

U.S. Army Garrison
Fort Monmouth, New Jersey

**Underground Storage Tank
Closure Report**

***Main Post – former Building 622
Harmon Ave.***

NJDEP UST Registration No. 81533-95

January 2008

UNDERGROUND STORAGE TANK REPORT

**MAIN POST -FORMER BUILDING 622
NJDEP UST REGISTRATION NO. 81533-95**

JANUARY 2008

PREPARED FOR:

**U.S. ARMY GARRISON, FORT MONMOUTH, NJ
DIRECTORATE OF PUBLIC WORKS
BUILDING 167
FORT MONMOUTH, NJ 07703**

PROJECT NO. 06-34950

PREPARED BY:

**TECOM-VINNELL SERVICES, INC.
P.O. BOX 60
FT. MONMOUTH, NJ 07703**

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EXECUTIVE SUMMARY

UST Closure

A single wall steel underground storage tank (UST) was closed by removal in accordance with the New Jersey Department of Environmental Protection (NJDEP) guidelines on May 28, 1990. The UST was located on the east side of former Building 622 in the Main Post area of Fort Monmouth. UST No. 81533-95 was a 1,000-gallon tank containing No. 2 heating oil.

Site Assessment

This site assessment was performed by TVS personnel in accordance with the NJDEP *Technical Requirements for Site Remediation* (N.J.A.C. 7:26E) and the NJDEP *Field Sampling Procedures Manual*.

During the time of UST removal, no closure soil samples were collected. Soil sampling was not required at the time. However, in order to confirm that the tank did not leak, this subsurface investigation was conducted. On January 27, 2006, a Geoprobe was utilized to collect soil samples 622-S, 622-C, 622-N and 622-C (groundwater) from a total of three (3) locations along the tank centerline bottom. All soil samples were analyzed for total petroleum hydrocarbons (TPH). Groundwater was encountered at approximately seven and one half (7.5) feet below surface grade in the borings. A sample of it was collected and analyzed for volatile organic analysis (VOA) and semi-volatile organic analysis (SVOA).

Findings

The closure soil samples collected from the location associated with former UST No. 81533-95, contained TPH concentrations below the NJDEP health based criterion of 10,000 milligrams per kilogram (mg/kg) for total organic contaminants (N.J.A.C. 7:26E and revisions dated February 3, 1994). All soil samples contained TPH concentrations of Not Detected.

Conclusions and Recommendations

Based on the closure soil sampling results, soils with TPH concentrations exceeding the NJDEP health based criterion of 10,000 mg/kg for total organic contaminants are not present in the location of the former UST. A groundwater sample, analyzed for volatile organic analysis and semi-volatile organic analysis, did not contain any compounds above the analytical method detection limits.

No Further Action is proposed in regard to the closure and site assessment of UST No. 81533-95 at former Building 622.

1.0 UNDERGROUND STORAGE TANK CLOSURE SOIL SAMPLING ACTIVITIES

1.1 OVERVIEW

One underground storage tank (UST), New Jersey Department of Environmental Protection (NJDEP) Registration No. 81533-95, was closed at former Building 622 of the Main Post at the U.S. Army Garrison, Fort Monmouth, New Jersey. Refer to site location map on Figure 1. This report presents the results of soil and groundwater sampling analysis to confirm that the tank did not leak. The UST was a 1,000-gallon, single-wall steel tank containing No. 2 heating oil for residential use. The UST was installed in 1941 and removal was done on May 28, 1990. An archived letter detailing the removal procedures along with the NJDEP UST Site Investigation Report Form are included in Appendix A.

This UST Closure Report has been prepared by TVS to assist the U.S. Army Garrison DPW in complying with the NJDEP - Underground Storage Tanks regulations. The applicable NJDEP regulations at the date of closure were the *Closure of Underground Storage Tank Systems* (N.J.A.C. 7:14B-9 et seq. December, 1987 and revisions dated April 20, 2003).

This report was prepared using information required by the *Technical Requirements for Site Remediation* (N.J.A.C. 7:26E) (*Technical Requirements*). Section 1 of this UST Closure Report provides a summary of the UST site. Section 2 of this report describes the site investigation activities. Conclusions and recommendations, including the results of the soil sampling investigation, are presented in Section 3 of this report.

1.2 SITE DESCRIPTION

Former Building 622, Harmon Ave., was located in the east-central portion (600 Area) of the Main Post of Fort Monmouth, as shown on Figure 1. UST No. 81533-95 was located on the east side of Building 622. Historical maps were used to determine the exact location of the former building and tank. A historical site map is provided on Figure 2.

1.2.1 Geological/Hydrogeological Setting

The following is a description of the geological/hydrogeological setting of the 600 Area. Included is a description of the regional geology of the area surrounding Fort Monmouth as well as descriptions of the local geology and hydrogeology of the Main Post area.

Regional Geology

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

In general, New Jersey Coastal Plain formations consist of a seaward-dipping wedge of unconsolidated deposits of clay, silt, sand and gravel. These formations typically strike northeast-southwest with a dip ranging from 10 to 60 feet per mile and were deposited on Precambrian and lower Paleozoic rocks (Zapeczka, 1989). 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 Zapeczka, 1990).

Local Geology

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

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

Hydrogeology

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

Based on records of wells drilled in the Main Post area, water is typically encountered at depths of 2 to 9 feet below ground surface (bgs). According to Jablonski, wells drilled in the Red Bank

and Tinton Sands may produce 2 to 25 gallons per minute (gpm). Some well owners have reported acidic water that requires treatment to remove iron.

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

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

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

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

Former Building 622 was located approximately 1,200 feet south of Parkers Creek, the nearest water body, which flows into the Shrewsbury River. Based on the Main Post topography, the groundwater flow in the area of the Building 622 is anticipated to be to the north.

1.3 HEALTH AND SAFETY

Work site health and safety hazards were minimized during all site investigation activities. All areas which posed a vapor hazard were monitored by a qualified individual utilizing a calibrated photo-ionizer detector : Thermo Instruments Organic Vapor Monitor (OVM) – Model #580-B. The individual ascertained if the area was properly vented to render the area safe, as defined by OSHA. All work areas were properly vented to insure that there were no contaminants present in the breathing zone above permissible exposure limits (PEL's).

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 Fort Monmouth Environmental Testing Laboratory, a NJDEP-certified testing laboratory. All sampling was performed by a NJDEP Certified Subsurface Evaluator according to the methods described in the NJDEP Field Sampling Procedures Manual (1992). Sampling frequency and parameters analyzed complied with the NJDEP document *Technical Requirements for Site Remediation*, 7:26E-3.9 (December 17, 2002 and revisions dated February 3, 2003) which was the applicable regulation at the date of the investigation. All records of the Site Investigation activities are maintained by the Fort Monmouth DPW Environmental Office.

The following Parties participated in Closure and Site Assessment Activities.

- Ft. Monmouth Directorate of Public Works-Environmental Division
Contact Person: Joseph Fallon
Phone Number: (732) 532-6223
- Subsurface Evaluator: Frank Accorsi
Employer: TECOM-Vinnell Services, Inc. (TVS)
Phone Number: (732) 532-5241
NJDEP License No.: 0010042
TVS - NJDEP License No.: US252302
- Analytical Laboratory: Fort Monmouth Environmental Testing Laboratory
Contact Person: Dan Wright
Phone Number: (732) 532-4359
NJDEP Laboratory Certification No.: 13461

2.2 FIELD SCREENING/MONITORING

Field screening of the soils was performed by a NJDEP certified Subsurface Evaluator using an OVM and visual observations. No potentially contaminated material was found during the investigation.

2.3 SOIL SAMPLING

On January 27, 2006, closure soil samples 622-S, 622-C, 622-N and 622-C (groundwater) were collected from a total of three (3) locations along the tank centerline bottom of the former UST. Groundwater was encountered at approximately seven and one-half (7.5) feet below surface grade in the borings. All soil samples were analyzed for TPH. A soil sample location map is provided on Figure 3.

The site assessment was performed by TVS personnel in accordance with the NJDEP *Technical Requirements for Site Remediation* and the NJDEP *Field Sampling Procedures Manual*. A summary of sampling activities including parameters analyzed is provided on Table 1. The soil samples were collected into laboratory prepared glassware using properly decontaminated stainless steel trowels. After collection, the samples were immediately placed on ice in a cooler and delivered to Fort Monmouth Environmental Testing Laboratory for analysis.

2.4 GROUNDWATER SAMPLING

On January 27, 2006, sample 622-C groundwater was collected from soil borehole 622-C to assess the groundwater quality in the location of the former tank. A temporary piezometer was installed in the borehole for sample collection. The sample was collected into laboratory prepared glassware using a disposable teflon bailer. The sample was analyzed for volatile organic analysis (VOA) and semi-volatile organic analysis (SVOA).

3.0 CONCLUSIONS AND RECOMMENDATIONS

3.1 SOIL SAMPLING RESULTS

Closure soil samples were collected from a total of three locations on January 27, 2006 to evaluate soil conditions in the location of the former UST. All samples were analyzed for TPH. The closure soil sample results were compared to the NJDEP health based criterion of 10,000 mg/kg for total organic contaminants (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 on Table 2. The analytical data package, including associated quality control data, is provided in Appendix B.

Closure soil samples collected on January 27, 2006 from UST 81533-95 contained no concentrations of TPH above the method detection limits.

3.2 GROUNDWATER SAMPLING RESULTS

One groundwater sample was collected via temporary piezometer installed in soil borehole 622-C. There were also no compounds detected above the method detection limits for the volatile organic analysis. There were no compounds detected above the method detection limits for the semi-volatile organic analysis.

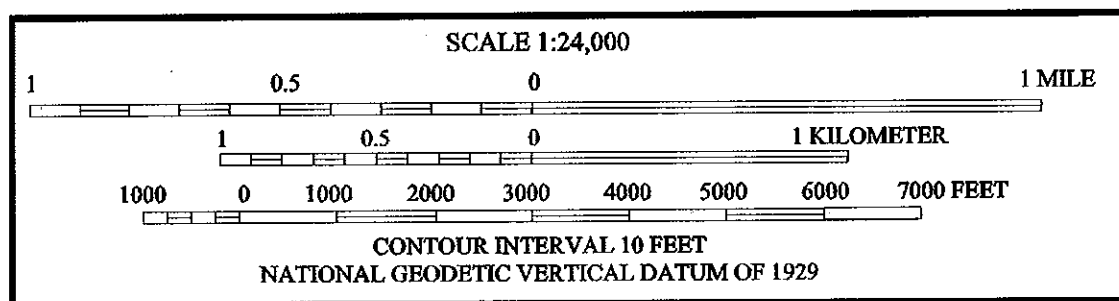
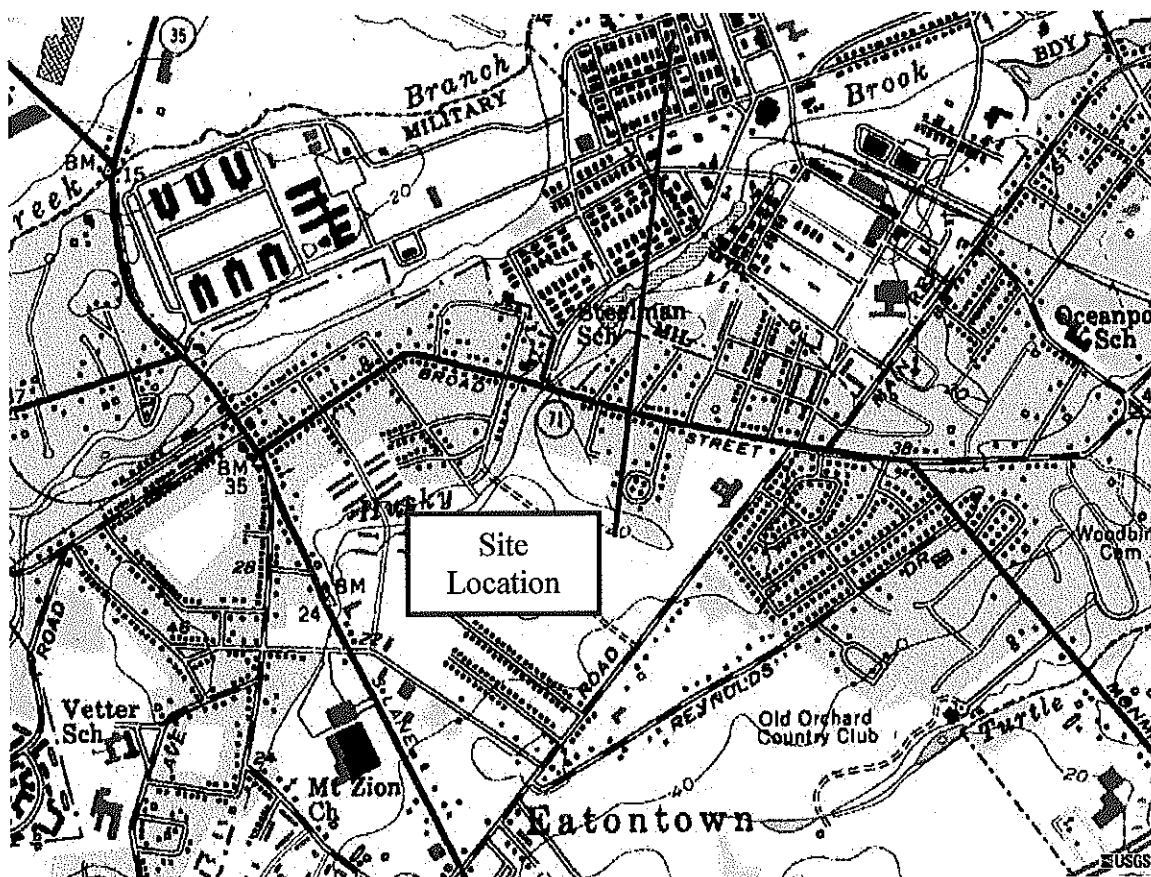
3.3 CONCLUSIONS AND RECOMMENDATIONS

The analytical results for all soil and groundwater samples collected from the UST closure assessment at UST No. 81533-95 were below the regulatory limit.

Based on the closure soil sampling results, soils with TPH concentrations exceeding the NJDEP health based criterion for total organic contaminants of 10,000 mg/kg are not present at the location of former UST No. 81533-95.

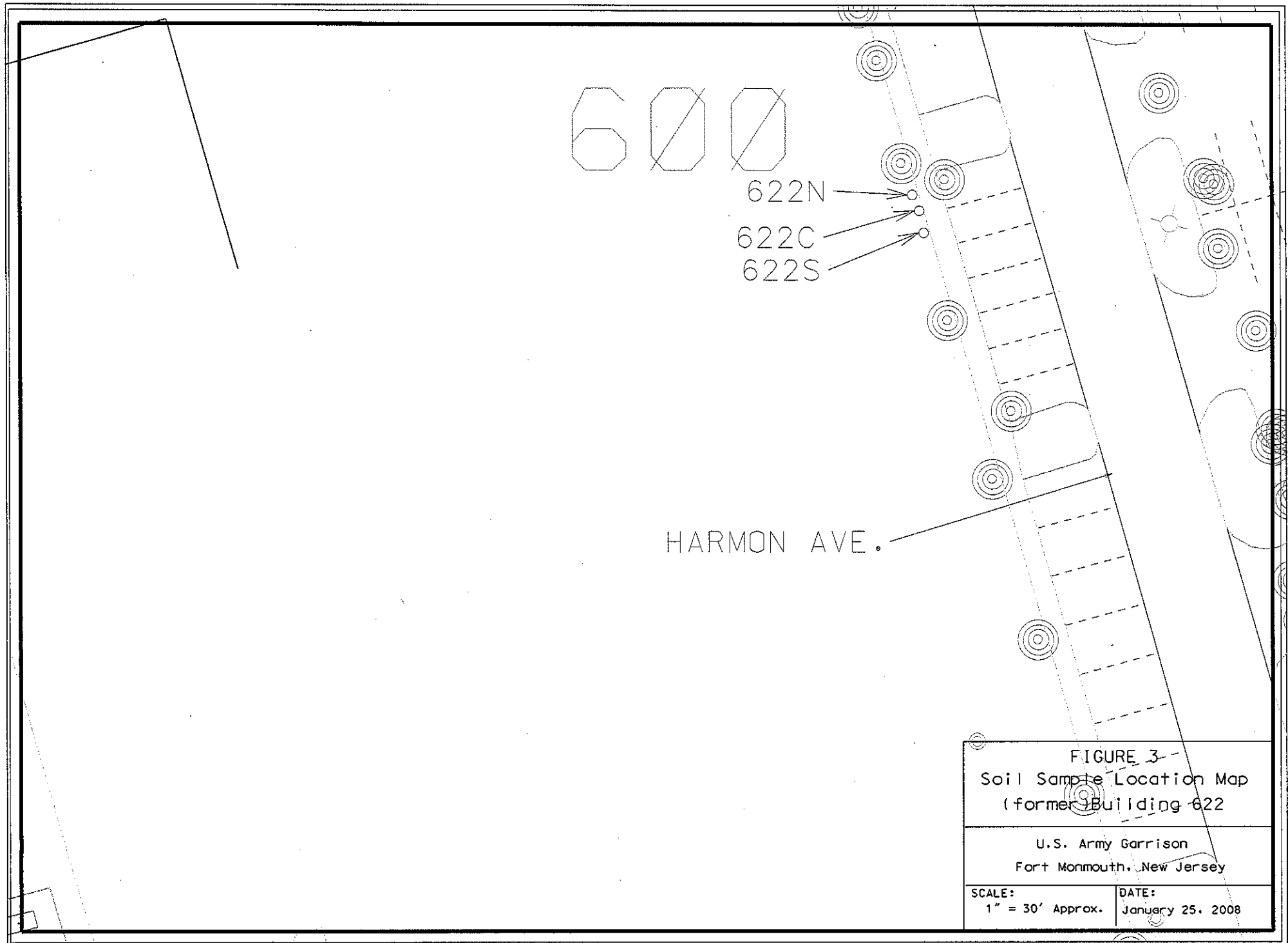
No Further Action is proposed in regard to the closure and site assessment of UST No. 81533-95 at former Building 622.

FIGURES



SOURCE: USGS 7½-MINUTE SERIES (TOPOGRAPHIC)
LONG BRANCH QUADRANGLE, NEW JERSEY, 1981.

