27461	40.00	ug/mL	-0.32
17) Naphthalene-d8	12.44	136	106422	40.00	ug/mL	-0.32
32) Acenaphthene-d10	17.75	164	62579	40.00	ug/mL	-0.33
50) Phenanthrene-d10	22.23	188	90364	40.00	ug/ml	-0.35
64) Chrysene-d12	30.31	240	57405	40.00	ug/mL	-0.39
73) Perylene-d12	34.25	264	23394	40.00	ug/mL	-0.45
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.12	112	43975	49.01	ug/mL	49.01%
3) Phenol-d5	8.14	99	72439	50.61	ug/mL	50.61%
18) Nitrobenzene-d5	10.42	82	72866	51.80	ug/mL	51.80%
36) 2-Fluorobiphenyl	15.91	172	97613	50.85	ug/mL	50.85%
54) 2,4,6-Tribromophenol	20.20	330	14666	60.77	ug/mL	60.77%
67) Terphenyl-d14	27.36	244	77377	41.94	ug/mL	41.94%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	2.15	74	77244	135.08	ug/ml	100
6) Phenol	8.18	94	153731	117.41	ug/mL	100
7) bis(2-Chloroethyl)ether	12.17	93	187081	121.20	ug/mL	88
8) 2-Chlorophenol	8.14	128	109258	117.57	ug/mL#	81
9) 1,3-Dichlorobenzene	8.51	146	111126	116.67	ug/mL	98
10) 1,4-Dichlorobenzene	8.76	146	110282	113.00	ug/mL	96
11) 1,2-Dichlorobenzene	9.14	146	107878	114.99	ug/mL	96
12) 2-Methylphenol	9.88	108	104312	122.10	ug/mLm	98
13) bis(2-chloroisopropyl)ethe	9.80	45	171386	143.01	ug/mL#	85
14) 4-Methylphenol	10.40	108	115007	120.40	ug/mL	98
15) N-Nitroso-Di-n-propylamine	10.28	70	123864	126.42	ug/mL	94
16) Hexachloroethane	10.09	117	69400	121.28	ug/mL#	76
19) Nitrobenzene	10.49	77	147477	114.34	ug/mL	99
20) Isophorone	11.36	82	327700	115.17	ug/mLm	95
21) 2-Nitrophenol	11.42	139	77152	132.95	ug/mL#	94
22) 2,4-Dimethylphenol	11.92	107	127738	126.70	ug/mL#	100
23) bis(2-Chloroethoxy)methane	12.17	93	187081	120.48	ug/mL#	100
24) 2,4-Dichlorophenol	12.23	162	94341	125.29	ug/mL#	92
25) 1,2,4-Trichlorobenzene	12.35	180	96836	123.00	ug/mL	94
26) Naphthalene	12.52	128	326255	123.77	ug/mL	98
27) 4-Chloroaniline	12.89	127	147346	119.03	ug/mL	100
28) Hexachlorobutadiene	13.02	225	51692	128.71	ug/mL	99
29) 4-Chloro-3-methylphenol	14.60	107	123083	128.28	ug/mL#	60
30) 2-Chloronaphthalene	16.09	162	197694	127.64	ug/ml#	100
31) 2-Methylnaphthalene	14.64	142	274545	176.23	ug/mL	96
33) Hexachlorocyclopentadiene	15.16	237	60194	146.19	ug/mL#	96
34) 2,4,6-Trichlorophenol	15.64	196	90332	130.60	ug/mL	97
35) 2,4,5-Trichlorophenol	15.72	196	54995	93.88	ug/mL	97

(#) = qualifier out of range (m)

Quantitation Report

Data File : c:\hpchem\1\data2\b8955.d
Acq On : 22 Oct 95 7:33 pm
Sample : 120 STD..... Converted from RTE d
Misc :
Quant Time: Oct 25 10:18 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 Sep 21 12:47:27 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37)	2-Nitroaniline	17.90	65	138140	135.05	ug/mL	88
38)	Dimethylphthalate	17.40	163	242759	120.83	ug/mL#	12
39)	Acenaphthylene	17.30	152	342901	122.91	ug/mL	97
40)	2,6-Dinitrotoluene	17.48	165	48493	91.22	ug/mL#	96
41)	3-Nitroaniline	19.78	138	59286	125.11	ug/mL	88
42)	Acenaphthene	17.86	153	190884	113.15	ug/mL	98
43)	2,4-Dinitrophenol	18.23	184	40770	204.04	ug/mL#	89
44)	4-Nitrophenol	18.71	109	42019	159.64	ug/mL#	54
45)	Dibenzofuran	18.42	168	296801	128.34	ug/mL	89
46)	2,4-Dinitrotoluene	18.66	165	94345	165.64	ug/mL#	1
47)	Diethylphthalate	19.62	149	290137	130.83	ug/mL#	92
48)	Fluorene	19.45	166	224635	124.55	ug/mL	98
49)	4-Chlorophenyl-phenylether	19.64	204	96095	119.28	ug/mL#	87
51)	4-Nitroaniline	19.78	138	59286	116.15	ug/mL	88
52)	4,6-Dinitro-2-methylphenol	19.89	198	39986	142.45	ug/mL	100
53)	n-Nitrosodiphenylamine	20.09	169	141300	118.05	ug/mL	94
55)	1,2-Diphenylhydrazine (as	20.12	77	478381	106.69	ug/ml	100
56)	4-Bromophenyl-phenylether	21.09	248	51369	104.17	ug/mL#	91
57)	Hexachlorobenzene	21.07	284	65026	117.30	ug/mL#	42
58)	Pentachlorophenol	21.78	266	45899	142.10	ug/mL	100
59)	Phenanthrene	22.33	178	298581	114.74	ug/mL	99
60)	Anthracene	22.48	178	287179	114.86	ug/mLm	99
61)	Carbazole	23.12	167	298791	124.42	ug/ml	96
62)	Di-n-butylphthalate	24.66	149	555739	116.35	ug/mL#	97
63)	Fluoranthene	25.91	202	302618	125.50	ug/mL#	71
65)	Benzidine	26.59	184	49499	100.44	ug/ml	100
66)	Pyrene	26.55	202	291218	92.80	ug/mL#	69
68)	Butylbenzylphthalate	29.15	149	219105	115.56	ug/mL#	13
69)	Benzo[a]anthracene	30.29	228	262300	142.20	ug/mL	99
70)	3,3'-Dichlorobenzidine	30.43	252	65850	167.10	ug/mL#	92
71)	Chrysene	30.35	228	152357	106.18	ug/mLm	99
72)	bis(2-Ethylhexyl)phthalate	31.14	149	325654	122.80	ug/mL#	38
74)	Di-n-octylphthalate	33.03	149	406461	88.26	ug/mL#	100
75)	Benzo[b]fluoranthene	33.30	252	147288	117.50	ug/mL#	84
76)	Benzo[k]fluoranthene	33.38	252	78044	82.74	ug/mLm	84
77)	Benzo[a]pyrene	34.11	252	74349	108.18	ug/mLm	83
78)	Indeno[1,2,3-cd]pyrene	36.77	276	44660	147.50	ug/mL#	47
79)	Dibenz[a,h]anthracene	36.89	278	42251	173.22	ug/mL#	78
80)	Benzo[g,h,i]perylene	37.31	276	40459	156.30	ug/mLm	71

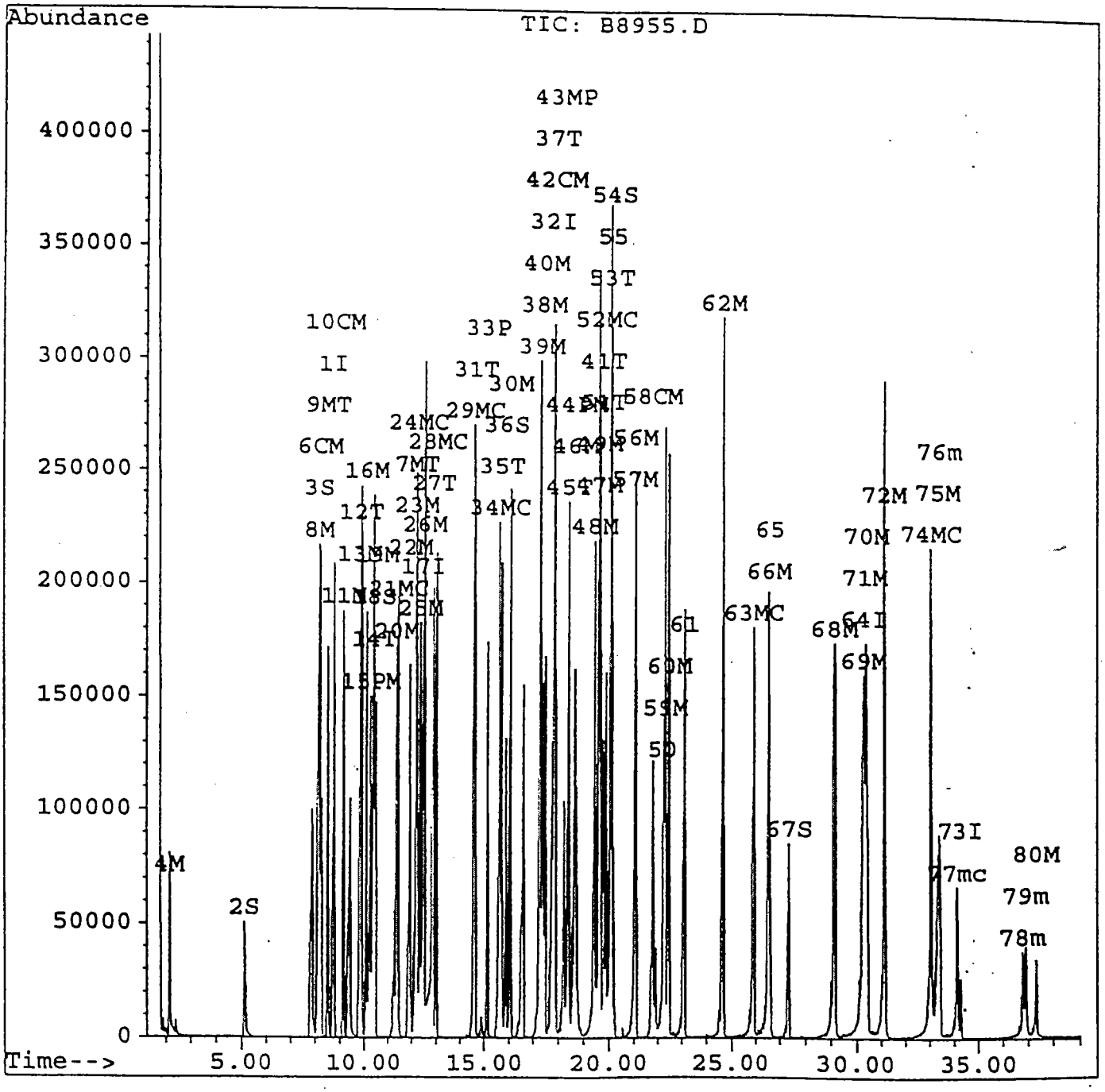
(#) = qualifier out of range (

Quantitation Report

Data File : c:\hpchem\1\data2\b8955.d
Acq On : 22 Oct 95 7:33 pm
Sample : 120 STD..... Converted from RTE d
Misc :
Quant Time: Oct 25 10:18 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 Sep 21 12:47:27 1995
Response via : Multiple Level Calibration



Quantitation Report

200

Data File : c:\hpchem\1\data2\b8956.d
Acq On : 22 Oct 95 8:24 pm
Sample : 160 STD....
Misc :
Quant Time: Oct 25 10:17 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 : Thu Sep 21 12:47:27 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.72	152	27386	40.00	ug/mL	-0.31
17) Naphthalene-d8	12.46	136	107758	40.00	ug/mL	-0.30
32) Acenaphthene-d10	17.76	164	64001	40.00	ug/mL	-0.32
50) Phenanthrene-d10	22.24	188	95140	40.00	ug/ml	-0.33
64) Chrysene-d12	30.32	240	58225	40.00	ug/mL	-0.37
73) Perylene-d12	34.24	264	21063	40.00	ug/mL	-0.45
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.13	112	44445	49.67	ug/mL	49.67%
3) Phenol-d5	8.16	99	75083	52.60	ug/mL	52.60%
18) Nitrobenzene-d5	10.43	82	72264	50.74	ug/mL	50.74%
36) 2-Fluorobiphenyl	15.91	172	99060	50.46	ug/mL	50.46%
54) 2,4,6-Tribromophenol	20.22	330	16295	64.13	ug/mL	64.13%
67) Terphenyl-d14	27.35	244	82703	44.20	ug/mL	44.20%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	2.17	74	103908	182.21	ug/ml	100
6) Phenol	8.21	94	225479	172.68	ug/mL	100
7) bis(2-Chloroethyl)ether	12.19	93	256181	166.42	ug/mL#	85
8) 2-Chlorophenol	8.16	128	146818	158.42	ug/mL#	83
9) 1,3-Dichlorobenzene	8.52	146	146004	153.71	ug/mL	97
10) 1,4-Dichlorobenzene	8.77	146	146889	150.93	ug/mL	96
11) 1,2-Dichlorobenzene	9.16	146	145353	155.36	ug/mL	97
12) 2-Methylphenol	9.89	108	140431	164.83	ug/mLm	98
13) bis(2-chloroisopropyl)ethe	9.91	45	341496	285.74	ug/mL#	1
14) 4-Methylphenol	10.43	108	147459	154.79	ug/mL	98
15) N-Nitroso-Di-n-propylamine	10.34	70	179120	183.32	ug/mL#	95
16) Hexachloroethane	10.10	117	94889	166.27	ug/mL#	68
19) Nitrobenzene	10.51	77	286692	219.52	ug/mL	90
20) Isophorone	11.42	82	441137	153.12	ug/mLm	92
21) 2-Nitrophenol	11.44	139	100411	170.88	ug/mL#	93
22) 2,4-Dimethylphenol	11.96	107	175209	171.62	ug/mL#	100
23) bis(2-Chloroethoxy)methane	12.19	93	256181	162.94	ug/mL#	100
24) 2,4-Dichlorophenol	12.27	162	129942	170.43	ug/mL#	91
25) 1,2,4-Trichlorobenzene	12.36	180	128880	161.68	ug/mL	94
26) Naphthalene	12.54	128	430569	161.32	ug/mL	98
27) 4-Chloroaniline	12.90	127	204994	163.55	ug/mL	100
28) Hexachlorobutadiene	13.02	225	66955	164.65	ug/mL	98
29) 4-Chloro-3-methylphenol	14.64	107	173471	178.55	ug/mL#	24
30) 2-Chloronaphthalene	16.10	162	277170	176.73	ug/ml#	100
31) 2-Methylnaphthalene	14.64	142	354781	224.91	ug/mL#	68
33) Hexachlorocyclopentadiene	15.16	237	78011	185.25	ug/mL	98
34) 2,4,6-Trichlorophenol	15.66	196	125669	177.65	ug/mL	96
35) 2,4,5-Trichlorophenol	15.74	196	69360	115.77	ug/mL	95

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

Quantitation Report

Data File : c:\hpchem\1\data2\b8956.d
Acq On : 22 Oct 95 8:24 pm
Sample : 160 STD....
Misc :
Quant Time: Oct 25 10:17 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 : Thu Sep 21 12:47:27 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37)	2-Nitroaniline	17.94	65	215417	205.92	ug/mL	88
38)	Dimethylphthalate	17.44	163	341294	166.10	ug/mL#	12
39)	Acenaphthylene	17.32	152	455035	159.47	ug/mL	97
40)	2,6-Dinitrotoluene	17.51	165	62227	114.45	ug/mL#	92
41)	3-Nitroaniline	19.87	138	76342	157.52	ug/mL	90
42)	Acenaphthene	17.88	153	252605	146.41	ug/mL	98
43)	2,4-Dinitrophenol	18.29	184	61925	303.03	ug/mL#	73
44)	4-Nitrophenol	18.77	109	62124	230.78	ug/mL#	58
45)	Dibenzofuran	18.44	168	392936	166.13	ug/mL#	88
46)	2,4-Dinitrotoluene	18.71	165	89489	153.63	ug/mL#	1
47)	Diethylphthalate	19.66	149	374865	165.28	ug/mL	94
48)	Fluorene	19.46	166	301296	163.35	ug/mL	99
49)	4-Chlorophenyl-phenylether	19.68	204	121982	148.05	ug/mL#	70
51)	4-Nitroaniline	19.87	138	76342	142.05	ug/mL	90
52)	4,6-Dinitro-2-methylphenol	19.93	198	54285	183.68	ug/mL	100
53)	n-Nitrosodiphenylamine	20.10	169	191063	151.61	ug/mL	95
55)	1,2-Diphenylhydrazine (as	20.14	77	657253	139.22	ug/ml	100
56)	4-Bromophenyl-phenylether	21.10	248	64647	124.52	ug/mL#	84
57)	Hexachlorobenzene	21.09	284	89180	152.80	ug/mL#	34
58)	Pentachlorophenol	21.82	266	66850	196.57	ug/mL	98
59)	Phenanthrene	22.34	178	400329	146.12	ug/mL	99
60)	Anthracene	22.50	178	391392	148.69	ug/mLm	99
61)	Carbazole	23.13	167	408325	161.50	ug/ml	95
62)	Di-n-butylphthalate	24.65	149	736070	146.37	ug/mL#	98
63)	Fluoranthene	26.52	202	405072	159.56	ug/mL#	56
65)	Benzidine	26.60	184	67999	136.03	ug/ml	100
66)	Pyrene	26.52	202	404840	127.19	ug/mL#	69
68)	Butylbenzylphthalate	29.15	149	308513	160.42	ug/mL#	9
69)	Benzo[a]anthracene	30.30	228	338083	180.70	ug/mL	99
70)	3,3'-Dichlorobenzidine	30.44	252	84475	211.34	ug/mL#	93
71)	Chrysene	30.38	228	179795	123.54	ug/mLm	99
72)	bis(2-Ethylhexyl)phthalate	31.13	149	408318	151.80	ug/mL#	37
74)	Di-n-octylphthalate	33.02	149	458843	110.66	ug/mL#	100
75)	Benzo[b]fluoranthene	33.31	252	156175	138.38	ug/mL#	83
76)	Benzo[k]fluoranthene	33.39	252	91964	108.29	ug/mLm	83
77)	Benzo[a]pyrene	34.10	252	88750	143.42	ug/mLm	83
78)	Indeno[1,2,3-cd]pyrene	36.78	276	49957	183.25	ug/mL#	44
79)	Dibenz[a,h]anthracene	36.90	278	50575	230.29	ug/mL#	79
80)	Benzo[g,h,i]perylene	37.32	276	46503	199.53	ug/mLm	69

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

Quantitation Report

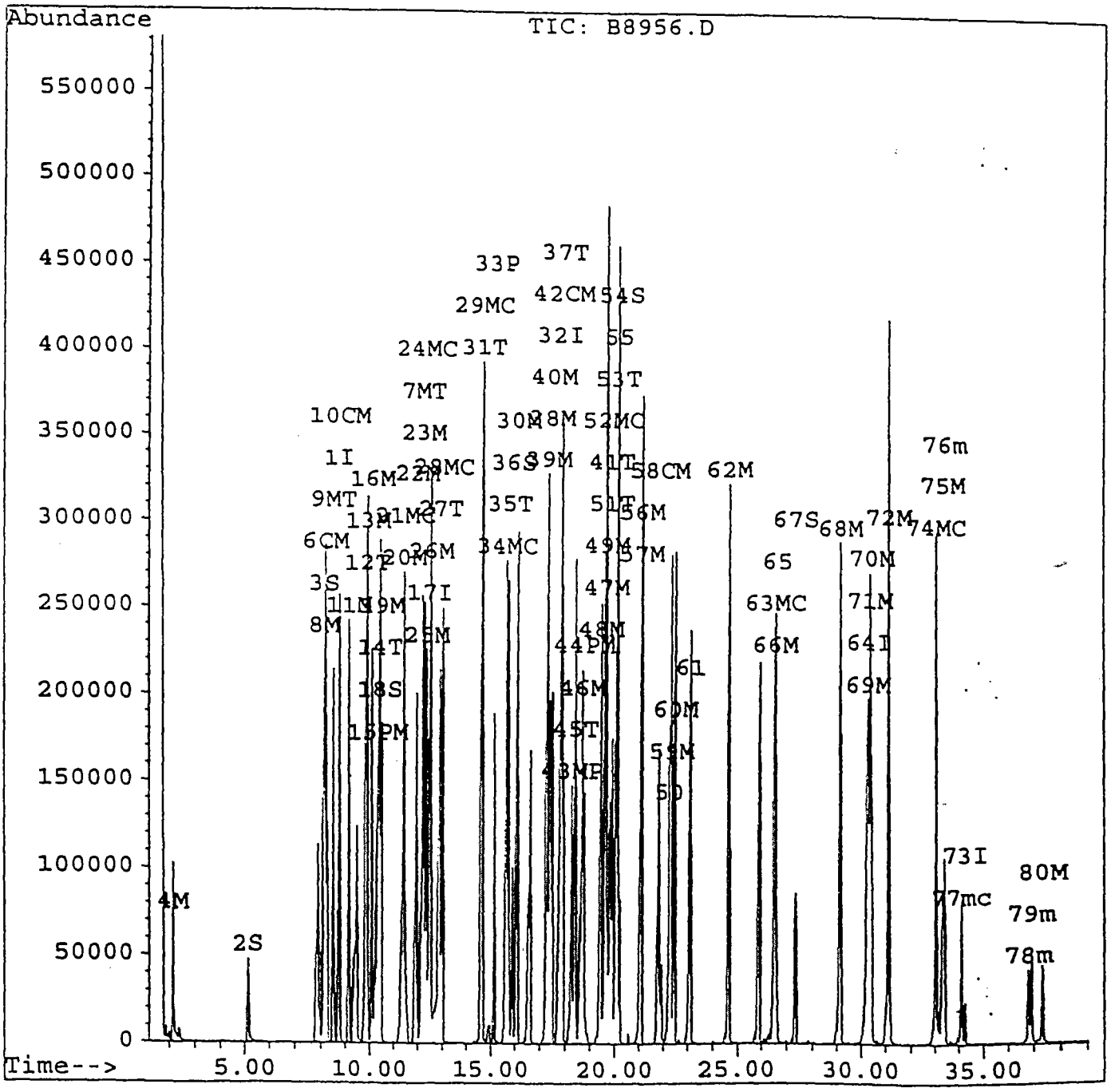
202

Data File : c:\hpchem\1\data2\b8956.d
Acq On : 22 Oct 95 8:24 pm
Sample : 160 STD....
Misc :
Quant Time: Oct 25 10:17 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 : Thu Sep 21 12:47:27 1995
Response via : Multiple Level Calibration



5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Nam EMSL Analytical Contract: _____

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

Lab File ID: B9453.D DFTPP Injection Date: 12/21/95

Instrument ID: ABNA DFTPP Injection Time: 1040

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE		
51	30.0 - 80.0% of mass 198	41.0		
68	Less than 2.0% of mass 69	0.0	0.0	)1
69	Mass 69 relative abundance	60.5		
70	Less than 2.0% of mass 69	0.9	1.5	)1
127	25.0 - 75.0% of mass 198	41.5		
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	6.0		
275	10.0 - 30.0% of mass 198	19.0		
365	Greater than 0.75% of mass 198	2.6		
441	Present, but less than mass 443	105.0		
442	40.0 - 110.0% of mass 198	64.0		
443	15.0 - 24.0% of mass 442	11.5	17.9	)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	B9454	12/21/95	1127
#		50 STANDARD	B9455	12/21/95	1218
#		80 STANDARD	B9456	12/21/95	1310
#		120 STANDARD	B9457	12/21/95	1402
#		160 STANDARD	B9458	12/21/95	1454
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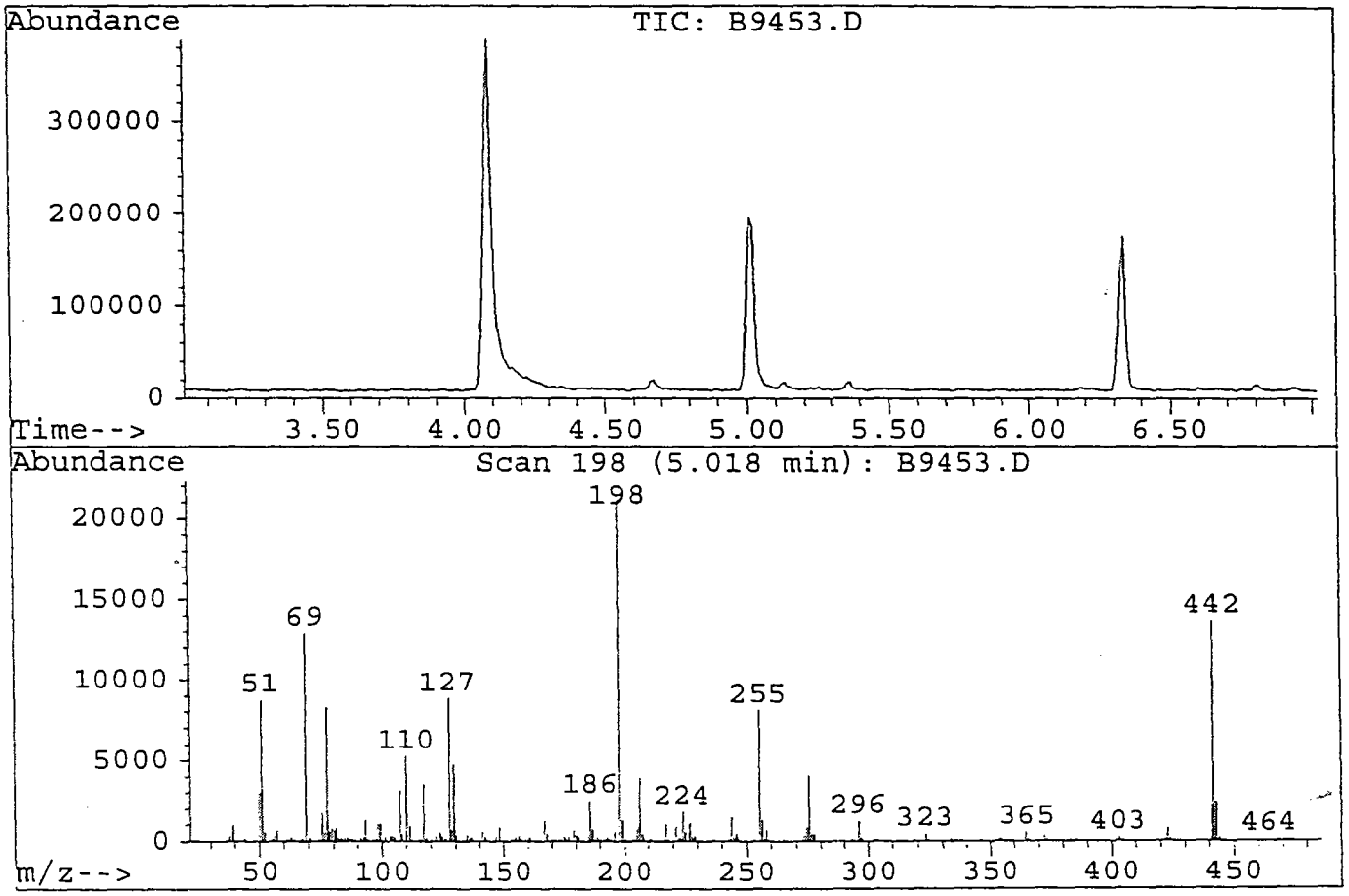
DFTPP

Data File : C:\HPCHEM\1\DATA2\B9453.D
Acq On : 21 Dec 95 10:40 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: 198

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	41.0	8742	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	60.5	12879	PASS
70	69	0	2	1.5	189	PASS
127	198	40	60	41.5	8838	PASS
197	198	0	1	0.0	0	PASS
198	198	100	100	100.0	21304	PASS
199	198	5	9	6.0	1278	PASS
275	198	10	30	19.0	4048	PASS
365	198	1	100	2.6	547	PASS
441	443	0	100	92.1	2247	PASS
442	198	40	100	64.0	13633	PASS
443	442	17	23	17.9	2441	PASS

Scan 198 (5.018 min): B9453.D
DFTPP..... Converted from RTE data file >B9453::D5

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	62	49.95	3032	61.25	138	67.55	178
36.80	144	50.95	8742	61.45	122	68.95	12879
37.90	298	51.95	554	61.75	90	70.05	189
39.10	1022	53.65	49	62.05	77	72.15	18
40.60	12	54.15	21	62.85	289	72.85	127
42.10	38	54.95	139	63.85	80	74.05	1066
42.80	117	55.15	151	64.65	83	75.05	1774
43.95	188	55.85	375	65.15	81	76.05	565
47.15	52	56.95	679	66.45	101	77.05	8292
47.85	62	58.95	50	66.65	108	78.05	598
48.65	90	60.85	110	67.05	63	79.05	744

Scan 198 (5.018 min): B9453.D
DFTPP..... Converted from RTE data file >B9453::D5

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
80.05	680	87.65	42	97.05	165	108.05	435
80.95	831	88.65	74	98.05	1101	109.95	5269
81.95	222	89.35	48	99.05	1040	111.05	935
82.35	95	91.05	253	99.95	102	111.95	82
82.55	93	92.05	219	101.05	281	112.65	60
83.05	208	92.95	1301	101.75	51	113.15	93
83.35	200	93.75	134	101.95	53	113.95	81
84.05	109	94.65	39	102.95	284	114.85	134
84.85	224	95.25	84	103.95	315	115.95	188
85.95	232	96.05	104	104.95	219	116.95	3544
87.05	173	96.65	120	107.05	3186	118.05	184

Scan 198 (5.018 min): B9453.D
DFTPP..... Converted from RTE data file >B9453::D5

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
118.85	53	130.00	375	140.90	569	154.10	117
119.75	86	130.90	103	142.00	234	155.00	331
121.95	340	132.40	81	142.90	95	156.10	365
123.05	517	132.90	45	145.30	28	157.00	115
123.95	265	134.10	139	145.90	113	158.70	82
125.05	141	135.00	427	146.80	317	159.00	127
125.25	160	135.90	202	147.90	901	160.00	240
125.55	113	136.80	214	148.90	127	161.00	281
127.05	8838	137.70	36	150.00	68	161.70	30
127.95	709	139.50	56	151.00	118	162.80	47
129.05	4726	140.10	102	153.00	161	163.00	44

Scan 198 (5.018 min): B9453.D
DFTPP..... Converted from RTE data file >B9453::D5

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
163.80	31	173.90	257	183.50	41	193.90	116
165.10	141	175.00	326	183.80	36	194.60	70
167.00	1310	176.00	154	185.00	346	196.10	579
168.00	493	176.90	292	186.00	2523	198.00	21304
168.70	76	178.00	70	187.00	724	199.00	1278
169.10	87	179.00	679	188.00	66	200.10	160
170.00	67	180.00	342	188.90	233	200.80	62
170.50	30	180.80	219	189.90	116	201.50	157
171.00	79	182.20	40	191.10	67	202.90	302
171.80	148	182.90	32	191.90	297	204.00	704
173.00	146	183.30	42	193.00	254	205.10	1039

Scan 198 (5.018 min): B9453.D
DFTPP..... Converted from RTE data file >B9453::D5

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
206.00	3967	216.85	1060	229.95	60	239.85	20
207.10	429	217.85	161	230.95	129	240.15	30
207.90	206	220.95	883	231.25	90	240.95	85
208.90	35	222.05	188	233.55	48	242.05	88
210.40	181	222.95	247	234.05	78	242.75	150
210.90	175	223.95	1827	234.95	133	243.05	137
213.30	77	224.95	607	235.95	84	243.95	1490
214.00	11	225.85	93	236.75	104	244.95	274
214.60	101	226.95	1141	237.95	24	245.95	464
214.90	51	227.85	275	238.25	16	246.95	113
216.10	152	228.95	303	239.15	53	248.85	74

Scan 198 (5.018 min): B9453.D
FTPP..... Converted from RTE data file >B9453::D5

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
249.85	69	260.75	23	274.95	4048	285.45	31
251.25	40	261.05	17	275.95	436	285.65	32
251.55	45	263.05	58	276.95	432	286.65	12
251.85	84	264.95	190	278.15	73	289.75	24
252.95	71	265.85	43	279.25	29	292.35	27
254.95	8092	267.65	37	280.15	34	293.15	153
255.95	1298	267.85	35	281.65	25	295.95	1227
256.95	174	269.65	37	282.75	54	296.85	184
257.95	677	271.95	89	282.95	52	298.25	22
258.75	70	272.95	341	283.95	32	298.55	23
258.95	76	273.95	849	285.05	67	300.45	52

Scan 198 (5.018 min): B9453.D
DFTPP..... Converted from RTE data file >B9453::D5

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
300.75	42	311.80	50	321.80	57	334.90	58
301.05	35	312.70	49	322.10	50	335.70	31
302.05	91	314.00	58	323.00	465	336.90	16
302.70	116	314.60	95	323.80	96	340.30	23
303.10	132	314.90	117	324.10	75	342.00	26
303.70	48	315.80	55	327.90	72	343.20	13
305.50	41	318.20	71	330.90	19	343.80	26
308.00	76	318.60	33	331.20	19	345.90	111
308.60	40	318.90	27	332.00	75	350.80	37
309.80	43	319.60	36	333.10	74	352.00	103
311.50	30	320.90	64	333.90	248	353.10	107