FIGURE 1
SITE LOCATION MAP
FORMER BUILDING 622
UST NO. 81533-95
FT. MONMOUTH, NJ



TABLES

TABLE 1

SUMMARY OF LABORATORY ANALYSIS

FT. MONMOUTH, (former) BUILDING 622, UST No. 81533-95
27 January 2006

SAMPLE ID	LABORATORY SAMPLE ID	SAMPLE DATE	SAMPLE MATRIX	ANALYTICAL PARAMETER	ANALYTICAL METHOD
622-S	6006101	27-Jan-06	SOIL	TPH	OQA-QAM-25
622-C	6006102	27-Jan-06	SOIL	TPH	OQA-QAM-25
622-N	6006104	27-Jan-06	SOIL	TPH	OQA-QAM-25
622-C-Groundwater	6006105	27-Jan-06	AQUEOUS	VOA, SVOA	SW-846, EPA 625
622-Duplic.	6006103	27-Jan-06	SOIL	TPH	OQA-QAM-25
Trip Blank	6006106	27-Jan-06	AQUEOUS	VOA	SW-846
Trip Blank	6006107	27-Jan-06	METHANOL	VOA	SW-846

ABBREVIATIONS:

TPH = Total Petroleum Hydrocarbons, Method NJDEP OQA-QAM-25

VOA = Volatile Organic Analysis, EPA SW-846 Method 8260

SVOA = Semi-Volatile Organic Analysis in Water, EPA Method 625

TABLE 2

SUMMARY OF LABORATORY ANALYTICAL RESULTS-SOIL

FT. MONMOUTH, (former) BUILDING 622, UST No. 81533-95
27 January 2006

TOTAL PETROLEUM HYDROCARBONS

SAMPLE ID	LABORATORY SAMPLE ID	SAMPLE LOCATION	SAMPLE DEPTH	MATRIX	TPH RESULTS
			(in feet)		mg/kg
622-S	6005701	SOUTH END UST	7.5 – 8.0	Soil	ND
622-C	6005702	CENTER UST	7.5 – 8.0	Soil	ND
622-N	6005703	NORTH END UST	7.5 – 8.0	Soil	ND

ABBREVIATIONS:

mg/kg = milligrams per kilogram = parts per million

ND = Compound Not Detected

NA = Compound Not Analyzed

*= Further Analyzed for Volatile Organic Compounds

Notes:

Gray shading indicates exceedance of NJDEP

health based criterion of 10,000 ppm total organic contaminants

TABLE 3

SUMMARY OF LABORATORY ANALYTICAL RESULTS- GROUNDWATER

FT. MONMOUTH, (former) BUILDING 622, UST No. 81533-95

27 January 2006

VOLATILE ORGANIC COMPOUNDS

SAMPLE ID	LAB SAMPLE ID	Benzene	Toluene	Ethyl- benzene	Xylenes (Total)
UNITS		ug/L	ug/L	ug/L	ug/L
622-C Groundwater	6006105	ND	ND	ND	ND
NJDEP Criteria	Ground Water Quality Criteria	2	1,000	700	NLE

SEMI-VOLATILE ORGANIC COMPOUNDS

SAMPLE ID	LAB SAMPLE ID	Naphtha- lene	2Methyl- naphthalene	Ace- naphthene	Fluorene	Phenan- threne
UNITS		ug/L	ug/L	ug/L	ug/L	ug/L
622-C Groundwater	6006105	ND	ND	ND	ND	ND
NJDEP Criteria	Ground Water Quality Criteria	300	NLE	NLE	300	NLE

ABBREVIATIONS:

ug/L = Micrograms Per Liter = parts per billion

ND = Compound Not Detected

NA = Compound Not Analyzed

NLE = No Limit Established

Notes:

Gray shading indicates exceedance of NJDEP
Class II Ground Water Quality Criteria

APPENDIX A

CERTIFICATIONS



STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Underground Storage Tanks
CN-029, Trenton, NJ 08625

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

SITE ASSESSMENT COMPLIANCE STATEMENT

Supplement to the New Jersey Standard Reporting Form
(Complete for ALL regulated UST abandonments or removals)

Within ninety (90) days of completing the UST closure of any State or Federally-regulated tank, the owner or operator must submit this completed form to the NJDEP Bureau of Underground Storage Tanks. If the facility is located in one of the counties listed on the back, a copy of this form must also be sent to the Health Agency indicated.

The owner or operator of any Federally-regulated tank must also comply with the following:

40 CFR Part 280.72 Assessing the site at closure or change-in-service

"(a) Before permanent closure or a change-in-service is completed, owners and operators must measure for the presence of a release where contamination is most likely to be present at the UST site. In selecting sample types, sample locations, and measurement methods, owners and operators must consider the method of closure, the nature of the stored substance, the type of backfill, the depth to ground water, and other factors appropriate for identifying the presence of a release."

FACILITY U.S. Army Fort Monmouth UST No. 0081533 Tank No. _____

Check off the following items as appropriate for the site.

58, 88, 95,

☒ The UST facility is only regulated by State law, therefore a site assessment is not mandatory. 104, 110, 113,

146, 148, 158,

☐ The UST facility is regulated by Federal law and a site assessment was conducted. 163.

The results of the site assessment indicate:

☒ There was NO release from the UST system.

☐ There was a release from the UST system and it was reported to the DEP Environmental Hotline (609-292-7172).

NOTE: The results of the site assessment are not to be submitted to the DEP or Health Agency unless requested to do so. The results are to be available for inspection at the UST facility.

Questions can be directed to the Bureau at (609) 984-3156.

*** This registration form shall be signed by the highest ranking individual at the facility with overall responsibility for that facility (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.

SACS-2,1/89

22 NOV 1991
Date _____
Signature _____
JAMES OTT
Acting Director
Div. Engineering and Housing
(Title)



DEPARTMENT OF THE ARMY
Headquarters, U.S. Army Garrison Fort Monmouth
Fort Monmouth, New Jersey 07703-5000



REPLY TO
ATTENTION OF

Directorate of Engineering
and Housing

22 NOV 1991

SUBJECT: Removal Procedure:

U.S. Army Fort Monmouth
Main Post West
Site Registration #0081533
Tank #58, 88, 95, 104, 110, 113, 146, 148, 158, 163
POC: Joseph M. Fallon (908) 532-6223

The remaining product inside each tank was removed for disposal by Lionetti Oil Recovery Co., Inc. Lionetti is a licensed hazardous waste transporter and treatment, storage, and disposal facility (USEPA ID #NJD084044064).

The top of each tank was excavated and cut open across the entire length of the tank. In addition, the inside of each tank was hand cleaned and thoroughly wiped down. The soil from the top of each excavation was visually inspected and analyzed using a HNU Model PI-101 photoionizer. No contamination was detected.

After each tank was cleaned, a visual inspection was made inside the tanks for signs of leakage. No corrosion was found inside the tanks.

Each tank was then removed from the ground and disposed of through a metal recycler. No contamination was discovered at the sites upon removing the tanks.

Each site was then backfilled with the excavated soil to close out the project.

Site Remediation Program
UST Site Remedial Investigation Report

A. Facility Name: (former) Building 622
Facility Street Address: Harmon Ave.
Municipality: Oceanport County: Monmouth
Block: NA Lot(s): NA Telephone Number: 732-532-6223

B. Owner (RP)'s Name: U.S. Army Garrison - Directorate of Public Works
Street Address: Building 167, Riverside Ave. City: Ft. Monmouth
State: NJ Zip: 07703 Telephone Number: 732-532-6223

C. (Check as appropriate)
☐ Site Investigation
Report (SIR) \$500 Fee
☐ Remedial Investigation
Report (RIR) \$1000 Fee

D. (Complete all that apply)
Assigned Case Manager: _____
UST Registration Number: 0081533-95 (7 digits)
• Incident Report Number: _____ (10 or 12 digits)
• Tank Closure Number C(N)9____ - ____ C 9- ____ C9____ - ____ (7 characters)

E. Certification by the Subsurface Evaluator:

The attached report conforms to the specific reporting requirements of N.J.A.C. 7:26E Yes No

Name: Frank Accorsi Signature: _____ UST Cert. No.: 0010042
Firm: Tecom-Vinnell Services, Inc. Firm's UST Cert. Number: US252302
Firm Address: P.O. 60 City: Ft. Monmouth
State: NJ Zip: 07703 Telephone Number: 732-532-5241

(NOTE: Certification numbers required only if work was conducted on USTs regulated per N.J.S.A. 5 8: 10A-2 1 et seq.)

F. Certification by the Responsible Party(ies) of the Facility:

The following certification shall be signed [according to the requirements of N.J.A.C. 7: 14B-1.7(b)]as follows:

1. For a Corporation by a person authorized by a resolution of the board of directors to sign the document. A copy of the resolution, certified as a true copy by the secretary of the corporation, shall be submitted along with the certification; or
2. For a partnership or sole proprietorship, by a general partner or the proprietor, respectively; or
3. For a municipality, State, federal or other public agency by either a principal executive officer or ranking elected Official.

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attached documents, and that based on my inquiry of those individuals responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate, or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties."

Name (Print or Type): _____ Title: _____

Signature: _____

Company Name: _____ Date: _____

APPENDIX B

SOIL AND GROUNDWATER ANALYTICAL DATA PACKAGE

FORT MONMOUTH ENVIRONMENTAL TESTING LABORATORY

DIRECTORATE OF PUBLIC WORKS

PHONE: (732) 532-4359 FAX: (732) 532-6263

WET-CHEM - METALS - ORGANICS - FIELD SAMPLING

CERTIFICATIONS: NJDEP #13461, NYSDOH #11699



ANALYTICAL DATA REPORT Fort Monmouth Environmental Laboratory ENVIRONMENTAL DIVISION Fort Monmouth, New Jersey PROJECT: BLDG. 622

Bldg. 622

Field Sample Location	Laboratory Sample ID#	Matrix	Date and Time of Collection	Date Received
622S 7.5-8.0'	6006101	Soil	27-Jan-06 08:57	01/27/06
622C 7.5-8.0'	6006102	Soil	27-Jan-06 09:37	01/27/06
Duplicate	6006103	Soil	27-Jan-06 09:37	01/27/06
622N 7.5-8.0'	6006104	Soil	27-Jan-06 10:12	01/27/06
622C GW	6006105	Aqueous	27-Jan-06 10:22	01/27/06
Trip Blank	6006106	Aqueous	27-Jan-06	01/27/06
Trip Blank	6006107	Methanol	27-Jan-06	01/27/06

ANALYSIS:

FORT MONMOUTH ENVIRONMENTAL LAB
VOA+15, BN+15, TPHC, % SOLIDS

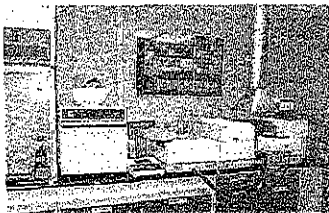
ENCLOSURE:
CHAIN OF CUSTODY
RESULTS

 3-10-08
Daniel Wright/Date
Laboratory Director

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CHAIN OF CUSTODY



Fort Monmouth Environmental Testing Laboratory

Bldg. 173, SELFM-PW-EV, Fort Monmouth, NJ 07703

Tel (732)532-4359 Fax (732)532-6263 EMail:wrightd@mail1.monmouth.army.mil

NJDEP Certification #13461

Chain of Custody Record

[illegible]

SAMPLE RECEIPT FORM

Date Received: 1-27-06

Work Order ID#: 60061

Site/Proj. Name: Bldg 422/UST

Cooler Temp (°C): 1.8°C

Received By: J. Wersma
(Print name)

Sign: J. Wersma

Check the appropriate box

1. Did the samples come in a cooler? ☒ yes ☐ no ☐ n/a
2. Were samples rec'd in good condition? ☒ yes ☐ no
3. Was the chain of custody filled out correctly and legibly? ☒ yes ☐ no
4. Was the chain of custody signed in the appropriate place? ☒ yes ☐ no
5. Did the labels agree with the chain of custody? ☒ yes ☐ no
6. Were the correct containers/preservatives used? ☒ yes ☐ no
7. Was a sufficient amount of sample supplied? ☒ yes ☐ no
8. Were air bubbles present in VOA vials? ☐ yes ☒ no ☐ n/a
9. Were samples received on ice? ☒ yes ☐ no
10. Were analyze-immediately tests perform within 15 minutes ☐ yes ☐ no ☒ n/a

Fill out the following table for each sample bottle

Lims ID	pH	Preservative	Sample ID	pH	Preservative
<u>60061/34612</u>		<u>AA</u>			

Comments: _____

Former UST 622 Sample Location GPS Positions

US State Plane 1983 New Jersey (NY East) 2900

NAD 1983 (Conus)

Geoid 96 (Conus)

(In US Survey Feet)

Position	Northing (Y Coord.)	Easting (X Coord.)
622N	539859.427	618731.450
622C	539855.530	618733.151
622S	539850.055	618734.218

METHOD SUMMARY

Methodology Summary

EPA Method 624

Gas Chromatographic Determination of Volatiles in Water

Surrogates and internal standards are added to a 5-ml aliquot of sample. The sample is then purged and desorbed into a GC/MS system. The organic compounds are separated by the gas chromatograph and detected using the mass spectrometer. Volatiles are identified and quantitated.

EPA SW-846 Method 8260

Gas Chromatographic Determination of Volatiles in Methanol

A 10-gram volume of soil is combined with 25-ml of Methanol and surrogates in the field. Internal standards are added and the sample is placed on a purge and trap concentrator. The sample is purged and desorbed into a GC/MS system. Volatiles are identified and quantitated. The final concentration is calculated using soil weight, percent moisture and concentration.

EPA Method 625

Gas Chromatographic Determination of Semi-volatiles in Water

Surrogates are added to a measured volume of sample, usually 1 liter, at a specified pH. The sample is serially extracted with Methylene Chloride using a separatory funnel. The extract is concentrated and internal standards are added. The sample is injected into a GC/MS system. Semi-volatiles are identified and quantitated.

NJDEP Method OQA-QAM-025 10/97

Gas Chromatographic Determination of Total Petroleum Hydrocarbons in Soil

Fifteen grams (15g) of soil is added to a 125-ml acid cleaned and solvent rinsed capped Erlenmeyer flask. 15g anhydrous Sodium Sulfate is added to dry the sample. Surrogate standard spiking solution is then added to the flask.

Twenty-five ml of Methylene Chloride is added to the flask and it is secured on an orbital shaker table. The agitation rate is set to 400 rpm and the sample is shaken for 30 minutes. The flask is removed from the table and the particulate matter is allowed to settle. The extract is transferred to a Teflon capped vial. A second 25-ml of Methylene Chloride is added to the flask and shaken for an additional 30 minutes. The flask is again removed and allowed to settle. The extracts are combined in the vial then transferred to a 1-ml auto-sampler vial.

The extract is then injected directly into a GC-FID for analysis. The sample is analyzed for Petroleum Hydrocarbons covering a range of C8-C42, including Pristane and Phytane. Total Petroleum Hydrocarbon concentration is determined by integrating between 5 minutes and 22 minutes. The baseline is established by starting the integration after the end of the solvent peak and stopping after the last peak. The final concentration of Total Petroleum Hydrocarbons is calculated using percent moisture, sample weight and concentration.

LABORATORY CHRONICLE

Laboratory Chronicle

Lab ID: 60061

Site: UST
Bldg. 622

	Date	Hold Time
Date Sampled	01/27/06	NA
Receipt/Refrigeration	01/27/06	NA
Extractions		
1. BN	02/02/06	7 days
2. TPHC	02/01/06	14 days
Analyses		
1. VOA	02/07,08/06	14 days
2. BN	02/02,03/06	40 days
3. TPHC	02/02/06	40 days

000009

**CONFORMANCE/
NON-
CONFORMANCE
SUMMARY**

GC/MS ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY FORMAT

	Indicate Yes, No, N/A
1. Chromatograms labeled/Compounds identified (Field samples and method blanks)	<u>yes</u>
2. Retention times for chromatograms provided	<u>yes</u>
3. GC/MS Tune Specifications	
a. BFB Meet Criteria	<u>yes</u>
b. DFTPP Meet Criteria	<u>yes</u>
4. GC/MS Tuning Frequency -- Performed every 24 hours for 600 series and 12 hours for 8000 series	<u>yes</u>
5. GC/MS Calibration -- Initial Calibration performed before sample analysis and continuing calibration performed within 24 hours of sample analysis for 600 series and 12 hours for 8000 series	<u>yes</u>
6. GC/MS Calibration requirements	
a. Calibration Check Compounds Meet Criteria	<u>yes</u>
b. System Performance Check Compounds Meet Criteria	<u>yes</u>
7. Blank Contamination -- If yes, List compounds and concentrations in each blank:	<u>yes</u>
a. VOA Fraction <u>Acetone 3.55 u/L</u>	
b. B/N Fraction _____	
c. Acid Fraction _____	
8. Surrogate Recoveries Meet Criteria	<u>NO</u>
If not met, list those compounds and their recoveries, which fall outside the acceptable range:	
a. VOA Fraction _____	
b. B/N Fraction <u>Terphenyl-d14 low in initial + reanalysis</u>	
c. Acid Fraction <u>NA</u>	
If not met, were the calculations checked and the results qualified as "estimated"?	
	<u>yes</u>
9. Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria (If not met, list those compounds and their recoveries, which fall outside the acceptable range)	<u>NO</u>
a. VOA Fraction <u>Various out see form</u>	
b. B/N Fraction <u>Benzidine rec. low</u>	
c. Acid Fraction <u>NA</u>	

GC/MS ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY FORMAT (cont.)

Indicate
Yes, No, N/A

10. Internal Standard Area/Retention Time Shift Meet Criteria
(If not met, list those compounds, which fall outside the acceptable range)

yes

- a. VOA Fraction _____
b. B/N Fraction _____
c. Acid Fraction NA

11. Extraction Holding Time Met

yes

If not met, list the number of days exceeded for each sample: _____

12. Analysis Holding Time Met

yes

If not met, list the number of days exceeded for each sample: _____

Additional Comments:

Laboratory Manager: _____

Date: 3-10-06

TPHC CONFORMANCE/NON-CONFORMANCE SUMMARY REPORT

Indicate
Yes, No, N/A

1. Method Detection Limits Provided
2. Method Blank Contamination – If yes, list the sample and the corresponding concentrations in each blank

3. Matrix Spike Results Summary Meet Criteria
(If not met, list the sample and corresponding recovery which falls outside the acceptable range)

4. Duplicate Results Summary Meet Criteria

5. IR Spectra submitted for standards, blanks and samples
6. Chromatograms submitted for standards, blanks and samples if GC fingerprinting was conducted
7. Analysis holding time met
(If not met, list number of days exceeded for each sample)

yes

NO

yes

yes

NA

yes

yes

Additional comments: _____

Laboratory Manager: _____

Date: 3-10-06

000013

**VOLATILE
ORGANICS
(AQUEOUS)**

**US ARMY FT. MONMOUTH ENVIRONMENTAL LABORATORY
NJDEP CERTIFICATION # 13461**

Definition of Qualifiers

- U:** The compound was analyzed for but not detected.
- B:** Indicates that the compound was found in the associated method blank as well as in the sample.
- J:** Indicates an estimated value. This flag is used:
- (1) When the mass spec and retention time data indicate the presence of a compound however the result is less than the MDL but greater than zero.
 - (2) When estimating the concentration of a tentatively identified compound (TIC), where a 1:1 response is assumed.
- D:** This flag is used to identify all compounds (target or TIC) that required a dilution.
- E:** Indicates the compound's concentration exceeds the calibration range of the instrument for that specific analysis.
- N:** This flag is only used for TICs. It indicates the presumptive evidence of a compound. For a generic characterization of a TIC, such as unknown hydrocarbon, the flag is not used.

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File VB021635.D
 Operator Skelton
 Date Acquired 7 Feb 2006 8:34 pm

Sample Name MB 07Feb2006
 Field ID MB 07Feb2006
 Sample Multiplier 1

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	RL	Qualifiers
107028	Acrolein			not detected	5	2.01 ug/L	5.00 ug/L	
107131	Acrylonitrile			not detected	5	1.23 ug/L	5.00 ug/L	
75650	tert-Butyl alcohol			not detected	100	5.70 ug/L	10.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.21 ug/L	2.00 ug/L	
108203	Di-isopropyl ether			not detected	20000	0.26 ug/L	2.00 ug/L	
75718	Dichlorodifluoromethane			not detected	1000	0.20 ug/L	2.00 ug/L	
74-87-3	Chloromethane			not detected	nle	0.24 ug/L	2.00 ug/L	
75-01-4	Vinyl Chloride			not detected	1	0.23 ug/L	2.00 ug/L	
74-83-9	Bromomethane			not detected	10	0.26 ug/L	2.00 ug/L	
75-00-3	Chloroethane			not detected	nle	0.29 ug/L	2.00 ug/L	
75-69-4	Trichlorofluoromethane			not detected	2000	0.23 ug/L	2.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	1	0.19 ug/L	2.00 ug/L	
67-64-1	Acetone	11.94	45398	3.55 ug/L	6000	0.36 ug/L	2.00 ug/L	
75-15-0	Carbon Disulfide			not detected	700	0.24 ug/L	2.00 ug/L	
75-09-2	Methylene Chloride			not detected	3	0.21 ug/L	2.00 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.24 ug/L	2.00 ug/L	
75-34-3	1,1-Dichloroethane			not detected	50	0.24 ug/L	2.00 ug/L	
108-05-4	Vinyl Acetate			not detected	7000	0.20 ug/L	2.00 ug/L	
78-93-3	2-Butanone			not detected	300	0.26 ug/L	2.00 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	70	0.20 ug/L	2.00 ug/L	
67-66-3	Chloroform			not detected	70	0.22 ug/L	2.00 ug/L	
71-55-6	1,1,1-Trichloroethane			not detected	30	0.20 ug/L	2.00 ug/L	
56-23-5	Carbon Tetrachloride			not detected	1	0.24 ug/L	2.00 ug/L	
71-43-2	Benzene			not detected	1	0.24 ug/L	2.00 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.23 ug/L	2.00 ug/L	
79-01-6	Trichloroethene			not detected	1	0.26 ug/L	2.00 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.24 ug/L	2.00 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.22 ug/L	2.00 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.23 ug/L	2.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	1	0.22 ug/L	2.00 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	nle	0.35 ug/L	2.00 ug/L	
108-88-3	Toluene			not detected	1000	0.26 ug/L	2.00 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	1	0.25 ug/L	2.00 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.28 ug/L	2.00 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.20 ug/L	2.00 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.43 ug/L	2.00 ug/L	
124-48-1	Dibromochloromethane			not detected	1	0.22 ug/L	2.00 ug/L	
108-90-7	Chlorobenzene			not detected	50	0.28 ug/L	2.00 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.27 ug/L	2.00 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	0.43 ug/L	4.00 ug/L	
95-47-6	o-Xylene			not detected	nle	0.21 ug/L	2.00 ug/L	
100-42-5	Styrene			not detected	100	0.21 ug/L	2.00 ug/L	
75-25-2	Bromoform			not detected	4	0.27 ug/L	2.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	1	0.45 ug/L	2.00 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.36 ug/L	2.00 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.35 ug/L	2.00 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.45 ug/L	2.00 ug/L	

*Results between MDL and RL are estimated values

*Higher of PQL's and Interim Criteria as per N.J.A.C. 7:9C 07Nov2005

Qualifiers

B = Compound found in related blank
 E = Value above linear range
 D = Value from dilution
 PQL = Practical Quantitation Limit

MDL = Method Detection Limit
 NLE = No Limit Established
 R.T. = Retention Time
 R.L. = Reporting Limit

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID:

MB 07Feb2006

Lab Name: FMETL NJDEP#: 13461
Project: 06-34880 Case No.: 60061 Location: 622 SDG No.: UST
Matrix: (soil/water) WATER Lab Sample ID: MB 07Feb2006
Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB021635.D
Level: (low/med) LOW Date Received: 1/27/2006
% Moisture: not dec. Date Analyzed: 2/7/2006
GC Column: RTX502 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Number TICs found: 1

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
1. 000079-20-9	Acetic acid, methyl ester	12.44	21	JN

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File VB021644.D
 Operator Skelfon
 Date Acquired 8 Feb 2006 2:39 am

Sample Name 6006106
 Field ID Trip Blank
 Sample Multiplier 1

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	RL	Qualifiers
107028	Acrolein			not detected	5	2.01 ug/L	5.00 ug/L	
107131	Acrylonitrile			not detected	5	1.23 ug/L	5.00 ug/L	
75650	tert-Butyl alcohol			not detected	100	5.70 ug/L	10.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.21 ug/L	2.00 ug/L	
108203	Di-isopropyl ether			not detected	20000	0.26 ug/L	2.00 ug/L	
75718	Dichlorodifluoromethane			not detected	1000	0.20 ug/L	2.00 ug/L	
74-87-3	Chloromethane			not detected	nle	0.24 ug/L	2.00 ug/L	
75-01-4	Vinyl Chloride			not detected	1	0.23 ug/L	2.00 ug/L	
74-83-9	Bromomethane			not detected	10	0.26 ug/L	2.00 ug/L	
75-00-3	Chloroethane			not detected	nle	0.29 ug/L	2.00 ug/L	
75-69-4	Trichlorofluoromethane			not detected	2000	0.23 ug/L	2.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	1	0.19 ug/L	2.00 ug/L	
67-64-1	Acetone			not detected	6000	0.36 ug/L	2.00 ug/L	
75-15-0	Carbon Disulfide			not detected	700	0.24 ug/L	2.00 ug/L	
75-09-2	Methylene Chloride	11.68	48348	2.27 ug/L	3	0.21 ug/L	2.00 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.24 ug/L	2.00 ug/L	
75-34-3	1,1-Dichloroethane			not detected	50	0.24 ug/L	2.00 ug/L	
108-05-4	Vinyl Acetate			not detected	7000	0.20 ug/L	2.00 ug/L	
78-93-3	2-Butanone			not detected	300	0.26 ug/L	2.00 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	70	0.20 ug/L	2.00 ug/L	
67-66-3	Chloroform			not detected	70	0.22 ug/L	2.00 ug/L	
71-55-6	1,1,1-Trichloroethane			not detected	30	0.20 ug/L	2.00 ug/L	
56-23-5	Carbon Tetrachloride			not detected	1	0.24 ug/L	2.00 ug/L	
71-43-2	Benzene			not detected	1	0.24 ug/L	2.00 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.23 ug/L	2.00 ug/L	
79-01-6	Trichloroethene			not detected	1	0.26 ug/L	2.00 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.24 ug/L	2.00 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.22 ug/L	2.00 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.23 ug/L	2.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	1	0.22 ug/L	2.00 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	nle	0.35 ug/L	2.00 ug/L	
108-88-3	Toluene			not detected	1000	0.26 ug/L	2.00 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	1	0.25 ug/L	2.00 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.28 ug/L	2.00 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.20 ug/L	2.00 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.43 ug/L	2.00 ug/L	
124-48-1	Dibromochloromethane			not detected	1	0.22 ug/L	2.00 ug/L	
108-90-7	Chlorobenzene			not detected	50	0.28 ug/L	2.00 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.27 ug/L	2.00 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	0.43 ug/L	4.00 ug/L	
95-47-6	o-Xylene			not detected	nle	0.21 ug/L	2.00 ug/L	
100-42-5	Styrene			not detected	100	0.21 ug/L	2.00 ug/L	
75-25-2	Bromoform			not detected	4	0.27 ug/L	2.00 ug/L	
79-34-5	1,1,1,2,2-Tetrachloroethane			not detected	1	0.45 ug/L	2.00 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.36 ug/L	2.00 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.35 ug/L	2.00 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.45 ug/L	2.00 ug/L	

*Results between MDL and RL are estimated values

*Higher of PQL's and Interim Criteria as per N.J.A.C. 7:9C.07Nov2005

Qualifiers

B = Compound found in related blank
 E = Value above linear range
 D = Value from dilution
 PQL = Practical Quantitation Limit

MDL = Method Detection Limit
 NLE = No Limit Established
 R.T. = Retention Time
 R.L. = Reporting Limit

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID:

Trip Blank

Lab Name: FMETL NJDEP#: 13461

Project: 06-34880 Case No.: 60061 Location: 622 SDG No.: UST

Matrix: (soil/water) WATER Lab Sample ID: 6006106

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB021644.D

Level: (low/med) LOW Date Received: 1/27/2006

% Moisture: not dec. _____ Date Analyzed: 2/8/2006

GC Column: RTX502 ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/LNumber TICs found: 1

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
1. 000079-20-9	Acetic acid, methyl ester	12.46	16	JN

Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File VB021643.D
 Operator Skelton
 Date Acquired 8 Feb 2006 1:58 am

Sample Name 6006105
 Field ID 622C GW
 Sample Multiplier 1

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	RL	Qualifiers
107028	Acrolein			not detected	5	2.01 ug/L	5.00 ug/L	
107131	Acrylonitrile			not detected	5	1.23 ug/L	5.00 ug/L	
75650	tert-Butyl alcohol			not detected	100	5.70 ug/L	10.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.21 ug/L	2.00 ug/L	
108203	Di-isopropyl ether			not detected	20000	0.26 ug/L	2.00 ug/L	
75718	Dichlorodifluoromethane			not detected	1000	0.20 ug/L	2.00 ug/L	
74-87-3	Chloromethane			not detected	nle	0.24 ug/L	2.00 ug/L	
75-01-4	Vinyl Chloride			not detected	1	0.23 ug/L	2.00 ug/L	
74-83-9	Bromomethane			not detected	10	0.26 ug/L	2.00 ug/L	
75-00-3	Chloroethane			not detected	nle	0.29 ug/L	2.00 ug/L	
75-69-4	Trichlorofluoromethane			not detected	2000	0.23 ug/L	2.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	1	0.19 ug/L	2.00 ug/L	
67-64-1	Acetone			not detected	6000	0.36 ug/L	2.00 ug/L	
75-15-0	Carbon Disulfide			not detected	700	0.24 ug/L	2.00 ug/L	
75-09-2	Methylene Chloride	11.68	44144	2.00 ug/L	3	0.21 ug/L	2.00 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.24 ug/L	2.00 ug/L	
75-34-3	1,1-Dichloroethane			not detected	50	0.24 ug/L	2.00 ug/L	
108-05-4	Vinyl Acetate			not detected	7000	0.20 ug/L	2.00 ug/L	
78-93-3	2-Butanone			not detected	300	0.26 ug/L	2.00 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	70	0.20 ug/L	2.00 ug/L	
67-66-3	Chloroform			not detected	70	0.22 ug/L	2.00 ug/L	
71-55-6	1,1,1-Trichloroethane			not detected	30	0.20 ug/L	2.00 ug/L	
56-23-5	Carbon Tetrachloride			not detected	1	0.24 ug/L	2.00 ug/L	
71-43-2	Benzene			not detected	1	0.24 ug/L	2.00 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.23 ug/L	2.00 ug/L	
79-01-6	Trichloroethene			not detected	1	0.26 ug/L	2.00 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.24 ug/L	2.00 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.22 ug/L	2.00 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.23 ug/L	2.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	1	0.22 ug/L	2.00 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	nle	0.35 ug/L	2.00 ug/L	
108-88-3	Toluene			not detected	1000	0.26 ug/L	2.00 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	1	0.25 ug/L	2.00 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.28 ug/L	2.00 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.20 ug/L	2.00 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.43 ug/L	2.00 ug/L	
124-48-1	Dibromochloromethane			not detected	1	0.22 ug/L	2.00 ug/L	
108-90-7	Chlorobenzene			not detected	50	0.28 ug/L	2.00 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.27 ug/L	2.00 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	0.43 ug/L	4.00 ug/L	
95-47-6	o-Xylene			not detected	nle	0.21 ug/L	2.00 ug/L	
100-42-5	Styrene			not detected	100	0.21 ug/L	2.00 ug/L	
75-25-2	Bromoform			not detected	4	0.27 ug/L	2.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	1	0.45 ug/L	2.00 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.36 ug/L	2.00 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.35 ug/L	2.00 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.45 ug/L	2.00 ug/L	

*Results between MDL and RL are estimated values

*Higher of PQL's and Interim Criteria as per N.J.A.C. 7:9C 07Nov2005

Qualifiers

B = Compound found in related blank
 E = Value above linear range
 D = Value from dilution
 PQL = Practical Quantitation Limit

MDL = Method Detection Limit
 NLE = No Limit Established
 R.T. = Retention Time
 R.L. = Reporting Limit

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID:

622C GW

Lab Name: FMETL NJDEP#: 13461

Project: 06-34880 Case No.: 60061 Location: 622 SDG No.: UST

Matrix: (soil/water) WATER Lab Sample ID: 6006105

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB021643.D

Level: (low/med) LOW Date Received: 1/27/2006

% Moisture: not dec. Date Analyzed: 2/8/2006

GC Column: RTX502 ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/LNumber TICs found: 1

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
1. 000079-20-9	Acetic acid, methyl ester	12.45	17	JN

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: FMETL NJDEP#: 13461
 Project: 06-34880 Case No.: 60061 Location: 622 SDG No.: UST
 Lab File ID: VB021627.D BFB Injection Date: 2/7/2006
 Instrument ID: GCMS#2 BFB Injection Time: 15:20
 GC Column: RTX502.2 ID: 0.25 (mm) Heated Purge: (Y/N) 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	52.8
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	75.1
175	4.0 - 9.0% of mass 174	5.4 (7.2)1
176	93.0 - 101.0% of mass 174	73.4 (97.8)1
177	5.0 - 9.0% of mass 176	4.8 (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:

	FIELD ID:	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD010	VSTD010	VB021628.D	2/7/2006	15:50
02	VSTD005	VSTD005	VB021629.D	2/7/2006	16:31
03	VSTD002	VSTD002	VB021630.D	2/7/2006	17:11
04	VSTD050	VSTD050	VB021631.D	2/7/2006	17:52
05	VSTD020	VSTD020	VB021632.D	2/7/2006	18:32
06	MB 07FEB2006	MB 07FEB2006	VB021635.D	2/7/2006	20:34
07	622C GW	6006105	VB021643.D	2/8/2006	1:58
08	TRIP BLANK	6006106	VB021644.D	2/8/2006	2:39

BFB

Data File : C:\HPCHEM\1\DATA\060207\VB021627.D

Vial: 1

Acq On : 7 Feb 2006 3:20 pm

Operator: Skelton

Sample : BFB Tune

Inst : GC/MS Ins

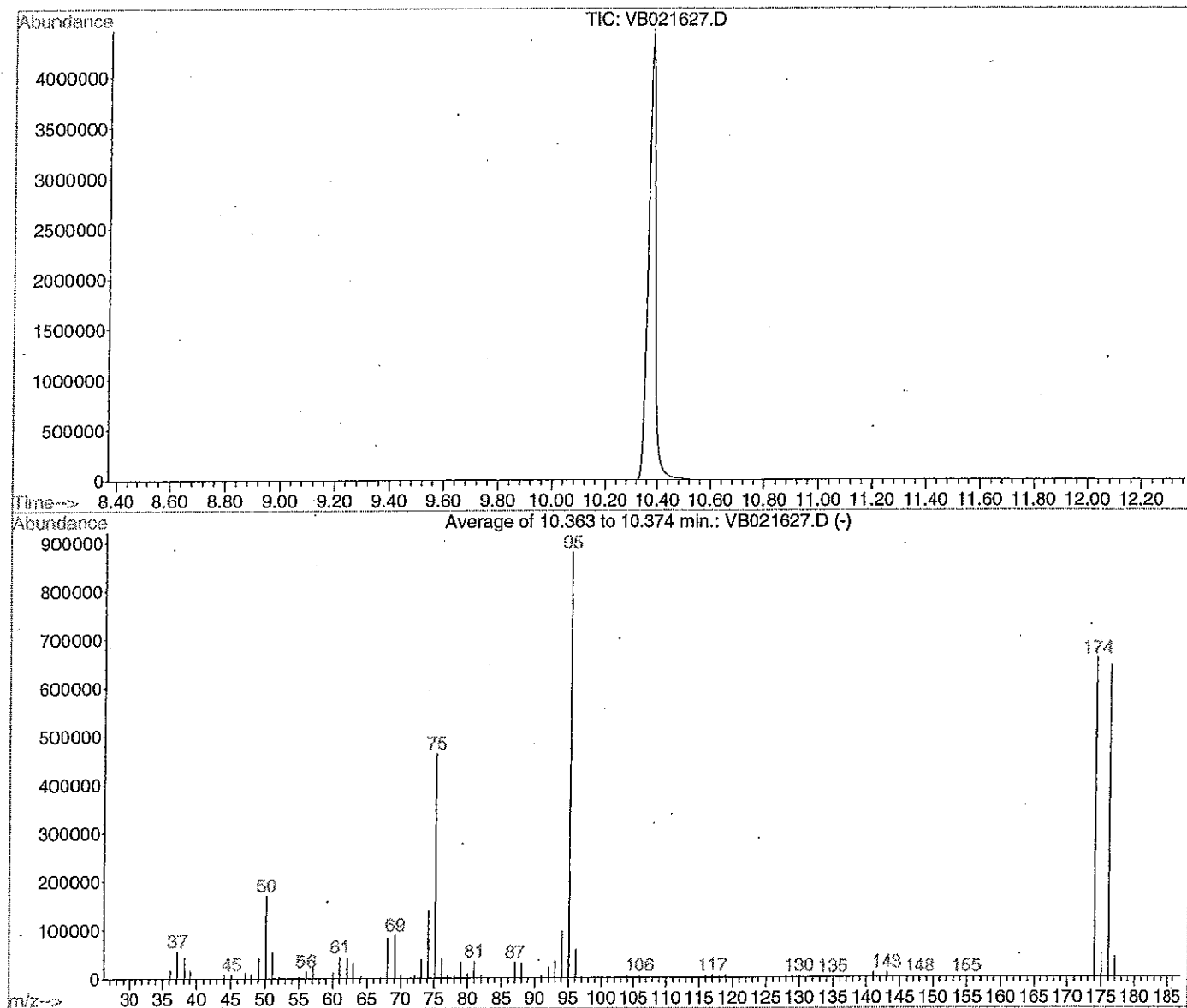
Misc : BFB Tune

Multiplr: 1.00

MS Integration Params: GAS10.P

Method : C:\HPCHEM\1\METHODS\M2VO231.M (RTE Integrator)

Title : Volatile Organics by GC/MS Method 624/8260/TCLP



AutoFind: Scans 163, 164, 165; Background Corrected with Scan 153

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.4	170859	PASS
75	95	30	60	52.8	463787	PASS
95	95	100	100	100.0	878592	PASS
96	95	5	9	6.6	57872	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	75.1	659413	PASS
175	174	5	9	7.2	47768	PASS
176	174	95	101	97.8	644608	PASS
177	176	5	9	6.5	42168	PASS

Response Factor Report GC/MS Ins

Method : C:\HPCHEM\1\METHODS\M2V0231.M (RTE Integrator)
 Title : Volatile Organics by GC/MS Method 624/8260/TCLP
 Last Update : Wed Feb 08 15:05:52 2006
 Response via : Initial Calibration

Calibration Files
 50 =VB021631.D 20 =VB021632.D 10 =VB021628.D
 5 =VB021629.D 2 =VB021630.D