Scan 198 (5.018 min): B9453.D
FTPP..... Converted from RTE data file >B9453::D5

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
354.10	160	371.00	60	389.65	29	404.15	89
355.00	32	372.10	302	389.85	31	410.75	31
356.00	30	372.70	53	390.75	18	412.95	23
357.20	46	372.90	68	393.65	37	414.95	33
359.00	32	374.10	33	393.95	34	416.35	42
363.80	20	374.50	19	394.95	12	416.75	27
364.90	547	379.00	91	396.35	39	420.95	87
366.00	111	381.70	28	400.35	16	421.85	94
369.90	32	383.00	105	401.05	47	422.05	94
370.10	36	383.70	18	401.85	126	422.95	792
370.50	30	384.00	25	402.95	226	423.85	170

Scan 198 (5.018 min): B9453.D
DFTPP..... Converted from RTE data file >B9453::D5

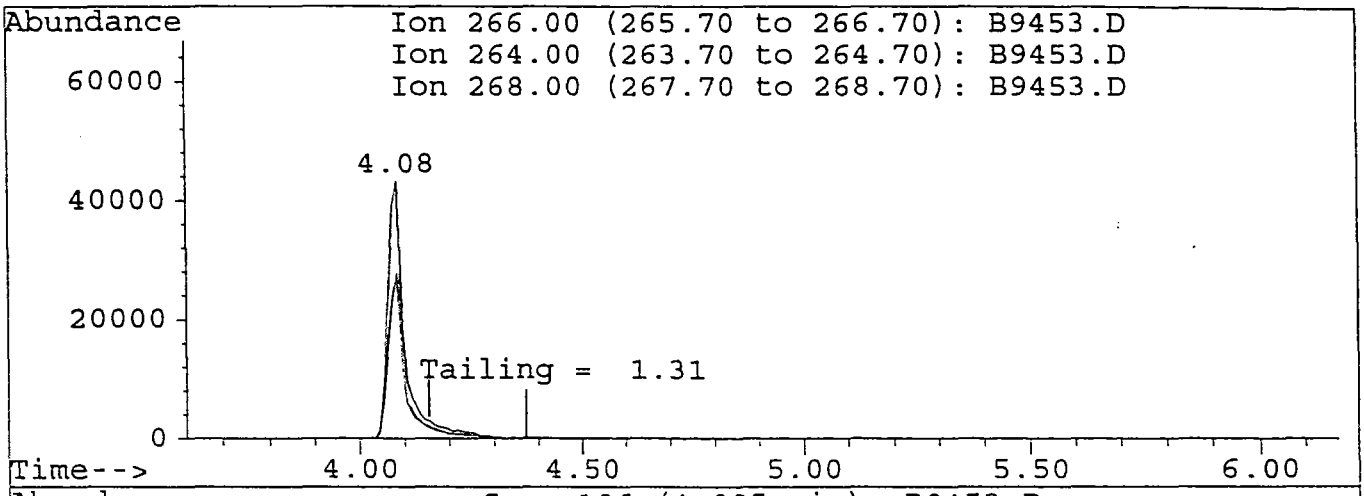
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
426.85	17	453.35	40				
435.05	42	459.15	23				
436.45	46	460.65	52				
437.35	29	464.35	85				
440.95	2247	468.05	39				
441.95	13633	470.25	26				
442.95	2441	472.05	20				
444.15	185						
449.05	27						
450.45	16						
451.05	12						

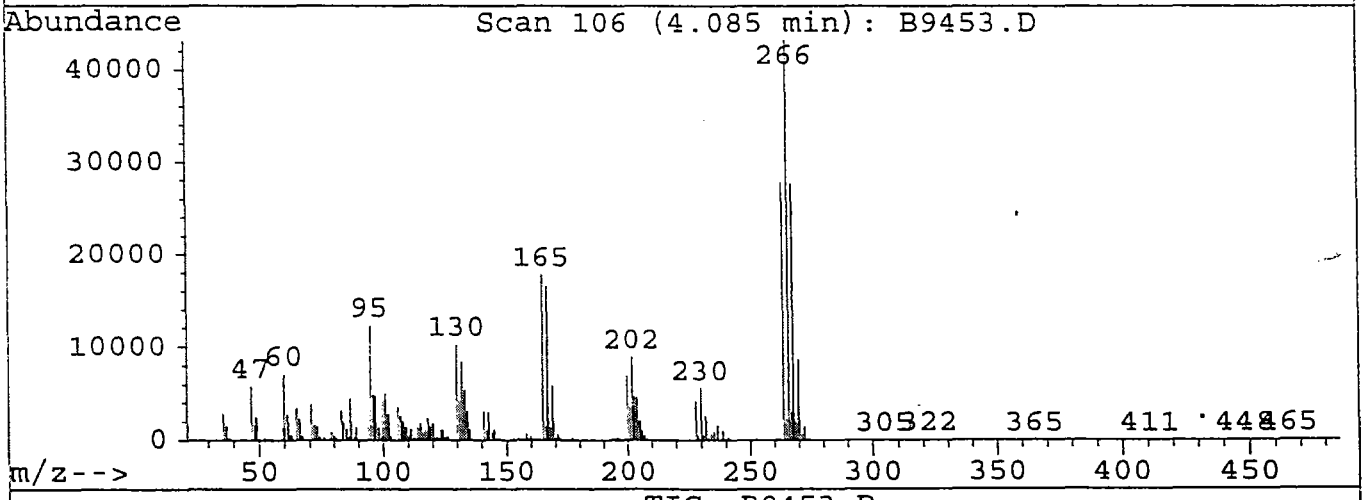
Quantitation Report

Data File : C:\HPCHEM\1\DATA2\B9453.D
Acq On : 21 Dec 95 10:40 am
Sample : DFTPP..... Converted from RTE d
Misc :
Quant Time: Dec 21 11:09 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 Nov 22 12:21:54 1995
Response via : Multiple Level Calibration





TIC: B9453.D

(1) Pentachlorophenol (CM)

5.12min 1.14ug/mL

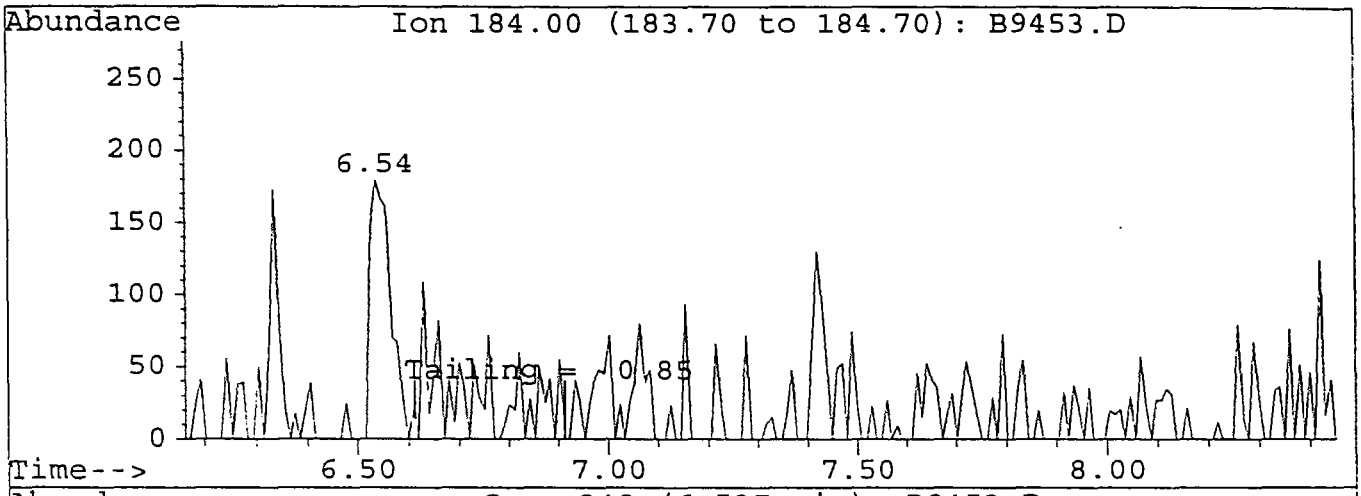
response 376

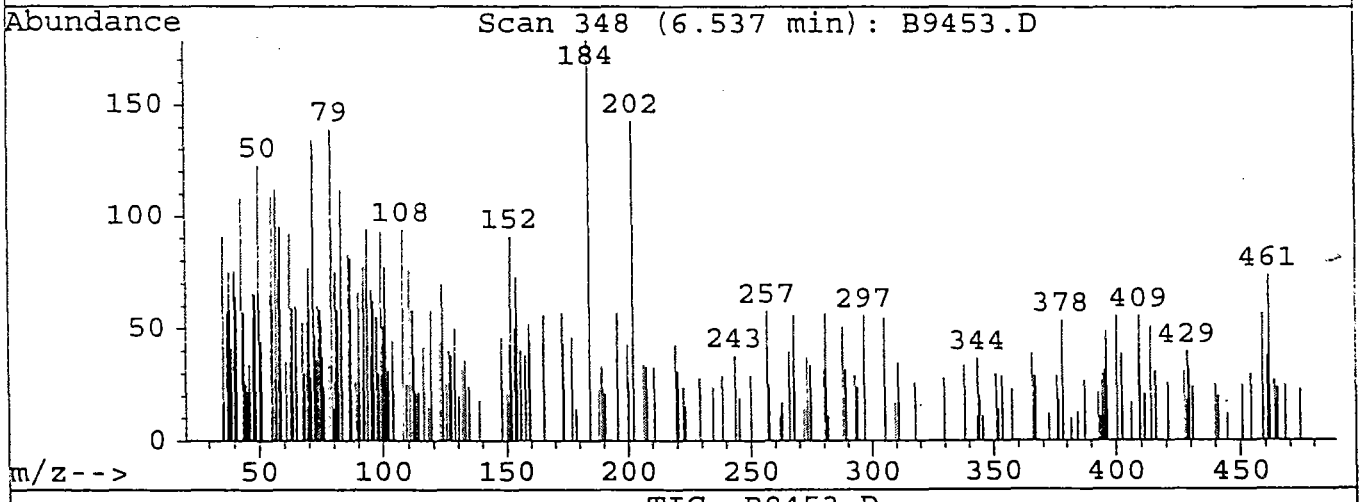
Ion	Exp%	Act%
266.00	100	100
264.00	64.30	33.51#
268.00	64.70	25.26#
0.00	0.00	0.00

Quantitation Report

Data File : C:\HPCHEM\1\DATA2\B9453.D Vial: 1
Acq On : 21 Dec 95 10:40 am Operator: SCOTTV
Sample : DFTPP..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Dec 21 11:09 1995

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed Nov 22 12:21:54 1995
Response via : Multiple Level Calibration





TIC: B9453.D

(2) Benzidine
7.42min 0.67ug/ml
response 205

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

210

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue Dec 26 12:04:15 1995
Response via : Initial Calibration

Calibration Files
160 =B9458.D 120 =B9457.D 80 =B9456.D
50 =B9455.D 20 =B9454.D

		Compound	160	120	80	50	20	Avg	%RSD
1)	I	1,4-Dichlorobenzene-d	----------ISTD----------						
2)	S	2-Fluorophenol	1.228	1.184	1.154	1.079	0.994	1.128	8.21
3)	S	Phenol-d5	2.072	1.805	1.745	1.612	1.425	1.732	13.84
4)	M	N-nitrosodimethylamin	0.863	0.840	0.578	0.697	0.631	0.722	17.42
5)		Pyridine		3.013				3.013	0.00
6)	CM	Phenol	1.609	1.727	1.640	1.575	1.310	1.572	9.98
7)	MT	bis(2-Chloroethyl)eth	1.872	1.941	1.803	1.860	1.547	1.805	8.43
8)	M	2-Chlorophenol	1.300	1.350	1.289	1.318	1.202	1.292	4.28
9)	MT	1,3-Dichlorobenzene	1.365	1.409	1.336	1.361	1.301	1.354	2.94
10)	CM	1,4-Dichlorobenzene	1.360	1.457	1.372	1.415	1.375	1.396	2.87
11)	M	1,2-Dichlorobenzene	1.322	1.404	1.352	1.379	1.323	1.356	2.62
12)	T	2-Methylphenol	1.129	1.192	1.189	1.154	0.951	1.123	8.89
13)	M	bis(2-chloroisopropyl	1.954	1.967	1.222	1.242	1.456	1.568	23.57
14)	T	4-Methylphenol	1.290	1.306	1.304	1.244	1.106	1.250	6.75
15)	PM	N-Nitroso-Di-n-propyl	1.125	1.113	0.984	1.048	0.818	1.018	12.29
16)	M	Hexachloroethane	0.850	0.895	0.888	0.896	0.803	0.866	4.67
17)	I	Naphthalene-d8	----------ISTD----------						
18)	S	Nitrobenzene-d5	0.413	0.407	0.396	0.366	0.323	0.381	9.80
19)	M	Nitrobenzene	0.505	0.488	0.480	0.459	0.393	0.465	9.35
20)	M	Isophorone	0.739	0.723	0.702	0.689	0.603	0.691	7.61
21)	MC	2-Nitrophenol	0.212	0.213	0.207	0.213	0.182	0.205	6.47
22)	M	2,4-Dimethylphenol	0.371	0.362	0.360	0.356	0.323	0.355	5.20
23)	M	bis(2-Chloroethoxy)me	0.449	0.449	0.416	0.427	0.367	0.421	8.01
24)	MC	2,4-Dichlorophenol	0.259	0.267	0.272	0.289	0.258	0.269	4.63
25)	M	1,2,4-Trichlorobenzen	0.281	0.288	0.291	0.303	0.319	0.296	5.00
26)	M	Naphthalene	0.940	0.867	0.903	0.944	0.874	0.906	3.96
27)	T	4-Chloroaniline	0.426	0.447	0.436	0.406	0.378	0.419	6.49
28)	MC	Hexachlorobutadiene	0.173	0.186	0.175	0.193	0.199	0.185	6.05
29)	MC	4-Chloro-3-methylphen	0.344	0.345	0.334	0.339	0.289	0.330	7.10
30)	M	2-Chloronaphthalene	0.648	0.636	0.586	0.643	0.647	0.632	4.11
31)	T	2-Methylnaphthalene	0.661	0.595	0.602	0.601	0.587	0.609	4.82
32)	I	Acenaphthene-d10	----------ISTD----------						
33)	P	Hexachlorocyclopentad	0.346	0.354	0.344	0.348	0.283	0.335	8.73
34)	MC	2,4,6-Trichlorophenol	0.429	0.371	0.357	0.362	0.358	0.375	8.06
35)	T	2,4,5-Trichlorophenol	0.295	0.347	0.371	0.362	0.308	0.337	9.96
36)	S	2-Fluorobiphenyl	1.221	1.177	1.206	1.205	1.227	1.207	1.60
37)	T	2-Nitroaniline	0.424	0.435	0.481	0.378	0.274	0.399	19.68
38)	M	Dimethylphthalate	1.045	1.180	1.271	1.324	1.353	1.235	10.11
39)	M	Acenaphthylene	1.716	1.723	1.667	1.724	1.614	1.689	2.83
40)	M	2,6-Dinitrotoluene	0.270	0.290	0.308	0.315	0.279	0.292	6.48
41)	T	3-Nitroaniline	0.161	0.220	0.291	0.222	0.170	0.213	24.31

(#) = Out of Range

Response Factor Report ABNA

211

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue Dec 26 12:04:15 1995
Response via : Initial Calibration

Calibration Files
160 =B9458.D 120 =B9457.D 80 =B9456.D
50 =B9455.D 20 =B9454.D

		Compound	160	120	80	50	20	Avg	%RSD
42)	CM	Acenaphthene	1.079	1.071	1.018	1.069	1.026	1.053	2.71
43)	MP	2,4-Dinitrophenol	0.145	0.164	0.148	0.099		0.139	19.97
44)	PM	4-Nitrophenol	0.188	0.255	0.246	0.177		0.216	18.37
45)	T	Dibenzofuran	1.245	1.299	1.506	1.464	1.412	1.385	7.96
46)	M	2,4-Dinitrotoluene	0.330	0.391	0.424	0.329	0.281	0.351	16.06
47)	M	Diethylphthalate	1.135	1.322	1.391	1.397	1.423	1.334	8.78
48)	M	Fluorene	0.932	1.076	1.070	1.099	1.098	1.055	6.62
49)	M	4-Chlorophenyl-phenyl	0.413	0.466	0.482	0.506	0.515	0.476	8.46
50)		Phenanthrene-d10	----------ISTD----------						
51)	T	4-Nitroaniline	0.125	0.141	0.177	0.181	0.134	0.152	16.67
52)	MC	4,6-Dinitro-2-methylp	0.107	0.151	0.146	0.116	0.088	0.122	21.65
53)	T	n-Nitrosodiphenylamin	0.453	0.426	0.406	0.540	0.533	0.472	13.03
54)	S	2,4,6-Tribromophenol	0.243	0.231	0.221	0.250	0.238	0.237	4.72
55)		1,2-Diphenylhydrazine	1.271	1.193	1.107	1.356	1.180	1.221	7.79
56)	M	4-Bromophenyl-phenyle	0.236	0.223	0.220	0.278	0.254	0.242	9.95
57)	M	Hexachlorobenzene	0.352	0.339	0.320	0.366	0.294	0.334	8.32
58)	CM	Pentachlorophenol	0.207	0.207	0.183	0.146		0.186	15.51
59)	M	Phenanthrene	1.071	1.035	1.013	1.045	0.977	1.028	3.42
60)	M	Anthracene	1.067	1.012	1.026	1.052	0.943	1.020	4.69
61)		Carbazole	0.975	1.004	0.959	0.823	0.563	0.865	21.12
62)	M	Di-n-butylphthalate	1.840	1.863	1.901	1.738	1.445	1.757	10.52
63)	MC	Fluoranthene	1.176	1.195	1.252	1.065	0.850	1.108	14.37
64)	I	Chrysene-d12	----------ISTD----------						
65)		Benzidine	0.015	0.010	0.009	0.011		0.011#	22.14
66)	M	Pyrene	1.369	1.312	1.259	1.189	0.974	1.221	12.54
67)	S	Terphenyl-d14	1.083	1.022	0.997	0.890	0.809	0.960	11.40
68)	M	Butylbenzylphthalate	0.888	0.877	0.834	0.818	0.684	0.820	9.95
69)	M	Benzo[a]anthracene	1.350	1.271	1.156	1.092	0.964	1.167	12.95
70)	M	3,3'-Dichlorobenzidin	0.394	0.506	0.385	0.375	0.368	0.406	14.09
71)	M	Chrysene	0.724	0.830	0.895	0.958	0.975	0.876	11.71
72)	M	bis(2-Ethylhexyl)phth	1.266	1.226	1.169	1.140	1.004	1.161	8.63
73)	I	Perylene-d12	----------ISTD----------						
74)	MC	Di-n-octylphthalate	3.247	3.396	3.061	2.567		3.068	11.75
75)	M	Benzo[b]fluoranthene	1.411	1.440	1.591	1.328	1.036	1.361	15.07
76)	m	Benzo[k]fluoranthene	1.350	0.971	1.142	1.177	1.138	1.156	11.68
77)	mc	Benzo[a]pyrene	1.067	1.059	1.152	1.008	0.917	1.041	8.30
78)	m	Indeno[1,2,3-cd]pyren	0.513	0.520	0.606	0.513	0.537	0.538	7.33
79)	m	Dibenz[a,h]anthracene	0.545	0.524	0.616	0.530	0.501	0.543	8.04
80)	M	Benzo[g,h,i]perylene	0.433	0.511	0.614	0.445	0.471	0.495	14.80

#) = Out of Range

Quantitation Report

Data File : c:\hpchem\1\data2\b9454.d Vial: 2
Acq On : 21 Dec 95 11:27 am Operator: SCOTTV
Sample : 20 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Dec 26 12:00 1995

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue Dec 26 12:09:14 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.28	152	7662	40.00	ug/mL	-0.56
17) Naphthalene-d8	11.01	136	32322	40.00	ug/mL	-0.56
32) Acenaphthene-d10	16.25	164	19863	40.00	ug/mL	-0.58
50) Phenanthrene-d10	20.64	188	25176	40.00	ug/ml	-0.61
64) Chrysene-d12	28.61	240	22480	40.00	ug/mL	-0.63
73) Perylene-d12	32.56	264	20050	40.00	ug/mL	-0.60
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	3.54	112	9517	43.63	ug/mL	43.63%
3) Phenol-d5	6.82	99	13651	37.58	ug/mL	37.58%
18) Nitrobenzene-d5	9.01	82	13036	33.75	ug/mL	33.75%
36) 2-Fluorobiphenyl	14.50	172	30473	57.71	ug/mL	57.71%
54) 2,4,6-Tribromophenol	18.66	330	7498	67.67	ug/mL	67.67%
67) Terphenyl-d14	25.78	244	22736	36.68	ug/mL	36.68%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	1.43	74	2412	14.76	ug/ml	100
6) Phenol	6.85	94	5020	15.89	ug/mL	100
7) bis(2-Chloroethyl)ether	10.80	93	5927	14.35	ug/mL	89
8) 2-Chlorophenol	6.72	128	4605	18.47	ug/mL#	89
9) 1,3-Dichlorobenzene	7.05	146	4983	19.23	ug/mL#	94
10) 1,4-Dichlorobenzene	7.32	146	5266	20.08	ug/mL	98
11) 1,2-Dichlorobenzene	7.70	146	5069	19.48	ug/mL	98
12) 2-Methylphenol	8.57	108	3642	15.61	ug/mLm	89
13) bis(2-chloroisopropyl)ethe	8.53	45	5577	12.97	ug/mLm	95
14) 4-Methylphenol	9.09	108	4236	16.93	ug/mL	89
15) N-Nitroso-Di-n-propylamine	8.84	70	3134	11.62	ug/mL#	87
16) Hexachloroethane	8.67	117	3075	19.39	ug/mL#	76
19) Nitrobenzene	9.05	77	6355	14.06	ug/mL#	62
20) Isophorone	9.88	82	9752	15.67	ug/mL	99
21) 2-Nitrophenol	9.99	139	2943	16.91	ug/mL#	79
22) 2,4-Dimethylphenol	10.59	107	5223	17.01	ug/mL#	100
23) bis(2-Chloroethoxy)methane	10.80	93	5927	14.19	ug/mL#	100
24) 2,4-Dichlorophenol	10.86	162	4169	18.64	ug/mL	94
25) 1,2,4-Trichlorobenzene	10.94	180	5150	20.39	ug/mL	92
26) Naphthalene	11.07	128	14124	18.24	ug/mL	98
27) 4-Chloroaniline	11.50	127	6115	16.97	ug/mL	97
28) Hexachlorobutadiene	11.63	225	3208	21.16	ug/mL	97
29) 4-Chloro-3-methylphenol	13.32	107	4666	14.54	ug/mL	95
30) 2-Chloronaphthalene	14.61	162	10449	18.67	ug/ml#	100
31) 2-Methylnaphthalene	13.19	142	9490	13.99	ug/mL	99
33) Hexachlorocyclopentadiene	13.73	237	2810	21.10	ug/mL	93
34) 2,4,6-Trichlorophenol	14.23	196	3554	20.37	ug/mL	88
35) 2,4,5-Trichlorophenol	14.38	196	3056	17.26	ug/mL	92

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

Quantitation Report

Data File : c:\hpchem\1\data2\b9454.d
Acq On : 21 Dec 95 11:27 am
Sample : 20 STD..... Converted from RTE d
Misc :
Quant Time: Dec 26 12:00 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 Dec 26 12:09:14 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37)	2-Nitroaniline	16.42	65	2724	8.44	ug/mL	91
38)	Dimethylphthalate	15.94	163	13442	19.82	ug/mL#	12
39)	Acenaphthylene	15.79	152	16031	20.09	ug/mL	97
40)	2,6-Dinitrotoluene	16.00	165	2773	16.62	ug/mL#	87
41)	3-Nitroaniline	18.23	138	1691	10.46	ug/mL	87
42)	Acenaphthene	16.33	153	10185	20.10	ug/mL	96
43)	2,4-Dinitrophenol	10.94	184	777	8.57	ug/mLm	91
44)	4-Nitrophenol	17.48	109	787	6.76	ug/mLm	76
45)	Dibenzofuran	16.89	168	14025	19.72	ug/mL#	86
46)	2,4-Dinitrotoluene	17.16	165	2795	12.19	ug/mL#	1
47)	Diethylphthalate	18.14	149	14134	19.00	ug/mL#	93
48)	Fluorene	17.91	166	10906	19.53	ug/mL	98
49)	4-Chlorophenyl-phenylether	18.14	204	5114	19.37	ug/mL#	88
51)	4-Nitroaniline	18.23	138	1691	15.00	ug/mL	87
52)	4,6-Dinitro-2-methylphenol	18.33	198	1110	13.48	ug/mL	100
53)	n-Nitrosodiphenylamine	18.56	169	6704	25.12	ug/mL	96
55)	1,2-Diphenylhydrazine (as	18.60	77	14848	19.77	ug/ml	100
56)	4-Bromophenyl-phenylether	19.56	248	3203	24.35	ug/mL	93
57)	Hexachlorobenzene	19.47	284	3706	20.06	ug/mL	96
58)	Pentachlorophenol	20.26	266	1247	10.87	ug/mL	91
59)	Phenanthrene	20.70	178	12303	19.77	ug/mL	93
60)	Anthracene	20.85	178	11874	18.90	ug/mLm	93
61)	Carbazole	21.56	167	7085	11.83	ug/ml	97
62)	Di-n-butylphthalate	23.16	149	18189	15.79	ug/mL	99
63)	Fluoranthene	24.26	202	10702	15.57	ug/mLm	98
65)	Benzidine	20.31	184	79	1.21	ug/mlm	100
66)	Pyrene	24.86	202	10946	13.15	ug/mL	94
68)	Butylbenzylphthalate	27.61	149	7686	12.60	ug/mL#	28
69)	Benzo[a]anthracene	28.59	228	10834	15.38	ug/mL	99
70)	3,3'-Dichlorobenzidine	28.82	252	4132	18.98	ug/mL	96
71)	Chrysene	28.67	228	10955	21.54	ug/mLm	99
72)	bis(2-Ethylhexyl)phthalate	29.63	149	11290	13.50	ug/mL#	28
74)	Di-n-octylphthalate	31.52	149	18880	8.88	ug/mL#	100
75)	Benzo[b]fluoranthene	31.59	252	10387	12.77	ug/mLm	96
76)	Benzo[k]fluoranthene	31.69	252	11411	18.67	ug/mL	96
77)	Benzo[a]pyrene	32.40	252	9191	17.76	ug/mLm	96
78)	Indeno[1,2,3-cd]pyrene	35.04	276	5380	14.75	ug/mL	90
79)	Dibenz[a,h]anthracene	35.19	278	5024	14.06	ug/mL	97
80)	Benzo[g,h,i]perylene	35.58	276	4721	12.99	ug/mLm	90

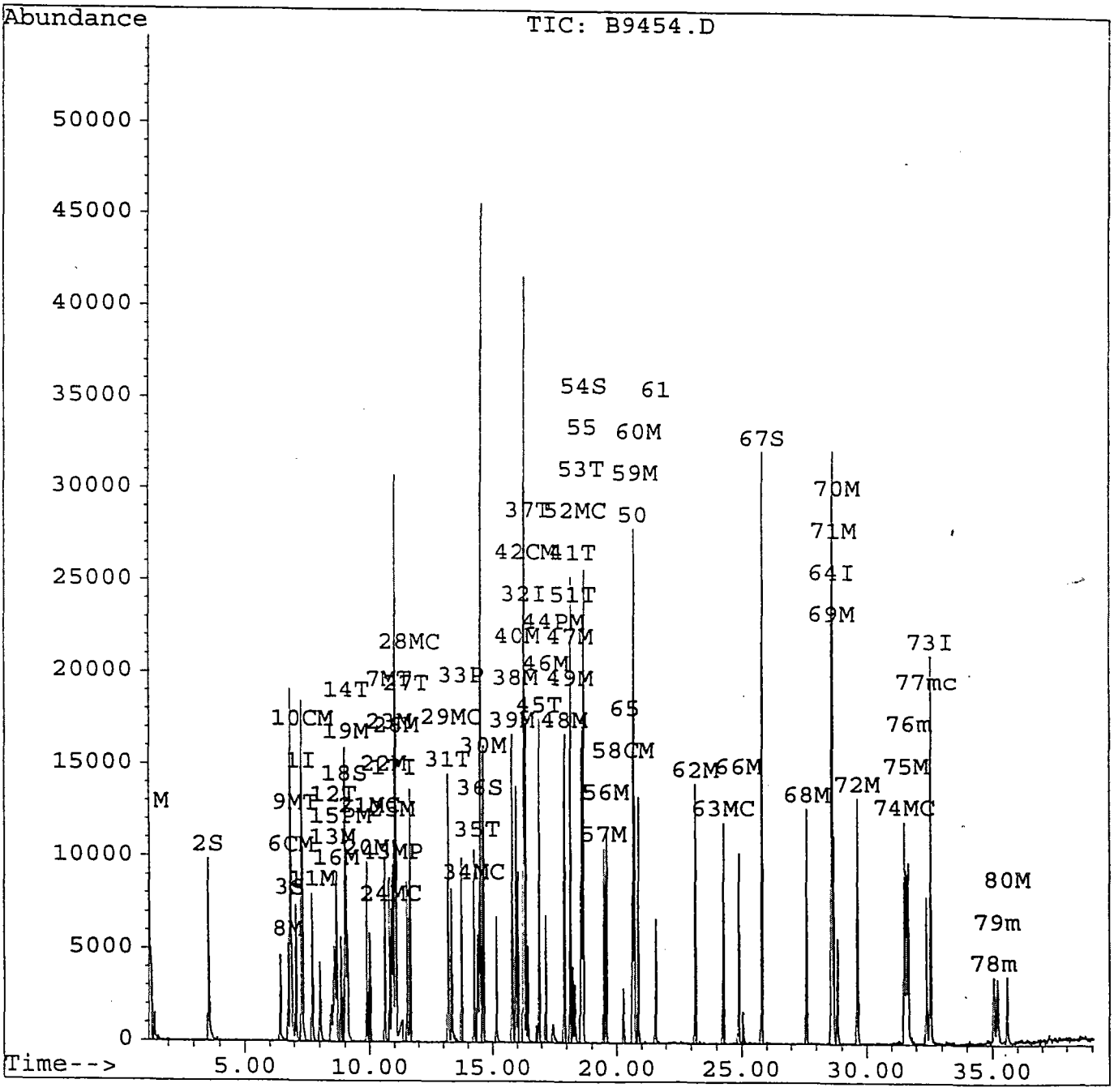
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data2\b9454.d
Acq On : 21 Dec 95 11:27 am
Sample : 20 STD..... Converted from RTE d
Misc :
Quant Time: Dec 26 12:00 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 Dec 26 12:09:14 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : c:\hpchem\1\data2\b9455.d Vial: 3 215
Acq On : 21 Dec 95 12:18 pm Operator: SCOTTV
Sample : 50 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Dec 26 11:51 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue Dec 26 12:09:14 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.28	152	8004	40.00	ug/mL	-0.56
17) Naphthalene-d8	11.04	136	34892	40.00	ug/mL	-0.54
32) Acenaphthene-d10	16.26	164	20965	40.00	ug/mL	-0.58
50) Phenanthrene-d10	20.65	188	25751	40.00	ug/ml	-0.60
64) Chrysene-d12	28.62	240	23396	40.00	ug/mL	-0.63
73) Perylene-d12	32.55	264	16072	40.00	ug/mL	-0.61
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	3.55	112	10796	47.38	ug/mL	47.38%
3) Phenol-d5	6.84	99	16130	42.51	ug/mL	42.51%
18) Nitrobenzene-d5	9.01	82	15954	38.26	ug/mL	38.26%
36) 2-Fluorobiphenyl	14.50	172	31574	56.65	ug/mL	56.65%
54) 2,4,6-Tribromophenol	18.66	330	8050	71.03	ug/mL	71.03%
67) Terphenyl-d14	25.79	244	26040	40.36	ug/mL	40.36%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	1.43	74	6976	40.87	ug/mlm	100
6) Phenol	6.88	94	15753	47.74	ug/mL	100
7) bis(2-Chloroethyl)ether	10.82	93	18609	43.12	ug/mL	89
8) 2-Chlorophenol	6.72	128	13188	50.62	ug/mL	90
9) 1,3-Dichlorobenzene	7.07	146	13616	50.29	ug/mL	99
10) 1,4-Dichlorobenzene	7.34	146	14161	51.68	ug/mL	97
11) 1,2-Dichlorobenzene	7.72	146	13798	50.75	ug/mL	98
12) 2-Methylphenol	8.59	108	11542	47.35	ug/mLm	97
13) bis(2-chloroisopropyl)ethe	8.47	45	12427	27.66	ug/mL#	93
14) 4-Methylphenol	9.11	108	12447	47.61	ug/mL	97
15) N-Nitroso-Di-n-propylamine	8.88	70	10482	37.21	ug/mL	88
16) Hexachloroethane	8.67	117	8967	54.11	ug/mL#	77
19) Nitrobenzene	9.07	77	20011	41.02	ug/mL#	77
20) Isophorone	9.92	82	30040	44.71	ug/mL	97
21) 2-Nitrophenol	10.02	139	9284	49.41	ug/mL#	80
22) 2,4-Dimethylphenol	10.61	107	15516	46.80	ug/mL#	100
23) bis(2-Chloroethoxy)methane	10.82	93	18609	41.28	ug/mL#	100
24) 2,4-Dichlorophenol	10.88	162	12585	52.13	ug/mL	95
25) 1,2,4-Trichlorobenzene	10.94	180	13201	48.41	ug/mL	94
26) Naphthalene	11.09	128	41172	49.27	ug/mL	100
27) 4-Chloroaniline	11.52	127	17713	45.52	ug/mL	94
28) Hexachlorobutadiene	11.63	225	8430	51.52	ug/mL	95
29) 4-Chloro-3-methylphenol	13.33	107	14771	42.63	ug/mL	92
30) 2-Chloronaphthalene	14.62	162	28046	46.42	ug/ml#	100
31) 2-Methylnaphthalene	13.21	142	26210	35.80	ug/mL	99
33) Hexachlorocyclopentadiene	13.73	237	9109	64.81	ug/mL	99
34) 2,4,6-Trichlorophenol	14.25	196	9481	51.47	ug/mL	99
35) 2,4,5-Trichlorophenol	14.37	196	9487	50.77	ug/mL	98