Compound			50	20	10	5	2	Avg	%RSD
			-----ISTD-----						
1)	I	Bromochloromethane							
2)	tm	Acrolein	0.090	0.077	0.063	0.069	0.046	0.069	24.06
3)	tm	Acrylonitrile	0.833	0.735	0.789	0.774	0.678	0.762	7.69
4)	tm	tert-Butyl alcohol	0.097	0.093	0.090	0.103	0.093	0.095	5.11
5)	tm	Methyl-tert-Butyl eth	4.833	4.005	4.052	3.915	3.424	4.046	12.52
6)	tm	Di-isopropyl ether	1.825	1.556	1.465	1.397	1.173	1.483	16.03
7)	Tm	Dichlorodifluorometha	1.674	1.521	1.919	1.960	1.920	1.799	10.69
8)	TPm	Chloromethane	2.202	2.120	2.465	2.598	2.589	2.395	9.26
9)	TCm	Vinyl Chloride	2.292	2.139	2.454	2.527	2.399	2.362	6.40
10)	Tm	Bromomethane	1.582	1.456	1.651	1.666	1.436	1.558	6.89
11)	Tm	Chloroethane	1.796	1.676	2.500	2.497	2.719	2.238	20.94
12)	Tm	Trichlorofluoromethan	4.399	4.044	4.571	4.695	4.542	4.450	5.63
13)	MC	1,1-Dichloroethene	3.239	2.913	2.920	3.000	2.744	2.963	6.09
14)	Tm	Acetone	0.496	0.550	0.795	1.194	2.255	1.058	68.40
15)	Tm	Carbon Disulfide	6.569	5.887	6.194	6.128	5.870	6.130	4.64
16)	Tm	Methylene Chloride	2.449	2.291	2.470	2.640	2.534	2.477	5.15
17)	Tm	trans-1,2-Dichloroeth	3.184	2.937	2.960	3.092	2.801	2.995	4.94
18)	TPm	1,1-Dichloroethane	4.153	3.740	3.993	4.085	3.800	3.954	4.52
19)	Tm	Vinyl Acetate	1.297	1.041	0.989	0.961	0.879	1.033	15.33
20)	Tm	2-Butanone	0.630	0.513	0.517	0.539	0.507	0.542	9.42
21)	Tm	cis-1,2-Dichloroethen	3.316	3.000	2.963	3.022	2.723	3.005	7.03
22)	TCm	Chloroform	4.265	4.071	4.347	4.539	4.241	4.293	3.97
23)	Tm	1,1,1-Trichloroethane	3.761	3.315	3.260	3.214	2.882	3.286	9.57
24)	Tm	Carbon Tetrachloride	3.241	2.838	2.870	2.933	2.651	2.907	7.37
25)	S	1,2-Dichloroethane-d4	4.003	3.921	3.988	4.014	3.794	3.944	2.31
			-----ISTD-----						
26)	I	1,4-Difluorobenzene							
27)	TM	Benzene	1.415	1.239	1.376	1.388	1.244	1.333	6.31
28)	Tm	1,2-Dichloroethane	0.479	0.423	0.483	0.498	0.468	0.470	6.09
29)	TM	Trichloroethene	0.368	0.314	0.341	0.340	0.310	0.335	6.97
30)	TCm	1,2-Dichloropropane	0.334	0.290	0.315	0.319	0.298	0.311	5.60
31)	Tm	Bromodichloromethane	0.459	0.390	0.434	0.428	0.395	0.421	6.84
32)	Tm	2-Chloroethyl vinyl e	0.188	0.147	0.145	0.134	0.124	0.148	16.74
33)	Tm	cis-1,3-Dichloroprope	0.572	0.468	0.480	0.442	0.378	0.468	14.95
34)	Tm	4-Methyl-2-Pentanone	0.073	0.059	0.058	0.060	0.055	0.061	11.53
35)	S	Toluene-d8	1.312	1.202	1.234	1.159	1.015	1.184	9.27
36)	TCM	Toluene	1.602	1.401	1.550	1.529	1.296	1.476	8.46
			-----ISTD-----						
37)	I	Chlorobenzene-d5							
38)	Tm	trans-1,3-Dichloropro	1.967	1.676	1.585	1.452	1.264	1.589	16.48
39)	Tm	1,1,2-Trichloroethane	1.145	1.071	1.130	1.137	1.080	1.113	3.10
40)	Tm	Tetrachloroethene	1.523	1.422	1.489	1.490	1.368	1.458	4.27
41)	Tm	2-Hexanone	0.420	0.364	0.338	0.347	0.347	0.363	9.13
42)	Tm	Dibromochloromethane	1.243	1.093	1.108	1.069	0.941	1.091	9.88
43)	TMP	Chlorobenzene	3.897	3.653	3.967	3.975	3.888	3.876	3.38
44)	TCm	Ethylbenzene	6.752	6.244	6.531	6.438	5.904	6.374	5.01
45)	Tm	m+p-Xylenes	2.468	2.228	2.305	2.199	1.857	2.211	10.12
46)	Tm	o-Xylene	5.118	4.659	4.568	4.106	3.360	4.362	15.26
47)	Tm	Styrene	3.788	3.315	3.290	2.980	2.359	3.147	16.73
48)	TPm	Bromoform	0.824	0.715	0.726	0.687	0.646	0.720	9.20
49)	S	Bromofluorobenzene	1.882	1.741	1.676	1.515	1.432	1.649	10.86
50)	TPm	1,1,2,2-Tetrachloroet	1.231	1.189	1.215	1.255	1.133	1.204	3.88
51)	Tm	1,3-Dichlorobenzene	2.607	2.439	2.387	2.364	2.128	2.385	7.22
52)	Tm	1,4-Dichlorobenzene	2.793	2.655	2.589	2.509	2.191	2.547	8.82
53)	Tm	1,2-Dichlorobenzene	2.347	2.278	2.203	2.207	2.001	2.207	5.87
54)	Tm	Naphthalene	0.446	0.639	0.412	0.516	0.586	0.520	18.21

4A
VOLATILE METHOD BLANK SUMMARY

FIELD ID:

MB 07Feb2006

Lab Name: FMETL NJDEP#: 13461
Project: 06-34880 Case No.: 60061 Location: 622 SDG No.: UST
Lab File ID: VB021635.D Lab Sample ID: MB 07Feb2006
Date Analyzed: 2/7/2006 Time Analyzed: 20:34
GC Column: RTX502. ID: 0.25 (mm) Heated Purge: (Y/N) N
Instrument ID: GCMS#2

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

	FIELD ID:	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	622C GW	6006106	VB021644.D	2:39

COMMENTS:

WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: FMETL NJDEP#: 13461
Project: 06-34880 Case No.: 60061 Location: 622 SDG No.: UST

	FIELD ID:	SMC1 DCE #	SMC2 TOL #	SMC3 BFB #	TOT OUT
01	MB 07FEB2006	91	98	93	0
02	622C GW	94	97	93	0
03	TRIP BLANK	97	96	92	0

QC LIMITS

SMC1	DCE	=	1,2-Dichloroethane-d4	(70-120)
SMC2	TOL	=	Toluene-d8	(70-120)
SMC3	BFB	=	Bromofluorobenzene	(70-120)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D System Monitoring Compound diluted out

Spike Recovery and RPD Summary Report - WATER

Method : C:\HPCHEM\1\METHODS\M2VO231.M (RTE Integrator)
 Title : Volatile Organics by GC/MS Method 624/8260/TCLP
 Last Update : Wed Feb 08 15:05:52 2006
 Response via : Initial Calibration

Non-Spiked Sample: VB021645.D

Sample	Spike Sample	Spike Duplicate Sample
File ID : VB021646.D	VB021647.D	
Sample : 6006204 MS	6006204 MSD	
Acq Time: 8 Feb 2006 3:59 am	8 Feb 2006 4:40 am	

Compound	Sample Conc	Spike Added	Spike Res	Dup Res	Spike %Rec	Dup %Rec	RPD	QC RPD	Limits % Rec
Acrolein	0.0	50	57	61	114	121	6	20	59-137
Acrylonitrile	0.0	50	61	64	121	128#	5	20	68-127
tert-Butyl alcohol	0.0	100	109	121	109	121	11	20	17-167
Methyl-tert-Butyl et	0.0	10	13	14	132#	139#	5	20	74-116
Di-isopropyl ether	0.0	10	14	14	136#	141#	4	20	77-117
Dichlorodifluorometh	0.0	10	10	10	96	99	3	20	50-131
Chloromethane	1.4	10	11	12	92	108	17	20	65-123
Vinyl Chloride	0.0	10	13	13	131#	135#	3	20	63-125
Bromomethane	5.7	10	15	15	89	94	6	20	72-118
Chloroethane	0.0	10	4	4	38#	40#	4	20	64-127
Trichlorofluorometha	0.0	10	8	8	81	79	3	20	60-122
1,1-Dichloroethene	0.0	10	10	10	99	101	2	20	68-116
Acetone	0.0	10	9	9	91	93	1	20	2-148
Carbon Disulfide	0.0	10	9	10	94	96	2	20	69-117
Methylene Chloride	2.6	10	15	16	120#	131#	9	20	79-110
trans-1,2-Dichloroet	0.0	10	11	12	114#	123#	8	20	73-113
1,1-Dichloroethane	0.0	10	2	2	22#	25#	13	20	77-112
Vinyl Acetate	0.0	10	13	13	126	134#	6	20	52-127
2-Butanone	0.0	10	13	13	131	133	1	20	12-162
cis-1,2-Dichloroethe	0.0	10	12	12	116#	124#	6	20	74-114
Chloroform	0.0	10	10	12	103	119#	14	20	79-110
1,1,1-Trichloroethan	0.0	10	12	12	116#	121#	4	20	73-114
Carbon Tetrachloride	0.0	10	11	11	109	113	4	20	69-115
Benzene	0.0	10	8	8	85	85	0	20	78-112
1,2-Dichloroethane	0.0	10	9	9	90	89	1	20	78-115
Trichloroethene	0.0	10	8	8	83	83	1	20	74-114
1,2-Dichloropropane	0.0	10	9	9	87	87	0	20	77-113
Bromodichloromethane	0.0	10	8	8	84	83	1	20	77-113
2-Chloroethyl vinyl	0.0	10	9	9	85	86	1	20	67-117
cis-1,3-Dichloroprop	0.0	10	8	8	85	84	1	20	75-116
4-Methyl-2-Pentanone	0.0	10	8	9	84	86	3	20	33-146
Toluene	0.0	10	9	9	87	87	1	20	80-113
trans-1,3-Dichloropr	0.0	10	9	9	86	85	0	20	75-117
1,1,2-Trichloroethan	0.0	10	9	9	92	92	0	20	78-116
Tetrachloroethene	0.0	10	8	8	83	82	2	20	73-115
2-Hexanone	0.0	10	8	9	83	85	3	20	30-147
Dibromochloromethane	0.0	10	9	8	86	84	2	20	77-115
Chlorobenzene	0.0	10	9	9	87	86	2	20	78-112
Ethylbenzene	0.0	10	8	8	84	83	2	20	77-113
m+p-Xylenes	0.0	20	17	17	86	84	3	20	76-115
o-Xylene	0.0	10	9	9	91	88	3	20	74-118
Styrene	0.0	10	9	8	87	85	2	20	77-116
Bromoform	0.0	10	8	8	84	83	1	20	72-116
1,1,2,2-Tetrachloroe	0.0	10	9	9	90	89	2	20	73-120
1,3-Dichlorobenzene	0.0	10	9	9	88	88	0	20	75-114
1,4-Dichlorobenzene	0.0	10	9	9	89	89	0	20	75-116
1,2-Dichlorobenzene	0.0	10	9	9	89	89	0	20	76-115
Naphthalene	0.1	10	6	7	60#	72	19	20	70-120

- Fails Limit Check

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: FMETL NJDEP#: 13461
 Project: 06-34880 Case No.: 60061 Location: 622 SDG No.: UST
 Lab File ID (Standard): VB021628.D Date Analyzed: 2/7/2006
 Instrument ID: GCMS#2 Time Analyzed: 15:50
 GC Column: RTX502.2 ID: 0.25 (mm) Heated Purge: (Y/N) N

	IS1BCM AREA #	RT #	IS2DFB AREA #	RT #	IS3CBZ AREA #	RT #
12 HOUR STD	371081	16.43	2603119	19.62	677143	25.65
UPPER LIMIT	742162	16.93	5206238	20.12	1354286	26.15
LOWER LIMIT	185541	15.93	1301560	19.12	338572	25.15
FIELD ID:						
01 MB 07FEB2006	362902	16.43	2581364	19.62	678449	25.65
02 622C GW	267963	16.44	2739438	19.62	725357	25.65
03 TRIP BLANK	257566	16.44	2745961	19.62	719337	25.65

IS1 BCM = Bromochloromethane
 IS2 DFB = 1,4-Difluorobenzene
 IS3 CBZ = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = - 50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column to be used to flag values outside QC limit with an asterisk.

* Values outside of contract required QC limits

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\060207\VB021635.D

Vial: 8

Acq On : 7 Feb 2006 8:34 pm

Operator: Skelton

Sample : MB 07Feb2006

Inst : GC/MS Ins

Misc : MB 07Feb2006

Multiplr: 1.00

MS Integration Params: GAS10.P

Quant Time: Feb 8 8:35 2006

Quant Results File: M2VO231.RES

Quant Method : C:\HPCHEM\1\METHODS\M2VO231.M (RTE Integrator)

Title : Volatile Organics by GC/MS Method 624/8260/TCLP

Last Update : Wed Feb 08 08:21:21 2006

Response via : Initial Calibration

DataAcq Meth : M2VO231

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	16.43	128	362902	30.00	ug/L	0.00
26) 1,4-Difluorobenzene	19.62	114	2581364	30.00	ug/L	0.00
37) Chlorobenzene-d5	25.65	119	678449	30.00	ug/L	0.00

System Monitoring Compounds

25) 1,2-Dichloroethane-d4	18.45	65	971892	27.16	ug/L	0.00
Spiked Amount	30.000	Range 70 - 120	Recovery	=	90.53%	
35) Toluene-d8	22.56	98	2989345	29.33	ug/L	0.00
Spiked Amount	30.000	Range 70 - 120	Recovery	=	97.77%	
49) Bromofluorobenzene	27.99	95	1044373	28.00	ug/L	0.00
Spiked Amount	30.000	Range 70 - 120	Recovery	=	93.33%	

Target Compounds

14) Acetone	11.94	43	45398	3.55	ug/L	Qvalue 91
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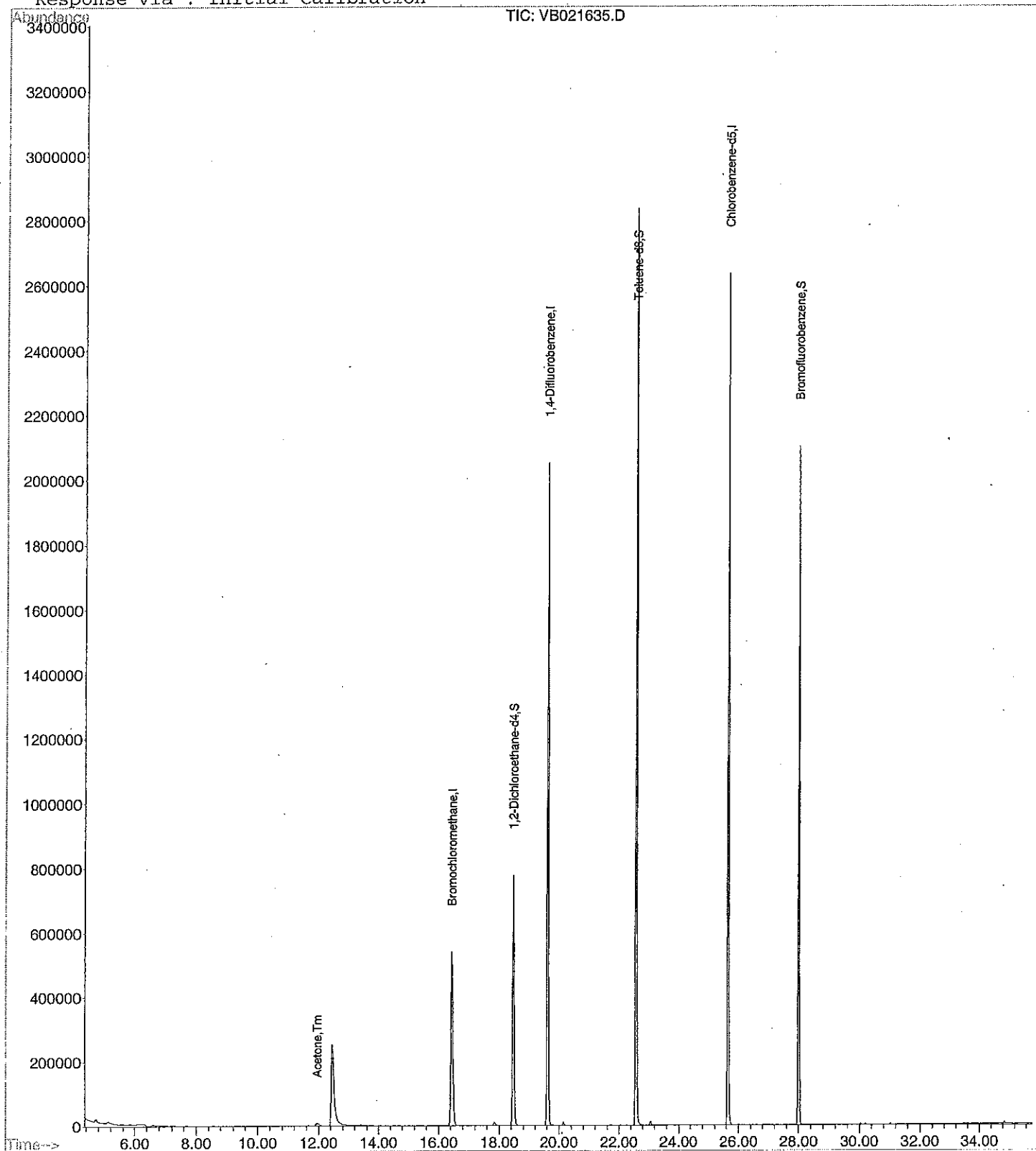
Quantitation Report

Data File : C:\HPCHEM\1\DATA\060207\VB021635.D
 Acq On : 7 Feb 2006 8:34 pm
 Sample : MB 07Feb2006
 Misc : MB 07Feb2006
 MS Integration Params: GAS10.P
 Quant Time: Feb 8 8:35 2006

Vial: 8
 Operator: Skelton
 Inst : GC/MS Ins
 Multiplr: 1.00

Quant Results File: M2VO231.RES

Method : C:\HPCHEM\1\METHODS\M2VO231.M (RTE Integrator)
 Title : Volatile Organics by GC/MS Method 624/8260/TCLP
 Last Update : Wed Feb 08 15:05:52 2006
 Response via : Initial Calibration



Data File : C:\HPCHEM\1\DATA\060207\VB021644.D Vial: 17
Acq On : 8 Feb 2006 2:39 am Operator: Skelton
Sample : 6006106 Inst : GC/MS Ins
Misc : Trip Blank Multiplr: 1.00
MS Integration Params: GAS10.P
Quant Time: Feb 28 14:39 2006 Quant Results File: M2VO231.RES

Quant Method : C:\HPCHEM\1\METHODS\M2VO231.M (RTE Integrator)
Title : Volatile Organics by GC/MS Method 624/8260/TCLP
Last Update : Wed Feb 08 15:05:52 2006
Response via : Initial Calibration
DataAcq Meth : M2VO231

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	16.44	128	257566	30.00	ug/L	0.01
26) 1,4-Difluorobenzene	19.62	114	2745961	30.00	ug/L	0.00
37) Chlorobenzene-d5	25.65	119	719337	30.00	ug/L	0.00
System Monitoring Compounds						
25) 1,2-Dichloroethane-d4	18.45	65	988899	29.20	ug/L	0.00
Spiked Amount 30.000	Range 70 - 120		Recovery =	97.33%		
35) Toluene-d8	22.57	98	3107386	28.66	ug/L	0.00
Spiked Amount 30.000	Range 70 - 120		Recovery =	95.53%		
49) Bromofluorobenzene	27.99	95	1095840	27.71	ug/L	0.00
Spiked Amount 30.000	Range 70 - 120		Recovery =	92.37%		
Target Compounds						Qvalue
16) Methylene Chloride	11.68	84	48348	2.27	ug/L	89

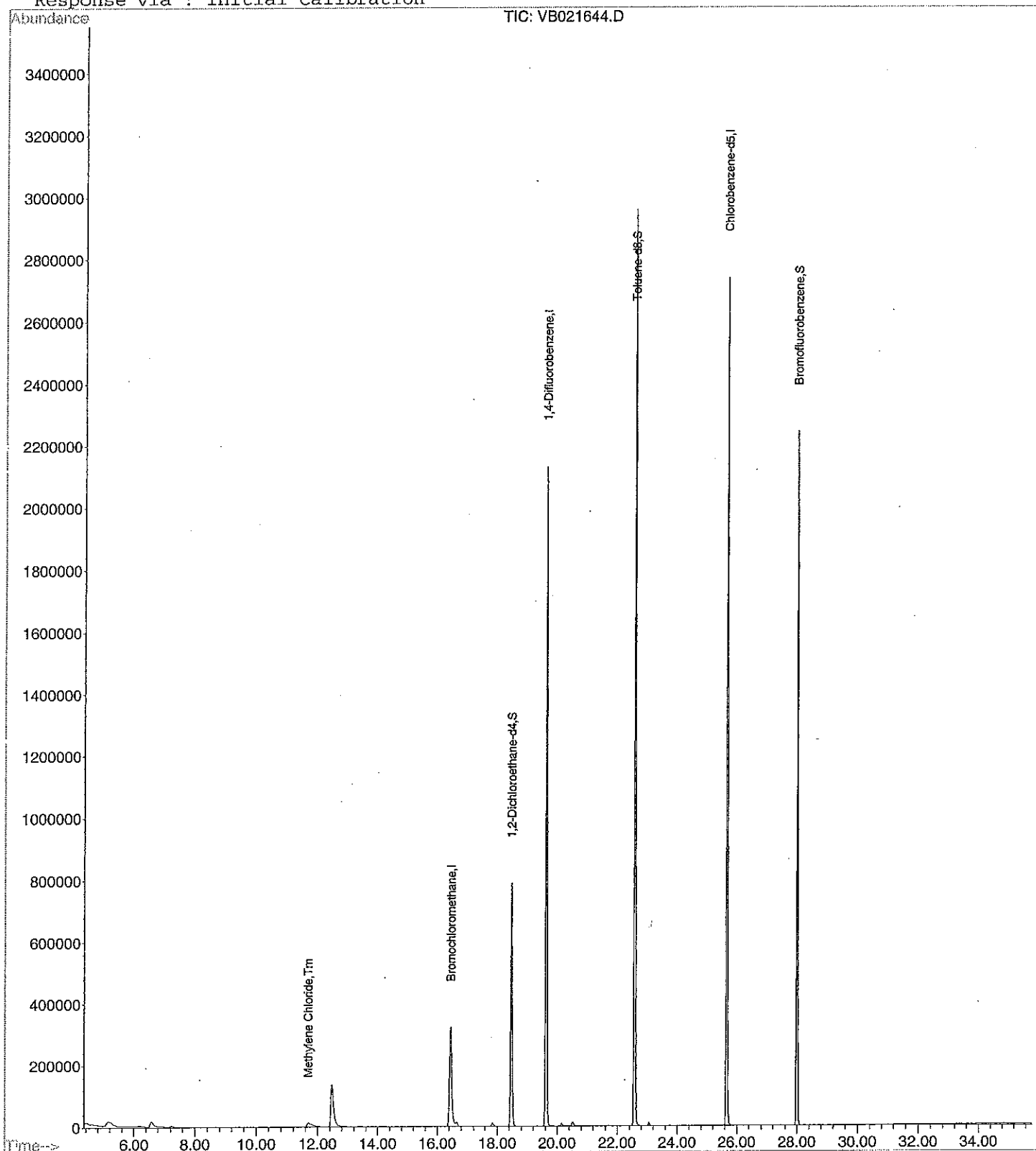
Quantitation Report

Data File : C:\HPCHEM\1\DATA\060207\VB021644.D
 Acq On : 8 Feb 2006 2:39 am
 Sample : 6006106
 Misc : Trip Blank
 MS Integration Params: GAS10.P
 Quant Time: Feb 28 14:39 2006

Vial: 17
 Operator: Skelton
 Inst : GC/MS Ins
 Multiplr: 1.00

Quant Results File: M2VO231.RES

Method : C:\HPCHEM\1\METHODS\M2VO231.M (RTE Integrator)
 Title : Volatile Organics by GC/MS Method 624/8260/TCLP
 Last Update : Wed Feb 08 15:05:52 2006
 Response via : Initial Calibration



Data File : C:\HPCHEM\1\DATA\060207\VB021643.D

Acq On : 8 Feb 2006 1:58 am

Sample : 6006105

Misc : 622C GW

MS Integration Params: GAS10.P

Quant Time: Feb 28 14:39 2006

Vial: 16

Operator: Skelton

Inst : GC/MS Ins

Multiplr: 1.00

Quant Results File: M2VO231.RES

Quant Method : C:\HPCHEM\1\METHODS\M2VO231.M (RTE Integrator)

Title : Volatile Organics by GC/MS Method 624/8260/TCLP

Last Update : Wed Feb 08 15:05:52 2006

Response via : Initial Calibration

DataAcq Meth : M2VO231

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	16.44	128	267963	30.00	ug/L	0.01
26) 1,4-Difluorobenzene	19.62	114	2739438	30.00	ug/L	0.00
37) Chlorobenzene-d5	25.65	119	725357	30.00	ug/L	0.00

System Monitoring Compounds

25) 1,2-Dichloroethane-d4	18.45	65	996140	28.28	ug/L	0.00
Spiked Amount	30.000	Range	70 - 120	Recovery	=	94.27%
35) Toluene-d8	22.57	98	3142376	29.06	ug/L	0.00
Spiked Amount	30.000	Range	70 - 120	Recovery	=	96.87%
49) Bromofluorobenzene	27.99	95	1112960	27.91	ug/L	0.00
Spiked Amount	30.000	Range	70 - 120	Recovery	=	93.03%

Target Compounds

16) Methylene Chloride	11.68	84	44144	2.00	ug/L	Qvalue 95
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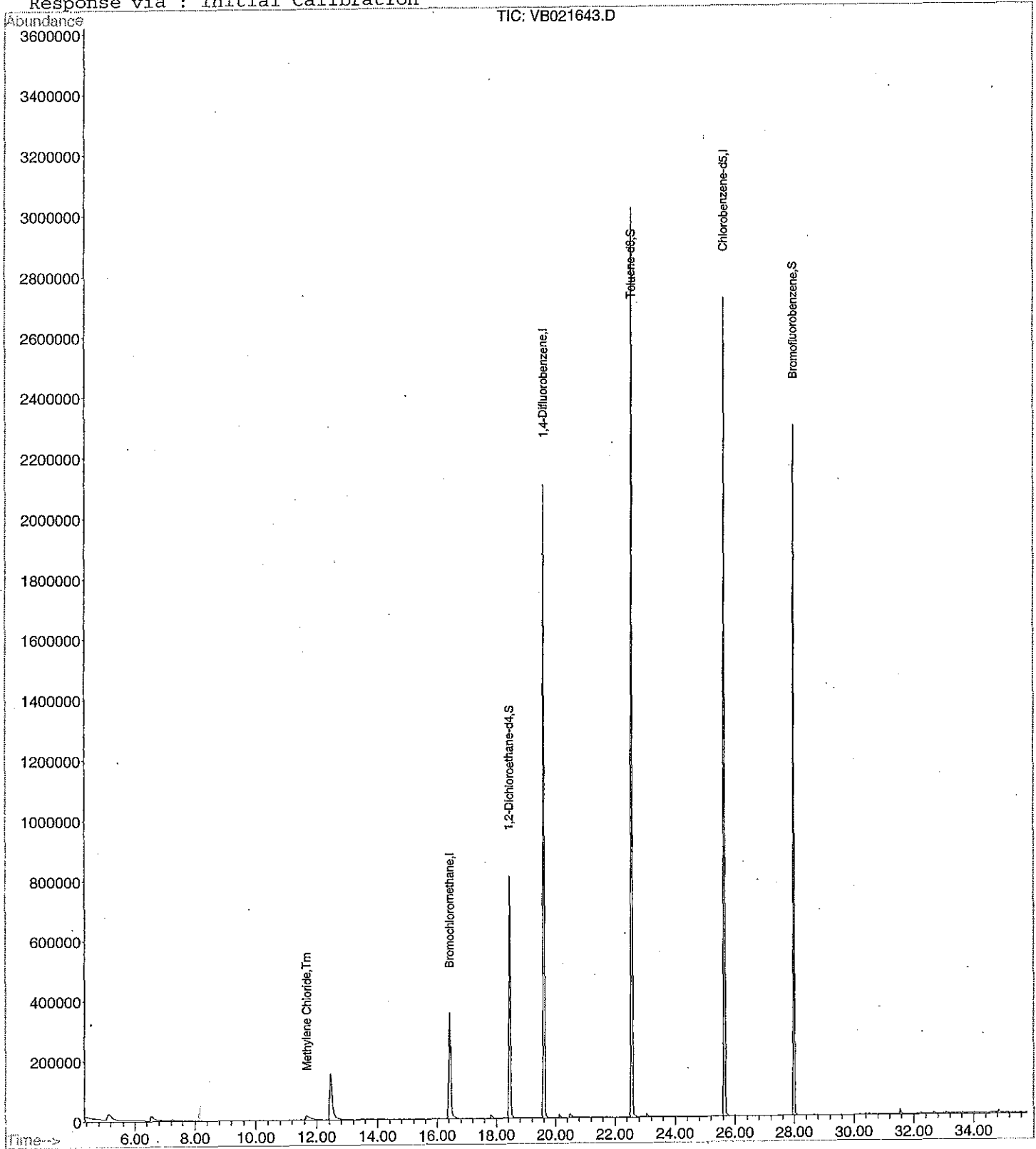
Quantitation Report

Data File : C:\HPCHEM\1\DATA\060207\VB021643.D
Acq On : 8 Feb 2006 1:58 am
Sample : 6006105
Misc : 622C GW
MS Integration Params: GAS10.P
Quant Time: Feb 28 14:39 2006

Vial: 16
Operator: Skelton
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: M2VO231.RES

Method : C:\HPCHEM\1\METHODS\M2VO231.M (RTE Integrator)
Title : Volatile Organics by GC/MS Method 624/8260/TCLP
Last Update : Wed Feb 08 15:05:52 2006
Response via : Initial Calibration



SEMI-VOLATILE ORGANICS

000035

Semi-Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Name **BNA11494.D**
 Operator **BPatel**
 Date Acquired **2-Feb-06**

Sample Name **MB-020206-01**
 Misc Info **MB-020206-01**
 Sample Multiplier **1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL	Qualifiers
110-86-1	Pyridine			not detected	NLE	1.13	10.00 ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	0.8	0.60	10.00 ug/L	
62-53-3	Aniline			not detected	6	2.38	10.00 ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	7	0.71	10.00 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	1.02	10.00 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.99	10.00 ug/L	
100-51-6	Benzyl alcohol			not detected	2000	0.66	10.00 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.96	10.00 ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.88	10.00 ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	10	0.76	10.00 ug/L	
67-72-1	Hexachloroethane			not detected	7	0.96	10.00 ug/L	
98-95-3	Nitrobenzene			not detected	6	0.86	10.00 ug/L	
78-59-1	Isophorone			not detected	40	0.76	10.00 ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.79	10.00 ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.89	10.00 ug/L	
91-20-3	Naphthalene			not detected	300	0.76	10.00 ug/L	
106-47-8	4-Chloroaniline			not detected	30	1.37	10.00 ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.99	10.00 ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLE	1.01	10.00 ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	40	0.92	10.00 ug/L	
91-58-7	2-Chloronaphthalene			not detected	600	0.72	10.00 ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.77	10.00 ug/L	
131-11-3	Dimethylphthalate			not detected	NLE	0.78	10.00 ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.67	10.00 ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	10	0.71	10.00 ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	1.18	10.00 ug/L	
83-32-9	Acenaphthene			not detected	400	0.73	10.00 ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.69	10.00 ug/L	
121-14-2	2,4-Dinitrotoluene			not detected	10	0.81	10.00 ug/L	
84-66-2	Diethylphthalate			not detected	6000	0.96	10.00 ug/L	
86-73-7	Fluorene			not detected	300	0.71	10.00 ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.73	10.00 ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	1.11	10.00 ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	10	0.62	10.00 ug/L	
103-33-3	Azobenzene			not detected	NLE	0.72	10.00 ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.92	10.00 ug/L	
118-74-1	Hexachlorobenzene			not detected	0.02	0.95	10.00 ug/L	
85-01-8	Phenanthrene			not detected	NLE	0.81	10.00 ug/L	
120-12-7	Anthracene			not detected	2000	0.76	10.00 ug/L	
84-74-2	Di-n-butylphthalate			not detected	700	0.92	10.00 ug/L	
206-44-0	Fluoranthene			not detected	300	0.82	10.00 ug/L	

Semi-Volatile Analysis Report

Page 2

Data File Name **BNA11494.D**
 Operator **BPatel**
 Date Acquired **2-Feb-06**

Sample Name **MB-020206-01**
 Misc Info **MB-020206-01**
 Sample Multiplier **1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL	Qualifiers
92-87-5	Benzidine			not detected	20	0.98	10.00	ug/L
129-00-0	Pyrene			not detected	200	0.79	10.00	ug/L
85-68-7	Butylbenzylphthalate			not detected	100	0.86	10.00	ug/L
56-55-3	Benzo[a]anthracene			not detected	0.1	0.82	10.00	ug/L
91-94-1	3,3'-Dichlorobenzidine			not detected	30	1.31	10.00	ug/L
218-01-9	Chrysene			not detected	5	0.77	10.00	ug/L
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	3	1.28	10.00	ug/L
117-84-0	Di-n-octylphthalate			not detected	100	1.02	10.00	ug/L
205-99-2	Benzo[b]fluoranthene			not detected	0.2	0.98	10.00	ug/L
207-08-9	Benzo[k]fluoranthene			not detected	0.5	0.92	10.00	ug/L
50-32-8	Benzo[a]pyrene			not detected	0.1	0.71	10.00	ug/L
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	0.2	0.76	10.00	ug/L
53-70-3	Dibenz[a,h]anthracene			not detected	0.3	0.76	10.00	ug/L
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	0.80	10.00	ug/L

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

Qualifiers

E= Value Exceeds Linear Range

D= Value from dilution

B= Compound in Related Blank

RL= Reporting Limit. The values between the MDL and RL are considered estimated.

MDL= Method Detection Limit

NLE= No Limit Established

R.T.=Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MB-020206-01

Lab Name: FMETL Lab Code 13461
Project: 06-34880 Case No.: 60061 Location: 622 SDG No.:
Matrix: (soil/water) WATER Lab Sample ID: MB-020206-01
Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA11494.D
Level: (low/med) LOW Date Received: 1/27/2006
% Moisture: decanted: (Y/N) N Date Extracted: 2/2/2006
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 2/2/2006
Injection Volume: 1.0 (uL) Dilution Factor: 1.0
GPC Cleanup: (Y/N) N pH:

CONCENTRATION UNITS:

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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Semi-Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File Name **BNA11496.D**
 Operator **BPatel**
 Date Acquired **2-Feb-06**

Sample Name **6006105**
 Misc Info **622C GW**
 Sample Multiplier **1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL	Qualifiers
110-86-1	Pyridine			not detected	NLE	1.13	10.00 ug/L	
62-75-9	N-nitroso-dimethylamine			not detected	0.8	0.60	10.00 ug/L	
62-53-3	Aniline			not detected	6	2.38	10.00 ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	7	0.71	10.00 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	1.02	10.00 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.99	10.00 ug/L	
100-51-6	Benzyl alcohol			not detected	2000	0.66	10.00 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.96	10.00 ug/L	
39638-32-9	bis(2-chloroisopropyl)ether			not detected	300	0.88	10.00 ug/L	
621-64-7	n-Nitroso-di-n-propylamine			not detected	10	0.76	10.00 ug/L	
67-72-1	Hexachloroethane			not detected	7	0.96	10.00 ug/L	
98-95-3	Nitrobenzene			not detected	6	0.86	10.00 ug/L	
78-59-1	Isophorone			not detected	40	0.76	10.00 ug/L	
111-91-1	bis(2-Chloroethoxy)methane			not detected	NLE	0.79	10.00 ug/L	
120-82-1	1,2,4-Trichlorobenzene			not detected	9	0.89	10.00 ug/L	
91-20-3	Naphthalene			not detected	300	0.76	10.00 ug/L	
106-47-8	4-Chloroaniline			not detected	30	1.37	10.00 ug/L	
87-68-3	Hexachlorobutadiene			not detected	1	0.99	10.00 ug/L	
91-57-6	2-Methylnaphthalene			not detected	NLB	1.01	10.00 ug/L	
77-47-4	Hexachlorocyclopentadiene			not detected	40	0.92	10.00 ug/L	
91-58-7	2-Chloronaphthalene			not detected	600	0.72	10.00 ug/L	
88-74-4	2-Nitroaniline			not detected	NLE	0.77	10.00 ug/L	
131-11-3	Dimethylphthalate			not detected	NLE	0.78	10.00 ug/L	
208-96-8	Acenaphthylene			not detected	NLE	0.67	10.00 ug/L	
606-20-2	2,6-Dinitrotoluene			not detected	10	0.71	10.00 ug/L	
99-09-2	3-Nitroaniline			not detected	NLE	1.18	10.00 ug/L	
83-32-9	Acenaphthene			not detected	400	0.73	10.00 ug/L	
132-64-9	Dibenzofuran			not detected	NLE	0.69	10.00 ug/L	
121-14-2	2,4-Dinitrotoluene			not detected	10	0.81	10.00 ug/L	
84-66-2	Diethylphthalate			not detected	6000	0.96	10.00 ug/L	
86-73-7	Fluorene			not detected	300	0.71	10.00 ug/L	
7005-72-3	4-Chlorophenyl-phenylether			not detected	NLE	0.73	10.00 ug/L	
100-01-6	4-Nitroaniline			not detected	NLE	1.11	10.00 ug/L	
86-30-6	n-Nitrosodiphenylamine			not detected	10	0.62	10.00 ug/L	
103-33-3	Azobenzene			not detected	NLE	0.72	10.00 ug/L	
101-55-3	4-Bromophenyl-phenylether			not detected	NLE	0.92	10.00 ug/L	
118-74-1	Hexachlorobenzene			not detected	0.02	0.95	10.00 ug/L	
85-01-8	Phenanthrene			not detected	NLE	0.81	10.00 ug/L	
120-12-7	Anthracene			not detected	2000	0.76	10.00 ug/L	
84-74-2	Di-n-butylphthalate			not detected	700	0.92	10.00 ug/L	
206-44-0	Fluoranthene			not detected	300	0.82	10.00 ug/L	

Semi-Volatile Analysis Report

Page 2

Data File Name **BNA11496.D**
 Operator **BPatel**
 Date Acquired **2-Feb-06**

Sample Name **6006105**
 Misc Info **622C GW**
 Sample Multiplier **1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL	Qualifiers
92-87-5	Benzidine			not detected	20	0.98	10.00 ug/L	
129-00-0	Pyrene			not detected	200	0.79	10.00 ug/L	
85-68-7	Butylbenzylphthalate			not detected	100	0.86	10.00 ug/L	
56-55-3	Benzo[a]anthracene			not detected	0.1	0.82	10.00 ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	30	1.31	10.00 ug/L	
218-01-9	Chrysene			not detected	5	0.77	10.00 ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	3	1.28	10.00 ug/L	
117-84-0	Di-n-octylphthalate			not detected	100	1.02	10.00 ug/L	
205-99-2	Benzo[b]fluoranthene			not detected	0.2	0.98	10.00 ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	0.5	0.92	10.00 ug/L	
50-32-8	Benzo[a]pyrene			not detected	0.1	0.71	10.00 ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	0.2	0.76	10.00 ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	0.3	0.76	10.00 ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLE	0.80	10.00 ug/L	

* Higher of PQL's and Ground Water Criteria as per NJAC 7:9-6 2-Sept-97

Qualifiers

E= Value Exceeds Linear Range

D= Value from dilution

B= Compound in Related Blank

RL= Reporting Limit. The values between the MDL and RL are considered estimated.