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

Quantitation Report

Data File : c:\hpchem\1\data2\b9455.d Vial: 3
Acq On : 21 Dec 95 12:18 pm Operator: SCOTTV
Sample : 50 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Dec 26 11:51 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue Dec 26 12:09:14 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37)	2-Nitroaniline	16.45	65	9916	29.09	ug/mL	92
38)	Dimethylphthalate	15.97	163	34709	48.48	ug/mL#	12
39)	Acenaphthylene	15.79	152	45172	53.64	ug/mL	99
40)	2,6-Dinitrotoluene	16.04	165	8250	46.84	ug/mL#	99
41)	3-Nitroaniline	18.30	138	5812	34.06	ug/mL#	77
42)	Acenaphthene	16.35	153	28015	52.38	ug/mL	96
43)	2,4-Dinitrophenol	16.78	184	2600	27.17	ug/mLm	71
44)	4-Nitrophenol	17.43	109	4634	37.73	ug/mLm	78
45)	Dibenzofuran	16.91	168	38364	51.10	ug/mL#	84
46)	2,4-Dinitrotoluene	17.18	165	8614	35.59	ug/mL#	1
47)	Diethylphthalate	18.16	149	36616	46.63	ug/mL	95
48)	Fluorene	17.91	166	28788	48.84	ug/mL	94
49)	4-Chlorophenyl-phenylether	18.16	204	13265	47.61	ug/mL#	73
51)	4-Nitroaniline	18.30	138	5812	50.41	ug/mL	77
52)	4,6-Dinitro-2-methylphenol	18.35	198	3739	44.38	ug/mL	100
53)	n-Nitrosodiphenylamine	18.59	169	17383	63.67	ug/mL	99
55)	1,2-Diphenylhydrazine (as	18.61	77	43654	56.83	ug/ml	100
56)	4-Bromophenyl-phenylether	19.57	248	8944	66.47	ug/mL	93
57)	Hexachlorobenzene	19.49	284	11769	62.27	ug/mL#	78
58)	Pentachlorophenol	20.26	266	4704	40.08	ug/mL	97
59)	Phenanthrene	20.72	178	33635	52.84	ug/mL	99
60)	Anthracene	20.88	178	33856	52.67	ug/mLm	99
61)	Carbazole	21.57	167	26489	43.23	ug/ml	94
62)	Di-n-butylphthalate	23.17	149	55929	47.47	ug/mL#	98
63)	Fluoranthene	24.27	202	34277	48.75	ug/mLm	83
65)	Benzidine	20.32	184	317	4.67	ug/mlm	100
66)	Pyrene	24.88	202	34777	40.14	ug/mL	95
68)	Butylbenzylphthalate	27.62	149	23933	37.69	ug/mL#	25
69)	Benzo[a]anthracene	28.60	228	31934	43.56	ug/mL	97
70)	3,3'-Dichlorobenzidine	28.83	252	10964	48.40	ug/mL	97
71)	Chrysene	28.69	228	28025	52.95	ug/mLm	97
72)	bis(2-Ethylhexyl)phthalate	29.62	149	33349	38.30	ug/mL#	19
74)	Di-n-octylphthalate	31.51	149	51581	30.27	ug/mL#	100
75)	Benzo[b]fluoranthene	31.60	252	26682	40.92	ug/mL	99
76)	Benzo[k]fluoranthene	31.68	252	23647	48.26	ug/mLm	99
77)	Benzo[a]pyrene	32.39	252	20248	48.82	ug/mLm	99
78)	Indeno[1,2,3-cd]pyrene	35.05	276	10316	35.28	ug/mL	96
79)	Dibenz[a,h]anthracene	35.18	278	10651	37.19	ug/mL	95
80)	Benzo[g,h,i]perylene	35.57	276	8932	30.66	ug/mLm	97

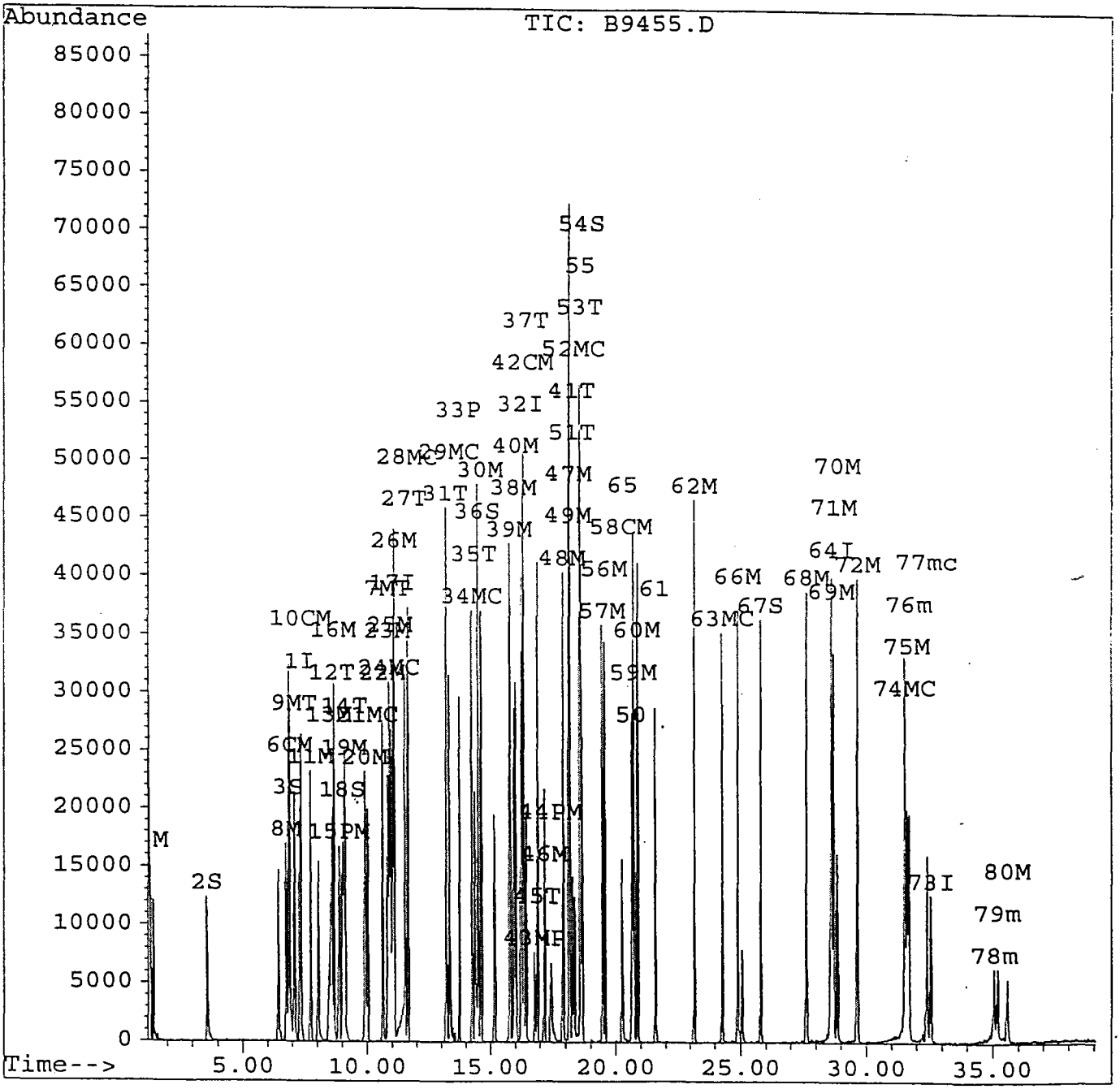
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data2\b9455.d
Acq On : 21 Dec 95 12:18 pm
Sample : 50 STD..... Converted from RTE d
Misc :
Quant Time: Dec 26 11:51 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 Dec 26 12:09:14 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : c:\hpchem\1\data2\b9456.d Vial: 4
Acq On : 21 Dec 95 1:10 pm Operator: SCOTTV
Sample : 80 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Dec 26 12:00 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue Dec 26 12:09:14 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.28	152	8895	40.00	ug/mL	-0.55
17) Naphthalene-d8	11.04	136	38554	40.00	ug/mL	-0.53
32) Acenaphthene-d10	16.28	164	23163	40.00	ug/mL	-0.55
50) Phenanthrene-d10	20.68	188	38104	40.00	ug/ml	-0.57
64) Chrysene-d12	28.65	240	38515	40.00	ug/mL	-0.59
73) Perylene-d12	32.54	264	22559	40.00	ug/mL	-0.61
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	3.57	112	12835	50.68	ug/mL	50.68%
3) Phenol-d5	6.86	99	19407	46.02	ug/mL	46.02%
18) Nitrobenzene-d5	9.04	82	19101	41.46	ug/mL	41.46%
36) 2-Fluorobiphenyl	14.51	172	34911	56.70	ug/mL	56.70%
54) 2,4,6-Tribromophenol	18.69	330	10517	62.72	ug/mL	62.72%
67) Terphenyl-d14	25.80	244	48017	45.21	ug/mL	45.21%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	1.43	74	10289	54.25	ug/ml	100
6) Phenol	6.90	94	29184	79.59	ug/mL	100
7) bis(2-Chloroethyl)ether	10.85	93	32076	66.88	ug/mL	94
8) 2-Chlorophenol	6.73	128	22932	79.21	ug/mL	94
9) 1,3-Dichlorobenzene	7.07	146	23775	79.02	ug/mL	92
10) 1,4-Dichlorobenzene	7.34	146	24405	80.15	ug/mL	97
11) 1,2-Dichlorobenzene	7.73	146	24045	79.58	ug/mL	98
12) 2-Methylphenol	8.61	108	21155	78.09	ug/mLm	99
13) bis(2-chloroisopropyl)ethe	8.50	45	21748	43.55	ug/mL	98
14) 4-Methylphenol	9.13	108	23194	79.83	ug/mL	99
15) N-Nitroso-Di-n-propylamine	8.92	70	17507	55.93	ug/mL	94
16) Hexachloroethane	8.67	117	15793	85.76	ug/mL#	80
19) Nitrobenzene	9.10	77	37043	68.72	ug/mL#	82
20) Isophorone	9.96	82	54123	72.91	ug/mL	96
21) 2-Nitrophenol	10.04	139	15978	76.96	ug/mL#	84
22) 2,4-Dimethylphenol	10.65	107	27775	75.81	ug/mL#	100
23) bis(2-Chloroethoxy)methane	10.85	93	32076	64.40	ug/mL#	100
24) 2,4-Dichlorophenol	10.91	162	20955	78.56	ug/mL	99
25) 1,2,4-Trichlorobenzene	10.96	180	22417	74.40	ug/mL	95
26) Naphthalene	11.10	128	69662	75.44	ug/mL	100
27) 4-Chloroaniline	11.54	127	33624	78.21	ug/mL	99
28) Hexachlorobutadiene	11.64	225	13513	74.73	ug/mL	99
29) 4-Chloro-3-methylphenol	13.33	107	25746	67.24	ug/mL	98
30) 2-Chloronaphthalene	14.64	162	45214	67.73	ug/ml#	100
31) 2-Methylnaphthalene	13.22	142	46386	57.34	ug/mL	96
33) Hexachlorocyclopentadiene	13.74	237	15949	102.71	ug/mL	99
34) 2,4,6-Trichlorophenol	14.26	196	16557	81.36	ug/mL	97
35) 2,4,5-Trichlorophenol	14.35	196	17168	83.15	ug/mL	93

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

Quantitation Report

Data File : c:\hpchem\1\data2\b9456.d Vial: 4 219
Acq On : 21 Dec 95 1:10 pm Operator: SCOTTV
Sample : 80 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Dec 26 12:00 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue Dec 26 12:09:14 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37)	2-Nitroaniline	16.47	65	22280	59.17	ug/mL	85
38)	Dimethylphthalate	16.01	163	58869	74.42	ug/mL#	12
39)	Acenaphthylene	15.82	152	77218	82.99	ug/mL	99
40)	2,6-Dinitrotoluene	16.07	165	14251	73.23	ug/mL#	100
41)	3-Nitroaniline	18.36	138	13461	71.40	ug/mL#	83
42)	Acenaphthene	16.38	153	47163	79.81	ug/mL	97
43)	2,4-Dinitrophenol	16.80	184	6858	64.88	ug/mL	89
44)	4-Nitrophenol	17.42	109	11409	84.07	ug/mL#	78
45)	Dibenzofuran	16.92	168	69770	84.11	ug/mL	89
46)	2,4-Dinitrotoluene	17.21	165	19651	73.48	ug/mL#	1
47)	Diethylphthalate	18.19	149	64429	74.26	ug/mL	95
48)	Fluorene	17.94	166	49570	76.12	ug/mL	96
49)	4-Chlorophenyl-phenylether	18.17	204	22315	72.49	ug/mL#	81
51)	4-Nitroaniline	18.36	138	13461	78.91	ug/mL	83
52)	4,6-Dinitro-2-methylphenol	18.42	198	11092	88.97	ug/mL	100
53)	n-Nitrosodiphenylamine	18.61	169	30957	76.63	ug/mL	97
55)	1,2-Diphenylhydrazine (as	18.63	77	84354	74.22	ug/ml	100
56)	4-Bromophenyl-phenylether	19.60	248	16761	84.18	ug/mL#	83
57)	Hexachlorobenzene	19.52	284	24393	87.22	ug/mL#	67
58)	Pentachlorophenol	20.29	266	13970	80.43	ug/mL	97
59)	Phenanthrene	20.75	178	77201	81.97	ug/mLm	99
60)	Anthracene	20.91	178	78172	82.19	ug/mL	99
61)	Carbazole	21.60	167	73111	80.63	ug/ml	95
62)	Di-n-butylphthalate	23.18	149	144908	83.12	ug/mL	99
63)	Fluoranthene	24.30	202	95434	91.73	ug/mLm	81
65)	Benzidine	20.33	184	688	6.15	ug/mlm	100
66)	Pyrene	24.91	202	97013	68.01	ug/mL#	90
68)	Butylbenzylphthalate	27.63	149	64270	61.48	ug/mL#	23
69)	Benzo[a]anthracene	28.61	228	89034	73.77	ug/mL	100
70)	3,3'-Dichlorobenzidine	28.84	252	29641	79.48	ug/mL#	93
71)	Chrysene	28.71	228	68904	79.08	ug/mLm	100
72)	bis(2-Ethylhexyl)phthalate	29.63	149	90066	62.84	ug/mL#	28
74)	Di-n-octylphthalate	31.52	149	138120	57.74	ug/mL#	100
75)	Benzo[b]fluoranthene	31.62	252	71800	78.45	ug/mL	99
76)	Benzo[k]fluoranthene	31.69	252	51514	74.90	ug/mLm	99
77)	Benzo[a]pyrene	32.41	252	51963	89.25	ug/mLm	99
78)	Indeno[1,2,3-cd]pyrene	35.04	276	27346	66.62	ug/mL	99
79)	Dibenz[a,h]anthracene	35.18	278	27796	69.14	ug/mL	95
80)	Benzo[g,h,i]perylene	35.56	276	27708	67.77	ug/mLm	99

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

Quantitation Report

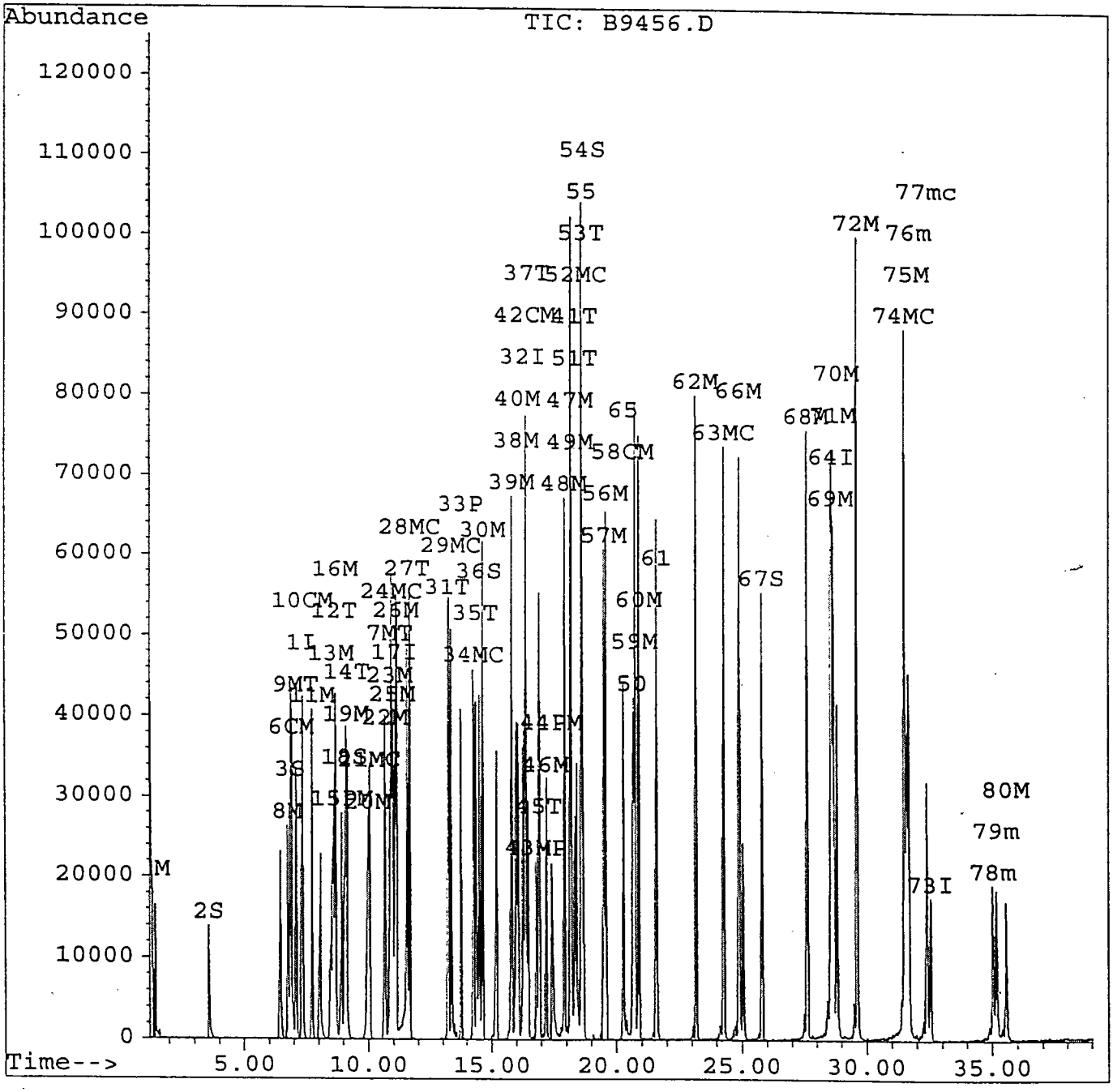
220

Data File : c:\hpchem\1\data2\b9456.d
Acq On : 21 Dec 95 1:10 pm
Sample : 80 STD.....
Misc :
Quant Time: Dec 26 12:00 1995

Converted from RTE d

Vial: 4
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue Dec 26 12:09:14 1995
Response via : Multiple Level Calibration



Quantitation Report

221

Data File : c:\hpchem\1\data2\b9457.d Vial: 5
Acq On : 21 Dec 95 2:02 pm Operator: SCOTTV
Sample : 120 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Dec 26 12:00 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue Dec 26 12:09:14 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.30	152	8190	40.00	ug/mL	-0.54
17) Naphthalene-d8	11.06	136	35391	40.00	ug/mL	-0.51
32) Acenaphthene-d10	16.28	164	22200	40.00	ug/mL	-0.55
50) Phenanthrene-d10	20.68	188	34602	40.00	ug/ml	-0.57
64) Chrysene-d12	28.66	240	32600	40.00	ug/mL	-0.59
73) Perylene-d12	32.53	264	18735	40.00	ug/mL	-0.62
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	3.57	112	12125	52.00	ug/mL	52.00%
3) Phenol-d5	6.88	99	18477	47.59	ug/mL	47.59%
18) Nitrobenzene-d5	9.06	82	17988	42.53	ug/mL	42.53%
36) 2-Fluorobiphenyl	14.53	172	32672	55.36	ug/mL	55.36%
54) 2,4,6-Tribromophenol	18.69	330	10000	65.67	ug/mL	65.67%
67) Terphenyl-d14	25.79	244	41637	46.32	ug/mL	46.32%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	1.45	74	20634	118.15	ug/mlm	100
6) Phenol	6.92	94	42436	125.69	ug/mL	100
7) bis(2-Chloroethyl)ether	10.87	93	47690	108.00	ug/mL	96
8) 2-Chlorophenol	6.74	128	33167	124.42	ug/mL	96
9) 1,3-Dichlorobenzene	7.09	146	34619	124.97	ug/mL	100
10) 1,4-Dichlorobenzene	7.36	146	35798	127.68	ug/mL	97
11) 1,2-Dichlorobenzene	7.75	146	34486	123.96	ug/mL	96
12) 2-Methylphenol	8.63	108	29290	117.42	ug/mLm	99
13) bis(2-chloroisopropyl)ethe	8.50	45	48332	105.12	ug/mL#	94
14) 4-Methylphenol	9.17	108	32087	119.94	ug/mL	99
15) N-Nitroso-Di-n-propylamine	8.96	70	27347	94.88	ug/mL	93
16) Hexachloroethane	8.69	117	22000	129.75	ug/mL#	70
19) Nitrobenzene	9.11	77	51833	104.75	ug/mL	92
20) Isophorone	10.02	82	76712	112.57	ug/mL	99
21) 2-Nitrophenol	10.06	139	22639	118.78	ug/mL#	88
22) 2,4-Dimethylphenol	10.67	107	38451	114.33	ug/mL#	100
23) bis(2-Chloroethoxy)methane	10.87	93	47690	104.30	ug/mL#	100
24) 2,4-Dichlorophenol	10.93	162	28385	115.92	ug/mL	96
25) 1,2,4-Trichlorobenzene	10.96	180	30567	110.51	ug/mL	94
26) Naphthalene	11.12	128	92013	108.55	ug/mL	100
27) 4-Chloroaniline	11.56	127	47491	120.34	ug/mL	99
28) Hexachlorobutadiene	11.64	225	19723	118.83	ug/mL	98
29) 4-Chloro-3-methylphenol	13.35	107	36615	104.18	ug/mL	96
30) 2-Chloronaphthalene	14.64	162	67502	110.15	ug/ml#	100
31) 2-Methylnaphthalene	13.24	142	63165	85.06	ug/mL	97
33) Hexachlorocyclopentadiene	13.76	237	23556	158.28	ug/mL	99
34) 2,4,6-Trichlorophenol	14.28	196	24740	126.84	ug/mL	99
35) 2,4,5-Trichlorophenol	14.37	196	23132	116.90	ug/mL	94

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

Quantitation Report

Data File : c:\hpchem\1\data2\b9457.d Vial: 5
Acq On : 21 Dec 95 2:02 pm Operator: SCOTTV
Sample : 120 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Dec 26 12:00 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue Dec 26 12:09:14 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37)	2-Nitroaniline	16.49	65	28959	80.24	ug/mL	93
38)	Dimethylphthalate	16.03	163	78566	103.63	ug/mL#	12
39)	Acenaphthylene	15.82	152	114738	128.66	ug/mL	99
40)	2,6-Dinitrotoluene	16.09	165	19290	103.42	ug/mL#	97
41)	3-Nitroaniline	18.37	138	14668	81.18	ug/mL#	85
42)	Acenaphthene	16.38	153	71340	125.96	ug/mL	99
43)	2,4-Dinitrophenol	16.82	184	10898	107.57	ug/mL	94
44)	4-Nitrophenol	17.44	109	16951	130.32	ug/mL	85
45)	Dibenzofuran	16.94	168	86490	108.79	ug/mL#	83
46)	2,4-Dinitrotoluene	17.23	165	26014	101.49	ug/mL#	1
47)	Diethylphthalate	18.21	149	88020	105.86	ug/mL#	93
48)	Fluorene	17.96	166	71673	114.84	ug/mL	97
49)	4-Chlorophenyl-phenylether	18.19	204	31028	105.16	ug/mL#	69
51)	4-Nitroaniline	18.37	138	14668	94.69	ug/mL	85
52)	4,6-Dinitro-2-methylphenol	18.42	198	15657	138.30	ug/mL	100
53)	n-Nitrosodiphenylamine	18.62	169	44226	120.55	ug/mL	94
55)	1,2-Diphenylhydrazine (as	18.66	77	123892	120.03	ug/ml	100
56)	4-Bromophenyl-phenylether	19.60	248	23142	128.00	ug/mL#	85
57)	Hexachlorobenzene	19.52	284	35191	138.57	ug/mL#	83
58)	Pentachlorophenol	20.29	266	21519	136.44	ug/mL	97
59)	Phenanthrene	20.76	178	107392	125.56	ug/mL	99
60)	Anthracene	20.91	178	105043	121.62	ug/mLm	99
61)	Carbazole	21.61	167	104225	126.58	ug/ml	96
62)	Di-n-butylphthalate	23.18	149	193398	122.17	ug/mL#	99
63)	Fluoranthene	24.30	202	123997	131.25	ug/mLm	77
65)	Benzidine	20.33	184	1007	10.64	ug/mlm	100
66)	Pyrene	24.92	202	128320	106.28	ug/mL#	88
68)	Butylbenzylphthalate	27.62	149	85757	96.92	ug/mL#	27
69)	Benzo[a]anthracene	28.62	228	124306	121.68	ug/mL	100
70)	3,3'-Dichlorobenzidine	28.83	252	49504	156.82	ug/mL#	95
71)	Chrysene	28.71	228	81173	110.06	ug/mLm	100
72)	bis(2-Ethylhexyl)phthalate	29.62	149	119876	98.81	ug/mL#	23
74)	Di-n-octylphthalate	31.51	149	190845	96.07	ug/mL#	100
75)	Benzo[b]fluoranthene	31.63	252	80942	106.49	ug/mLm	97
76)	Benzo[k]fluoranthene	31.70	252	54593	95.58	ug/mLm	97
77)	Benzo[a]pyrene	32.40	252	59541	123.14	ug/mLm	97
78)	Indeno[1,2,3-cd]pyrene	35.03	276	29204	85.67	ug/mL	99
79)	Dibenz[a,h]anthracene	35.17	278	29443	88.19	ug/mL#	91
80)	Benzo[g,h,i]perylene	35.56	276	28700	84.52	ug/mLm	99

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

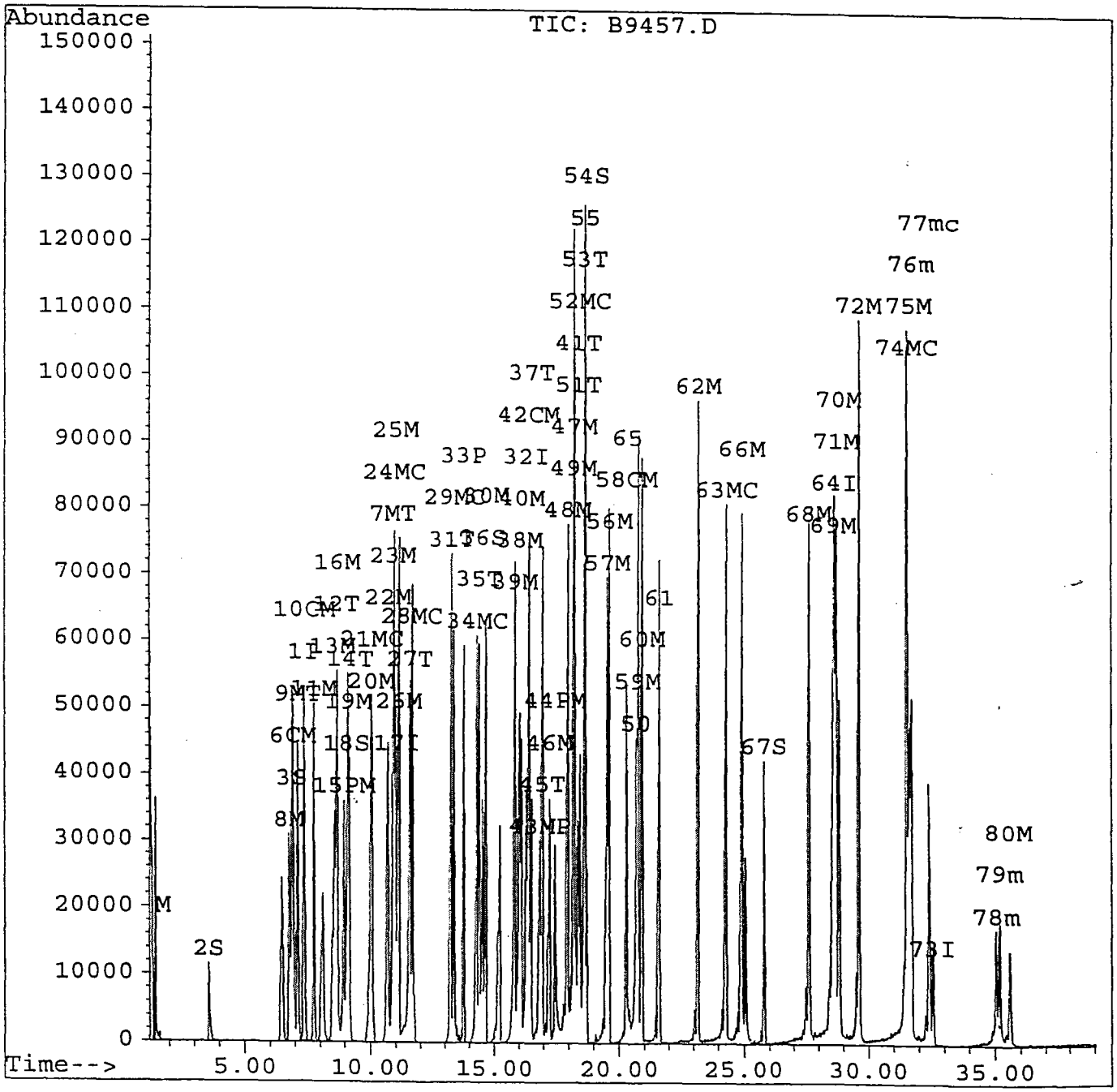
Quantitation Report

Data File : c:\hpchem\1\data2\b9457.d
Acq On : 21 Dec 95 2:02 pm
Sample : 120 STD.....
Misc :
Quant Time: Dec 26 12:00 1995

Converted from RTE d

Vial: 5
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue Dec 26 12:09:14 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : c:\hpchem\1\data2\b9458.d Vial: 6
Acq On : 21 Dec 95 2:54 pm Operator: SCOTTV
Sample : 160 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Dec 26 12:02 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue Dec 26 12:09:14 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.30	152	8269	40.00	ug/mL	-0.54
17) Naphthalene-d8	11.06	136	34499	40.00	ug/mL	-0.51
32) Acenaphthene-d10	16.29	164	21782	40.00	ug/mL	-0.55
50) Phenanthrene-d10	20.67	188	27930	40.00	ug/ml	-0.58
64) Chrysene-d12	28.65	240	23706	40.00	ug/mL	-0.59
73) Perylene-d12	32.54	264	14423	40.00	ug/mL	-0.61
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	3.57	112	12694	53.92	ug/mL	53.92%
3) Phenol-d5	6.88	99	21421	54.64	ug/mL	54.64%
18) Nitrobenzene-d5	9.06	82	17829	43.25	ug/mL	43.25%
36) 2-Fluorobiphenyl	14.53	172	33244	57.41	ug/mL	57.41%
54) 2,4,6-Tribromophenol	18.70	330	8467	68.88	ug/mL	68.88%
67) Terphenyl-d14	25.79	244	32094	49.10	ug/mL	49.10%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	1.45	74	28534	161.82	ug/mlm	100
6) Phenol	6.92	94	53208	156.09	ug/mL	100
7) bis(2-Chloroethyl)ether	10.89	93	61925	138.90	ug/mL	87
8) 2-Chlorophenol	6.76	128	42995	159.75	ug/mL	97
9) 1,3-Dichlorobenzene	7.09	146	45149	161.42	ug/mL	99
10) 1,4-Dichlorobenzene	7.36	146	44987	158.92	ug/mL	97
11) 1,2-Dichlorobenzene	7.75	146	43720	155.65	ug/mL	97
12) 2-Methylphenol	8.65	108	37342	148.27	ug/mLm	94
13) bis(2-chloroisopropyl)ethe	8.50	45	64623	139.21	ug/mL#	93
14) 4-Methylphenol	9.19	108	42669	157.98	ug/mL	94
15) N-Nitroso-Di-n-propylamine	8.98	70	37226	127.93	ug/mL	99
16) Hexachloroethane	8.69	117	28100	164.14	ug/mL#	78
19) Nitrobenzene	9.13	77	69678	144.45	ug/mL	98
20) Isophorone	10.06	82	101950	153.48	ug/mLm	97
21) 2-Nitrophenol	10.06	139	29260	157.49	ug/mL	91
22) 2,4-Dimethylphenol	10.68	107	51255	156.35	ug/mL#	100
23) bis(2-Chloroethoxy)methane	10.89	93	61925	138.93	ug/mL#	100
24) 2,4-Dichlorophenol	10.93	162	35697	149.55	ug/mL	97
25) 1,2,4-Trichlorobenzene	10.98	180	38777	143.82	ug/mL	93
26) Naphthalene	11.14	128	129660	156.92	ug/mL	99
27) 4-Chloroaniline	11.56	127	58737	152.68	ug/mL	99
28) Hexachlorobutadiene	11.66	225	23811	147.16	ug/mL	98
29) 4-Chloro-3-methylphenol	13.35	107	47402	138.36	ug/mL	96
30) 2-Chloronaphthalene	14.67	162	89457	149.75	ug/ml#	100
31) 2-Methylnaphthalene	13.24	142	91151	125.92	ug/mL	95
33) Hexachlorocyclopentadiene	13.76	237	30132	206.35	ug/mL	98
34) 2,4,6-Trichlorophenol	14.28	196	37340	195.12	ug/mL	97
35) 2,4,5-Trichlorophenol	14.38	196	25693	132.34	ug/mL	97