MDL= Method Detection Limit

NLE= No Limit Established

R.T.=Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

622C-GW

Lab Name: FMETL Lab Code 13461
Project: 06-34880 Case No.: 60061 Location: 622 SDG No.: _____
Matrix: (soil/water) WATER Lab Sample ID: 6006105
Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA11496.D
Level: (low/med) LOW Date Received: 1/27/2006
% Moisture: _____ decanted: (Y/N) N Date Extracted: 2/2/2006
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 2/2/2006
Injection Volume: 1.0 (uL) Dilution Factor: 1.0
GPC Cleanup: (Y/N) N pH: _____

CONCENTRATION UNITS:

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: FMETL Lab Code 13461
 Project: 06-34880 Case No.: 60061 Location: 622 SDG No.:
 Lab File ID: BNA11332.D DFTPP Injection Date: 11/3/2005
 Instrument ID: GC_BNA_2 DFTPP Injection Time: 9:33

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	46.2
68	Less than 2.0% of mass 69	0.9 (1.8)1
69	Mass 69 Relative abundance	51.6
70	Less than 2.0% of mass 69	0.4 (0.7)1
127	25.0 - 75.0% of mass 198	51.4
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.5
275	10.0 - 30.0% of mass 198	22.3
365	Greater than 0.75% of mass 198	2.1
441	Present, but less than mass 443	10.9
442	40.0 - 110.0% of mass 198	64.7
443	15.0 - 24.0% of mass 442	13.9 (21.6)2

1-Value is % mass 69

2-Value is % mass 442

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD120	SSTD120	BNA11333.D	11/3/2005	9:57
02	SSTD010	SSTD010	BNA11334.D	11/3/2005	10:40
03	SSTD050	SSTD050	BNA11335.D	11/3/2005	11:24
04	SSTD020	SSTD020	BNA11336.D	11/3/2005	12:08
05	SSTD080	SSTD080	BNA11337.D	11/3/2005	12:51

CLP

Data File : C:\HPCHEM\1\DATA\051103\BNA11332.D

Vial: 99

Acq On : 3 Nov 2005 9:33 am

Operator: BPatel

Sample : DFTPP Tune

Inst : GC/MS Ins

Misc : SV080105.01

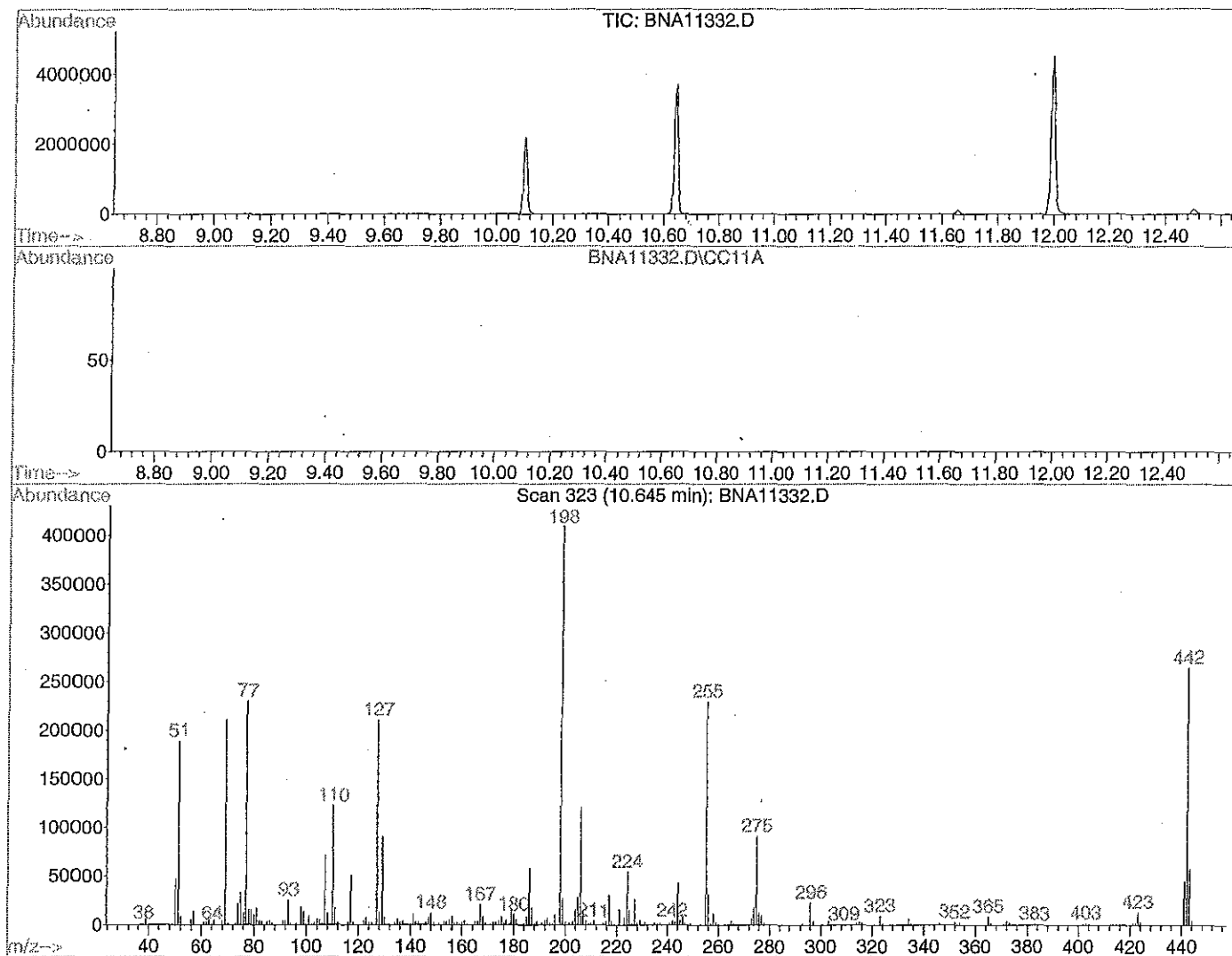
Multiplr: 1.00

MS Integration Params: ODD.P

GC Integration Params: rteint2.p

Method : C:\HPCHEM\1\METHODS\M262593.M (RTE Integrator)

Title : BNA Calibration



Spectrum Information: Scan 323

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	46.2	189312	PASS
68	69	0.00	2	1.8	3845	PASS
69	198	0.00	100	51.6	211392	PASS
70	69	0.00	2	0.7	1460	PASS
127	198	40	60	51.4	210752	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	409984	PASS
199	198	5	9	6.5	26680	PASS
275	198	10	30	22.3	91280	PASS
365	198	1	100	2.1	8485	PASS
441	443	1	99	77.9	44552	PASS
442	198	40	100	64.7	265088	PASS
443	442	17	23	21.6	57184	PASS

Response Factor Report GC/MS Ins

Method : C:\HPCHEM\1\METHODS\M262593.M (RTE Integrator)
 Title : BNA Calibration
 Last Update : Thu Nov 03 13:40:19 2005
 Response via : Initial Calibration

Calibration Files

120 =BNA11333.D 80 =BNA11337.D 50 =BNA11335.D
 20 =BNA11336.D 10 =BNA11334.D

	Compound	120	80	50	20	10	Avg	%RSD
1) I	1,4-Dichlorobenzene-d	-----ISTD-----						
2) T	Pyridine	1.621	1.540	1.525	1.532	1.462	1.536	3.69
3) T	N-nitroso-dimethylami	0.882	0.832	0.827	0.831	0.748	0.824	5.85
4) S	2-Fluorophenol	1.316	1.256	1.283	1.229	1.189	1.255	3.88
5) T	Aniline	2.399	2.297	2.313	2.310	2.223	2.308	2.70
6) S	Phenol-d6	1.800	1.730	1.751	1.730	1.667	1.736	2.76
7) TCM	Phenol	2.014	1.926	1.946	1.973	1.886	1.949	2.48
8) T	bis(2-Chloroethyl)eth	1.410	1.377	1.399	1.388	1.340	1.383	1.93
9) TM	2-Chlorophenol	1.339	1.297	1.302	1.307	1.266	1.302	1.98
10) T	1,3-Dichlorobenzene	1.520	1.489	1.511	1.525	1.462	1.501	1.75
11) TCM	1,4-Dichlorobenzene	1.572	1.558	1.566	1.560	1.519	1.555	1.34
12) T	Benzyl alcohol	1.025	0.988	1.010	0.991	0.921	0.987	4.06
13) T	1,2-Dichlorobenzene	1.436	1.413	1.426	1.448	1.367	1.418	2.21
14) T	2-Methylphenol	1.352	1.322	1.358	1.363	1.315	1.342	1.61
15) T	bis(2-chloroisopropyl	1.710	1.681	1.728	1.744	1.624	1.697	2.79
16) T	4-Methylphenol	1.435	1.390	1.416	1.432	1.338	1.402	2.87
17) TPM	n-Nitroso-di-n-propyl	0.246	0.240	0.244	0.248	0.243	0.244	1.27
18) T	Hexachloroethane	0.649	0.636	0.653	0.645	0.615	0.639	2.36
19) I	Naphthalene-d8	-----ISTD-----						
20) S	Nitrobenzene-d5	0.585	0.587	0.591	0.582	0.571	0.583	1.31
21) T	Nitrobenzene	0.559	0.561	0.562	0.560	0.554	0.559	0.56
22) T	Isophorone	0.937	0.933	0.950	0.945	0.946	0.942	0.75
23) TC	2-Nitrophenol	0.197	0.197	0.197	0.193	0.184	0.194	2.89
24) T	2,4-Dimethylphenol	0.471	0.476	0.476	0.470	0.473	0.473	0.62
25) T	bis(2-Chloroethoxy)me	0.495	0.498	0.494	0.502	0.494	0.497	0.71
26) TC	2,4-Dichlorophenol	0.329	0.327	0.326	0.316	0.312	0.322	2.28
27) T	Benzoic Acid	0.317	0.284	0.222	0.146	0.092	0.212	44.17
28) TM	1,2,4-Trichlorobenzen	0.359	0.355	0.356	0.355	0.355	0.356	0.57
29) T	Naphthalene	1.058	1.079	1.089	1.084	1.088	1.080	1.16
30) T	4-Chloroaniline	0.444	0.442	0.457	0.450	0.455	0.449	1.44
31) TC	Hexachlorobutadiene	0.218	0.219	0.218	0.215	0.215	0.217	0.83
32) TCM	4-Chloro-3-methylphen	0.419	0.421	0.429	0.419	0.399	0.417	2.62
33) T	2-Methylnaphthalene	0.698	0.702	0.707	0.702	0.692	0.700	0.76
34) I	Acenaphthene-d10	-----ISTD-----						
35) TP	Hexachlorocyclopentad	0.397	0.377	0.367	0.318	0.281	0.348	13.56
36) TC	2,4,6-Trichlorophenol	0.404	0.396	0.399	0.389	0.376	0.393	2.73
37) T	2,4,5-Trichlorophenol	0.434	0.427	0.427	0.405	0.402	0.419	3.42
38) S	2-Fluorobiphenyl	1.307	1.308	1.308	1.292	1.300	1.303	0.54
39) T	2-Chloronaphthalene	1.133	1.135	1.145	1.129	1.148	1.138	0.71
40) T	2-Nitroaniline	0.378	0.378	0.380	0.369	0.362	0.373	1.98
41) T	Dimethylphthalate	1.340	1.356	1.372	1.367	1.353	1.358	0.92
42) T	Acenaphthylene	1.802	1.827	1.829	1.816	1.821	1.819	0.59
43) T	2,6-Dinitrotoluene	0.315	0.314	0.314	0.306	0.291	0.308	3.32
44) T	3-Nitroaniline	0.309	0.308	0.316	0.311	0.307	0.310	1.20
45) TCM	Acenaphthene	1.114	1.124	1.105	1.101	1.109	1.110	0.79
46) TP	2,4-Dinitrophenol	0.203	0.195	0.181	0.140	0.089	0.162	29.31
47) T	Dibenzofuran	1.614	1.634	1.634	1.618	1.623	1.625	0.57
48) TMP	4-Nitrophenol	0.416	0.408	0.410	0.385	0.356	0.395	6.27
49) TM	2,4-Dinitrotoluene	0.457	0.457	0.461	0.436	0.419	0.446	3.99
50) T	Diethylphthalate	1.397	1.428	1.446	1.431	1.408	1.422	1.35
51) T	Fluorene	1.361	1.376	1.377	1.343	1.344	1.360	1.21
52) T	4-Chlorophenyl-phenyl	0.659	0.653	0.643	0.651	0.648	0.651	0.87
53) T	4-Nitroaniline	0.314	0.309	0.320	0.310	0.306	0.312	1.68
54) I	Phenanthrene-d10	-----ISTD-----						

Response Factor Report GC/MS Ins

Method : C:\HPCHEM\1\METHODS\M262593.M (RTE Integrator)
 Title : BNA Calibration
 Last Update : Thu Nov 03 13:40:19 2005
 Response via : Initial Calibration

Calibration Files

120 =BNA11333.D 80 =BNA11337.D 50 =BNA11335.D
 20 =BNA11336.D 10 =BNA11334.D

	Compound	120	80	50	20	10	Avg	%RSD
55) T	4,6-Dinitro-2-methylp	0.172	0.162	0.154	0.132	0.105	0.145	18.54
56) TC	n-Nitrosodiphenylamin	0.566	0.559	0.562	0.554	0.556	0.559	0.88
57) T	Azobenzene	0.999	0.995	1.018	1.041	1.023	1.015	1.88
58) S	2,4,6-Tribromophenol	0.102	0.099	0.098	0.096	0.090	0.097	4.74
59) T	4-Bromophenyl-phenyle	0.228	0.224	0.218	0.216	0.208	0.219	3.39
60) T	Hexachlorobenzene	0.242	0.239	0.230	0.230	0.224	0.233	3.17
61) TCM	Pentachlorophenol	0.139	0.128	0.115	0.095	0.069	0.109	25.56
62) T	Phenanthrene	1.189	1.179	1.183	1.198	1.201	1.190	0.79
63) T	Anthracene	1.150	1.135	1.153	1.167	1.151	1.151	1.00
64) T	Di-n-butylphthalate	1.277	1.285	1.325	1.363	1.361	1.322	3.07
65) TC	Fluoranthene	1.236	1.234	1.237	1.240	1.228	1.235	0.36
-----ISTD-----								
66) I	Chrysene-d12	0.471	0.473	0.501	0.583	0.691	0.544	17.27
67) T	Benzidine	1.214	1.225	1.246	1.253	1.259	1.239	1.54
68) TM	Pyrene	0.860	0.844	0.838	0.830	0.836	0.841	1.34
69) S	p-Terphenyl-d14	0.596	0.597	0.608	0.611	0.608	0.604	1.17
70) T	Butylbenzylphthalate	1.291	1.252	1.226	1.195	1.201	1.233	3.19
71) T	Benzo[a]anthracene	0.484	0.436	0.427	0.435	0.470	0.450	5.57
72) T	3,3'-Dichlorobenzidin	1.065	1.072	1.051	1.056	1.057	1.060	0.79
73) T	Chrysene	0.757	0.756	0.770	0.769	0.771	0.765	1.00
74) T	bis(2-Ethylhexyl)phth							
-----ISTD-----								
75) I	Perylene-d12	2.119	2.089	2.119	2.064	2.028	2.084	1.87
76) TC	Di-n-octylphthalate	1.794	1.751	1.681	1.624	1.623	1.695	4.51
77) T	Benzo[b]fluoranthene	1.790	1.725	1.710	1.648	1.607	1.696	4.17
78) T	Benzo[k]fluoranthene	1.607	1.564	1.524	1.474	1.445	1.523	4.31
79) TC	Benzo[a]pyrene	1.748	1.714	1.663	1.580	1.520	1.645	5.73
80) T	Indeno[1,2,3-cd]pyren	1.465	1.410	1.348	1.275	1.235	1.347	6.99
81) T	Dibenz[a,h]anthracene	1.391	1.389	1.355	1.292	1.243	1.334	4.84
82) T	Benzo[g,h,i]perylene							

5B

**SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)**

Lab Name: FMETL Lab Code 13461
 Project: 06-34880 Case No.: 60061 Location: 622 SDG No.: _____
 Lab File ID: BNA11490.D DFTPP Injection Date: 2/2/2006
 Instrument ID: GC_BNA_2 DFTPP Injection Time: 11:25

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	41.9
68	Less than 2.0% of mass 69	0.7 (1.4)1
69	Mass 69 Relative abundance	48.3
70	Less than 2.0% of mass 69	0.2 (0.4)1
127	25.0 - 75.0% of mass 198	47.8
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	6.9
275	10.0 - 30.0% of mass 198	24.4
365	Greater than 0.75% of mass 198	2.6
441	Present, but less than mass 443	10.6
442	40.0 - 110.0% of mass 198	75.9
443	15.0 - 24.0% of mass 442	15.5 (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:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD050	SSTD050	BNA11491.D	2/2/2006	11:50
02	MB-020206-01	MB-020206-01	BNA11494.D	2/2/2006	14:11
03	622C-GW	6006105	BNA11496.D	2/2/2006	15:46
04	622C-GW RE	6006105	BNA11508.D	2/3/2006	8:35

CLP

Data File : C:\HPCHEM\1\DATA\060202\BNA11490.D

Vial: 99

Acq On : 2 Feb 2006 11:25 am

Operator: BPatel

Sample : DFTPP Tune

Inst : GC/MS Ins

Misc : SV020206.01

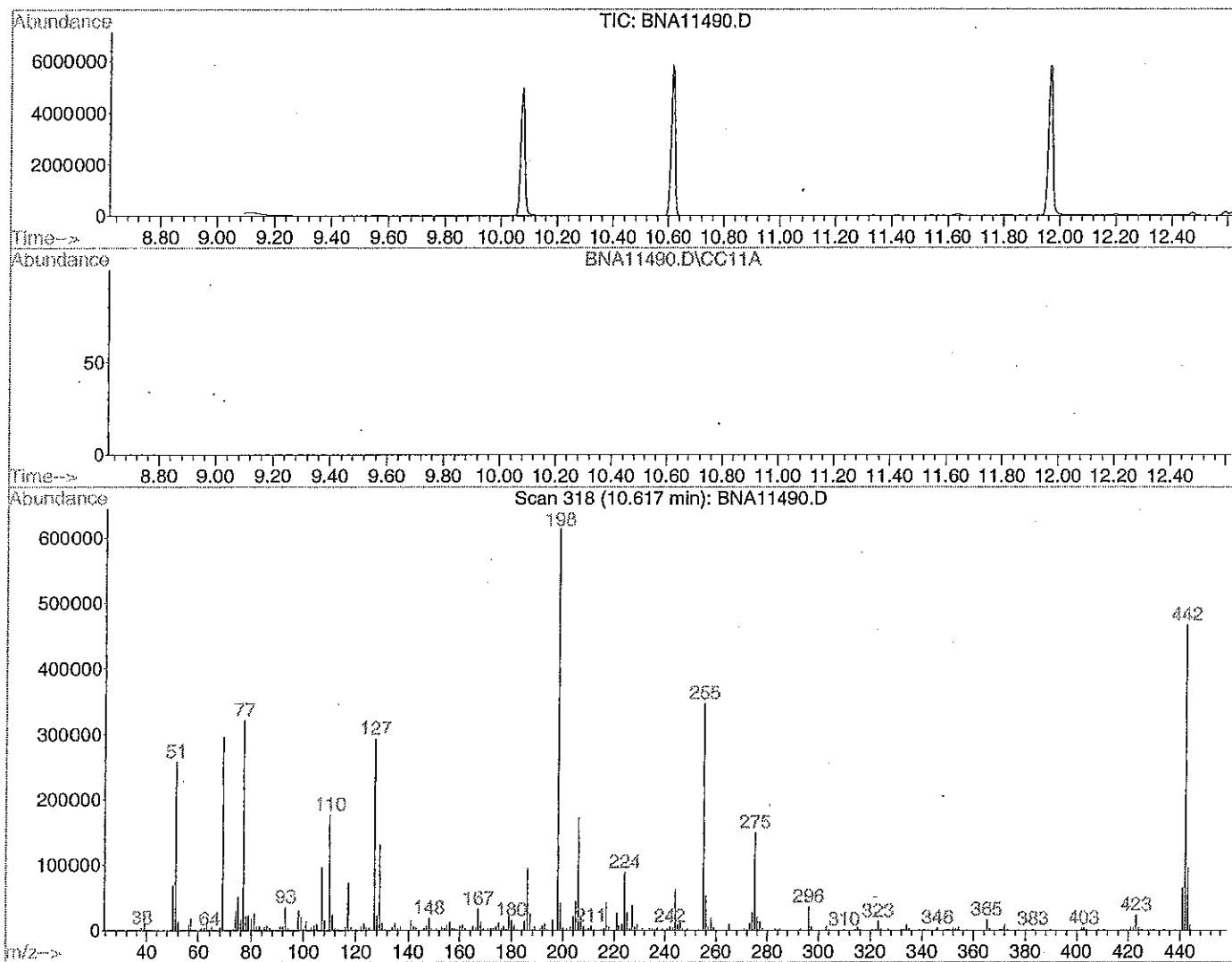
Multiplr: 1.00

MS Integration Params: ODD.P

GC Integration Params: rteint2.p

Method : C:\HPCHEM\1\METHODS\M262593.M (RTE Integrator)

Title : BNA Calibration



Spectrum Information: Scan 318

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	41.9	257728	PASS
68	69	0.00	2	1.4	4277	PASS
69	198	0.00	100	48.3	296704	PASS
70	69	0.00	2	0.4	1311	PASS
127	198	40	60	47.8	293504	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	614592	PASS
199	198	5	9	6.9	42304	PASS
275	198	10	30	24.4	149952	PASS
365	198	1	100	2.6	15967	PASS
441	443	1	99	68.2	65040	PASS
442	198	40	100	75.9	466688	PASS
443	442	17	23	20.4	95328	PASS

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\060202\BNA11491.D

Vial: 100

Acq On : 2 Feb 2006 11:50 am

Operator: BPatel

Sample : Sstd050

Inst : GC/MS Ins

Misc : SV013006.01

Multiplr: 1.00

MS Integration Params: ODD.P

GC Integration Params: rteint2.p

Method : C:\HPCHEM\1\METHODS\M262593.M (RTE Integrator)

Title : BNA Calibration

Last Update : Thu Nov 03 13:40:19 2005

Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min

Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	AvgRRF	CCRF	%Dev	Area%	Dev(min)
1 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	126	-0.05
2 T	Pyridine	1.536	1.504	2.1	125	-0.01
3 T	N-nitroso-dimethylamine	0.824	0.803	2.5	123	0.00
4 S	2-Fluorophenol	1.255	1.280	-2.0	126	0.00
5 T	Aniline	2.308	2.070	10.3	113	-0.04
6 S	Phenol-d6	1.736	1.665	4.1	120	-0.02
7 TCM	Phenol	1.949	1.875	3.8	122	-0.02
8 T	bis(2-Chloroethyl)ether	1.383	1.370	0.9	124	-0.03
9 TM	2-Chlorophenol	1.302	1.306	-0.3	127	-0.03
10 T	1,3-Dichlorobenzene	1.501	1.511	-0.7	126	-0.04
11 TCM	1,4-Dichlorobenzene	1.555	1.555	0.0	126	-0.04
12 T	Benzyl alcohol	0.987	0.963	2.4	121	-0.03
13 T	1,2-Dichlorobenzene	1.418	1.404	1.0	124	-0.05
14 T	2-Methylphenol	1.342	1.303	2.9	121	-0.02
15 T	bis(2-chloroisopropyl)ether	1.697	1.674	1.4	122	-0.04
16 T	4-Methylphenol	1.402	1.344	4.1	120	-0.03
17 TPM	n-Nitroso-di-n-propylamine	0.244	0.234	4.1	121	-0.04
18 T	Hexachloroethane	0.639	0.644	-0.8	125	-0.05
19 I	Naphthalene-d8	1.000	1.000	0.0	122	-0.05
20 S	Nitrobenzene-d5	0.583	0.578	0.9	119	-0.04
21 T	Nitrobenzene	0.559	0.552	1.3	120	-0.04
22 T	Isophorone	0.942	0.923	2.0	118	-0.05
23 TC	2-Nitrophenol	0.194	0.199	-2.6	123	-0.04
24 T	2,4-Dimethylphenol	0.473	0.465	1.7	119	-0.04
25 T	bis(2-Chloroethoxy)methane	0.497	0.495	0.4	122	-0.04
26 TC	2,4-Dichlorophenol	0.322	0.335	-4.0	125	-0.03
27 T	Benzoic Acid	0.212	0.252	-18.9	138	-0.02
28 TM	1,2,4-Trichlorobenzene	0.356	0.367	-3.1	126	-0.05
29 T	Naphthalene	1.080	1.081	-0.1	121	-0.05
30 T	4-Chloroaniline	0.449	0.389	13.4	104	-0.04
31 TC	Hexachlorobutadiene	0.217	0.231	-6.5	129	-0.04
32 TCM	4-Chloro-3-methylphenol	0.417	0.416	0.2	118	-0.02
33 T	2-Methylnaphthalene	0.700	0.702	-0.3	121	-0.04
34 I	Acenaphthene-d10	1.000	1.000	0.0	122	-0.05
35 TP	Hexachlorocyclopentadiene	0.348	0.343	1.4	114	-0.05
36 TC	2,4,6-Trichlorophenol	0.393	0.403	-2.5	123	-0.04
37 T	2,4,5-Trichlorophenol	0.419	0.429	-2.4	122	-0.02
38 S	2-Fluorobiphenyl	1.303	1.319	-1.2	123	-0.04
39 T	2-Chloronaphthalene	1.138	1.143	-0.4	122	-0.05
40 T	2-Nitroaniline	0.373	0.366	1.9	117	-0.04
41 T	Dimethylphthalate	1.358	1.351	0.5	120	-0.04
42 T	Acenaphthylene	1.819	1.794	1.4	119	-0.05
43 T	2,6-Dinitrotoluene	0.308	0.313	-1.6	121	-0.04
44 T	3-Nitroaniline	0.310	0.275	11.3	106	-0.04
45 TCM	Acenaphthene	1.110	1.111	-0.1	122	-0.05
46 TP	2,4-Dinitrophenol	0.162	0.170	-4.9	114	-0.04
47 T	Dibenzofuran	1.625	1.597	1.7	119	-0.05
48 TMP	4-Nitrophenol	0.395	0.409	-3.5	121	0.00
49 TM	2,4-Dinitrotoluene	0.446	0.440	1.3	116	-0.05
50 T	Diethylphthalate	1.422	1.415	0.5	119	-0.04
51 T	Fluorene	1.360	1.354	0.4	120	-0.04
52 T	4-Chlorophenyl-phenylether	0.651	0.660	-1.4	125	-0.05

(#)= Out of Range

BNA11491.D M262593.M

Mon Feb 06 10:32:49 2006

000048

Page 1

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\060202\BNA11491.D

Acq On : 2 Feb 2006 11:50 am

Sample : Sstd050

Misc : SV013006.01

MS Integration Params: ODD.P

Vial: 100

Operator: BPatel

Inst : GC/MS Ins

Multiplr: 1.00

GC Integration Params: rteint2.p

Method : C:\HPCHEM\1\METHODS\M262593.M (RTE Integrator)

Title : BNA Calibration

Last Update : Thu Nov 03 13:40:19 2005

Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min

Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
53 T	4-Nitroaniline	0.312	0.253	18.9	96	-0.04
54 I	Phenanthrene-d10	1.000	1.000	0.0	119	-0.05
55 T	4,6-Dinitro-2-methylphenol	0.145	0.157	-8.3	121	-0.04
56 TC	n-Nitrosodiphenylamine	0.559	0.558	0.2	118	-0.04
57 T	Azobenzene	1.015	1.007	0.8	117	-0.04
58 S	2,4,6-Tribromophenol	0.097	0.100	-3.1	120	-0.04
59 T	4-Bromophenyl-phenylether	0.219	0.223	-1.8	122	-0.05
60 T	Hexachlorobenzene	0.233	0.239	-2.6	123	-0.05
61 TCM	Pentachlorophenol	0.109	0.130	-19.3	133	-0.04
62 T	Phenanthrene	1.190	1.173	1.4	117	-0.05
63 T	Anthracene	1.151	1.137	1.2	117	-0.04
64 T	Di-n-butylphthalate	1.322	1.306	1.2	117	-0.04
65 TC	Fluoranthene	1.235	1.207	2.3	116	-0.04
66 I	Chrysene-d12	1.000	1.000	0.0	113	-0.05
67 T	Benzidine	0.544	0.521	4.2	117	-0.04
68 TM	Pyrene	1.239	1.276	-3.0	115	-0.05
69 S	p-Terphenyl-d14	0.841	0.885	-5.2	119	-0.04
70 T	Butylbenzylphthalate	0.604	0.610	-1.0	113	-0.04
71 T	Benzo[a]anthracene	1.233	1.244	-0.9	114	-0.04
72 T	3,3'-Dichlorobenzidine	0.450	0.512	-13.8	135	-0.04
73 T	Chrysene	1.060	1.070	-0.9	115	-0.04
74 T	bis(2-Ethylhexyl)phthalate	0.765	0.760	0.7	111	-0.04
75 I	Perylene-d12	1.000	1.000	0.0	110	-0.05
76 TC	Di-n-octylphthalate	2.084	2.014	3.4	105	-0.04
77 T	Benzo[b]fluoranthene	1.695	1.733	-2.2	114	-0.04
78 T	Benzo[k]fluoranthene	1.696	1.711	-0.9	110	-0.05
79 TC	Benzo[a]pyrene	1.523	1.528	-0.3	111	-0.04
80 T	Indeno[1,2,3-cd]pyrene	1.645	1.604	2.5	106	-0.07
81 T	Dibenz[a,h]anthracene	1.347	1.301	3.4	106	-0.07
82 T	Benzo[g,h,i]perylene	1.334	1.300	2.5	106	-0.08

4B

EPA SAMPLE NO.

SEMIVOLATILE METHOD BLANK SUMMARY

MB-020206-01

Lab Name: FMETL Lab Code 13461
Project: 06-34880 Case No.: 60061 Location: 622 SDG No.:
Lab File ID: BNA11494.D Lab Sample ID: MB-020206-01
Instrument ID: GC/MS Ins Date Extracted: 2/2/2006
Matrix: (soil/water) WATER Date Analyzed: 2/2/2006
Level: (low/med) LOW Time Analyzed: 14:11

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	622C-GW	6006105	BNA11496.D	2/2/2006
02	622C-GW RE	6006105	BNA11508.D	2/3/2006

COMMENTS:

WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: FMETL Lab Code 13461
 Project: 06-34880 Case No.: 60061 Location: 622 SDG No.:

	EPA SAMPLE NO.	S1 NBZ #	S2 2FP #	S3 TPL #	TOT OUT
01	MB-020206-01	74	78	86	0
02	622C-GW	62	66	46 *	1
03	622C-GW RE	62	65	46 *	1

QC LIMITS

S1	NBZ	=	Nitrobenzene-d5	(40-110)
S2	2FP	=	2-Fluorobiphenyl	(50-110)
S3	TPL	=	p-Terphenyl-d14	(50-135)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogate diluted out

Semi-Volatile MS/MSD Recovery Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

MS Lab ID: 6004508MS
MSD Lab ID: 6004508MSD
Matrix: Aqueous
Date Extracted: 01/25/06
Date Analyzed: 01/30/06

MS Sample ID: 886 RW#3MS
MSD Sample ID: 886 RW#3MSD
Sample File ID: BNA11473.D
MS File ID: BNA11474.D
MSD File ID: BNA11475.D

Compound Name	MS % Rec.	MSD % Rec.	% RPD	RPD Limits	Lower Control Limits	Upper Control Limits	Qualifier		
Pyridine	27.6	29.3	5.8	30.0	5	58			
N-nitroso-dimethylamine	39.9	45.7	13.6	30.0	25	110			
Aniline	47.9	40.6	16.5	30.0	4	90			
Phenol	32.1	30.8	4.3	30.0	10	115			
bis(2-Chloroethyl)ether	74.1	77.5	4.4	30.0	35	110			
2-Chlorophenol	72.7	74.9	3.0	30.0	35	105			
1,3-Dichlorobenzene	65.3	75.8	15.0	30.0	30	100			
1,4-Dichlorobenzene	65.8	75.7	14.0	30.0	30	100			
Benzyl alcohol	60.8	62.4	2.6	30.0	30	110			
1,2-Dichlorobenzene	68.6	76.7	11.2	30.0	35	100			
2-Methylphenol	64.4	64.8	0.5	30.0	40	110			
bis(2-chloroisopropyl)ether	77.6	83.5	7.3	30.0	25	130			
4-Methylphenol	58.8	56.5	4.1	30.0	30	110			
n-Nitroso-di-n-propylamine	77.1	79.1	2.6	30.0	35	130			
Hexachloroethane	62.8	72.5	14.4	30.0	30	95			
Nitrobenzene	73.4	75.6	3.0	30.0	45	110			
Isophorone	76.5	77.0	0.7	30.0	50	110			
2-Nitrophenol	73.7	76.0	3.1	30.0	40	115			
2,4-Dimethylphenol	72.2	73.0	1.1	30.0	30	110			
bis(2-Chloroethoxy)methane	74.7	74.7	0.0	30.0	45	105			
2,4-Dichlorophenol	75.0	76.3	1.7	30.0	50	105			
Benzoic Acid	24.2	22.3	8.2	30.0	0	125			
1,2,4-Trichlorobenzene	74.6	79.2	6.0	30.0	35	105			
Naphthalene	74.7	78.1	4.5	30.0	40	100			
4-Chloroaniline	57.9	48.6	17.5	30.0	15	110			
Hexachlorobutadiene	75.1	79.4	5.5	30.0	25	105			
4-Chloro-3-methylphenol	73.3	73.7	0.6	30.0	45	110			
2-Methylnaphthalene	75.8	77.2	1.8	30.0	45	105			
Hexachlorocyclopentadiene	45.2	45.8	1.4	30.0	5	67			
2,4,6-Trichlorophenol	80.5	82.6	2.6	30.0	50	115			
2,4,5-Trichlorophenol	81.4	80.5	1.1	30.0	50	110			
2-Chloronaphthalene	83.3	83.5	0.2	30.0	50	105			
2-Nitroaniline	80.3	79.6	0.9	30.0	50	115			
Dimethylphthalate	85.3	84.5	0.9	30.0	25	125			
Acenaphthylene	76.6	77.7	1.5	30.0	50	105			
2,6-Dinitrotoluene	81.2	80.3	1.1	30.0	50	115			
3-Nitroaniline	65.9	58.7	11.6	30.0	20	125			
Acenaphthene	78.0	79.6	2.0	30.0	45	110			

Semi-Volatile MS/MSD Recovery Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

MS Lab ID:	6004508MS	MS Sample ID:	6004508MS
MSD Lab ID:	6004508MSD	MSD Sample ID:	6004508MSD
Matrix:	Aqueous	Sample File ID:	BNA11473.D
Date Extracted:	01/25/06	MS File ID:	BNA11474.D
Date Analyzed:	01/30/06	MSD File ID:	BNA11475.D

Compound Name	MS % Rec.	MSD % Rec.	% RPD	RPD Limits	Lower Control Limits	Upper Control Limits	Qualifier		
2,4-Dinitrophenol	62.9	61.4	2.4	30.0	15	140			
Dibenzofuran	77.7	79.2	1.9	30.0	55	105			
4-Nitrophenol	37.6	3.5	165.9	30.0	0	125			^
2,4-Dinitrotoluene	79.5	81.7	2.8	30.0	50	120			
Diethylphthalate	82.1	83.3	1.4	30.0	40	120			
Fluorene	79.1	80.4	1.7	30.0	50	110			
4-Chlorophenyl-phenylether	80.4	84.0	4.4	30.0	50	110			
4-Nitroaniline	68.2	69.4	1.7	30.0	35	120			
4,6-Dinitro-2-methylphenol	71.8	71.2	0.8	30.0	40	130			
n-Nitrosodiphenylamine	73.9	73.9	0.1	30.0	50	110			
Azobenzene	74.1	74.6	0.7	30.0	58	102			
4-Bromophenyl-phenylether	75.7	78.2	3.2	30.0	50	115			
Hexachlorobenzene	72.9	73.7	1.1	30.0	50	110			
Pentachlorophenol	81.8	80.7	1.4	30.0	40	115			
Phenanthrene	73.4	74.6	1.6	30.0	50	115			
Anthracene	74.7	76.1	1.8	30.0	55	110			
Di-n-butylphthalate	79.1	79.9	1.1	30.0	55	115			
Fluoranthene	73.7	73.3	0.6	30.0	55	115			
Benzidine	1.0	0.5	60.0	30.0	5	100	**	**	^
Pyrene	86.6	88.9	2.7	30.0	50	130			
Butylbenzylphthalate	87.2	88.1	1.1	30.0	45	115			
Benzo[a]anthracene	80.7	81.3	0.7	30.0	55	110			
3,3'-Dichlorobenzidine	55.1	51.8	6.2	30.0	20	110			
Chrysene	82.6	83.7	1.3	30.0	55	110			
bis(2-Ethylhexyl)phthalate	87.3	88.3	1.1	30.0	40	125			
Di-n-octylphthalate	65.8	67.0	1.9	30.0	35	135			
Benzo[b]fluoranthene	60.4	61.4	1.6	30.0	45	120			
Benzo[k]fluoranthene	61.0	60.8	0.4	30.0	45	125			
Benzo[a]pyrene	60.1	61.0	1.6	30.0	55	110			
Indeno[1,2,3-cd]pyrene	57.9	58.4	0.9	30.0	45	125			
Dibenz[a,h]anthracene	58.3	58.2	0.1	30.0	40	125			
Benzo[g,h,i]perylene	60.0	59.4	1.0	30.0	40	125			

Page 2 of 2

Qualifiers :

**

% Recovery is Outside QC Limits

^

% RPD is Outside QC Limits

000053

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: FMETL Lab Code 13461
 Project: 06-34880 Case No.: 60061 Location: 622 SDG No.:
 Lab File ID (Standard): BNA11491.D Date Analyzed: 2/2/2006
 Instrument ID: GC_BNA_2 Time Analyzed: 11:50

	IS1DCB AREA #	RT #	IS2NAP AREA #	RT #	IS3ANE AREA #	RT #
12 HOUR STD	691632	10.35	2335869	13.28	1477556	17.49
UPPER LIMIT	1383264	10.85	4671738	13.78	2955112	17.99
LOWER LIMIT	345816	9.85	1167935	12.78	738778	16.99
EPA SAMPLE NO.						
01 MB-020206-01	708149	10.35	2623569	13.28	1584414	17.49
02 622C-GW	832714	10.35	3059629	13.28	1835970	17.49
03 622C-GW RE	701038	10.35	2699290	13.27	1671679	17.49

IS1 DCB = 1,4-Dichlorobenzene-d4
 IS2 NAP = Naphthalene-d8
 IS3 ANE = Acenaphthene-d10
 IS4 PNE = Phenanthrene-d10
 IS5 CYS = Chrysene-d12
 IS6 PRL = 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 to be used to flag values outside QC limit with an asterisk.