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

Quantitation Report

Data File : c:\hpchem\1\data2\b9458.d Vial: 6
Acq On : 21 Dec 95 2:54 pm Operator: SCOTTV
Sample : 160 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Dec 26 12:02 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue Dec 26 12:09:14 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37)	2-Nitroaniline	16.52	65	36969	104.40	ug/mL	87
38)	Dimethylphthalate	16.03	163	91077	122.44	ug/mL#	11
39)	Acenaphthylene	15.84	152	149482	170.84	ug/mL	100
40)	2,6-Dinitrotoluene	16.11	165	23495	128.39	ug/mL#	93
41)	3-Nitroaniline	18.37	138	14010	79.02	ug/mL	90
42)	Acenaphthene	16.40	153	94052	169.25	ug/mL	96
43)	2,4-Dinitrophenol	16.83	184	12676	127.52	ug/mL	86
44)	4-Nitrophenol	17.44	109	16337	128.01	ug/mL#	81
45)	Dibenzofuran	16.94	168	108498	139.09	ug/mL#	87
46)	2,4-Dinitrotoluene	17.25	165	28746	114.30	ug/mL#	1
47)	Diethylphthalate	18.22	149	98897	121.22	ug/mL#	92
48)	Fluorene	17.96	166	81212	132.62	ug/mL	95
49)	4-Chlorophenyl-phenylether	18.20	204	36009	124.38	ug/mL#	70
51)	4-Nitroaniline	18.37	138	14010	112.04	ug/mL	90
52)	4,6-Dinitro-2-methylphenol	18.45	198	12005	131.37	ug/mL	100
53)	n-Nitrosodiphenylamine	18.62	169	50591	170.84	ug/mL	98
55)	1,2-Diphenylhydrazine (as	18.66	77	141967	170.40	ug/ml	100
56)	4-Bromophenyl-phenylether	19.61	248	26396	180.87	ug/mL#	89
57)	Hexachlorobenzene	19.53	284	39275	191.60	ug/mL#	87
58)	Pentachlorophenol	20.30	266	23142	181.78	ug/mL	95
59)	Phenanthrene	20.76	178	119616	173.26	ug/mL	99
60)	Anthracene	20.92	178	119156	170.92	ug/mLm	99
61)	Carbazole	21.61	167	108930	163.89	ug/ml	95
62)	Di-n-butylphthalate	23.19	149	205554	160.87	ug/mL#	98
63)	Fluoranthene	24.31	202	131389	172.29	ug/mLm	82
65)	Benzidine	20.34	184	1395	20.27	ug/mlm	100
66)	Pyrene	24.91	202	129819	147.87	ug/mL	92
68)	Butylbenzylphthalate	27.63	149	84223	130.90	ug/mL#	25
69)	Benzo[a]anthracene	28.63	228	128013	172.33	ug/mL	99
70)	3,3'-Dichlorobenzidine	28.84	252	37391	162.89	ug/mL#	95
71)	Chrysene	28.73	228	68647	128.00	ug/mLm	99
72)	bis(2-Ethylhexyl)phthalate	29.63	149	120019	136.04	ug/mL#	25
74)	Di-n-octylphthalate	31.52	149	187341	122.50	ug/mL#	100
75)	Benzo[b]fluoranthene	31.64	252	81381	139.08	ug/mLm	97
76)	Benzo[k]fluoranthene	31.64	252	77913	177.18	ug/mLm	97
77)	Benzo[a]pyrene	32.41	252	61572	165.42	ug/mLm	97
78)	Indeno[1,2,3-cd]pyrene	35.05	276	29591	112.76	ug/mL	98
79)	Dibenz[a,h]anthracene	35.18	278	31456	122.38	ug/mL#	92
80)	Benzo[g,h,i]perylene	35.57	276	24967	95.51	ug/mLm	99

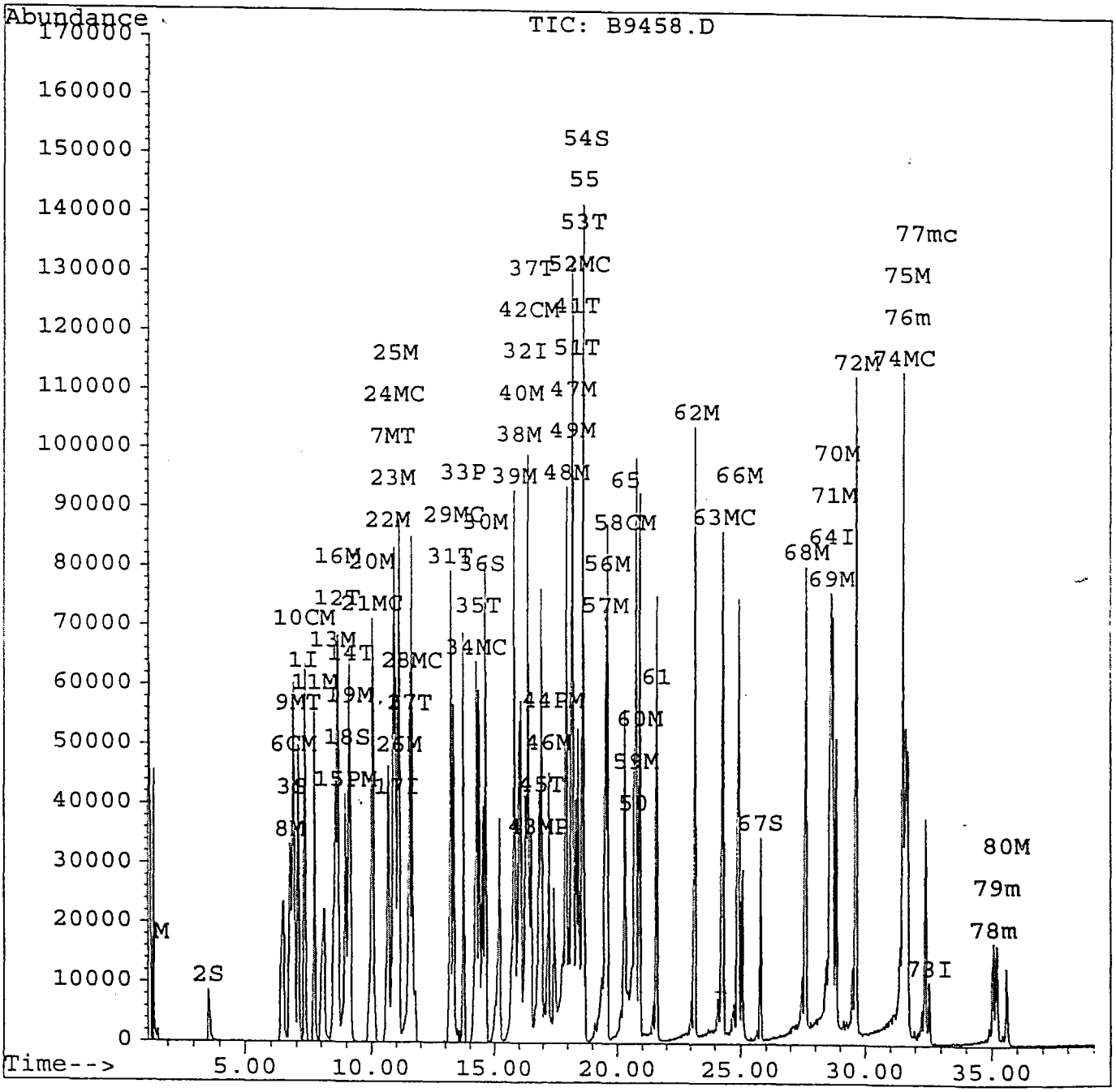
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data2\b9458.d
Acq On : 21 Dec 95 2:54 pm
Sample : 160 STD..... Converted from RTE d
Misc :
Quant Time: Dec 26 12:02 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 Dec 26 12:09:14 1995
Response via : Multiple Level Calibration



5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

227

Lab Name : EMSL ANALYTICAL Contract: _____

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

Lab File ID: B9005.D DFTPP Injection Date: 10/27/95

Instrument ID: ABNA DFTPP Injection Time: 1121

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	58.5
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	76.5
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	25.0 - 75.0% of mass 198	46.5
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	7.5
275	10.0 - 30.0% of mass 198	19.3
365	Greater than 0.75% of mass 198	2.3
441	Present, but less than mass 443	10.1
442	40.0 - 110.0% of mass 198	62.3
443	15.0 - 24.0% of mass 442	11.8 (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:

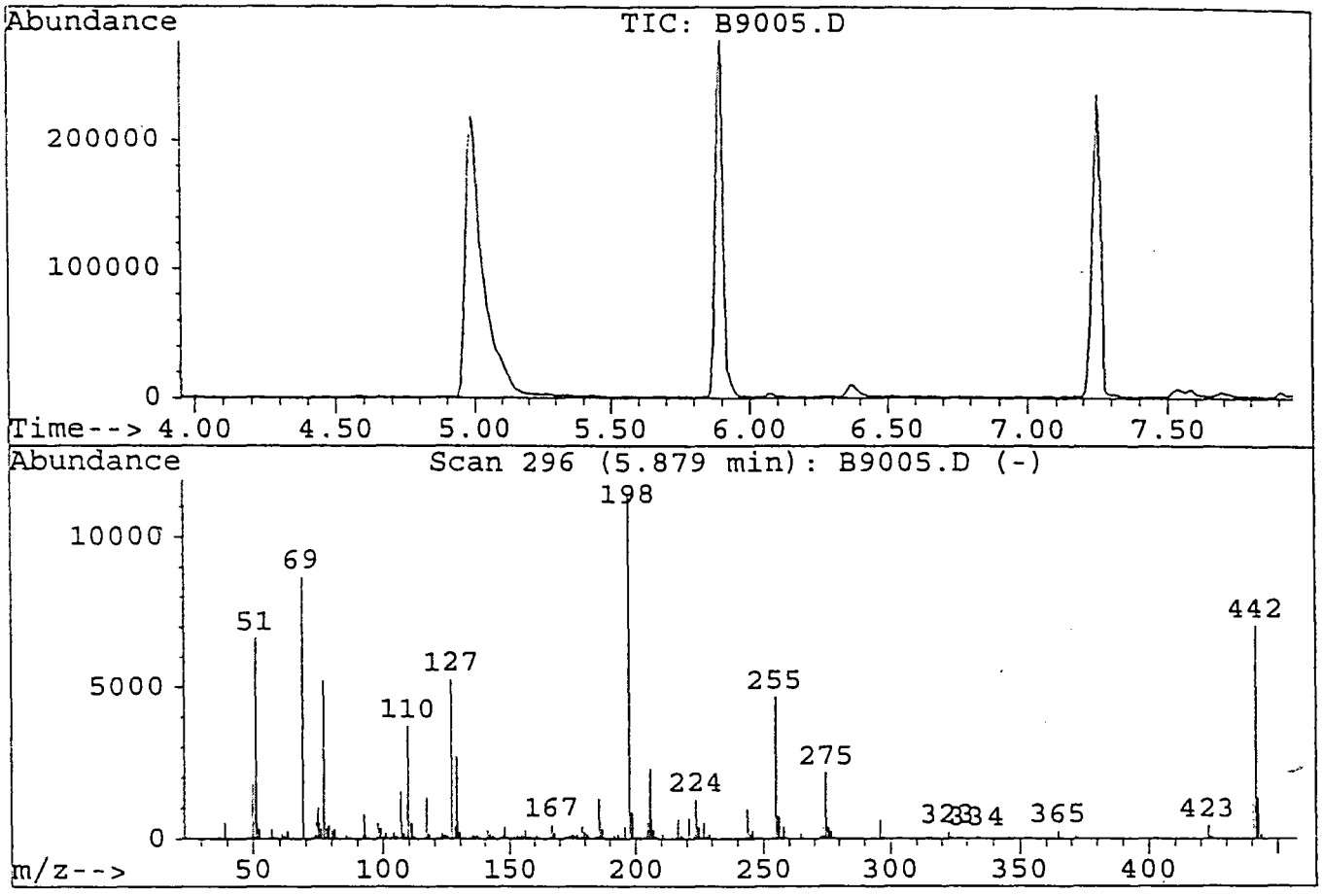
	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD050	50 STD	B9008.D	10/27/95	1329
02	SBLK01	BLANK1	B9009.D	10/27/95	1421
03	9547000B	9547000B	B9010.D	10/27/95	1512
04	46360MS	46360MS	B9011.D	10/27/95	1604
05	46360MSD	46360MSD	B9012.D	10/27/95	1656
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

DFTPP

Data File : C:\HPCHEM\1\DATA2\B9005.D
Acq On : 27 Oct 95 11:21 am
Sample : DFTPP.....
Misc :

Vial: 1
Operator: SCOTTV
Converted from RTE d Inst : ABNA
BT Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration



Peak Apex is scan: 303

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	58.5	6640	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	76.5	8681	PASS
70	69	0	2	0.0	0	PASS
127	198	40	60	46.5	5278	PASS
197	198	0	1	0.0	0	PASS
198	198	100	100	100.0	11354	PASS
199	198	5	9	7.5	851	PASS
275	198	10	30	19.3	2186	PASS
365	198	1	100	2.3	262	PASS
441	443	0	100	85.7	1150	PASS
442	198	40	100	62.3	7070	PASS
443	442	17	23	19.0	1342	PASS

Scan 296 (5.879 min): B9005.D

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
37.00	76	61.05	162	78.05	357	92.95	836
39.10	538	62.05	105	78.95	456	94.05	60
40.10	11	63.05	251	80.05	272	96.00	4
49.15	60	64.05	21	81.05	337	98.00	514
50.10	1802	65.05	39	82.05	22	99.00	334
51.10	6640	69.05	8681	83.95	27	100.00	61
52.10	309	73.25	96	84.15	30	100.90	173
56.05	84	74.05	568	85.95	152	102.10	23
57.05	325	74.95	1043	87.05	60	103.00	131
57.95	40	75.95	325	88.15	24	104.00	213
58.95	33	77.05	5224	92.15	139	105.00	77

Scan 296 (5.879 min): B9005.D

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
106.10	45	119.20	28	131.95	21	145.95	60
107.00	1558	120.10	23	133.85	94	147.05	123
108.00	176	122.10	159	135.05	173	147.95	389
109.10	71	123.10	219	135.95	85	148.85	58
109.95	3714	124.00	134	136.95	116	150.05	34
111.00	519	125.00	94	137.75	36	151.25	56
112.00	87	127.00	5278	140.05	29	151.95	43
113.10	31	128.00	424	140.95	285	152.95	140
116.00	131	128.95	2715	141.95	153	153.95	69
117.00	1370	129.85	217	143.05	97	154.95	138
117.90	140	131.10	50	145.05	19	156.05	290

Scan 296 (5.879 min): B9005.D

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
157.15	71	169.10	53	178.80	398	189.90	28
157.95	86	170.20	25	179.85	215	190.90	62
158.95	48	170.90	34	180.90	122	191.90	140
159.95	73	171.90	78	181.90	29	193.00	137
160.85	143	173.00	95	182.80	17	195.00	27
161.95	53	174.00	147	184.00	47	195.90	402
164.05	17	175.00	154	184.80	122	197.90	11354
164.90	13	176.00	98	185.85	1327	198.80	851
165.95	79	177.10	135	186.90	319	200.00	72
166.90	470	177.80	31	187.90	49	201.40	85
167.90	186	178.10	37	188.80	46	203.00	60

Scan 296 (5.879 min): B9005.D

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
203.80	274	220.95	681	234.95	47	246.90	54
204.95	542	222.85	148	235.95	43	247.60	10
205.95	2320	223.85	1298	236.95	67	248.90	64
206.85	289	224.95	385	239.05	37	253.40	16
207.95	112	225.95	47	239.90	19	254.90	4690
208.95	41	226.95	533	240.90	49	255.80	735
210.75	167	227.95	107	241.80	74	256.90	64
214.85	42	228.85	163	242.90	80	257.90	400
215.95	68	229.95	32	243.90	1011	258.90	49
216.75	644	230.85	57	244.80	168	264.90	163
217.95	101	233.85	55	245.90	273	271.80	20

Scan 296 (5.879 min): B9005.D

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
272.90	141	302.85	75	331.70	25	365.85	41
273.80	394	303.95	33	332.90	24	370.85	31
274.90	2186	313.80	44	333.90	159	371.85	130
275.90	356	314.90	72	334.90	33	382.55	16
276.85	235	315.90	45	340.70	20	382.95	24
277.75	37	320.70	24	345.80	64	389.70	22
282.95	18	321.80	17	351.95	54	401.90	58
284.95	37	322.90	232	352.95	51	402.80	67
293.05	43	323.90	53	353.85	74	403.70	21
295.85	649	326.70	36	354.85	17	420.90	47
296.85	108	327.90	29	364.85	262	422.90	447

Scan 296 (5.879 min): B9005.D

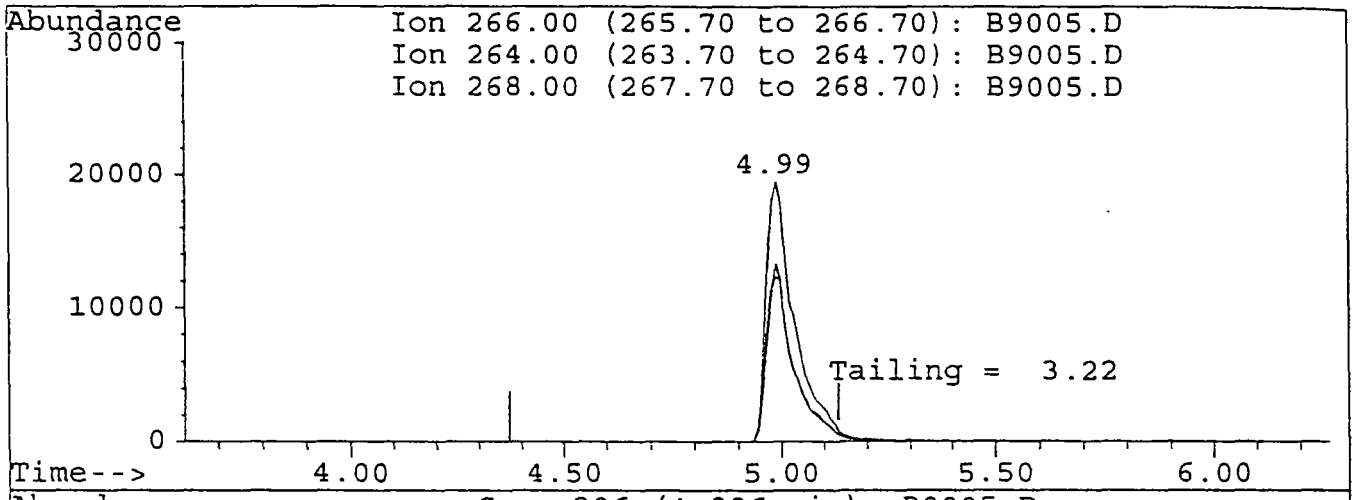
Modified:subtracted

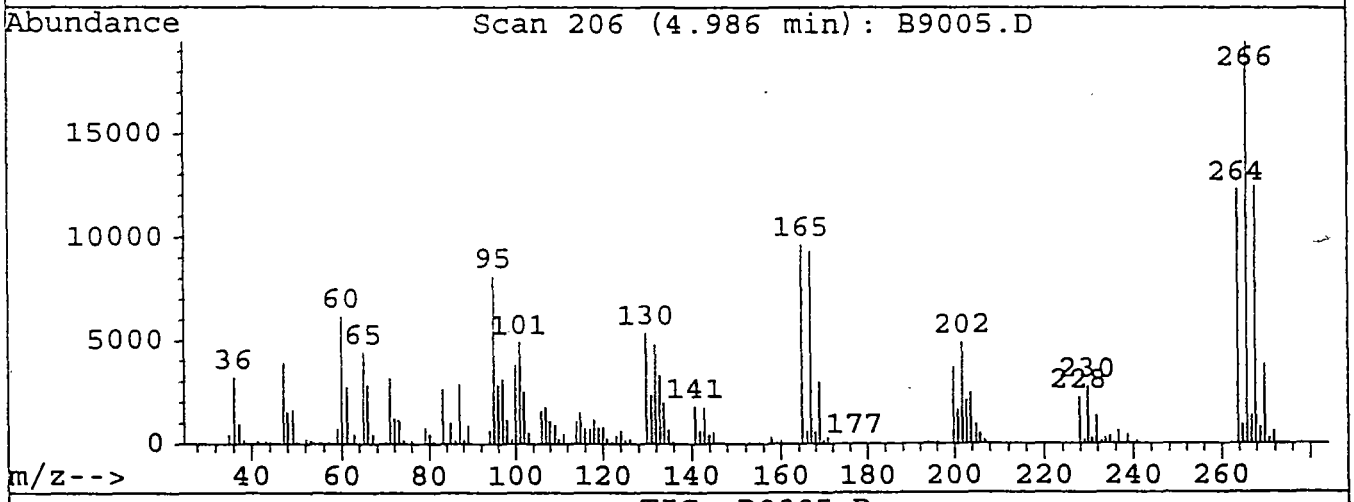
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
423.85	81						
440.85	1150						
441.85	7070						
442.75	1342						
443.75	155						

Quantitation Report

Data File : C:\HPCHEM\1\DATA2\B9005.D Vial: 1
Acq On : 27 Oct 95 11:21 am Operator: SCOTTV
Sample : DFTPP..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Oct 27 12:32 1995

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed Oct 25 10:20:51 1995
Response via : Multiple Level Calibration





TIC: B9005.D

(1) Pentachlorophenol (CM)

4.99min 272.64ug/mL

response 90052

Ion	Exp%	Act%
266.00	100	100
264.00	64.30	63.35
268.00	64.70	68.27
0.00	0.00	0.00

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EMSL ANALYTICAL Contract: _____

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

Instrument ID: ABNA Calibration Date: #### Time: 1329

Lab File ID: B9008.D Init. Calib. Date(s): #### 1/0/00

Init. Calib. Times: 1329 0000

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Chrysene	0.857	1.008		-17.6	
bis(2-Ethylhexyl)phthalate	1.785	1.714		4.0	
Di-n-octylphthalate	5.692	5.727		-0.6	30.0
Benzo[b]fluoranthene	1.952	1.846		5.4	
Benzo[k]fluoranthene	1.162	1.246		-7.2	
Benzo[a]pyrene	1.081	1.178		-9.0	30.0
Indeno[1,2,3-cd]pyrene	0.561	0.585		-4.3	
Dibenz[a,h]anthracene	0.549	0.494		10.0	
Benzo[g,h,i]perylene	0.510	0.437		14.3	
Nitrobenzene-d5	0.542	0.524		3.3	
2-Fluorobiphenyl	1.220	1.209		0.9	
Terphenyl-d14	0.994	1.151		-15.8	

All other compounds must meet a minimum RRF of 0.010.

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA2\B9008.D Vial: 2
Acq On : 27 Oct 95 1:29 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 : Wed Oct 25 10:20:51 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	89	-0.10
2	S	2-Fluorophenol	1.275	1.248	2.1	88	-0.08
3	S	Phenol-d5	2.069	2.002	3.2	89	-0.04
4	M	N-nitrosodimethylamine	0.887	0.841	5.2	84	-0.06
5		Pyridine	0.795	0.000#	100.0#	0#	-1.55#
6	CM	Phenol	1.941	2.100	-8.2	100	-0.04
7	MT	bis(2-Chloroethyl)ether	2.373	2.336	1.6	90	-0.08
8	M	2-Chlorophenol	1.333	1.349	-1.2	90	-0.08
9	MT	1,3-Dichlorobenzene	1.367	1.410	-3.1	90	-0.08
10	CM	1,4-Dichlorobenzene	1.383	1.419	-2.6	87	-0.10
11	M	1,2-Dichlorobenzene	1.347	1.385	-2.8	89	-0.10
12	T	2-Methylphenol	1.279	1.273	0.5	88	-0.06
13	M	bis(2-chloroisopropyl)ether	2.234	1.940	13.2	93	-0.06
14	T	4-Methylphenol	1.402	1.302	7.1	78	-0.06
15	PM	N-Nitroso-Di-n-propylamine	1.528	1.444	5.5	86	-0.08
16	M	Hexachloroethane	0.868	0.883	-1.7	90	-0.10
17	I	Naphthalene-d8	1.000	1.000	0.0	88	-0.10
18	S	Nitrobenzene-d5	0.542	0.524	3.4	87	-0.08
19	M	Nitrobenzene	0.519	0.516	0.6	93	-0.08
20	M	Isophorone	1.101	1.024	7.0	88	-0.10
21	MC	2-Nitrophenol	0.239	0.227	5.2	81	-0.10
22	M	2,4-Dimethylphenol	0.387	0.378	2.2	89	-0.06
23	M	bis(2-Chloroethoxy)methane	0.603	0.598	0.8	90	-0.08
24	MC	2,4-Dichlorophenol	0.295	0.282	4.4	85	-0.06
25	M	1,2,4-Trichlorobenzene	0.304	0.309	-1.6	88	-0.10
26	M	Naphthalene	1.003	0.942	6.1	82	-0.10
27	T	4-Chloroaniline	0.470	0.439	6.7	86	-0.08
28	MC	Hexachlorobutadiene	0.160	0.160	-0.5	88	-0.08
29	MC	4-Chloro-3-methylphenol	0.388	0.356	8.4	80	-0.04
30	M	2-Chloronaphthalene	0.634	0.647	-2.0	90	-0.08
31	T	2-Methylnaphthalene	0.870	0.829	4.7	81	-0.10
32	I	Acenaphthene-d10	1.000	1.000	0.0	87	-0.10
33	P	Hexachlorocyclopentadiene	0.289	0.246	15.1	88	-0.08
34	MC	2,4,6-Trichlorophenol	0.426	0.387	9.2	83	-0.08
35	T	2,4,5-Trichlorophenol	0.347	0.413	-18.9	89	-0.06
36	S	2-Fluorobiphenyl	1.220	1.209	0.9	84	-0.10
37	T	2-Nitroaniline	0.783	0.773	1.3	89	-0.06
38	M	Dimethylphthalate	1.368	1.400	-2.3	88	-0.08
39	M	Acenaphthylene	1.801	1.833	-1.8	86	-0.10
40	M	2,6-Dinitrotoluene	0.308	0.351	-14.1	81	-0.08

(#) = Out of Range

Evaluate Continuing Calibration Report

236

Data File : C:\HPCHEM\1\DATA2\B9008.D Vial: 2
Acq On : 27 Oct 95 1:29 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 : Wed Oct 25 10:20:51 1995
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
41	T	3-Nitroaniline	0.342	0.354	-3.5	84	-0.06
42	CM	Acenaphthene	1.020	1.150	-12.8	96	-0.10
43	MP	2,4-Dinitrophenol	0.210	0.227	-8.3	114	-0.08
44	PM	4-Nitrophenol	0.228	0.222	2.4	88	0.00
45	T	Dibenzofuran	1.534	1.481	3.5	82	-0.10
46	M	2,4-Dinitrotoluene	0.452	0.459	-1.4	85	-0.08
47	M	Diethylphthalate	1.556	1.602	-2.9	88	-0.08
48	M	Fluorene	1.167	1.206	-3.3	87	-0.08
49	M	4-Chlorophenyl-phenylether	0.509	0.505	0.8	85	-0.10
50		Phenanthrene-d10	1.000	1.000	0.0	80	-0.10
51	T	4-Nitroaniline	0.230	0.259	-12.3	84	-0.06
52	MC	4,6-Dinitro-2-methylphenol	0.148	0.147	1.1	74	-0.08
53	T	n-Nitrosodiphenylamine	0.543	0.578	-6.6	82	-0.08
54	S	2,4,6-Tribromophenol	0.127	0.123	2.6	81	-0.08
55		1,2-Diphenylhydrazine (as a	1.784	1.999	-12.0	85	-0.08
56	M	4-Bromophenyl-phenylether	0.187	0.199	-6.3	85	-0.10
57	M	Hexachlorobenzene	0.237	0.247	-4.3	83	-0.10
58	CM	Pentachlorophenol	0.163	0.130	19.7	71	-0.10
59	M	Phenanthrene	1.087	1.152	-6.0	82	-0.09
60	M	Anthracene	1.068	1.135	-6.3	82	-0.09
61		Carbazole	1.065	0.890	16.4	68	-0.09
62	M	Di-n-butylphthalate	2.011	1.728	14.1	67	-0.11
63	MC	Fluoranthene	1.092	0.939	14.1	67	-0.74#
64	I	Chrysene-d12	1.000	1.000	0.0	36#	-0.11
65		Benzidine	0.274	0.276	-0.9	42#	-0.10
66	M	Pyrene	1.600	1.832	-14.5	42#	-0.11
67	S	Terphenyl-d14	0.994	1.151	-15.8	45#	-0.11
68	M	Butylbenzylphthalate	1.245	1.293	-3.9	38#	-0.11
69	M	Benzo[a]anthracene	1.429	1.239	13.3	30#	-0.13
70	M	3,3'-Dichlorobenzidine	0.386	0.330	14.4	30#	-0.09
71	M	Chrysene	0.857	1.008	-17.6	42#	-0.11
72	M	bis(2-Ethylhexyl)phthalate	1.785	1.714	3.9	35#	-0.11
73	I	Perylene-d12	1.000	1.000	0.0	34#	-0.09
74	MC	Di-n-octylphthalate	5.692	5.727	-0.6	33#	-0.11
75	M	Benzo[b]fluoranthene	1.952	1.846	5.5	26#	-0.11
76	m	Benzo[k]fluoranthene	1.162	1.246	-7.2	36#	-0.11
77	mc	Benzo[a]pyrene	1.081	1.178	-8.9	37#	-0.09
78	m	Indeno[1,2,3-cd]pyrene	0.561	0.585	-4.3	34#	-0.09
79	m	Dibenz[a,h]anthracene	0.549	0.494	9.9	30#	-0.09

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA2\B9008.D Vial: 2
Acq On : 27 Oct 95 1:29 pm Operator: SCOTTV SUF
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 Oct 25 10:20:51 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	0.510	0.437	14.3	28#	-0.09
81		1-Methyl naphthalene	0.000	0.000#	0.0	0#	-14.07#
82		7,12-Dimethylbenz(a)anthrac	0.000	0.000#	0.0	0#	-36.48#
83		Quinoline	0.000	0.000#	0.0	85	-0.08
84		Thiophenol	0.000	0.000#	0.0	0#	-5.86#
85		4-Methyl chrysene	0.000	0.000#	0.0	0#	-31.87#
86		Dibenz(a,j)acridine	0.000	0.000#	0.0	29#	-0.09
87		Indene	0.000	0.000#	0.0	0#	-9.67#
88		Benzyl alcohol	0.000	0.000#	0.0	91	-0.10
89		Benzoic acid	0.000	0.000#	0.0	90	-0.06

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

Quantitation Report

Data File : c:\hpchem\1\data2\b9008.d Vial: 2
Acq On : 27 Oct 95 1:29 pm Operator: SCOTTV
Sample : 50 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Oct 30 14:27 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed Oct 25 10:20:51 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.59	152	26722	40.00	ug/mL	-0.10
17) Naphthalene-d8	12.33	136	104351	40.00	ug/mL	-0.10
32) Acenaphthene-d10	17.63	164	57774	40.00	ug/mL	-0.10
50) Phenanthrene-d10	22.12	188	79042	40.00	ug/ml	-0.10
64) Chrysene-d12	30.18	240	25699	40.00	ug/mL	-0.11
73) Perylene-d12	34.15	264	9983	40.00	ug/mL	-0.09
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.03	112	41696	48.95	ug/mL	48.95%
3) Phenol-d5	8.05	99	66887	48.39	ug/mL	48.39%
18) Nitrobenzene-d5	10.31	82	68307	48.30	ug/mL	48.30%
36) 2-Fluorobiphenyl	15.80	172	87328	49.56	ug/mL	49.56%
54) 2,4,6-Tribromophenol	20.08	330	12186	48.69	ug/mL	48.69%
67) Terphenyl-d14	27.25	244	36967	57.91	ug/mL	57.91%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	2.08	74	28093	47.39	ug/ml	100
6) Phenol	8.09	94	70156	54.11	ug/mL	100
7) bis(2-Chloroethyl)ether	12.04	93	78019	49.22	ug/mL	99
8) 2-Chlorophenol	8.03	128	45049	50.60	ug/mL#	80
9) 1,3-Dichlorobenzene	8.40	146	47089	51.56	ug/mL	96
10) 1,4-Dichlorobenzene	8.65	146	47410	51.30	ug/mL	97
11) 1,2-Dichlorobenzene	9.04	146	46258	51.39	ug/mL	96
12) 2-Methylphenol	9.77	108	42525	49.77	ug/mLm	100
13) bis(2-chloroisopropyl)ethe	9.71	45	64814	43.42	ug/mL	99
14) 4-Methylphenol	10.29	108	43505	46.44	ug/mL	100
15) N-Nitroso-Di-n-propylamine	10.13	70	48217	47.24	ug/mL	93
16) Hexachloroethane	9.98	117	29491	50.85	ug/mL#	74
19) Nitrobenzene	10.37	77	67275	49.68	ug/mLm	91
20) Isophorone	11.17	82	133559	46.48	ug/mL	94
21) 2-Nitrophenol	11.29	139	29599	47.42	ug/mL#	90
22) 2,4-Dimethylphenol	11.81	107	49328	48.89	ug/mL#	100
23) bis(2-Chloroethoxy)methane	12.04	93	78019	49.60	ug/mL#	100
24) 2,4-Dichlorophenol	12.12	162	36829	47.80	ug/mL	96
25) 1,2,4-Trichlorobenzene	12.22	180	40319	50.79	ug/mL	94
26) Naphthalene	12.39	128	122894	46.95	ug/mL	100
27) 4-Chloroaniline	12.78	127	57235	46.63	ug/mL	99
28) Hexachlorobutadiene	12.91	225	20908	50.23	ug/mL	99
29) 4-Chloro-3-methylphenol	14.53	107	46386	45.80	ug/mL#	1
30) 2-Chloronaphthalene	15.97	162	84381	51.00	ug/ml#	100
31) 2-Methylnaphthalene	14.53	142	108166	47.67	ug/mL#	71
33) Hexachlorocyclopentadiene	15.05	237	17734	42.44	ug/mL#	96
34) 2,4,6-Trichlorophenol	15.53	196	27935	45.40	ug/mL	96
35) 2,4,5-Trichlorophenol	15.63	196	29810	59.43	ug/mL	95

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

Quantitation Report

Data File : c:\hpchem\1\data2\b9008.d Vial: 2
Acq On : 27 Oct 95 1:29 pm Operator: SCOTTV
Sample : 50 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Oct 30 14:27 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed Oct 25 10:20:51 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37)	2-Nitroaniline	17.79	65	55820	49.36	ug/mL	86
38)	Dimethylphthalate	17.27	163	101087	51.16	ug/mL#	12
39)	Acenaphthylene	17.17	152	132357	50.88	ug/mL	98
40)	2,6-Dinitrotoluene	17.34	165	25335	57.03	ug/mLm	99
41)	3-Nitroaniline	19.68	138	25550	51.73	ug/mL	89
42)	Acenaphthene	17.73	153	83055	56.38	ug/mL	98
43)	2,4-Dinitrophenol	18.10	184	16396	54.13	ug/mLm	83
44)	4-Nitrophenol	18.65	109	16063	48.80	ug/mLm	55
45)	Dibenzofuran	18.29	168	106926	48.25	ug/mL	94
46)	2,4-Dinitrotoluene	18.52	165	33124	50.69	ug/mL#	1
47)	Diethylphthalate	19.48	149	115678	51.47	ug/mL#	93
48)	Fluorene	19.33	166	87065	51.64	ug/mL	98
49)	4-Chlorophenyl-phenylether	19.52	204	36435	49.59	ug/mL#	85
51)	4-Nitroaniline	19.68	138	25550	56.16	ug/mL	89
52)	4,6-Dinitro-2-methylphenol	19.73	198	14484	49.43	ug/mL	100
53)	n-Nitrosodiphenylamine	19.97	169	57135	53.30	ug/mL	95
55)	1,2-Diphenylhydrazine (as	20.00	77	197478	56.01	ug/ml	100
56)	4-Bromophenyl-phenylether	20.97	248	19642	53.15	ug/mL	91
57)	Hexachlorobenzene	20.93	284	24441	52.13	ug/mL#	50
58)	Pentachlorophenol	21.66	266	12892	40.14	ug/mLm	97
59)	Phenanthrene	22.20	178	113864	53.01	ug/mL	99
60)	Anthracene	22.36	178	112150	53.16	ug/mLm	99
61)	Carbazole	23.01	167	87921	41.79	ug/ml	96
62)	Di-n-butylphthalate	24.53	149	170725	42.96	ug/mL	99
63)	Fluoranthene	25.78	202	92729	42.97	ug/mLm	70
65)	Benzidine	22.12	184	8865	50.45	ug/mlm	100
66)	Pyrene	26.42	202	58853	57.24	ug/mLm	60
68)	Butylbenzylphthalate	29.04	149	41544	51.93	ug/mL#	12
69)	Benzo[a]anthracene	30.14	228	39805	43.35	ug/mL	99
70)	3,3'-Dichlorobenzidine	30.33	252	10615	42.80	ug/mL#	90
71)	Chrysene	30.25	228	32370	58.81	ug/mLm	99
72)	bis(2-Ethylhexyl)phthalate	31.03	149	55067	48.03	ug/mL#	34
74)	Di-n-octylphthalate	32.93	149	71466	50.31	ug/mL#	100
75)	Benzo[b]fluoranthene	33.20	252	23032	47.27	ug/mL#	80
76)	Benzo[k]fluoranthene	33.28	252	15551	53.61	ug/mLm	80
77)	Benzo[a]pyrene	34.00	252	14699	54.47	ug/mLm	80
78)	Indeno[1,2,3-cd]pyrene	36.67	276	7304	52.14	ug/mLm	32
79)	Dibenz[a,h]anthracene	36.79	278	6166	45.03	ug/mL#	83
80)	Benzo[g,h,i]perylene	37.21	276	5449	42.84	ug/mL#	63

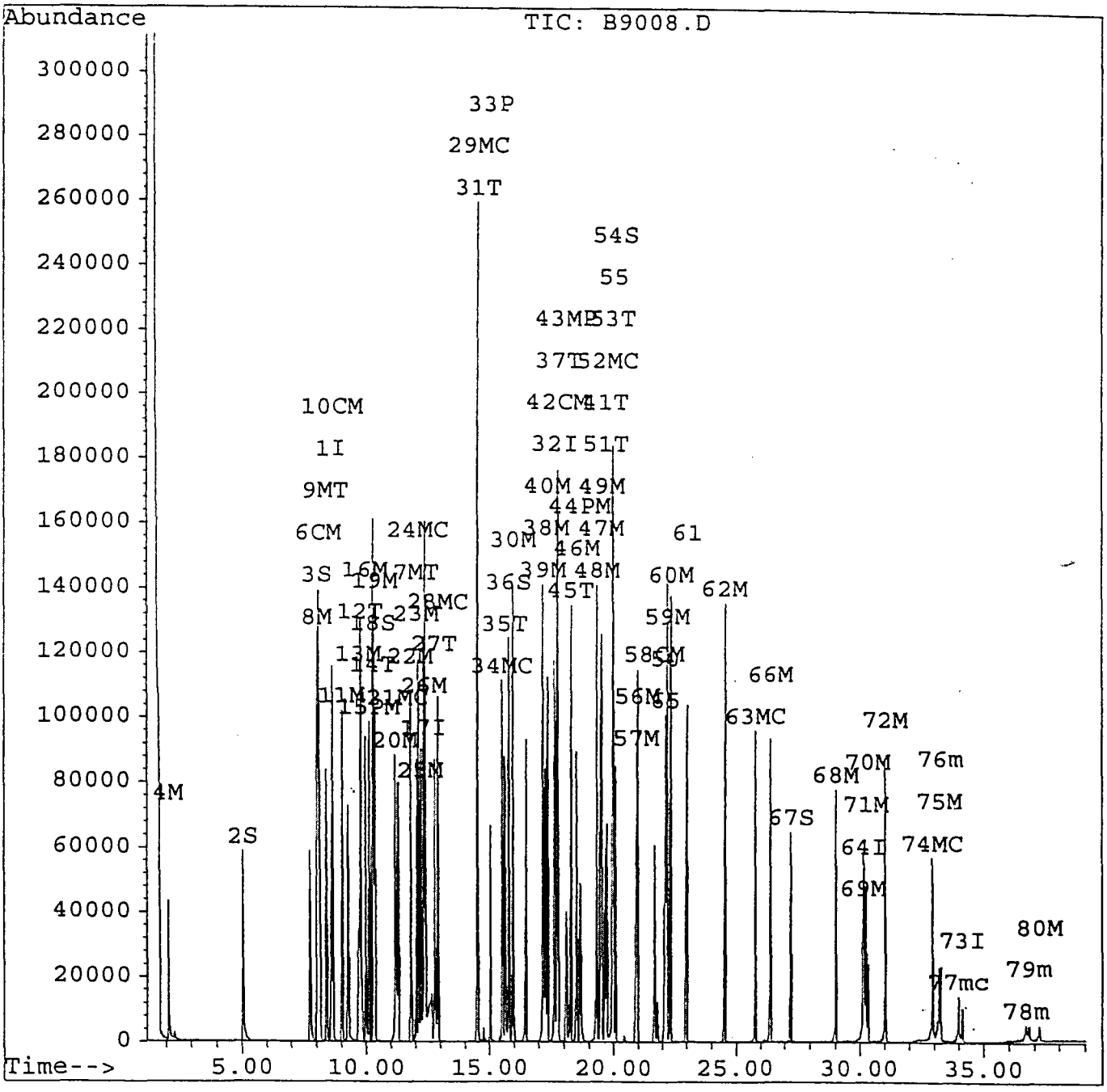
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data2\b9008.d
Acq On : 27 Oct 95 1:29 pm
Sample : 50 STD..... Converted from RTE d
Misc :
Quant Time: Oct 30 14:27 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 Oct 25 10:20:51 1995
Response via : Multiple Level Calibration



5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

241

Lab Name : EMSL ANALYTICAL Contract: _____

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

Lab File ID: B9468.D DFTPP Injection Date: 12/26/95

Instrument ID: ABNA DFTPP Injection Time: 1104

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	54.0
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	71.7
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	25.0 - 75.0% of mass 198	42.8
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	7.8
275	10.0 - 30.0% of mass 198	18.4
365	Greater than 0.75% of mass 198	2.9
441	Present, but less than mass 443	9.5
442	40.0 - 110.0% of mass 198	52.8
443	15.0 - 24.0% of mass 442	10.8 (20.4)2

1-Value is % mass 69 2-Value is % mass 442

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

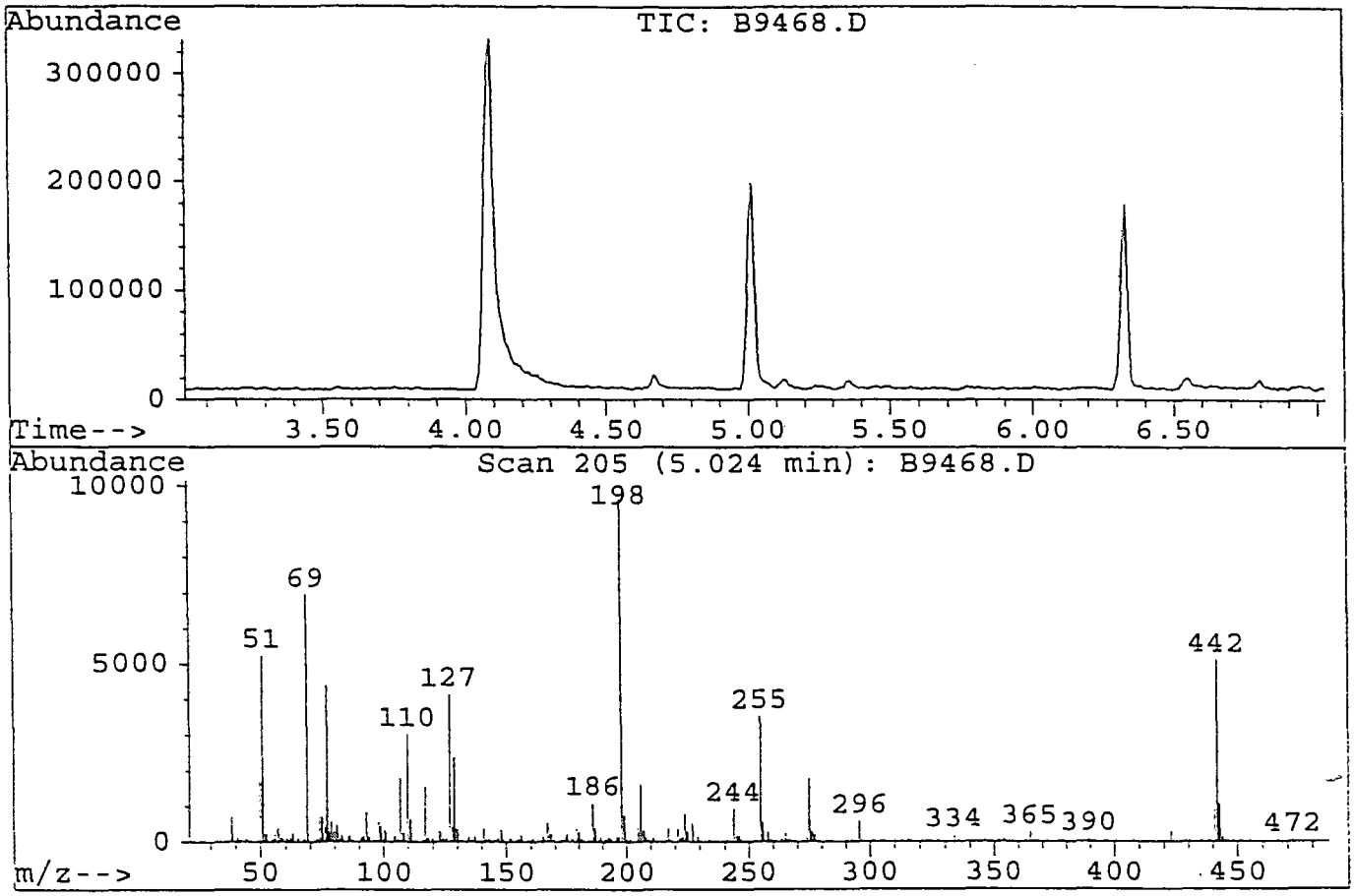
	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD050	50 STD	B9469.D	12/26/95	1125
02	SBLK01	BLANK1	B9470.D	12/26/95	1236
03	9558188B	9558188B	B9471.D	12/26/95	1328
04	9558189B	9558189B	B9472.D	12/26/95	1420
05	9558190B	9558190B	B9473.D	12/26/95	1513
06	9558191B	9558191B	B9474.D	12/26/95	1605
07	9558195B	9558195B	B9475.D	12/26/95	1656
08	9558196B	9558196B	B9476.D	12/26/95	1749
09	SBLK02	BLANK2	B9477.D	12/26/95	1840
10	9558311B	9558311B	B9478.D	12/26/95	1932
11	9558313B	9558313B	B9479.D	12/26/95	2023
12	9558314B	9558314B	B9480.D	12/26/95	2115
13	9558315B	9558315B	B9481.D	12/26/95	2206
14	9558316B	9558316B	B9482.D	12/26/95	2257
15	9558317B	9558317B	B9483.D	12/26/95	2348
16					
17					
18					
19					
20					
21					
22					

DFTPP

242

Data File : C:\HPCHEM\1\DATA2\B9468.D Vial: 1
Acq On : 26 Dec 95 11:04 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: 205

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	54.0	5234	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	71.7	6954	PASS
70	69	0	2	0.0	0	PASS
127	198	40	60	42.8	4153	PASS
197	198	0	1	0.0	0	PASS
198	198	100	100	100.0	9693	PASS
199	198	5	9	7.8	753	PASS
275	198	10	30	18.4	1788	PASS
365	198	1	100	2.9	284	PASS
441	443	0	100	88.4	923	PASS
442	198	40	100	52.8	5118	PASS
443	442	17	23	20.4	1044	PASS

Scan 205 (5.024 min): B9468.D
DFTPP..... Converted from RTE data file >B9468::D5

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.10	47	51.05	5234	61.85	145	72.95	150
38.10	137	52.15	219	62.95	258	74.05	694
38.90	706	54.35	69	64.75	91	74.95	713
40.00	58	55.05	96	65.05	112	76.15	395
40.80	137	55.85	243	66.75	61	77.05	4390
41.80	72	56.95	401	67.05	65	78.05	260
42.50	37	58.15	122	67.25	59	79.05	568
44.05	129	58.75	60	67.65	93	79.95	283
44.75	28	58.95	64	68.95	6954	81.05	463
48.95	151	60.15	148	70.75	40	82.15	86
49.95	1732	60.85	77	72.05	89	83.05	176

Scan 205 (5.024 min): B9468.D
DFTPP..... Converted from RTE data file >B9468::D5

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
85.15	163	95.45	44	105.85	85	117.85	104
85.95	177	96.05	40	107.05	1802	119.85	89
86.65	38	97.05	78	108.05	248	122.15	174
87.15	38	97.95	577	108.95	47	122.85	306
89.05	21	98.95	424	110.05	3036	123.95	109
89.95	38	100.05	76	110.95	644	124.45	43
90.45	100	100.85	317	112.85	48	125.25	93
91.05	163	102.05	40	114.35	24	126.95	4153
91.85	193	102.45	21	115.85	79	128.05	410
92.95	842	103.85	137	116.05	81	129.05	2392
94.05	134	104.85	208	116.95	1606	129.95	359

Scan 205 (5.024 min): B9468.D
DFTPP..... Converted from RTE data file >B9468::D5

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
131.10	58	142.90	98	151.30	107	164.00	81
131.90	59	143.60	31	151.50	106	165.00	154
133.90	111	144.60	20	151.80	64	165.70	30
134.90	161	145.00	68	154.00	92	167.00	545
135.80	82	145.70	61	155.00	129	168.00	209
136.30	39	146.00	79	156.10	200	169.30	58
137.00	167	146.20	81	158.10	53	171.80	80
138.70	21	146.90	149	158.90	49	172.80	70
139.60	14	148.00	338	159.80	76	173.30	66
140.90	391	148.70	43	160.70	111	174.00	146
141.80	88	150.30	17	163.30	43	174.90	216

Scan 205 (5.024 min): B9468.D
DFTPP..... Converted from RTE data file >B9468::D5

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
176.80	96	186.90	403	199.00	753	209.00	61
177.10	66	188.20	73	199.90	76	210.30	40
177.40	48	189.00	137	200.50	22	210.80	100
179.00	373	191.10	89	201.30	72	211.10	108
179.80	266	192.00	104	201.70	32	213.70	42
181.00	95	192.70	132	203.00	47	216.10	86
182.50	27	193.20	77	204.10	271	216.95	378
183.20	20	195.10	59	205.00	416	217.85	56
183.80	56	195.90	148	206.00	1641	219.75	18
184.80	134	196.40	140	207.00	321	220.95	368
186.00	1089	198.00	9693	207.90	112	221.75	100

Scan 205 (5.024 min): B9468.D
DFTPP..... Converted from RTE data file >B9468::D5

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
222.65	119	235.15	45	242.85	29	252.25	20
222.95	127	236.25	31	244.05	933	252.65	45
224.05	792	236.75	32	244.95	168	253.25	35
224.95	279	239.05	70	245.95	152	254.95	3537
226.95	536	239.95	37	246.55	55	255.95	537
228.95	143	240.25	35	247.95	35	257.15	54
230.05	28	240.85	52	248.95	57	257.95	283
233.55	96	241.35	23	249.85	34	258.95	69
234.25	23	241.65	40	250.65	17	260.85	33
234.55	33	241.85	45	251.65	46	262.75	15
234.85	38	242.55	28	251.95	33	263.35	60

Scan 205 (5.024 min): B9468.D
DFTPP..... Converted from RTE data file >B9468::D5

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
263.85	106	276.05	261	290.45	15	306.20	22
264.95	251	277.05	207	291.75	26	309.40	13
265.95	60	277.95	57	292.35	77	310.10	29
266.85	51	278.95	25	293.15	30	312.90	53
267.65	47	279.25	20	294.05	26	315.00	68
268.65	41	281.85	27	296.05	582	315.90	54
268.95	37	282.65	47	300.55	29	317.80	23
272.05	50	283.15	37	301.05	24	321.00	51
273.05	90	283.35	40	303.90	45	323.10	180
274.05	335	283.75	39	304.90	25	324.00	62
275.05	1788	290.15	34	305.20	45	327.00	55

Scan 205 (5.024 min): B9468.D
DFTPP..... Converted from RTE data file >B9468::D5

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
327.20	55	350.60	23	367.10	23	388.65	55
329.20	13	351.90	71	368.10	39	389.65	76
331.70	19	353.40	56	369.80	17	395.95	26
333.90	180	354.00	84	371.90	93	396.25	29
335.50	34	357.80	26	373.20	47	396.65	44
336.90	35	359.70	21	376.70	67	399.95	24
340.20	20	360.70	27	377.90	31	400.35	12
341.00	13	362.80	45	378.90	52	400.65	18
342.40	31	364.40	39	383.80	59	401.45	23
345.10	34	365.00	284	385.10	34	403.75	32
346.00	80	366.00	31	387.40	35	407.15	32

Scan 205 (5.024 min): B9468.D
DFTPP..... Converted from RTE data file >B9468::D5

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
407.65	16	422.95	277	445.45	41	469.45	19
407.85	21	425.15	11	448.15	36	472.25	42
408.45	43	428.75	18	450.35	13		
409.25	10	430.25	28	450.95	33		
410.15	17	434.95	47	451.55	72		
412.45	30	437.35	20	453.95	34		
415.15	38	438.75	49	454.55	17		
418.05	33	441.05	923	454.85	19		
419.95	25	441.95	5118	457.55	10		
420.15	23	443.05	1044	460.55	37		
421.85	38	443.95	130	465.95	33		

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EMSL ANALYTICAL Contract: _____

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

Instrument ID: ABNA Calibration Date: #### Time: 1125

Lab File ID: B9469.D Init. Calib. Date(s): #### 1/0/00

Init. Calib. Times: 1125 0000

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Chrysene	0.876	0.899		-2.6	
bis(2-Ethylhexyl)phthalate	1.161	1.250		-7.7	
Di-n-octylphthalate	3.068	3.082		-0.5	30.0
Benzo[b]fluoranthene	1.361	1.588		-16.7	
Benzo[k]fluoranthene	1.156	1.098		5.0	
Benzo[a]pyrene	1.041	1.163		-11.7	30.0
Indeno[1,2,3-cd]pyrene	0.538	0.572		-6.3	
Dibenz[a,h]anthracene	0.543	0.586		-7.9	
Benzo[g,h,i]perylene	0.495	0.531		-7.3	
Nitrobenzene-d5	0.381	0.366		3.9	
2-Fluorobiphenyl	1.207	1.129		6.5	
Terphenyl-d14	0.960	1.009		-5.1	

All other compounds must meet a minimum RRF of 0.010.

FORM VII SV

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EMSL ANALYTICAL Contract: _____

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

Instrument ID: ABNA Calibration Date: #### Time: 1125

Lab File ID: B9469.D Init. Calib. Date(s): #### 1/0/00

Init. Calib. Times: 1125 0000

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
Phenol	1.572	1.543		1.8	30.0
bis(2-Chloroethyl)ether	1.805	1.717		4.9	
2-Chlorophenol	1.292	1.276		1.2	
1,3-Dichlorobenzene	1.354	1.414		-4.4	
1,4-Dichlorobenzene	1.396	1.400		-0.3	.30.0
1,2-Dichlorobenzene	1.356	1.356		0.0	
2-Methylphenol	1.123	1.198		-6.7	
bis(2-chloroisopropyl)ether	1.568	1.668		-6.4	
4-Methylphenol	1.250	1.198		4.2	
N-Nitroso-Di-n-propylamine	1.018	0.877	0.050	13.9	
Hexachloroethane	0.866	0.842		2.8	
Nitrobenzene	0.465	0.462		0.6	
Isophorone	0.691	0.667		3.5	
2-Nitrophenol	0.205	0.235		-14.6	30.0
2,4-Dimethylphenol	0.355	0.353		0.6	
bis(2-Chloroethoxy)methane	0.421	0.424		-0.7	
2,4-Dichlorophenol	0.269	0.285		-5.9	30.0
1,2,4-Trichlorobenzene	0.296	0.315		-6.4	
Naphthalene	0.906	0.903		0.3	
4-Chloroaniline	0.419	0.431		-2.9	
Hexachlorobutadiene	0.185	0.200		-8.1	30.0
4-Chloro-3-methylphenol	0.330	0.334		-1.2	30.0
2-Methylnaphthalene	0.609	0.617		-1.3	
Hexachlorocyclopentadiene	0.335	0.303	0.050	9.6	
2,4,6-Trichlorophenol	0.375	0.357		4.8	30.0
2,4,5-Trichlorophenol	0.337	0.382		-13.4	
2-Chloronaphthalene	0.632	0.670		-6.0	
2-Nitroaniline	0.399	0.439		-10.0	
Dimethylphthalate	1.235	1.292		-4.6	
Acenaphthylene	1.689	1.698		-0.5	
2,6-Dinitrotoluene	0.292	0.323		-10.6	
3-Nitroaniline	0.213	0.254		-19.2	
Acenaphthene	1.053	1.117		-6.1	30.0
2,4-Dinitrophenol	0.139	0.119	0.050	14.4	
4-Nitrophenol	0.216	0.215	0.050	0.5	
Dibenzofuran	1.385	1.409		-1.7	
2,4-Dinitrotoluene	0.351	0.322		8.3	

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: #### Time: 1125

Lab File ID: B9469.D Init. Calib. Date(s): #### 1/0/00

Init. Calib. Times: 1125 0000

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Diethylphthalate	1.334	1.547		-16.0	
Fluorene	1.055	1.259		-19.3	
4-Chlorophenyl-phenylether	0.476	0.547		-14.9	
4-Nitroaniline	0.152	0.143		5.9	
4,6-Dinitro-2-methylphenol	0.122	0.119		2.5	30.0
n-Nitrosodiphenylamine	0.472	0.485		-2.8	
4-Bromophenyl-phenylether	0.242	0.268		-10.7	
Hexachlorobenzene	0.334	0.357		-6.9	
Pentachlorophenol	0.186	0.202		-8.6	30.0
Phenanthrene	1.028	1.106		-7.6	
Anthracene	1.020	1.117		-9.5	
Carbazole	0.865	0.994		-14.9	
Di-n-butylphthalate	1.757	1.960		-11.6	
Fluoranthene	1.108	1.305		-17.8	30.0
Pyrene	1.221	1.291		-5.7	
Butylbenzylphthalate	0.820	0.858		-4.6	
Benzo[a]anthracene	1.167	1.222		-4.7	
3,3'-Dichlorobenzidine	0.406	0.393		3.2	
Chrysene	0.876	0.899		-2.6	
bis(2-Ethylhexyl)phthalate	1.161	1.250		-7.7	
Di-n-octylphthalate	3.068	3.082		-0.5	30.0
Benzo[b]fluoranthene	1.361	1.588		-16.7	
Benzo[k]fluoranthene	1.156	1.098		5.0	
Benzo[a]pyrene	1.041	1.163		-11.7	30.0
Indeno[1,2,3-cd]pyrene	0.538	0.572		-6.3	
Dibenz[a,h]anthracene	0.543	0.586		-7.9	
Benzo[g,h,i]perylene	0.495	0.531		-7.3	
2-Fluorophenol	1.128	1.078		4.4	
Phenol-d5	1.732	1.585		8.5	
Nitrobenzene-d5	0.381	0.366		3.9	
2-Fluorobiphenyl	1.207	1.129		6.5	
2,4,6-Tribromophenol	0.237	0.248		-4.6	
Terphenyl-d14	0.960	1.009		-5.1	

All other compounds must meet a minimum RRF of 0.010.

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

249

Lab Name: EMSL ANALYTICAL Contract: _____

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

Instrument ID: ABNA Calibration Date: #### Time: 1125

Lab File ID: B9469.D Init. Calib. Date(s): #### 1/0/00

Init. Calib. Times: 1125 0000

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
N-nitrosodimethylamine	0.722	0.640		11.4	
Phenol	1.572	1.543		1.8	30.0
bis(2-Chloroethyl)ether	1.805	1.717		4.9	
2-Chlorophenol	1.292	1.276		1.2	
1,3-Dichlorobenzene	1.354	1.414		-4.4	
1,4-Dichlorobenzene	1.396	1.400		-0.3	30.0
1,2-Dichlorobenzene	1.356	1.356		0.0	
bis(2-chloroisopropyl)ether	1.568	1.668		-6.4	
N-Nitroso-Di-n-propylamine	1.018	0.877	0.050	13.9	
Hexachloroethane	0.866	0.842		2.8	
Nitrobenzene	0.465	0.462		0.6	
Isophorone	0.691	0.667		3.5	
2-Nitrophenol	0.205	0.235		-14.6	30.0
2,4-Dimethylphenol	0.355	0.353		0.6	
bis(2-Chloroethoxy)methane	0.421	0.424		-0.7	
2,4-Dichlorophenol	0.269	0.285		-5.9	30.0
1,2,4-Trichlorobenzene	0.296	0.315		-6.4	
Naphthalene	0.906	0.903		0.3	
Hexachlorobutadiene	0.185	0.200		-8.1	30.0
4-Chloro-3-methylphenol	0.330	0.334		-1.2	30.0
Hexachlorocyclopentadiene	0.335	0.303	0.050	9.6	
2,4,6-Trichlorophenol	0.375	0.357		4.8	30.0
2-Chloronaphthalene	0.632	0.670		-6.0	
Dimethylphthalate	1.235	1.292		-4.6	
Acenaphthylene	1.689	1.698		-0.5	
2,6-Dinitrotoluene	0.292	0.323		-10.6	
Acenaphthene	1.053	1.117		-6.1	30.0
2,4-Dinitrophenol	0.139	0.119	0.050	14.4	
4-Nitrophenol	0.216	0.215	0.050	0.5	
2,4-Dinitrotoluene	0.351	0.322		8.3	
Diethylphthalate	1.334	1.547		-16.0	
Fluorene	1.055	1.259		-19.3	
4-Chlorophenyl-phenylether	0.476	0.547		-14.9	
4,6-Dinitro-2-methylphenol	0.122	0.119		2.5	30.0
n-Nitrosodiphenylamine	0.472	0.485		-2.8	
1,2-Diphenylhydrazine(as azo)	0.000	0.000			
4-Bromophenyl-phenylether	0.242	0.268		-10.7	

All other compounds must meet a minimum RRF of 0.010.

FORM VIII SV

SEMIVOLATILE CONTINUING CALIBRATION CHECK

250

Lab Name: EMSL ANALYTICAL Contract: _____

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

Instrument ID: ABNA Calibration Date: #### Time: 1125

Lab File ID: B9469.D Init. Calib. Date(s): #### 1/0/00

Init. Calib. Times: 1125 0000

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Hexachlorobenzene	0.334	0.357		-6.9	
Pentachlorophenol	0.186	0.202		-8.6	30.0
Phenanthrene	1.028	1.106		-7.6	
Anthracene	1.020	1.117		-9.5	
Di-n-butylphthalate	1.757	1.960		-11.6	
Fluoranthene	1.108	1.305		-17.8	30.0
Benzidine	0.011	0.012		-9.1	
Pyrene	1.221	1.291		-5.7	
Butylbenzylphthalate	0.820	0.858		-4.6	
Benzo[a]anthracene	1.167	1.222		-4.7	
3,3'-Dichlorobenzidine	0.406	0.393		3.2	
Chrysene	0.876	0.899		-2.6	
bis(2-Ethylhexyl)phthalate	1.161	1.250		-7.7	
Di-n-octylphthalate	3.068	3.082		-0.5	30.0
Benzo[b]fluoranthene	1.361	1.588		-16.7	
Benzo[k]fluoranthene	1.156	1.098		5.0	
Benzo[a]pyrene	1.041	1.163		-11.7	30.0
Indeno[1,2,3-cd]pyrene	0.538	0.572		-6.3	
Dibenz[a,h]anthracene	0.543	0.586		-7.9	
Benzo[g,h,i]perylene	0.495	0.531		-7.3	
2-Fluorophenol	1.128	1.078		4.4	
Phenol-d5	1.732	1.585		8.5	
Nitrobenzene-d5	0.381	0.366		3.9	
2-Fluorobiphenyl	1.207	1.129		6.5	
2,4,6-Tribromophenol	0.237	0.248		-4.6	
Terphenyl-d14	0.960	1.009		-5.1	

All other compounds must meet a minimum RRF of 0.010.

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA2\B9469.D Vial: 2
Acq On : 26 Dec 95 11:25 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 : Tue Dec 26 12:09:14 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	97	-0.01
2	S	2-Fluorophenol	1.128	1.078	4.4	97	0.00
3	S	Phenol-d5	1.732	1.585	8.5	95	-0.01
4	M	N-nitrosodimethylamine	0.722	0.640	11.4	89	0.00
5		Pyridine	3.013	0.000#	100.0#	0#	-1.49#
6	CM	Phenol	1.572	1.543	1.8	95	-0.01
7	MT	bis(2-Chloroethyl)ether	1.805	1.717	4.9	90	0.00
8	M	2-Chlorophenol	1.292	1.276	1.2	94	-0.01
9	MT	1,3-Dichlorobenzene	1.354	1.414	-4.4	101	-0.01
10	CM	1,4-Dichlorobenzene	1.396	1.400	-0.3	96	-0.01
11	M	1,2-Dichlorobenzene	1.356	1.356	0.0	95	-0.01
12	T	2-Methylphenol	1.123	1.198	-6.7	101	0.52#
13	M	bis(2-chloroisopropyl)ether	1.568	1.668	-6.4	130	0.06
14	T	4-Methylphenol	1.250	1.198	4.2	93	0.00
15	PM	N-Nitroso-Di-n-propylamine	1.018	0.877	13.9	81	0.00
16	M	Hexachloroethane	0.866	0.842	2.8	91	-0.02
17	I	Naphthalene-d8	1.000	1.000	0.0	90	-0.02
18	S	Nitrobenzene-d5	0.381	0.366	3.8	90	0.00
19	M	Nitrobenzene	0.465	0.462	0.8	91	0.00
20	M	Isophorone	0.691	0.667	3.4	87	-0.01
21	MC	2-Nitrophenol	0.205	0.235	-14.3	99	0.00
22	M	2,4-Dimethylphenol	0.355	0.353	0.3	90	0.00
23	M	bis(2-Chloroethoxy)methane	0.421	0.424	-0.7	90	0.00
24	MC	2,4-Dichlorophenol	0.269	0.285	-6.0	89	-0.02
25	M	1,2,4-Trichlorobenzene	0.296	0.315	-6.5	94	0.00
26	M	Naphthalene	0.906	0.903	0.3	86	-0.02
27	T	4-Chloroaniline	0.419	0.431	-3.0	96	-0.02
28	MC	Hexachlorobutadiene	0.185	0.200	-8.1	93	-0.02
29	MC	4-Chloro-3-methylphenol	0.330	0.334	-1.1	89	-0.02
30	M	2-Chloronaphthalene	0.632	0.670	-6.0	94	0.00
31	T	2-Methylnaphthalene	0.609	0.617	-1.3	93	-0.02
32	I	Acenaphthene-d10	1.000	1.000	0.0	98	0.00
33	P	Hexachlorocyclopentadiene	0.335	0.303	9.4	85	-0.02
34	MC	2,4,6-Trichlorophenol	0.375	0.357	5.0	96	-0.02
35	T	2,4,5-Trichlorophenol	0.337	0.382	-13.6	103	-0.02
36	S	2-Fluorobiphenyl	1.207	1.129	6.4	92	-0.02
37	T	2-Nitroaniline	0.399	0.439	-10.1	113	0.00
38	M	Dimethylphthalate	1.235	1.292	-4.7	95	0.00
39	M	Acenaphthylene	1.689	1.698	-0.5	96	0.00
40	M	2,6-Dinitrotoluene	0.292	0.323	-10.5	100	-0.02

(#) = Out of Range

Evaluate Continuing Calibration Report

252

Data File : C:\HPCHEM\1\DATA2\B9469.D Vial: 2
Acq On : 26 Dec 95 11:25 am Operator: SCOTTV
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 : Tue Dec 26 12:09:14 1995
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
41	T	3-Nitroaniline	0.213	0.254	-19.4	112	0.00
42	CM	Acenaphthene	1.053	1.117	-6.2	102	0.00
43	MP	2,4-Dinitrophenol	0.139	0.119	14.1	118	-0.02
44	PM	4-Nitrophenol	0.216	0.215	0.7	118	-0.02
45	T	Dibenzofuran	1.385	1.409	-1.7	94	-0.02
46	M	2,4-Dinitrotoluene	0.351	0.322	8.3	96	0.00
47	M	Diethylphthalate	1.334	1.547	-16.0	108	-0.02
48	M	Fluorene	1.055	1.259	-19.3	112	0.00
49	M	4-Chlorophenyl-phenylether	0.476	0.547	-14.8	106	-0.02
50		Phenanthrene-d10	1.000	1.000	0.0	137	0.00
51	T	4-Nitroaniline	0.152	0.143	5.7	109	0.00
52	MC	4,6-Dinitro-2-methylphenol	0.122	0.119	1.9	141	0.00
53	T	n-Nitrosodiphenylamine	0.472	0.485	-2.9	123	0.00
54	S	2,4,6-Tribromophenol	0.237	0.248	-4.6	136	0.00
55		1,2-Diphenylhydrazine (as a	1.221	1.051	13.9	106	0.00
56	M	4-Bromophenyl-phenylether	0.242	0.268	-10.4	132	0.00
57	M	Hexachlorobenzene	0.334	0.357	-6.7	134	-0.01
58	CM	Pentachlorophenol	0.186	0.202	-8.7	190#	0.00
59	M	Phenanthrene	1.028	1.106	-7.6	145	0.00
60	M	Anthracene	1.020	1.117	-9.6	146	-0.01
61		Carbazole	0.865	0.994	-15.0	166#	0.00
62	M	Di-n-butylphthalate	1.757	1.960	-11.6	155#	-0.01
63	MC	Fluoranthene	1.108	1.305	-17.8	168#	0.00
64	I	Chrysene-d12	1.000	1.000	0.0	151#	0.00
65		Benzidine	0.011	0.012#	-9.2	170#	-0.34
66	M	Pyrene	1.221	1.291	-5.7	163#	0.00
67	S	Terphenyl-d14	0.960	1.009	-5.0	171#	-0.01
68	M	Butylbenzylphthalate	0.820	0.858	-4.5	158#	-0.01
69	M	Benzo[a]anthracene	1.167	1.222	-4.8	168#	-0.01
70	M	3,3'-Dichlorobenzidine	0.406	0.393	3.0	158#	-0.01
71	M	Chrysene	0.876	0.899	-2.6	141	0.00
72	M	bis(2-Ethylhexyl)phthalate	1.161	1.250	-7.6	165#	0.00
73	I	Perylene-d12	1.000	1.000	0.0	110	-0.01
74	MC	Di-n-octylphthalate	3.068	3.082	-0.5	132	0.00
75	M	Benzo[b]fluoranthene	1.361	1.588	-16.7	132	0.00
76	m	Benzo[k]fluoranthene	1.156	1.098	5.0	103	0.00
77	mc	Benzo[a]pyrene	1.041	1.163	-11.8	127	0.00
78	m	Indeno[1,2,3-cd]pyrene	0.538	0.572	-6.4	123	-0.01
79	m	Dibenz[a,h]anthracene	0.543	0.586	-7.9	122	-0.01

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA2\B9469.D Vial: 2
Acq On : 26 Dec 95 11:25 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 : Tue Dec 26 12:09:14 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	0.495	0.531	-7.4	131	-0.01

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

Quantitation Report

Data File : c:\hpchem\1\data2\b9469.d Vial: 2
Acq On : 26 Dec 95 11:25 am Operator: SCOTTV
Sample : 50 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Dec 27 9:58 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue Dec 26 12:09:14 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.27	152	7771	40.00	ug/mL	-0.01
17) Naphthalene-d8	11.02	136	31449	40.00	ug/mL	-0.02
32) Acenaphthene-d10	16.26	164	20468	40.00	ug/mL	0.00
50) Phenanthrene-d10	20.65	188	35324	40.00	ug/ml	0.00
64) Chrysene-d12	28.62	240	35218	40.00	ug/mL	0.00
73) Perylene-d12	32.53	264	17686	40.00	ug/mL	-0.01
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	3.55	112	10470	47.78	ug/mL	47.78%
3) Phenol-d5	6.82	99	15400	45.77	ug/mL	45.77%
18) Nitrobenzene-d5	9.02	82	14407	48.10	ug/mL	48.10%
36) 2-Fluorobiphenyl	14.49	172	28898	46.78	ug/mL	46.78%
54) 2,4,6-Tribromophenol	18.67	330	10931	52.32	ug/mL	52.32%
67) Terphenyl-d14	25.77	244	44400	52.51	ug/mL	52.51%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	1.43	74	6215	44.32	ug/ml	100
6) Phenol	6.86	94	14993	49.09	ug/mL	100
7) bis(2-Chloroethyl)ether	10.83	93	16677	47.57	ug/mL	95
8) 2-Chlorophenol	6.71	128	12395	49.39	ug/mL#	88
9) 1,3-Dichlorobenzene	7.05	146	13739	52.21	ug/mL	98
10) 1,4-Dichlorobenzene	7.32	146	13595	50.14	ug/mL	98
11) 1,2-Dichlorobenzene	7.71	146	13168	49.99	ug/mL	94
12) 2-Methylphenol	9.11	108	11634	53.33	ug/mL	93
13) bis(2-chloroisopropyl)ethe	8.54	45	16205	53.19	ug/mLm	97
14) 4-Methylphenol	9.11	108	11634	47.91	ug/mL	93
15) N-Nitroso-Di-n-propylamine	8.88	70	8516	43.07	ug/mL	95
16) Hexachloroethane	8.65	117	8177	48.58	ug/mL	85
19) Nitrobenzene	9.08	77	18146	49.62	ug/mL#	86
20) Isophorone	9.90	82	26231	48.28	ug/mL	99
21) 2-Nitrophenol	10.02	139	9235	57.16	ug/mL#	81
22) 2,4-Dimethylphenol	10.62	107	13895	49.85	ug/mL#	100
23) bis(2-Chloroethoxy)methane	10.83	93	16677	50.33	ug/mL#	100
24) 2,4-Dichlorophenol	10.87	162	11201	52.99	ug/mL	95
25) 1,2,4-Trichlorobenzene	10.94	180	12401	53.25	ug/mL	98
26) Naphthalene	11.08	128	35495	49.86	ug/mL	99
27) 4-Chloroaniline	11.50	127	16961	51.52	ug/mL	100
28) Hexachlorobutadiene	11.62	225	7862	54.03	ug/mL	97
29) 4-Chloro-3-methylphenol	13.31	107	13111	50.54	ug/mL	96
30) 2-Chloronaphthalene	14.62	162	26337	53.00	ug/ml#	100
31) 2-Methylnaphthalene	13.20	142	24264	50.67	ug/mL	96
33) Hexachlorocyclopentadiene	13.72	237	7760	45.29	ug/mL	90
34) 2,4,6-Trichlorophenol	14.24	196	9125	47.50	ug/mL	97
35) 2,4,5-Trichlorophenol	14.35	196	9780	56.80	ug/mL	91

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

Quantitation Report

Data File : c:\hpchem\1\data2\b9469.d Vial: 2
Acq On : 26 Dec 95 11:25 am Operator: SCOTTV
Sample : 50 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Dec 27 9:58 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue Dec 26 12:09:14 1995
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37) 2-Nitroaniline	16.45	65	11227	55.05	ug/mL	97
38) Dimethylphthalate	15.97	163	33061	52.33	ug/mL#	13
39) Acenaphthylene	15.80	152	43437	50.27	ug/mL	100
40) 2,6-Dinitrotoluene	16.03	165	8264	55.27	ug/mL#	89
41) 3-Nitroaniline	18.30	138	6499	59.70	ug/mLm	94
42) Acenaphthene	16.36	153	28589	53.08	ug/mL	97
43) 2,4-Dinitrophenol	16.76	184	3056	42.94	ug/mL	88
44) 4-Nitrophenol	17.41	109	5493	49.63	ug/mL	86
45) Dibenzofuran	16.89	168	36044	50.85	ug/mL#	86
46) 2,4-Dinitrotoluene	17.18	165	8238	45.87	ug/mLm	1
47) Diethylphthalate	18.15	149	39585	58.01	ug/mL	94
48) Fluorene	17.92	166	32203	59.65	ug/mL	97
49) 4-Chlorophenyl-phenylether	18.15	204	13995	57.41	ug/mL#	78
51) 4-Nitroaniline	18.30	138	6314	47.15	ug/mLm	94
52) 4,6-Dinitro-2-methylphenol	18.36	198	5268	49.04	ug/mL	100
53) n-Nitrosodiphenylamine	18.59	169	21420	51.44	ug/mL	98
55) 1,2-Diphenylhydrazine (as	18.61	77	46423	43.04	ug/ml	100
56) 4-Bromophenyl-phenylether	19.57	248	11816	55.22	ug/mL#	90
57) Hexachlorobenzene	19.48	284	15744	53.36	ug/mL	95
58) Pentachlorophenol	20.27	266	8927	54.36	ug/mL	95
59) Phenanthrene	20.73	178	48833	53.79	ug/mL	99
60) Anthracene	20.86	178	49342	54.79	ug/mLm	99
61) Carbazole	21.58	167	43897	57.48	ug/ml	96
62) Di-n-butylphthalate	23.15	149	86560	55.78	ug/mL#	98
63) Fluoranthene	24.27	202	57609	58.90	ug/mLm	81
65) Benzidine	20.30	184	538	54.58	ug/mlm	100
66) Pyrene	24.89	202	56817	52.86	ug/mL#	91
68) Butylbenzylphthalate	27.60	149	37751	52.27	ug/mL#	31
69) Benzo[a]anthracene	28.58	228	53808	52.39	ug/mL	99
70) 3,3'-Dichlorobenzidine	28.82	252	17310	48.48	ug/mL	97
71) Chrysene	28.70	228	39564	51.28	ug/mLm	99
72) bis(2-Ethylhexyl)phthalate	29.62	149	55020	53.82	ug/mL#	24
74) Di-n-octylphthalate	31.51	149	68136	50.23	ug/mLm	100
75) Benzo[b]fluoranthene	31.61	252	35111	58.34	ug/mLm	96
76) Benzo[k]fluoranthene	31.69	252	24269	47.49	ug/mLm	96
77) Benzo[a]pyrene	32.40	252	25718	55.90	ug/mLm	96
78) Indeno[1,2,3-cd]pyrene	35.04	276	12648	53.19	ug/mL	97
79) Dibenz[a,h]anthracene	35.17	278	12959	53.95	ug/mL#	93
80) Benzo[g,h,i]perylene	35.56	276	11744	53.70	ug/mLm	96

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

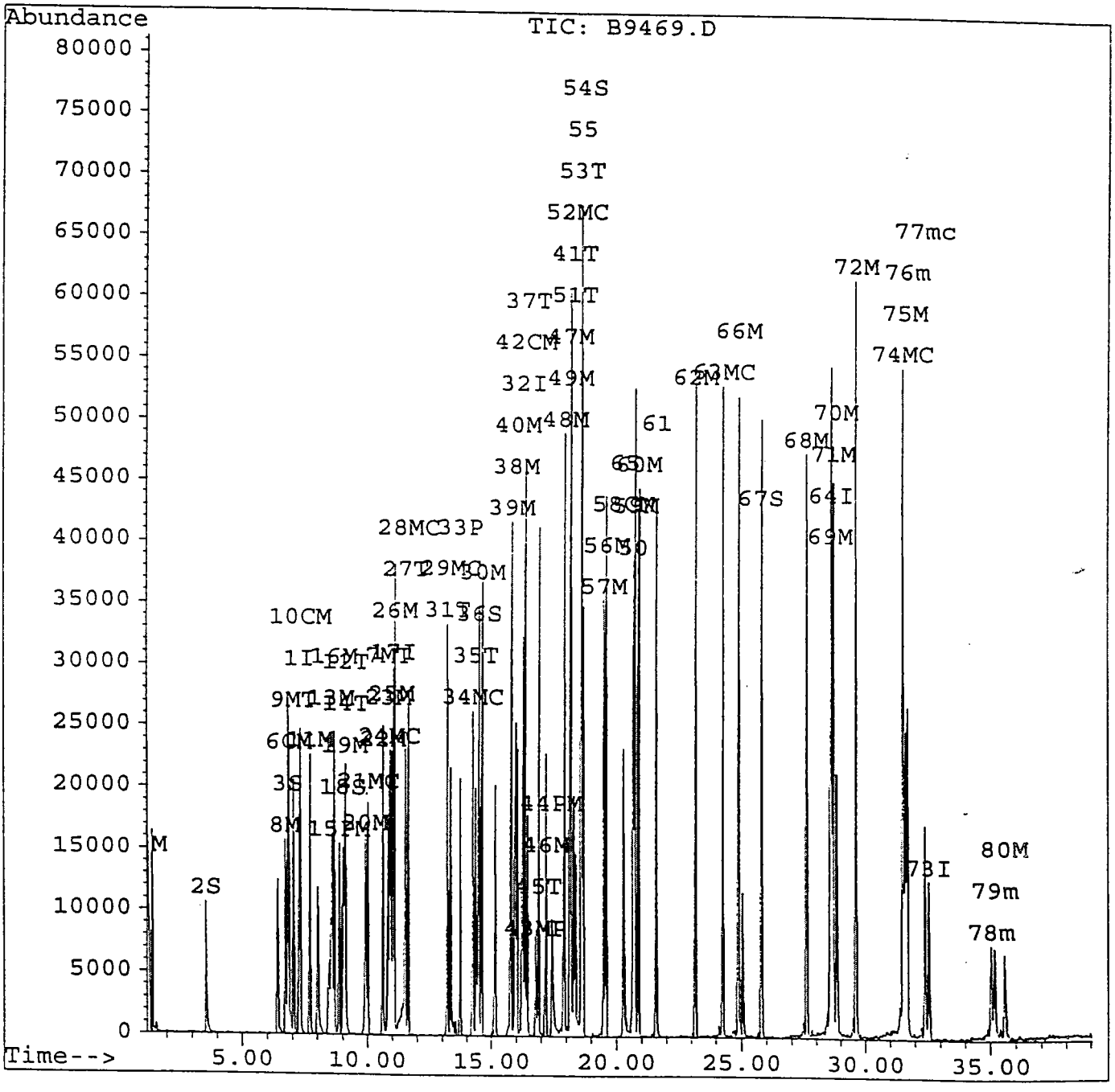
Quantitation Report

Data File : c:\hpchem\1\data2\b9469.d
Acq On : 26 Dec 95 11:25 am
Sample : 50 STD.....
Misc :
Quant Time: Dec 27 9:58 1995

Converted from RTE d

Vial: 2
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue Dec 26 12:09:14 1995
Response via : Multiple Level Calibration



8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

257

Lab Name: EMSL ANALYTICAL Contract: _____

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

Lab File ID (Standard): B9008.D Date Analyzed: 10/27/95

Instrument ID: ABNA Time Analyzed: 1329

		IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
	12 HOUR STD	26722	8.59	104351	12.33	57774	17.63
	UPPER LIMIT	53444	9.09	208702	12.83	115548	18.13
	LOWER LIMIT	13361	8.09	52176	11.83	28887	17.13
	SAMPLE NO.						
01	SBLK01	22496	8.59	83610	12.31	47426	17.62
02	9547000B	24097	8.60	94497	12.32	54817	17.61
03	46360MS	24328	8.60	97435	12.32	56181	17.64
04	46360MSD	25002	8.60	97241	12.34	55587	17.64
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): B9008.D Date Analyzed: 10/27/95

Instrument ID: ABNA Time Analyzed: 1329

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
	12 HOUR STD	79042	22.12	25699	30.18	9983	34.15
	UPPER LIMIT	158084	22.62	51398	30.68	19966	34.65
	LOWER LIMIT	39521	21.62	12850	29.68	4992	33.65
	SAMPLE NO.						
01	SBLK01	61940	22.09	43279	30.18	19502	34.16
02	9547000B	77921	22.11	44563	30.17	16352	34.16
03	46360MS	74786	22.13	35528	30.18	16536	34.14
04	46360MSD	77102	22.13	28509	30.19	10719	34.15
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

259

Lab Name: EMSL ANALYTICAL Contract: _____

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

Lab File ID (Standard): B9469.D Date Analyzed: 12/26/95

Instrument ID: ABNA Time Analyzed: 1125

		IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
	12 HOUR STD	7771	7.27	31449	11.02	20468	16.26
	UPPER LIMIT	15542	7.77	62898	11.52	40936	16.76
	LOWER LIMIT	3886	6.77	15725	10.52	10234	15.76
	SAMPLE NO.						
01	SBLK01	7458	7.26	29914	11.00	18755	16.23
02	9558188B	8924	7.26	36767	11.00	23340	16.24
03	9558189B	7941	7.26	31079	11.00	20400	16.24
04	9558190B	7796	7.26	31276	11.00	20007	16.23
05	9558191B	7989	7.26	31787	10.99	19890	16.23
06	9558195B	8219	7.26	31514	11.00	22858	16.23
07	9558196B	7150	7.26	27915	11.00	17186	16.23
08	SBLK02	8386	7.26	32580	11.00	22116	16.23
09	9558311B	9544	7.26	38966	11.00	24933	16.23
10	9558313B	7690	7.26	30820	11.00	19267	16.23
11	9558314B	8550	7.26	35386	11.00	22395	16.23
12	9558315B	8213	7.26	32583	11.00	20978	16.23
13	9558316B	7706	7.26	32060	11.00	21124	16.23
14	9558317B	8821	7.27	38250	11.00	25653	16.24
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

260

Lab Name: EMSL ANALYTICAL Contract: _____

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

Lab File ID (Standard): B9469.D Date Analyzed: 12/26/95

Instrument ID: ABNA Time Analyzed: 1125

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
	12 HOUR STD	35324	20.65	35218	28.62	17686	32.53
	UPPER LIMIT	70648	21.15	70436	29.12	35372	33.03
	LOWER LIMIT	17662	20.15	17609	28.12	8843	32.03
	SAMPLE NO.						
01	SBLK01	35414	20.64	45521	28.61	31190	32.56
02	9558188B	40695	20.65	46341	28.60	31872	32.55
03	9558189B	35349	20.65	39375	28.60	25346	32.54
04	9558190B	35474	20.64	42253	28.59	27158	32.54
05	9558191B	32983	20.64	49439	28.61	36893 *	32.55
06	9558195B	38128	20.64	44965	28.59	30511	32.54
07	9558196B	31872	20.62	44817	28.59	34345	32.56
08	SBLK02	39178	20.64	48266	28.59	36878 *	32.56
09	9558311B	41078	20.64	60115	28.61	41191 *	32.54
10	9558313B	37750	20.64	48903	28.59	37763 *	32.56
11	9558314B	39827	20.62	50880	28.59	44639 *	32.54
12	9558315B	38289	20.64	53562	28.59	40526 *	32.54
13	9558316B	38478	20.64	50164	28.59	37293 *	32.54
14	9558317B	43586	20.63	53856	28.61	40386 *	32.55
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. 9558313B Field Blank

Lab Name: EMSL ANALYTICAL Contract: _____

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

Matrix: (soil/water) WATER Lab Sample ID: 9558313B

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B9479.D

Level: (low/med) _____ Date Received: _____

% Moisture: _____ decanted: (Y/N): N Date Extracted: 12/23/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 12/26/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

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

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
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. 262

9558313B
Field Blank

Lab Name: EMSL ANALYTICAL Contract: _____

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

Matrix: (soil/water) WATER Lab Sample ID: 9558313B

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B9479.D

Level: (low/med) _____ Date Received: _____

% Moisture: _____ decanted: (Y/N): N Date Extracted: 12/23/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 12/26/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

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

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
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. 263

9558313B
Field Blank

Lab Name: EMSL ANALYTICAL Contract:

Project No.: Site: Location: Group:

Matrix: (soil/water) WATER Lab Sample ID: 9558313B

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: B9479.D

Level: (low/med) Date Received:

% Moisture: decanted: (Y/N) N Date Extracted: 12/23/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 12/26/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 1 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc	Q
1.	Unknown Hydrocarbon	27.84	6	J
2.				
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30.				

Quantitation Report

Data File : c:\hpchem\1\data2\b9479.d Vial: 12
Acq On : 26 Dec 95 8:23 pm Operator: SCOTTV
Sample : 58313..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Dec 27 11:00 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue Dec 26 12:09:14 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.26	152	7690	40.00	ug/mL	-0.02
17) Naphthalene-d8	11.00	136	30820	40.00	ug/mL	-0.04
32) Acenaphthene-d10	16.23	164	19267	40.00	ug/mL	-0.02
50) Phenanthrene-d10	20.64	188	37750	40.00	ug/ml	0.00
64) Chrysene-d12	28.59	240	48903	40.00	ug/mL	-0.03
73) Perylene-d12	32.56	264	37763	40.00	ug/mL	0.00
System Monitoring Compounds						**%Recovery**
2) 2-Fluorophenol	3.55	112	8809	40.62	ug/mL	40.62%
3) Phenol-d5	6.80	99	8566	25.72	ug/mL	25.72%
18) Nitrobenzene-d5	8.99	82	16404	55.88	ug/mL	55.88%
36) 2-Fluorobiphenyl	14.48	172	31019	53.34	ug/mL	53.34%
54) 2,4,6-Tribromophenol	18.64	330	15518	69.50	ug/mL	69.50%
67) Terphenyl-d14	25.80	244	85905	73.17	ug/mL	73.17%
Target Compounds						**Qvalue**

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

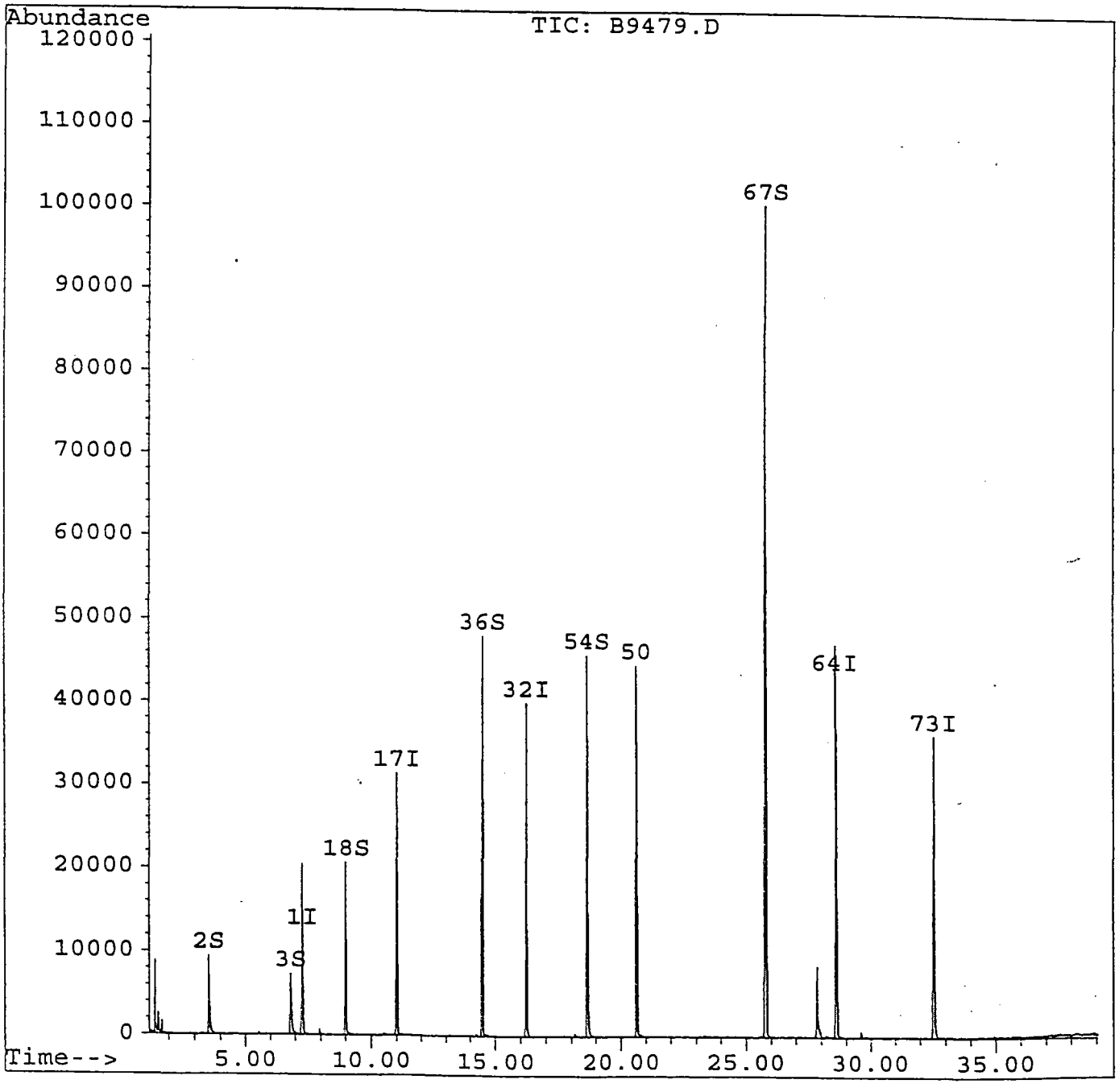
Quantitation Report

Data File : c:\hpchem\1\data2\b9479.d
Acq On : 26 Dec 95 8:23 pm
Sample : 58313.....
Misc :
Quant Time: Dec 27 11:00 1995

Converted from RTE d

Vial: 12
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue Dec 26 12:09:14 1995
Response via : Multiple Level Calibration



Library Search Compound Report

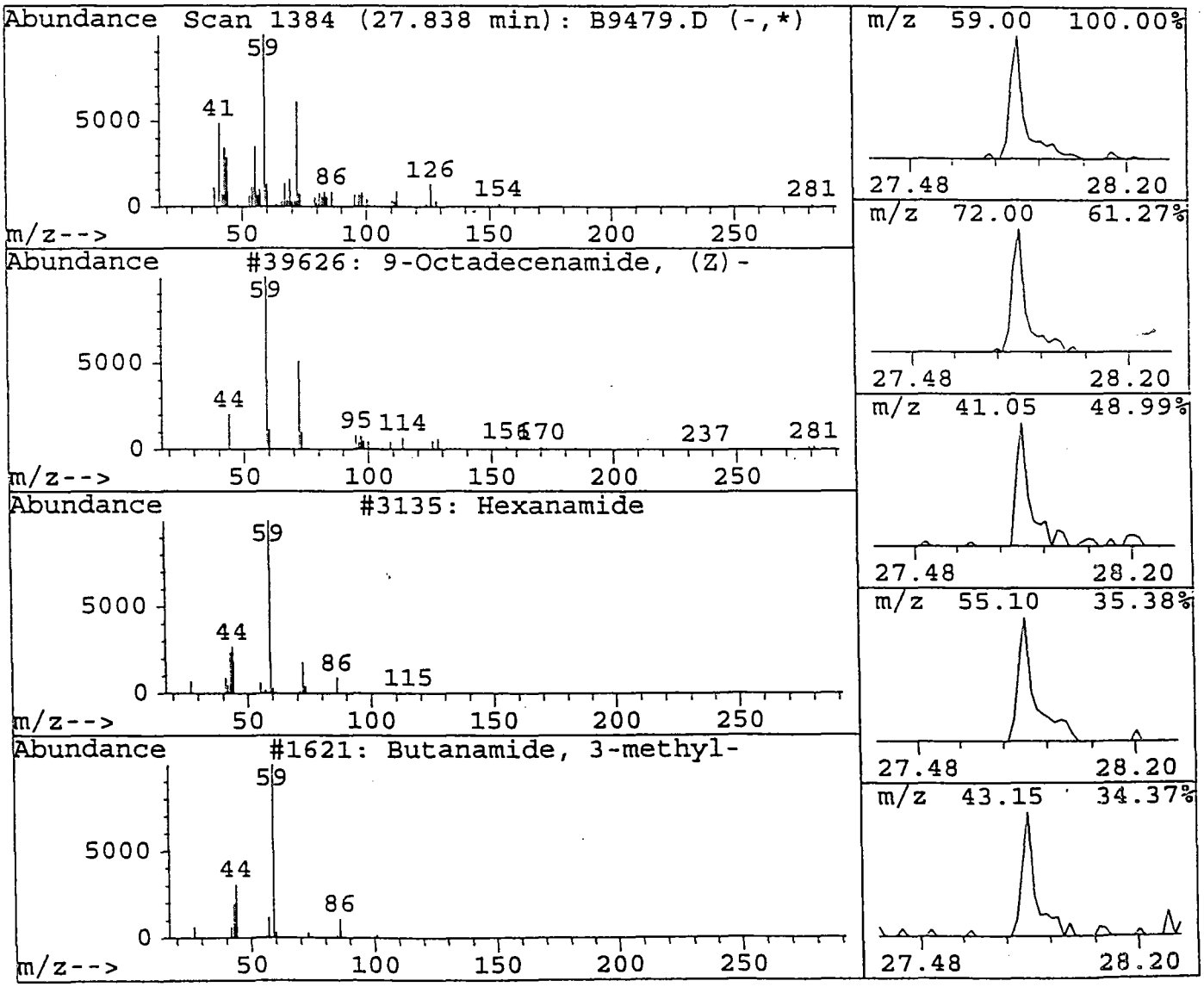
Data File : c:\hpchem\1\data2\b9479.d
Acq On : 26 Dec 95 8:23 pm
Sample : 58313.....
Misc :

Vial: 12
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.
27.84	6.33 ug/mL	22455	Chrysene-d12	28.59

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	9-Octadecenamide, (Z)-	39626	000301-02-0	72
2	Hexanamide	3135	000628-02-4	38
3	Butanamide, 3-methyl-	1621	000541-46-8	37
4	Cyclooctanemethanol, .alpha.,.alpha	15325	016624-06-9	35
5	2-Propanone, 1-cyclopentyl-	4580	001122-98-1	32



SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO. 267

9558315B

Lab Name: EMSL ANALYTICAL Contract: _____

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

Matrix: (soil/water) WATER Lab Sample ID: 9558315B

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B9481.D

Level: (low/med) _____ Date Received: _____

% Moisture: _____ decanted: (Y/N): N Date Extracted: 12/23/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 12/26/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

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

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
62-75-9	N-nitrosodimethylamine	2	U
111-44-4	bis(2-Chloroethyl)ether	1	U
541-73-1	1,3-Dichlorobenzene	2	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	2	U
108-60-1	bis(2-chloroisopropyl)ether	5	U
621-64-7	N-Nitroso-Di-n-propylamine	2	U
67-72-1	Hexachloroethane	1	U
98-95-3	Nitrobenzene	2	U
78-59-1	Isophorone	1	U
111-91-1	bis(2-Chloroethoxy)methane	3	U
120-82-1	1,2,4-Trichlorobenzene	2	U
91-20-3	Naphthalene	2	U
87-68-3	Hexachlorobutadiene	2	U
77-47-4	Hexachlorocyclopentadiene	12	U
91-58-7	2-Chloronaphthalene	1	U
131-11-3	Dimethylphthalate	1	U
208-96-8	Acenaphthylene	5	U
606-20-2	2,6-Dinitrotoluene	2	U
83-32-9	Acenaphthene	3	U
121-14-2	2,4-Dinitrotoluene	3	U
84-66-2	Diethylphthalate	1	U
86-73-7	Fluorene	3	U
7005-72-3	4-Chlorophenyl-phenylether	3	U
86-30-6	n-Nitrosodiphenylamine	6	U
122-66-7	1,2-Diphenylhydrazine(as azo)	6	U
101-55-3	4-Bromophenyl-phenylether	2	U
118-74-1	Hexachlorobenzene	2	U
85-01-08	Phenanthrene	2	U
120-12-7	Anthracene	2	U
84-74-2	Di-n-butylphthalate	16	
206-44-0	Fluoranthene	1	U
92-87-5	Benzidine	1	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO. 268

9558315B

Lab Name: EMSL ANALYTICAL Contract: _____

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

Matrix: (soil/water) WATER Lab Sample ID: 9558315B

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B9481.D

Level: (low/med) _____ Date Received: _____

% Moisture: _____ decanted: (Y/N): N Date Extracted: 12/23/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 12/26/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

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

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
129-00-0	Pyrene	2	U
85-68-7	Butylbenzylphthalate	9	U
56-55-3	Benzo[a]anthracene	2	U
91-94-1	3,3'-Dichlorobenzidine	15	U
218-01-9	Chrysene	2	U
117-81-7	bis(2-Ethylhexyl)phthalate	4	U
117-84-0	Di-n-octylphthalate	2	U
205-99-2	Benzo[b]fluoranthene	1	U
207-08-9	Benzo[k]fluoranthene	2	U
50-32-8	Benzo[a]pyrene	2	U
193-39-5	Indeno[1,2,3-cd]pyrene	2	U
53-70-3	Dibenz[a,h]anthracene	3	U
191-24-2	Benzo[g,h,i]perylene	2	U

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO. 269

9558315B

Lab Name: EMSL ANALYTICAL Contract: _____

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

Matrix: (soil/water) WATER Lab Sample ID: 9558315B

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: B9481.D

Level: (low/med) _____ Date Received: _____

% Moisture: _____ decanted: (Y/N) N Date Extracted: 12/23/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 12/26/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

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

Number TICs found: 0 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc	Q
1.	NONE FOUND			
2.				
3.				
4.				
5.				
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Quantitation Report

270

Data File : c:\hpchem\1\data2\b9481.d Vial: 14
Acq On : 26 Dec 95 10:06 pm Operator: SCOTTV
Sample : 58315..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Dec 27 11:02 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue Dec 26 12:09:14 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.26	152	8213	40.00	ug/mL	-0.02
17) Naphthalene-d8	11.00	136	32583	40.00	ug/mL	-0.04
32) Acenaphthene-d10	16.23	164	20978	40.00	ug/mL	-0.02
50) Phenanthrene-d10	20.64	188	38289	40.00	ug/ml	0.00
64) Chrysene-d12	28.59	240	53562	40.00	ug/mL	-0.03
73) Perylene-d12	32.54	264	40526	40.00	ug/mL	0.00
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	0.00	112	0	0.00	ug/mL	0.00%
3) Phenol-d5	7.26	99	171	0.48	ug/mL	0.48%
18) Nitrobenzene-d5	8.99	82	22937	73.91	ug/mL	73.91%
36) 2-Fluorobiphenyl	14.48	172	37114	58.62	ug/mL	58.62%
54) 2,4,6-Tribromophenol	0.00	330	0	0.00	ug/mL	0.00%
67) Terphenyl-d14	25.80	244	96215	74.82	ug/mL	74.82%
Target Compounds						Qvalue
62) Di-n-butylphthalate	23.14	149	26654	15.84	ug/mL	99

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

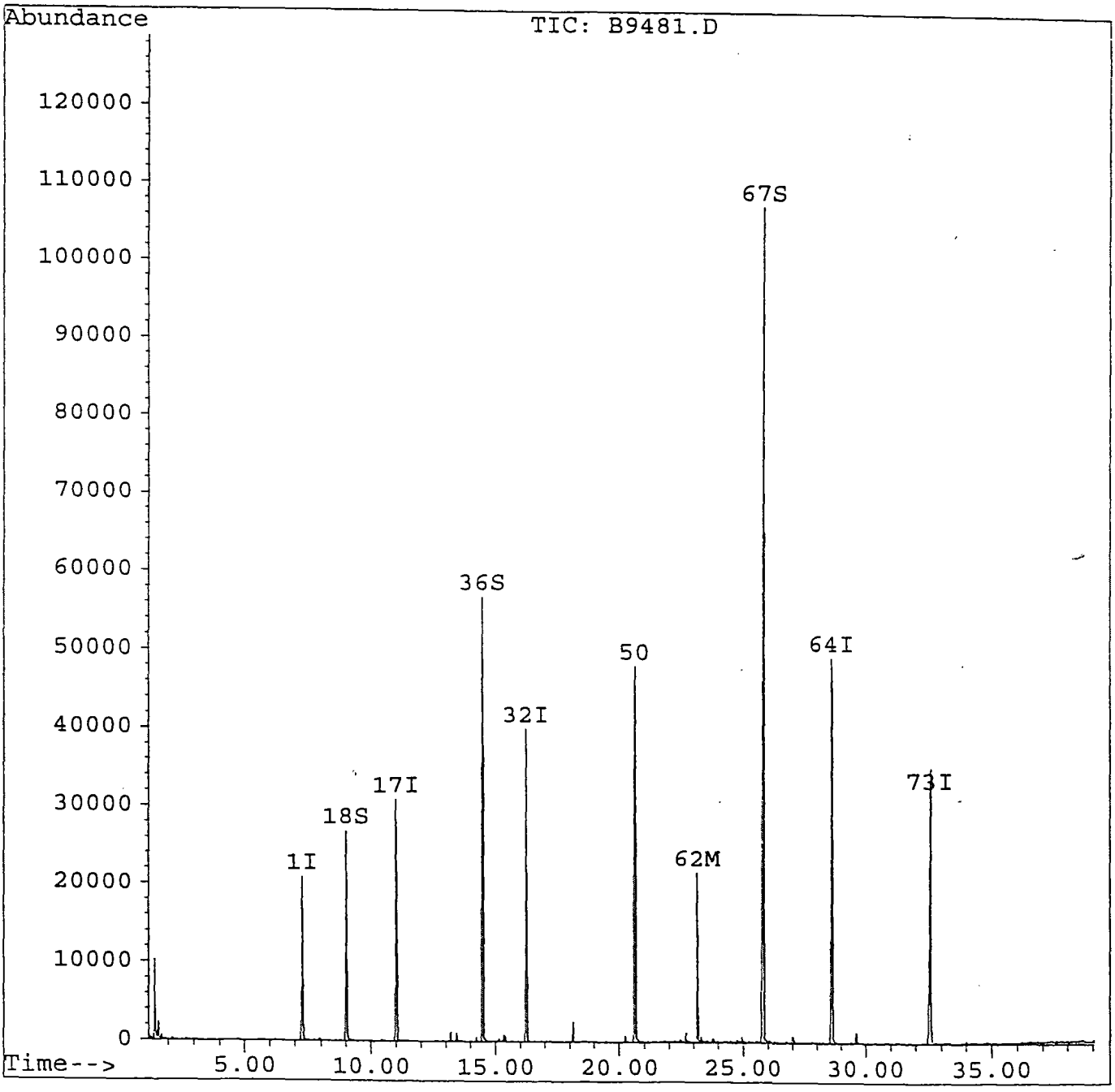
Quantitation Report

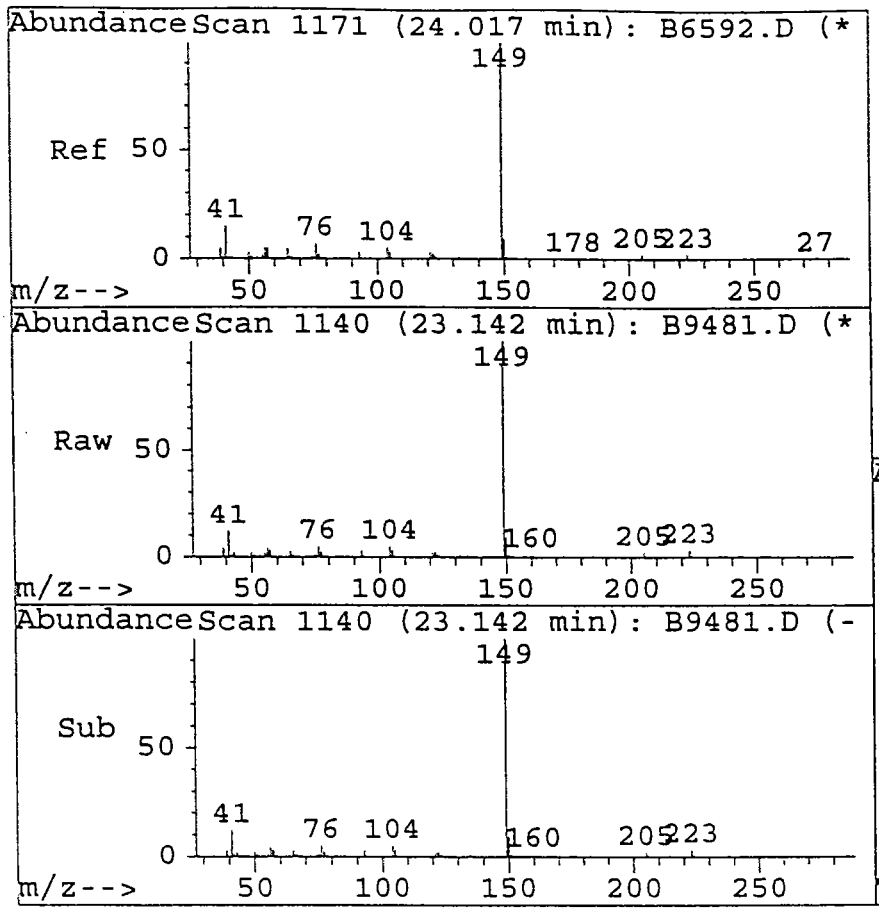
Data File : c:\hpchem\1\data2\b9481.d
Acq On : 26 Dec 95 10:06 pm
Sample : 58315.....
Misc :
Quant Time: Dec 27 11:02 1995

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 : Tue Dec 26 12:09:14 1995
Response via : Multiple Level Calibration

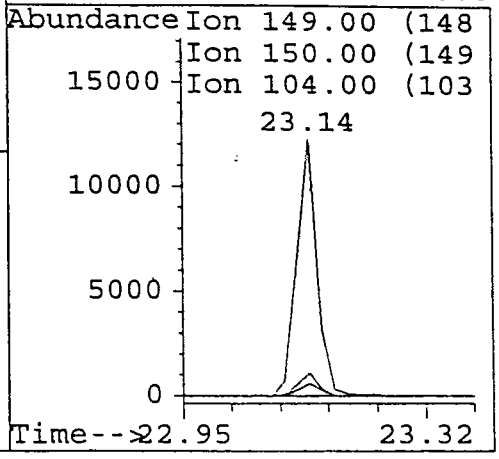




#62
Di-n-butylphthalate
Concen: 15.84 ug/mL
RT: 23.14 min Scan# 1140
Delta R.T. -0.03 min
Lab File: b9481.d
Acq: 26 Dec 95 10:06 pm

Tgt Ion:149 Resp: 26654

Ion	Ratio	Lower	Upper
149	100		
150	8.9	7.3	10.9
104	4.9	3.7	5.5
0	0.0	0.0	0.0



WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: EMSL ANALYTICAL Contract: _____

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

	SAMPLE NO.	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	#	#	#	#	#	TOT OUT
01	SBLK01	41	37	65						
02	9547000B	56	49	91						
03	46360MS	54	58	110						
04	46360MSD	51	56	121						
05										
06										
07										
08										
09										
10										
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30										

	QC LIMITS
S1 (NBZ) = Nitrobenzene-d5	(22-101)
S2 (FBP) = 2-Fluorobiphenyl	(20-94)
S3 (TPH) = Terphenyl-d14	(35-127)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogate diluted out

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	43	28	59	58	71	72			
02	9558188B	26	18	33	35	64	59			
03	9558189B	28	20	51	52	73	83			
04	9558190B	29	21	61	56	62	77			
05	9558191B	36	24	52	48	63	64			
06	9558195B	38	27	64	57	66	74			
07	9558196B	40	27	63	60	59	70			
08	SBLK02	45	29	64	58	67	73			
09	9558311B	42	30	62	55	83	67			
10	9558313B	41	26	56	53	70	73			
11	9558314B			64	56		68			
12	9558315B			74	59		75			
13	9558316B			68	53		76			
14	9558317B			46	37		61			
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

4B

SEMIVOLATILE METHOD BLANK SUMMARY

SAMPLE NO. 275

SBLK01

Lab Name: EMSL ANALYTICAL Contract: _____

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

Lab File ID: B9009.D Lab Sample ID: BLANK1

Instrument ID: ABNA Date Extracted: 10/18/95

Matrix: (soil/water) WATER Date Analyzed: 10/27/95

Level: (low/med) _____ Time Analyzed: 1421

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

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	9547000B	9547000B	B9010.D	10/27/95
02	46360MS	46360MS	B9011.D	10/27/95
03	46360MSD	46360MSD	B9012.D	10/27/95
04				
05				
06				
07				
08				
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29				
30				

COMMENTS:

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO. 276

SBLK01

Lab Name: EMSL ANALYTICAL Contract:

Project No.: Site: Location: Group:

Matrix: (soil/water) WATER Lab Sample ID: BLANK1

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B9009.D

Level: (low/med) Date Received: 10/13/95

% Moisture: decanted: (Y/N): N Date Extracted: 10/18/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/27/95

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	
206-44-0	Fluoranthene	1	U
92-87-5	Benzidine	1	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO. 277

SBLK01

Lab Name: EMSL ANALYTICAL Contract: _____

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

Matrix: (soil/water) WATER Lab Sample ID: BLANK1

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B9009.D

Level: (low/med) _____ Date Received: 10/13/95

% Moisture: _____ decanted: (Y/N): N Date Extracted: 10/18/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/27/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

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

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
129-00-0	Pyrene	2	U
85-68-7	Butylbenzylphthalate	9	U
56-55-3	Benzo[a]anthracene	2	U
91-94-1	3,3'-Dichlorobenzidine	15	U
218-01-9	Chrysene	2	U
117-81-7	bis(2-Ethylhexyl)phthalate	4	U
117-84-0	Di-n-octylphthalate	2	U
205-99-2	Benzo[b]fluoranthene	1	U
207-08-9	Benzo[k]fluoranthene	2	U
50-32-8	Benzo[a]pyrene	2	U
193-39-5	Indeno[1,2,3-cd]pyrene	2	U
53-70-3	Dibenz[a,h]anthracene	3	U
191-24-2	Benzo[g,h,i]perylene	2	U

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO. 278

SBLK01

Lab Name: EMSL ANALYTICAL Contract: _____

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

Matrix: (soil/water) WATER Lab Sample ID: BLANK1

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: B9009.D

Level: (low/med) _____ Date Received: 10/13/95

% Moisture: _____ decanted: (Y/N) N Date Extracted: 10/18/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/27/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

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

Number TICs found: 1 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc	Q
1.	Unknown	6.94	2	J
2.				
3.				
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27.				
28.				
29.				
30.				

Quantitation Report

Data File : c:\hpchem\1\data2\b9009.d Vial: 3
Acq On : 27 Oct 95 2:21 pm Operator: SCOTTV
Sample : BLANK..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Oct 31 15:20 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed Oct 25 10:20:51 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.59	152	22496	40.00	ug/mL	-0.10
17) Naphthalene-d8	12.31	136	83610	40.00	ug/mL	-0.12
32) Acenaphthene-d10	17.62	164	47426	40.00	ug/mL	-0.11
50) Phenanthrene-d10	22.09	188	61940	40.00	ug/ml	-0.14
64) Chrysene-d12	30.18	240	43279	40.00	ug/mL	-0.11
73) Perylene-d12	34.16	264	19502	40.00	ug/mL	-0.08
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.01	112	31567	44.02	ug/mL	44.02%
3) Phenol-d5	8.01	99	53072	45.61	ug/mL	45.61%
18) Nitrobenzene-d5	10.27	82	46833	41.33	ug/mL	41.33%
36) 2-Fluorobiphenyl	15.77	172	53376	36.90	ug/mL	36.90%
54) 2,4,6-Tribromophenol	20.03	330	7869	40.12	ug/mL	40.12%
67) Terphenyl-d14	27.27	244	69697	64.83	ug/mL	64.83%
Target Compounds						Qvalue
62) Di-n-butylphthalate	24.52	149	16902	5.43	ug/mL#	98

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

Quantitation Report

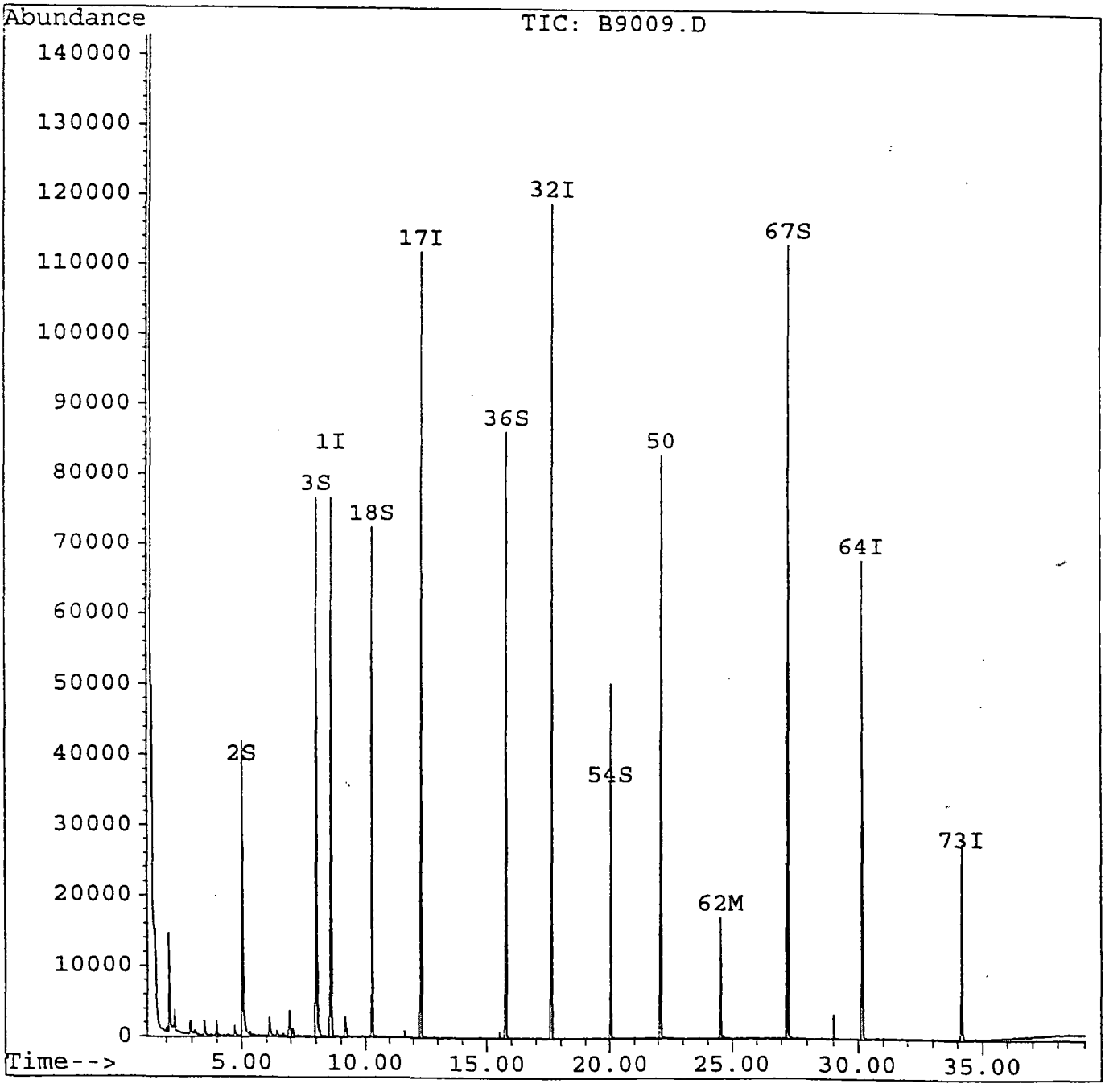
280

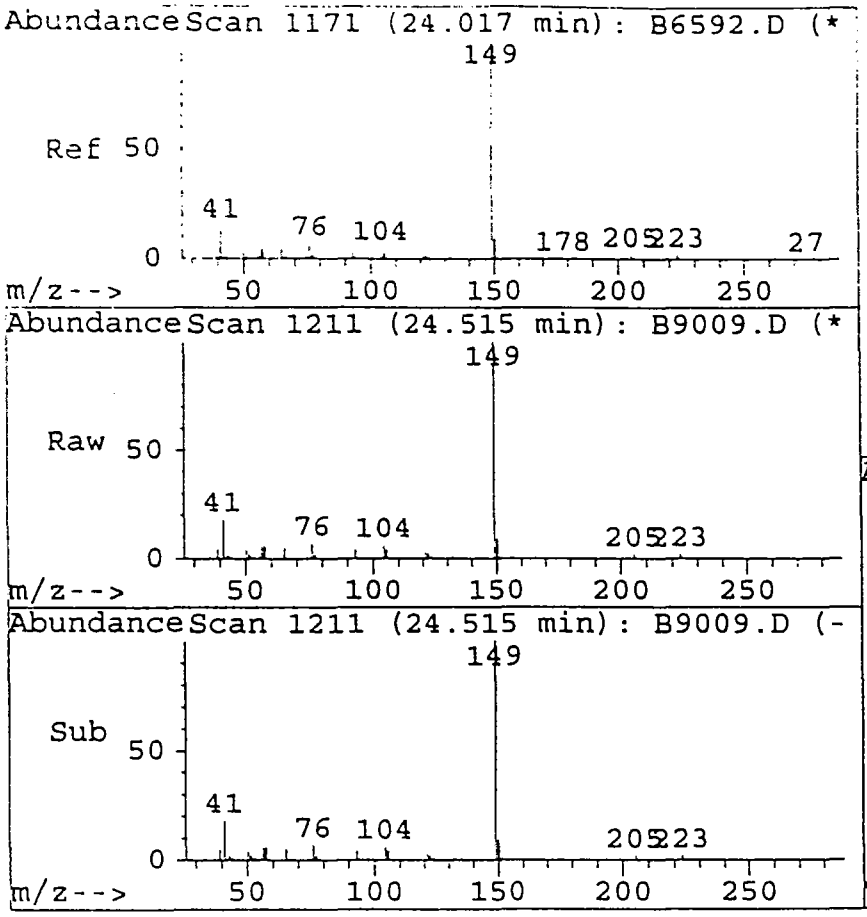
Data File : c:\hpchem\1\data2\b9009.d
Acq On : 27 Oct 95 2:21 pm
Sample : BLANK.....
Misc :
Quant Time: Oct 31 15:20 1995

Converted from RTE d

Vial: 3
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed Oct 25 10:20:51 1995
Response via : Multiple Level Calibration

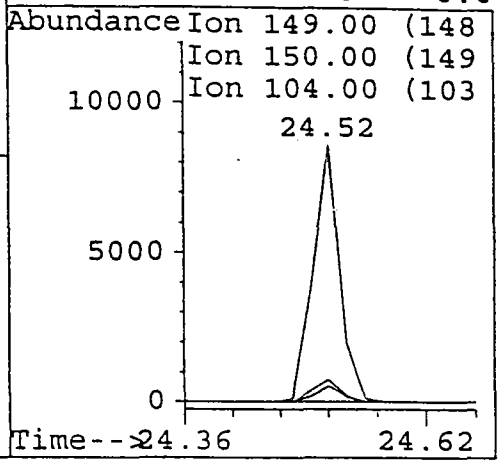




#62
Di-n-butylphthalate
Concen: 5.43 ug/mL
RT: 24.52 min Scan# 1211
Delta R.T. -0.12 min
Lab File: b9009.d
Acq: 27 Oct 95 2:21 pm

Tgt Ion:149 Resp: 16902

Ion	Ratio	Lower	Upper
149	100		
150	8.9	7.3	10.9
104	6.4	3.7	5.5#
0	0.0	0.0	0.0



Library Search Compound Report

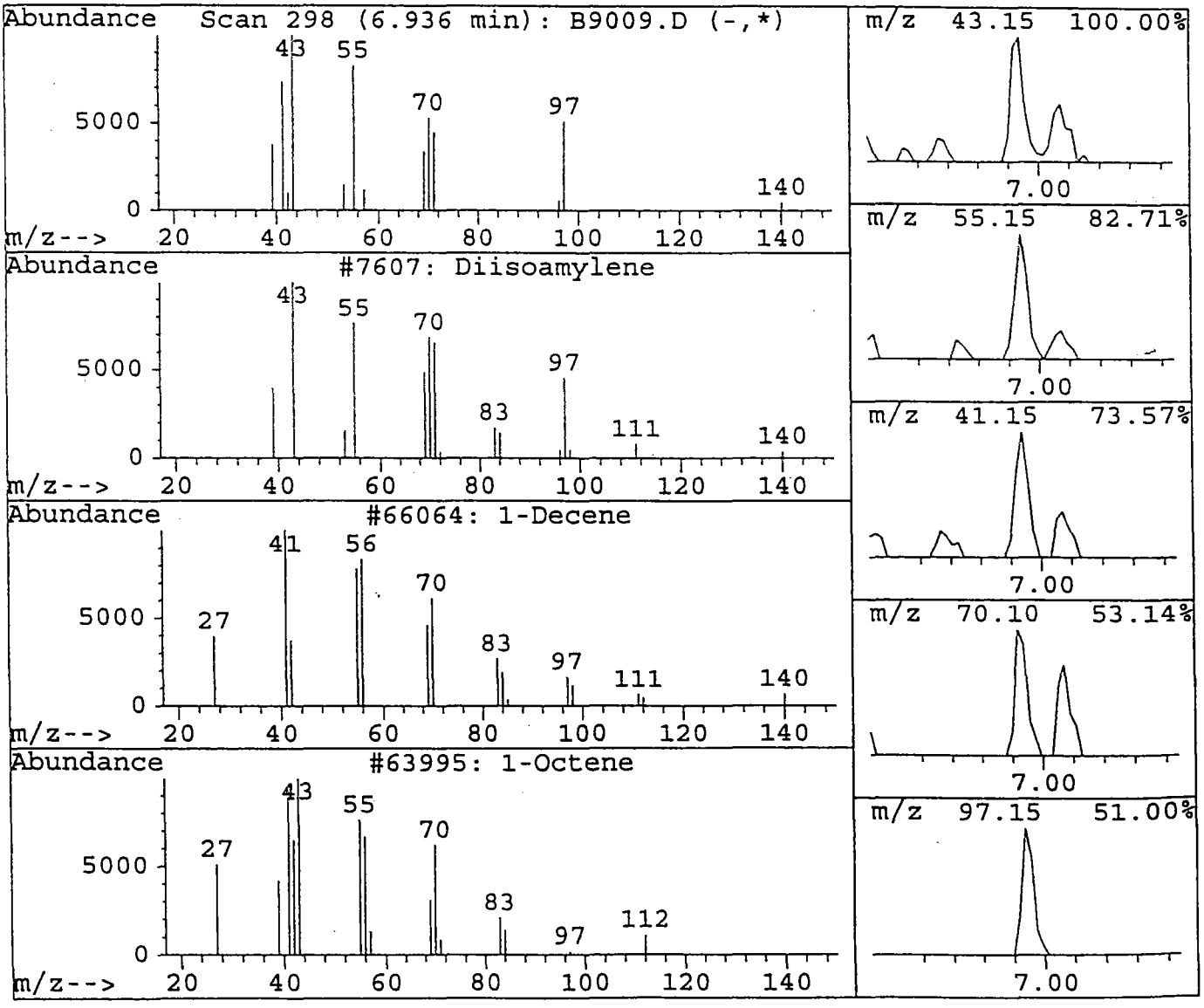
Data File : c:\hpchem\1\data2\b9009.d
Acq On : 27 Oct 95 2:21 pm
Sample : BLANK.....
Misc :

Vial: 3
Operator: SCOTTV
Converted from RTE d Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Library : C:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
6.94	2.46 ug/ml	10825	1,4-Dichlorobenzene-d4	8.59

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Diisoamylene	7607	054063-09-1	64
2	1-Decene	66064	000872-05-9	35
3	1-Octene	63995	000111-66-0	35
4	Heptane, 4-methyl-	3096	000589-53-7	25
5	Cyclopentane, 1,2-dimethyl-, cis-	1367	001192-18-3	25



4B

SAMPLE NO. 283

SEMIVOLATILE METHOD BLANK SUMMARY

SBLK02

Lab Name: EMSL ANALYTICAL Contract: _____

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

Lab File ID: B9477.D Lab Sample ID: BLANK2

Instrument ID: ABNA Date Extracted: 12/23/95

Matrix: (soil/water) WATER Date Analyzed: 12/26/95

Level: (low/med) _____ Time Analyzed: 1840

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

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	9558311B	9558311B	B9478.D	12/26/95
02	9558313B	9558313B	B9479.D	12/26/95
03	9558314B	9558314B	B9480.D	12/26/95
04	9558315B	9558315B	B9481.D	12/26/95
05	9558316B	9558316B	B9482.D	12/26/95
06	9558317B	9558317B	B9483.D	12/26/95
07				
08				
09				
10				
11				
12				
13				
14				
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16				
17				
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30				

COMMENTS:

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

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: B9477.D

Level: (low/med) Date Received:

% Moisture: decanted: (Y/N): N Date Extracted: 12/23/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 12/26/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
62-75-9	N-nitrosodimethylamine	2	U
111-44-4	bis(2-Chloroethyl)ether	1	U
541-73-1	1,3-Dichlorobenzene	2	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	2	U
108-60-1	bis(2-chloroisopropyl)ether	5	U
621-64-7	N-Nitroso-Di-n-propylamine	2	U
67-72-1	Hexachloroethane	1	U
98-95-3	Nitrobenzene	2	U
78-59-1	Isophorone	1	U
111-91-1	bis(2-Chloroethoxy)methane	3	U
120-82-1	1,2,4-Trichlorobenzene	2	U
91-20-3	Naphthalene	2	U
87-68-3	Hexachlorobutadiene	2	U
77-47-4	Hexachlorocyclopentadiene	12	U
91-58-7	2-Chloronaphthalene	1	U
131-11-3	Dimethylphthalate	1	U
208-96-8	Acenaphthylene	5	U
606-20-2	2,6-Dinitrotoluene	2	U
83-32-9	Acenaphthene	3	U
121-14-2	2,4-Dinitrotoluene	3	U
84-66-2	Diethylphthalate	1	U
86-73-7	Fluorene	3	U
7005-72-3	4-Chlorophenyl-phenylether	3	U
86-30-6	n-Nitrosodiphenylamine	6	U
122-66-7	1,2-Diphenylhydrazine(as azo)	6	U
101-55-3	4-Bromophenyl-phenylether	2	U
118-74-1	Hexachlorobenzene	2	U
85-01-08	Phenanthrene	2	U
120-12-7	Anthracene	2	U
84-74-2	Di-n-butylphthalate	5	U
206-44-0	Fluoranthene	1	U
92-87-5	Benzidine	1	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO. 285

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: B9477.D

Level: (low/med) _____ Date Received: _____

% Moisture: _____ decanted: (Y/N): N Date Extracted: 12/23/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 12/26/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

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

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
129-00-0	Pyrene	2	U
85-68-7	Butylbenzylphthalate	9	U
56-55-3	Benzo[a]anthracene	2	U
91-94-1	3,3'-Dichlorobenzidine	15	U
218-01-9	Chrysene	2	U
117-81-7	bis(2-Ethylhexyl)phthalate	4	U
117-84-0	Di-n-octylphthalate	2	U
205-99-2	Benzo[b]fluoranthene	1	U
207-08-9	Benzo[k]fluoranthene	2	U
50-32-8	Benzo[a]pyrene	2	U
193-39-5	Indeno[1,2,3-cd]pyrene	2	U
53-70-3	Dibenz[a,h]anthracene	3	U
191-24-2	Benzo[g,h,i]perylene	2	U

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO. 286

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: B9477.D

Level: (low/med) Date Received:

% Moisture: decanted: (Y/N): N Date Extracted: 12/23/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 12/26/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
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. 287

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: B9477.D

Level: (low/med) _____ Date Received: _____

% Moisture: _____ decanted: (Y/N): N Date Extracted: 12/23/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 12/26/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

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

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
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

Quantitation Report

Data File : c:\hpchem\1\data2\b9477.d Vial: 10
Acq On : 26 Dec 95 6:40 pm Operator: SCOTTV
Sample : BLANK..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Dec 27 10:58 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue Dec 26 12:09:14 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.26	152	8386	40.00	ug/mL	-0.02
17) Naphthalene-d8	11.00	136	32580	40.00	ug/mL	-0.04
32) Acenaphthene-d10	16.23	164	22116	40.00	ug/mL	-0.02
50) Phenanthrene-d10	20.64	188	39178	40.00	ug/ml	0.00
64) Chrysene-d12	28.59	240	48266	40.00	ug/mL	-0.03
73) Perylene-d12	32.56	264	36878	40.00	ug/mL	0.00
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	3.53	112	10529	44.53	ug/mL	44.53%
3) Phenol-d5	6.78	99	10502	28.92	ug/mL	28.92%
18) Nitrobenzene-d5	9.00	82	19835	63.92	ug/mL	63.92%
36) 2-Fluorobiphenyl	14.48	172	38587	57.81	ug/mL	57.81%
54) 2,4,6-Tribromophenol	18.64	330	15568	67.19	ug/mL	67.19%
67) Terphenyl-d14	25.80	244	85054	73.40	ug/mL	73.40%
Target Compounds						Qvalue

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

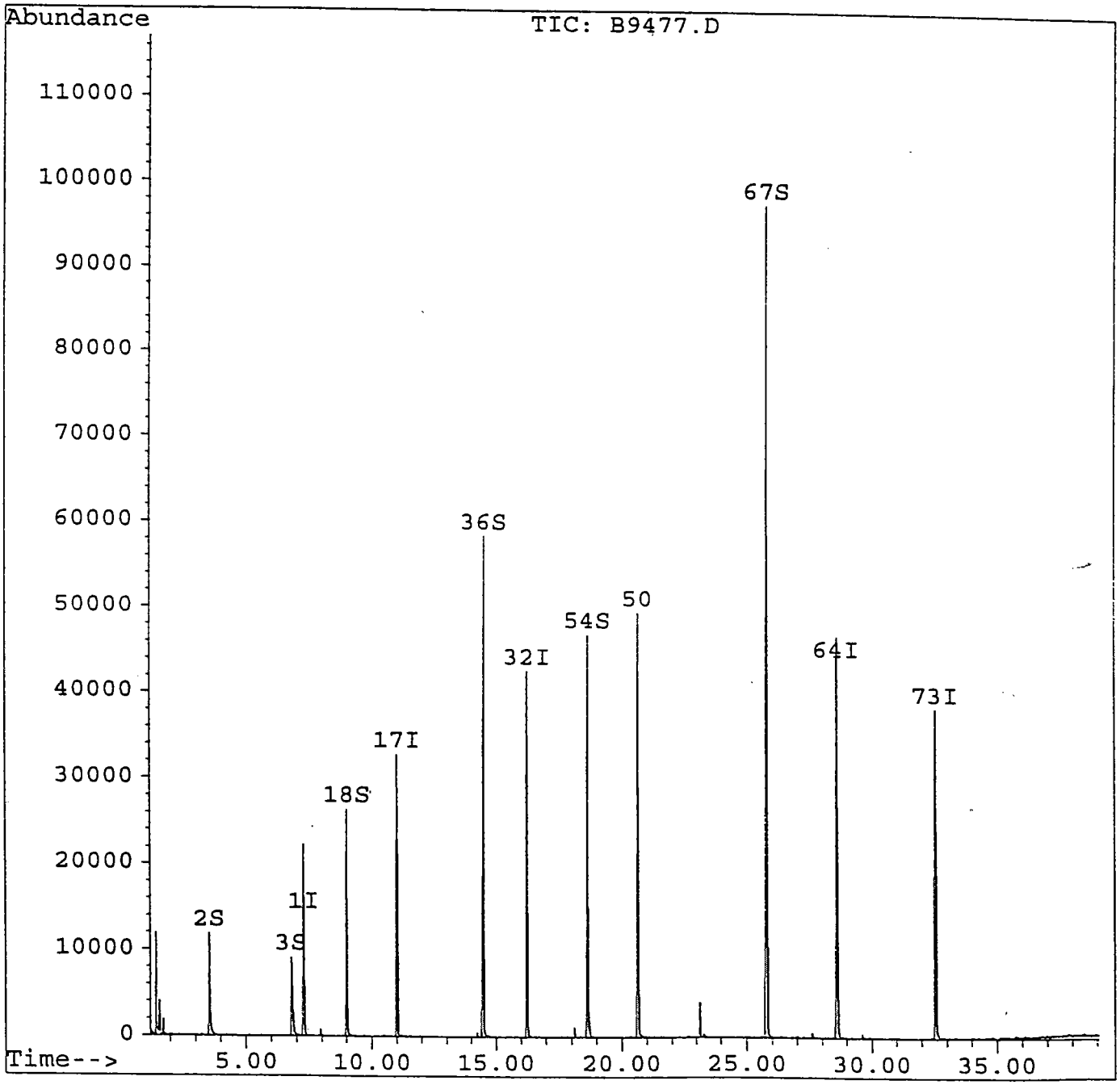
Quantitation Report

Data File : c:\hpchem\1\data2\b9477.d
Acq On : 26 Dec 95 6:40 pm
Sample : BLANK.....
Misc :
Quant Time: Dec 27 10:58 1995

Converted from RTE d

Vial: 10
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue Dec 26 12:09:14 1995
Response via : Multiple Level Calibration



Spike Recovery and RPD Summary Report - WATER

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed Nov 22 12:21:54 1995
Response via : Initial Calibration

Non-Spiked Sample: B8997.D

	Spike Sample	Spike Duplicate Sample
File ID :	B9011.D	B9012.D
Sample :	46360MS.....	Converted from RTE data file >B9011::D5

Compound	Sample Conc	Spike Added	Spike Res	Dup Res	Spike %Rec	Dup %Rec	RPD	QC Limits RPD	QC Limits % Rec
N-nitrosodimethylami	0.3	100	42	50	41	49	18	100	1-300
Phenol	0.6	100	59	59	59	59	0	23	5-112
bis(2-Chloroethyl)et	0.0	100	57	51	57	51	11	55	12-158
2-Chlorophenol	0.0	100	57	53	57	53	8	29	23-134
1,3-Dichlorobenzene	0.0	100	45	43	45	43	3	42	1-172
1,4-Dichlorobenzene	0.0	100	47	45	47	45	5	32	20-124
1,2-Dichlorobenzene	0.0	100	47	45	47	45	5	31	32-129
bis(2-chloroisopropy	0.0	100	77	72	77	72	7	46	36-166
N-Nitroso-Di-n-propy	0.0	100	51	47	51	47	9	55	1-230
Hexachloroethane	0.0	100	44	41	44	41	7	25	40-113
Nitrobenzene	0.2	100	50	48	50	47	5	39	35-180
Isophorone	0.0	100	48	45	48	45	7	63	21-196
2-Nitrophenol	0.0	100	54	50	54	50	8	35	29-182
2,4-Dimethylphenol	0.0	100	75	84	75	84	11	26	32-119
bis(2-Chloroethoxy)m	0.0	100	56	51	56	51	8	35	33-184
2,4-Dichlorophenol	0.0	100	72	77	72	77	7	26	39-135
1,2,4-Trichlorobenze	0.0	100	49	46	49	46	7	28	44-142
Naphthalene	0.3	100	52	48	51	48	7	30	21-133
Hexachlorobutadiene	0.0	100	52	48	52	48	6	26	24-116
4-Chloro-3-methylphe	0.0	100	74	83	74	83	11	37	22-147
2-Chloronaphthalene	0.0	100	63	61	63	61	3	13	60-118
2,4,6-Trichloropheno	0.0	100	65	73	65	73	12	32	37-144
Dimethylphthalate	0.0	100	11	11	11	11	3	23	1-112
Acenaphthylene	0.0	100	62	63	62	63	2	40	33-145
2,6-Dinitrotoluene	0.0	100	96	99	96	99	3	30	50-158
Acenaphthene	0.0	100	73	74	73	74	1	28	47-145
2,4-Dinitrophenol	0.0	100	54	60	54	60	10	50	1-191
4-Nitrophenol	0.0	100	50	52	50	52	3	47	1-132
2,4-Dinitrotoluene	0.0	100	83	83	83	83	0	22	39-139
Diethylphthalate	0.0	100	20	20	20	20	1	27	1-114
Fluorene	0.0	100	80	83	80	83	4	21	59-121
4-Chlorophenyl-pheny	0.0	100	78	81	78	81	3	33	25-158
4,6-Dinitro-2-methyl	0.1	100	85	87	85	87	2	93	1-181
4-Bromophenyl-phenyl	0.0	100	93	89	93	89	4	23	53-127
Hexachlorobenzene	0.0	100	88	88	88	88	0	25	1-152
Pentachlorophenol	0.0	100	77	81	77	81	5	49	14-176
Phenanthrene	0.1	100	86	94	86	94	9	21	54-120
Anthracene	0.1	100	74	79	74	79	7	32	52-115
Di-n-butylphthalate	20.6	100	53	59	33	38	14	17	1-118
Fluoranthene	0.1	100	75	75	75	75	0	33	26-137
Pyrene	0.2	100	102	101	102	100	2	25	52-115
Butylbenzylphthalate	0.0	100	62	65	62	65	5	23	1-152
Benzo[a]anthracene	0.2	100	84	88	83	88	5	28	33-143

Chrysene	0.3	100	86	92	85	92	8	48	17-168
bis(2-Ethylhexyl)pht	0.0	100	89	101	89	101	12	41	8-158
Di-n-octylphthalate	0.2	100	74	87	74	86	16	31	4-146
Benzo[b]fluoranthene	0.0	100	71	89	71	89	23	39	24-159
Benzo[k]fluoranthene	0.0	100	71	77	71	77	7	32	11-162
Benzo[a]pyrene	0.0	100	83	88	83	88	7	39	17-163
Indeno[1,2,3-cd]pyre	0.0	100	81	94	81	94	15	45	1-171
Dibenz[a,h]anthracen	0.0	100	70	86	70	86	20	70	1-227
Benzo[g,h,i]perylene	0.0	100	72	86	72	86	17	59	1-219

Quantitation Report

Data File : c:\hpchem\1\data2\b9011.d
Acq On : 27 Oct 95 4:04 pm
Sample : 46360MS.....
Misc :
Quant Time: Oct 31 15:39 1995

Converted from RTE d

Vial: 5
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed Oct 25 10:20:51 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.60	152	24328	40.00	ug/mL	-0.09
17) Naphthalene-d8	12.32	136	97435	40.00	ug/mL	-0.11
32) Acenaphthene-d10	17.64	164	56181	40.00	ug/mL	-0.09
50) Phenanthrene-d10	22.13	188	74786	40.00	ug/ml	-0.10
64) Chrysene-d12	30.18	240	35528	40.00	ug/mL	-0.10
73) Perylene-d12	34.14	264	16536	40.00	ug/mL	-0.10
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.07	112	40915	52.76	ug/mL	52.76%
3) Phenol-d5	8.10	99	81492	64.76	ug/mL	64.76%
18) Nitrobenzene-d5	10.29	82	71765	54.35	ug/mL	54.35%
36) 2-Fluorobiphenyl	15.81	172	99873	58.28	ug/mL	58.28%
54) 2,4,6-Tribromophenol	20.10	330	20403	86.16	ug/mL	86.16%
67) Terphenyl-d14	27.26	244	97283	110.24	ug/mL	110.24%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	2.10	74	22456	41.61	ug/ml	100
6) Phenol	8.12	94	70099	59.38	ug/mL	100
7) bis(2-Chloroethyl)ether	12.03	93	82048	56.86	ug/mL	100
8) 2-Chlorophenol	8.06	128	46342	57.17	ug/mL#	83
9) 1,3-Dichlorobenzene	8.39	146	37275	44.83	ug/mL	99
10) 1,4-Dichlorobenzene	8.66	146	39314	46.72	ug/mL	97
11) 1,2-Dichlorobenzene	9.04	146	38547	47.04	ug/mL#	96
12) 2-Methylphenol	9.29	108	5196	6.68	ug/mL	53
13) bis(2-chloroisopropyl)ethe	9.72	45	104911	77.20	ug/mL	98
15) N-Nitroso-Di-n-propylamine	10.12	70	47254	50.85	ug/mL	98
16) Hexachloroethane	9.99	117	23206	43.95	ug/mL#	67
19) Nitrobenzene	10.35	77	62972	49.80	ug/mL#	86
20) Isophorone	11.18	82	128772	48.00	ug/mL#	93
21) 2-Nitrophenol	11.30	139	31651	54.31	ug/mL#	92
22) 2,4-Dimethylphenol	14.60	107	70299	74.63	ug/mLm	100
23) bis(2-Chloroethoxy)methane	12.03	93	82048	55.86	ug/mL#	100
24) 2,4-Dichlorophenol	12.18	162	51706	71.87	ug/mL#	90
25) 1,2,4-Trichlorobenzene	12.22	180	36372	49.07	ug/mL	95
26) Naphthalene	12.40	128	126554	51.78	ug/mL	98
27) 4-Chloroaniline	12.40	127	15664	13.67	ug/mL#	13
28) Hexachlorobutadiene	12.90	225	20087	51.69	ug/mL	98
29) 4-Chloro-3-methylphenol	14.60	107	70394	74.44	ug/mL	90
30) 2-Chloronaphthalene	15.97	162	96889	62.71	ug/mlm	100
31) 2-Methylnaphthalene	14.60	142	50713	23.94	ug/mL#	16
34) 2,4,6-Trichlorophenol	15.56	196	38970	65.14	ug/mL	97
35) 2,4,5-Trichlorophenol	15.56	196	38970	79.89	ug/mL	97
37) 2-Nitroaniline	18.53	65	4756	4.33	ug/mL#	38
38) Dimethylphthalate	17.26	163	21170	11.02	ug/mL#	13

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

Quantitation Report

Data File : c:\hpchem\1\data2\b9011.d
Acq On : 27 Oct 95 4:04 pm
Sample : 46360MS.....
Misc :
Quant Time: Oct 31 15:39 1995

Converted from RTE d

Vial: 5
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed Oct 25 10:20:51 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
39)	Acenaphthylene	17.18	152	156148	61.73	ug/mL	97
40)	2,6-Dinitrotoluene	17.35	165	41277	95.56	ug/mL#	79
41)	3-Nitroaniline	19.34	138	1557	3.24	ug/mL#	19
42)	Acenaphthene	17.74	153	105172	73.42	ug/mL	98
43)	2,4-Dinitrophenol	18.11	184	15991	54.29	ug/mL#	85
44)	4-Nitrophenol	18.86	109	16078	50.23	ug/mL#	61
46)	2,4-Dinitrotoluene	18.53	165	52578	82.74	ug/mL#	1
47)	Diethylphthalate	19.46	149	43228	19.78	ug/mL	97
48)	Fluorene	19.34	166	131556	80.24	ug/mL	98
49)	4-Chlorophenyl-phenylether	19.54	204	55916	78.26	ug/mL#	84
51)	4-Nitroaniline	19.34	138	1557	3.62	ug/mL#	19
52)	4,6-Dinitro-2-methylphenol	19.73	198	23619	85.19	ug/mL	100
53)	n-Nitrosodiphenylamine	19.94	169	71016	70.01	ug/mL	96
55)	1,2-Diphenylhydrazine (as	19.54	77	69196	20.74	ug/ml	100
56)	4-Bromophenyl-phenylether	20.99	248	32480	92.88	ug/mL#	88
57)	Hexachlorobenzene	20.95	284	38892	87.66	ug/mL#	39
58)	Pentachlorophenol	21.70	266	23340	76.81	ug/mL	99
59)	Phenanthrene	22.20	178	174965	86.09	ug/mL	99
60)	Anthracene	22.36	178	148000	74.15	ug/mLm	99
62)	Di-n-butylphthalate	24.54	149	201030	53.46	ug/mL	99
63)	Fluoranthene	25.81	202	152814	74.83	ug/mL#	53
65)	Benzidine	22.13	184	11493	47.31	ug/ml	100
66)	Pyrene	26.43	202	145327	102.25	ug/mL#	70
68)	Butylbenzylphthalate	29.04	149	68443	61.89	ug/mL#	15
69)	Benzo[a]anthracene	30.17	228	106111	83.59	ug/mL	99
70)	3,3'-Dichlorobenzidine	30.32	252	3672	10.71	ug/mL#	93
71)	Chrysene	30.26	228	65164	85.64	ug/mLm	99
72)	bis(2-Ethylhexyl)phthalate	31.04	149	141688	89.39	ug/mL#	37
74)	Di-n-octylphthalate	32.95	149	174136	74.01	ug/mL#	100
75)	Benzo[b]fluoranthene	33.20	252	56999	70.62	ug/mL#	89
76)	Benzo[k]fluoranthene	33.28	252	34292	71.37	ug/mLm	89
77)	Benzo[a]pyrene	34.01	252	36949	82.66	ug/mLm	89
78)	Indeno[1,2,3-cd]pyrene	36.69	276	18775	80.91	ug/mL#	25
79)	Dibenz[a,h]anthracene	36.81	278	15952	70.33	ug/mL#	75
80)	Benzo[g,h,i]perylene	37.21	276	15258	72.43	ug/mLm	60

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

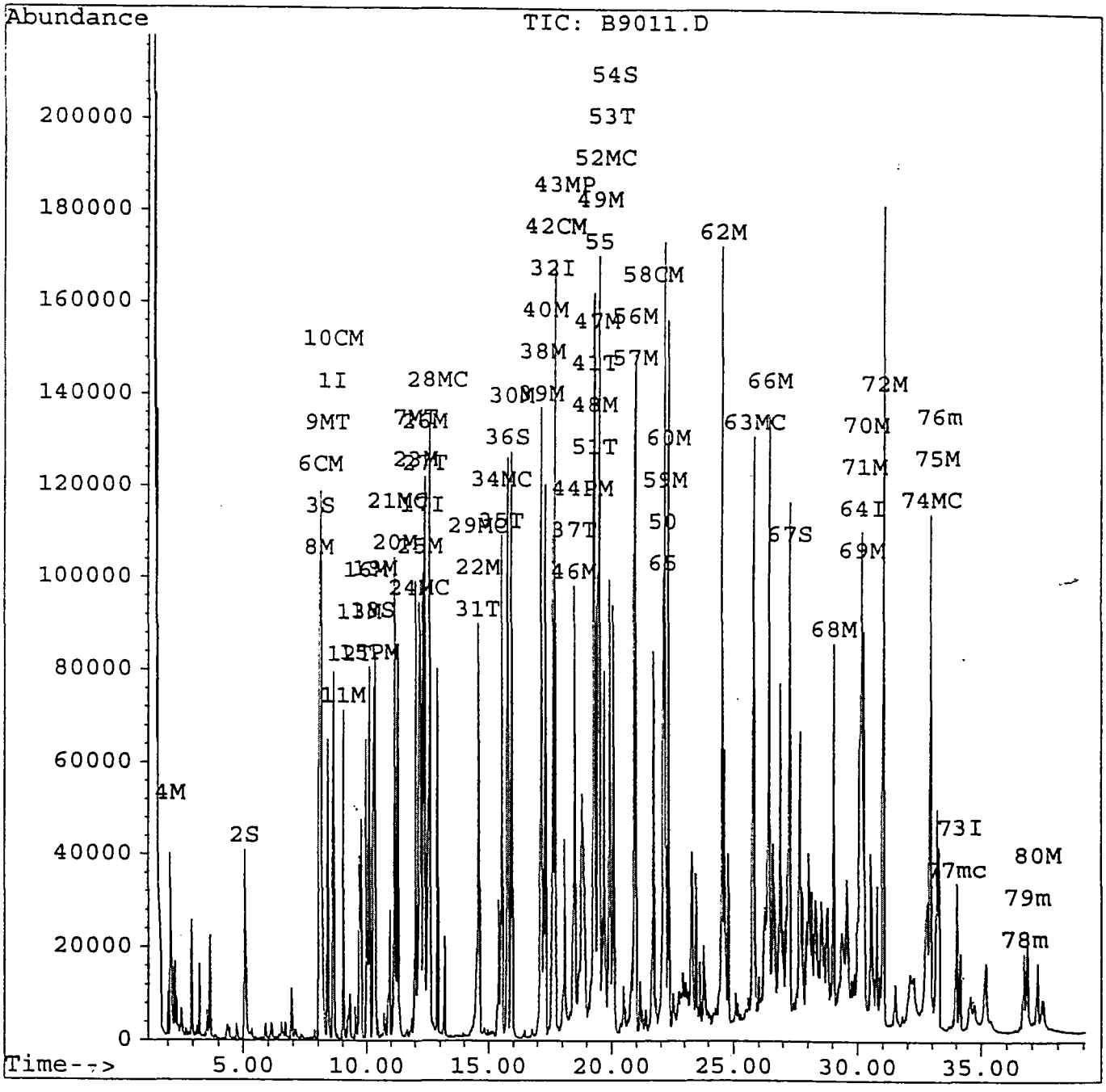
Quantitation Report

Data File : c:\hpchem\1\data2\b9011.d
Acq On : 27 Oct 95 4:04 pm
Sample : 46360MS.....
Misc :
Quant Time: Oct 31 15:39 1995

Converted from RTE d

Vial: 5
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed Oct 25 10:20:51 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : c:\hpchem\1\data2\b9012.d
Acq On : 27 Oct 95 4:56 pm
Sample : 46360MSD.....
Misc :
Quant Time: Oct 31 15:38 1995

Vial: 6 296
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 Oct 25 10:20:51 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.60	152	25002	40.00	ug/mL	-0.09
17) Naphthalene-d8	12.34	136	97241	40.00	ug/mL	-0.09
32) Acenaphthene-d10	17.64	164	55587	40.00	ug/mL	-0.09
50) Phenanthrene-d10	22.13	188	77102	40.00	ug/ml	-0.10
64) Chrysene-d12	30.19	240	28509	40.00	ug/mL	-0.10
73) Perylene-d12	34.15	264	10719	40.00	ug/mL	-0.09
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.07	112	41071	51.53	ug/mL	51.53%
3) Phenol-d5	8.10	99	86409	66.82	ug/mL	66.82%
18) Nitrobenzene-d5	10.29	82	67083	50.90	ug/mL	50.90%
36) 2-Fluorobiphenyl	15.81	172	95217	56.16	ug/mL	56.16%
54) 2,4,6-Tribromophenol	20.10	330	21999	90.11	ug/mL	90.11%
67) Terphenyl-d14	27.29	244	85795	121.15	ug/mL	121.15%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	2.10	74	27505	49.59	ug/ml	100
6) Phenol	8.13	94	71763	59.15	ug/mL	100
7) bis(2-Chloroethyl)ether	12.03	93	75257	50.75	ug/mL	97
8) 2-Chlorophenol	8.06	128	44078	52.91	ug/mL#	84
9) 1,3-Dichlorobenzene	8.39	146	37044	43.35	ug/mL	96
10) 1,4-Dichlorobenzene	8.66	146	38620	44.66	ug/mL	97
11) 1,2-Dichlorobenzene	9.04	146	37641	44.70	ug/mL	97
12) 2-Methylphenol	9.29	108	5280	6.60	ug/mL	56
13) bis(2-chloroisopropyl)ethe	9.72	45	100159	71.72	ug/mL	100
15) N-Nitroso-Di-n-propylamine	10.12	70	44456	46.55	ug/mL#	97
16) Hexachloroethane	9.99	117	22213	40.93	ug/mL#	69
19) Nitrobenzene	10.35	77	59971	47.52	ug/mL	88
20) Isophorone	11.18	82	119927	44.79	ug/mL#	92
21) 2-Nitrophenol	11.30	139	29087	50.01	ug/mL#	93
22) 2,4-Dimethylphenol	14.61	107	78542	83.54	ug/mLm	100
23) bis(2-Chloroethoxy)methane	12.03	93	75257	51.34	ug/mL#	100
24) 2,4-Dichlorophenol	12.18	162	55427	77.20	ug/mL#	92
25) 1,2,4-Trichlorobenzene	12.22	180	33976	45.93	ug/mL	94
26) Naphthalene	12.40	128	117900	48.34	ug/mL	99
27) 4-Chloroaniline	12.40	127	14859	12.99	ug/mL#	9
28) Hexachlorobutadiene	12.90	225	18787	48.44	ug/mL	98
29) 4-Chloro-3-methylphenol	14.61	107	78226	82.88	ug/mL	88
30) 2-Chloronaphthalene	15.96	162	94046	60.99	ug/mlm	100
31) 2-Methylnaphthalene	14.61	142	56412	26.68	ug/mL#	16
34) 2,4,6-Trichlorophenol	15.58	196	43455	73.41	ug/mL	96
35) 2,4,5-Trichlorophenol	15.58	196	43455	90.04	ug/mL	96
37) 2-Nitroaniline	18.53	65	5027	4.62	ug/mL#	36
38) Dimethylphthalate	17.26	163	21488	11.30	ug/mL#	14

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

Quantitation Report

Data File : c:\hpchem\1\data2\b9012.d Vial: 6
Acq On : 27 Oct 95 4:56 pm Operator: SCOTTV
Sample : 46360MSD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Oct 31 15:38 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed Oct 25 10:20:51 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
39)	Acenaphthylene	17.18	152	157682	63.01	ug/mL	98
40)	2,6-Dinitrotoluene	17.35	165	42117	98.54	ug/mL#	93
41)	3-Nitroaniline	19.34	138	1555	3.27	ug/mL#	19
42)	Acenaphthene	17.74	153	104941	74.04	ug/mL	98
43)	2,4-Dinitrophenol	18.13	184	17570	60.29	ug/mL#	82
44)	4-Nitrophenol	18.96	109	16471	52.01	ug/mL#	60
46)	2,4-Dinitrotoluene	18.53	165	52140	82.92	ug/mL#	1
47)	Diethylphthalate	19.48	149	43087	19.93	ug/mL#	93
48)	Fluorene	19.34	166	134877	83.15	ug/mL	99
49)	4-Chlorophenyl-phenylether	19.54	204	56911	80.50	ug/mL#	86
51)	4-Nitroaniline	19.34	138	1555	3.50	ug/mL#	19
52)	4,6-Dinitro-2-methylphenol	19.73	198	24840	86.90	ug/mL	100
53)	n-Nitrosodiphenylamine	19.96	169	73730	70.51	ug/mL	94
55)	1,2-Diphenylhydrazine (as	19.54	77	71856	20.89	ug/ml	100
56)	4-Bromophenyl-phenylether	20.99	248	32240	89.43	ug/mL#	90
57)	Hexachlorobenzene	20.95	284	40163	87.81	ug/mL#	46
58)	Pentachlorophenol	21.72	266	25232	80.54	ug/mL	99
59)	Phenanthrene	22.20	178	196854	93.95	ug/mL	99
60)	Anthracene	22.36	178	162894	79.16	ug/mLm	99
62)	Di-n-butylphthalate	24.56	149	227050	58.57	ug/mLm	98
63)	Fluoranthene	25.82	202	157448	74.79	ug/mL#	68
65)	Benzidine	22.13	184	12053	61.83	ug/ml	100
66)	Pyrene	26.44	202	114720	100.58	ug/mLm	73
68)	Butylbenzylphthalate	29.07	149	57991	65.35	ug/mLm	1
69)	Benzo[a]anthracene	30.17	228	89943	88.30	ug/mL	98
70)	3,3'-Dichlorobenzidine	30.33	252	3072	11.16	ug/mL#	89
71)	Chrysene	30.27	228	56444	92.44	ug/mLm	98
72)	bis(2-Ethylhexyl)phthalate	31.04	149	127927	100.58	ug/mL#	36
74)	Di-n-octylphthalate	32.93	149	132028	86.56	ug/mL#	100
75)	Benzo[b]fluoranthene	33.20	252	46610	89.08	ug/mL#	86
76)	Benzo[k]fluoranthene	33.28	252	23877	76.66	ug/mLm	86
77)	Benzo[a]pyrene	34.02	252	25611	88.39	ug/mLm	86
78)	Indeno[1,2,3-cd]pyrene	36.70	276	14190	94.34	ug/mL#	28
79)	Dibenz[a,h]anthracene	36.81	278	12632	85.92	ug/mL#	72
80)	Benzo[g,h,i]perylene	37.22	276	11729	85.89	ug/mLm	61

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

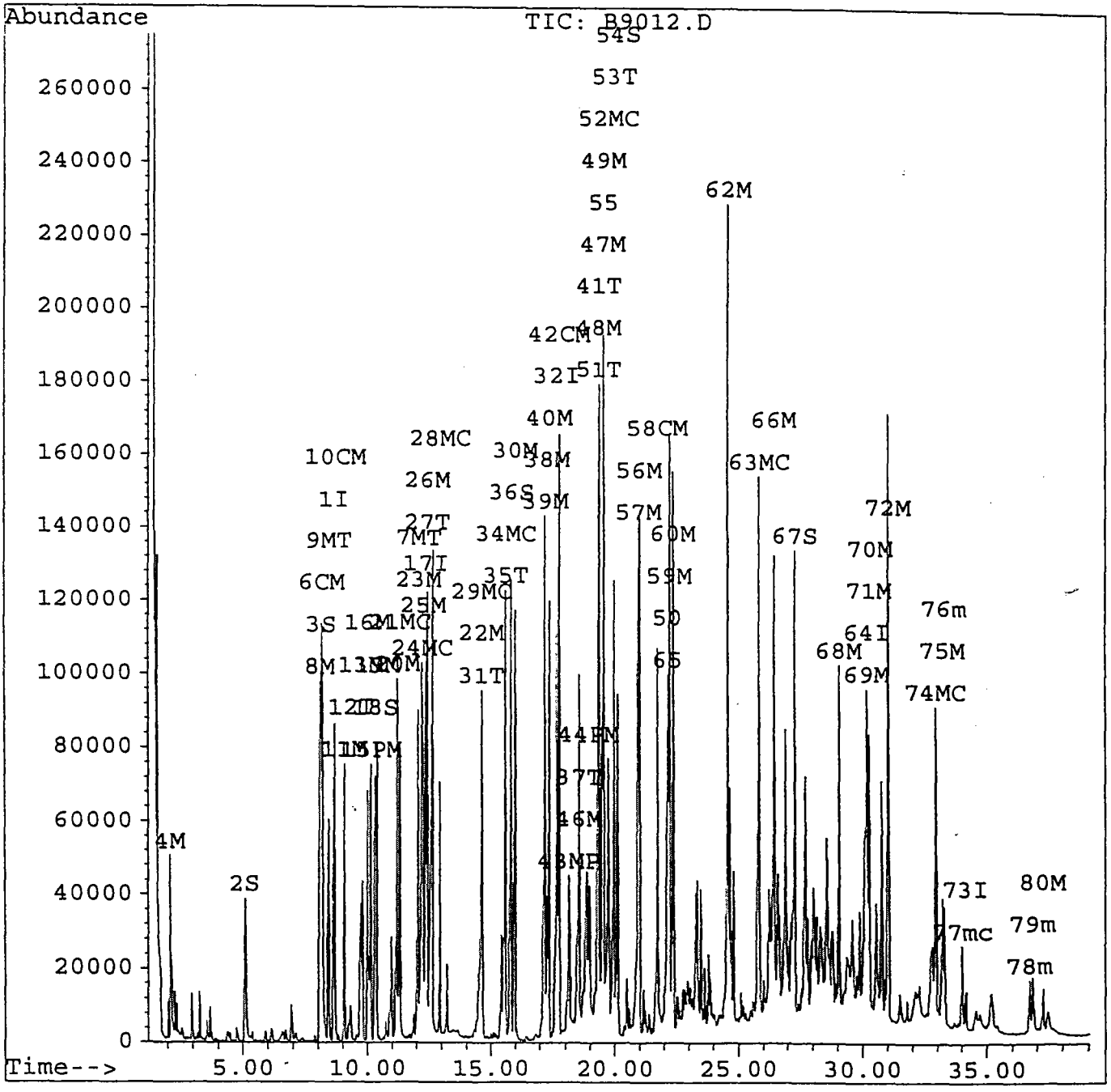
Quantitation Report

Data File : c:\hpchem\1\data2\b9012.d
Acq On : 27 Oct 95 4:56 pm
Sample : 46360MSD.....
Misc :
Quant Time: Oct 31 15:38 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 : Wed Oct 25 10:20:51 1995
Response via : Multiple Level Calibration



New Jersey Department of Environmental Protection
Division of Water Resources
Bureau of Underground Storage Tanks
CN-029, Trenton, New Jersey 08625

LABORATORY AUTHENTICATION STATEMENT

I certify under penalty of law, where applicable, this laboratory meets the Laboratory Performance Standards and Quality Control requirements specified in N.J.A.C. 7:18, 40 CFR Part 136 for Water and Wastewater Analyses and SW 846 for Solid Waste Analyses. I have personally examined and am familiar with the information contained in this report, and based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate, complete, and meets the standards specified in N.J.A.C. 7:18, 40 CFR Part 136, and/or SW 846. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment.

Carl Tarara

Laboratory Manager (as defined in N.J.A.C. 7:18)