* Values outside of contract required QC limits

8C
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: FMETL Lab Code 13461
 Project: 06-34880 Case No.: 60061 Location: 622 SDG No.:
 Lab File ID (Standard): BNA11491.D Date Analyzed: 02/02/06
 Instrument ID: GC_BNA_2 Time Analyzed: 11:50

		IS4PNE AREA #	RT #	IS5CYS AREA #	RT #	IS6PRL AREA #	RT #
	12 HOUR STD	2448844	21.08	2322567	27.50	1366911	30.70
	UPPER LIMIT	4897688	20.58	4645134	27.00	2733822	30.20
	LOWER LIMIT	1224422	21.58	1161284	28.00	683456	31.20
	EPA SAMPLE NO.						
01	MB-020206-01	2898606	21.08	2561522	27.49	2074195	30.69
02	622C-GW	3307944	21.08	2825493	27.49	2269524	30.69
03	622C-GW RE	3042131	21.07	2732091	27.49	2070295	30.70

IS1 DCB = 1,4-Dichlorobenzene-d4
 IS2 NAP = Naphthalene-d8
 IS3 ANE = Acenaphthene-d10
 IS4 PNE = Phenanthrene-d10
 IS5 CYS = Chrysene-d12
 IS6 PRL = 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 to be used to flag values outside QC limit with an asterisk.

* Values outside of contract required QC limits

Data File : C:\HPCHEM\1\DATA\060202\BNA11494.D

Vial: 3

Acq On : 2 Feb 2006 2:11 pm

Operator: BPatel

Sample : MB-020206-01

Inst : GC/MS Ins

Misc : MB-020206-01

Multiplr: 1.00

MS Integration Params: ODD.P

GC Integration Params: rteint2.p

Quant Time: Feb 2 14:59 2006

Quant Results File: M262593.RES

Quant Method : C:\HPCHEM\1\METHODS\M262593.M (RTE Integrator)

Title : BNA Calibration

Last Update : Thu Nov 03 13:40:19 2005

Response via : Initial Calibration

DataAcq Meth : M262593

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.35	152	708149	40.00	ug/L	-0.04
19) Naphthalene-d8	13.28	136	2623569	40.00	ug/L	-0.05
34) Acenaphthene-d10	17.49	164	1584414	40.00	ug/L	-0.05
54) Phenanthrene-d10	21.08	188	2898606	40.00	ug/L	-0.05
66) Chrysene-d12	27.49	240	2561522	40.00	ug/L	-0.06
75) Perylene-d12	30.69	264	2074195	40.00	ug/L	-0.05

System Monitoring Compounds

4) 2-Fluorophenol	0.00	112	0	0.00	ug/L	
Spiked Amount	100.000	Range	20 - 110	Recovery	=	0.00%#
6) Phenol-d6	0.00	99	0	0.00	ug/L	
Spiked Amount	100.000	Range	10 - 115	Recovery	=	0.00%#
20) Nitrobenzene-d5	11.61	82	1413072	36.94	ug/L	-0.05
Spiked Amount	50.000	Range	40 - 110	Recovery	=	73.88%
38) 2-Fluorobiphenyl	15.90	172	2010552	38.96	ug/L	-0.04
Spiked Amount	50.000	Range	50 - 110	Recovery	=	77.92%
58) 2,4,6-Tribromophenol	0.00	330	0	0.00	ug/L	
Spiked Amount	100.000	Range	40 - 125	Recovery	=	0.00%#
69) p-Terphenyl-d14	25.01	244	2326410	43.17	ug/L	-0.04
Spiked Amount	50.000	Range	50 - 135	Recovery	=	86.34%

Target Compounds

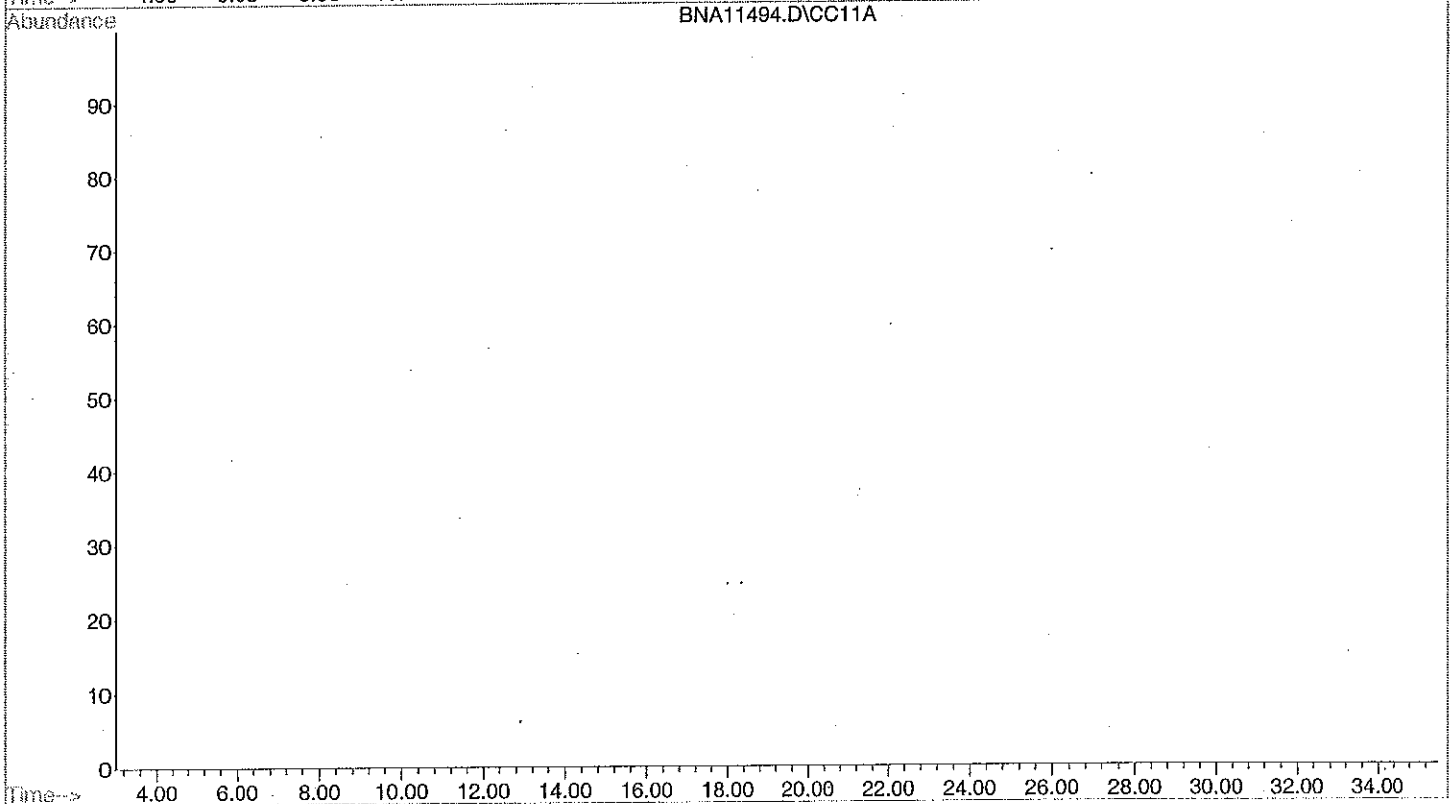
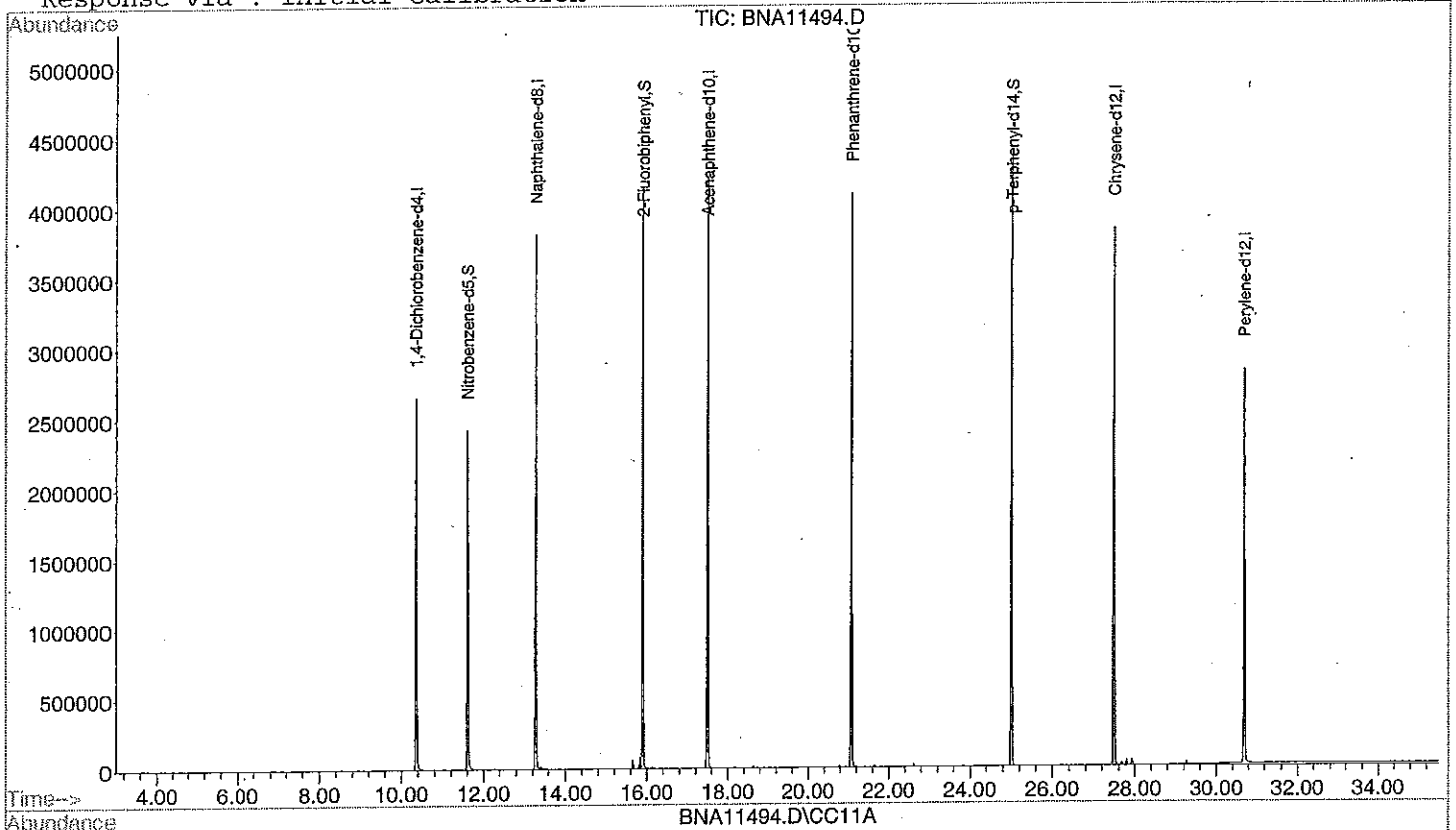
Qvalue

Quantitation Report

Data File : C:\HPCHEM\1\DATA\060202\BNA11494.D
 Acq On : 2 Feb 2006 2:11 pm
 Sample : MB-020206-01
 Misc : MB-020206-01
 MS Integration Params: ODD.P
 Quant Time: Feb 2 14:59 2006

Vial: 3
 Operator: BPatel
 Inst : GC/MS Ins
 Multiplr: 1.00
 GC Integration Params: rteint2.p
 Quant Results File: M262593.RES

Method : C:\HPCHEM\1\METHODS\M262593.M (RTE Integrator)
 Title : BNA Calibration
 Last Update : Thu Nov 03 13:40:19 2005
 Response via : Initial Calibration



Data File : C:\HPCHEM\1\DATA\060202\BNA11496.D Vial: 5
Acq On : 2 Feb 2006 3:46 pm Operator: BPatel
Sample : 6006105 Inst : GC/MS Ins
Misc : 622C GW Multiplr: 1.00
MS Integration Params: ODD.P GC Integration Params: rteint2.p
Quant Time: Feb 2 16:22 2006 Quant Results File: M262593.RES

Quant Method : C:\HPCHEM\1\METHODS\M262593.M (RTE Integrator)

Title : BNA Calibration
Last Update : Thu Nov 03 13:40:19 2005
Response via : Initial Calibration
DataAcq Meth : M262593

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.35	152	832714	40.00	ug/L	-0.04
19) Naphthalene-d8	13.28	136	3059629	40.00	ug/L	-0.05
34) Acenaphthene-d10	17.49	164	1835970	40.00	ug/L	-0.05
54) Phenanthrene-d10	21.08	188	3307944	40.00	ug/L	-0.05
66) Chrysene-d12	27.49	240	2825493	40.00	ug/L	-0.06
75) Perylene-d12	30.69	264	2269524	40.00	ug/L	-0.05

System Monitoring Compounds

4) 2-Fluorophenol	0.00	112	0	0.00	ug/L	
Spiked Amount 100.000	Range 20 - 110		Recovery =	0.00%#		
6) Phenol-d6	0.00	99	0	0.00	ug/L	
Spiked Amount 100.000	Range 10 - 115		Recovery =	0.00%#		
20) Nitrobenzene-d5	11.61	82	1391065	31.19	ug/L	-0.05
Spiked Amount 50.000	Range 40 - 110		Recovery =	62.38%		
38) 2-Fluorobiphenyl	15.90	172	1958136	32.75	ug/L	-0.05
Spiked Amount 50.000	Range 50 - 110		Recovery =	65.50%		
58) 2,4,6-Tribromophenol	0.00	330	0	0.00	ug/L	
Spiked Amount 100.000	Range 40 - 125		Recovery =	0.00%#		
69) p-Terphenyl-d14	25.00	244	1377400	23.17	ug/L	-0.04
Spiked Amount 50.000	Range 50 - 135		Recovery =	46.34%#		

Target Compounds

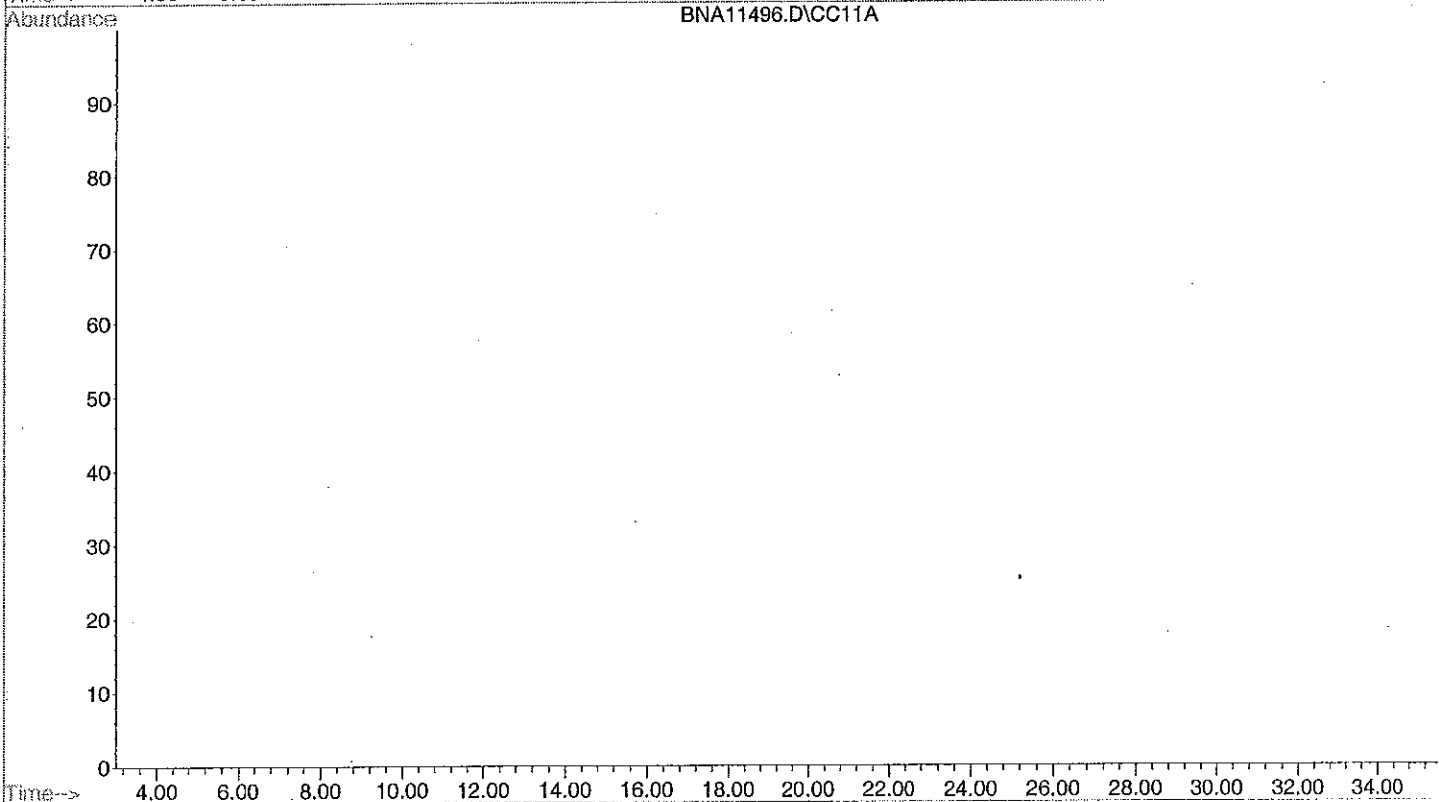
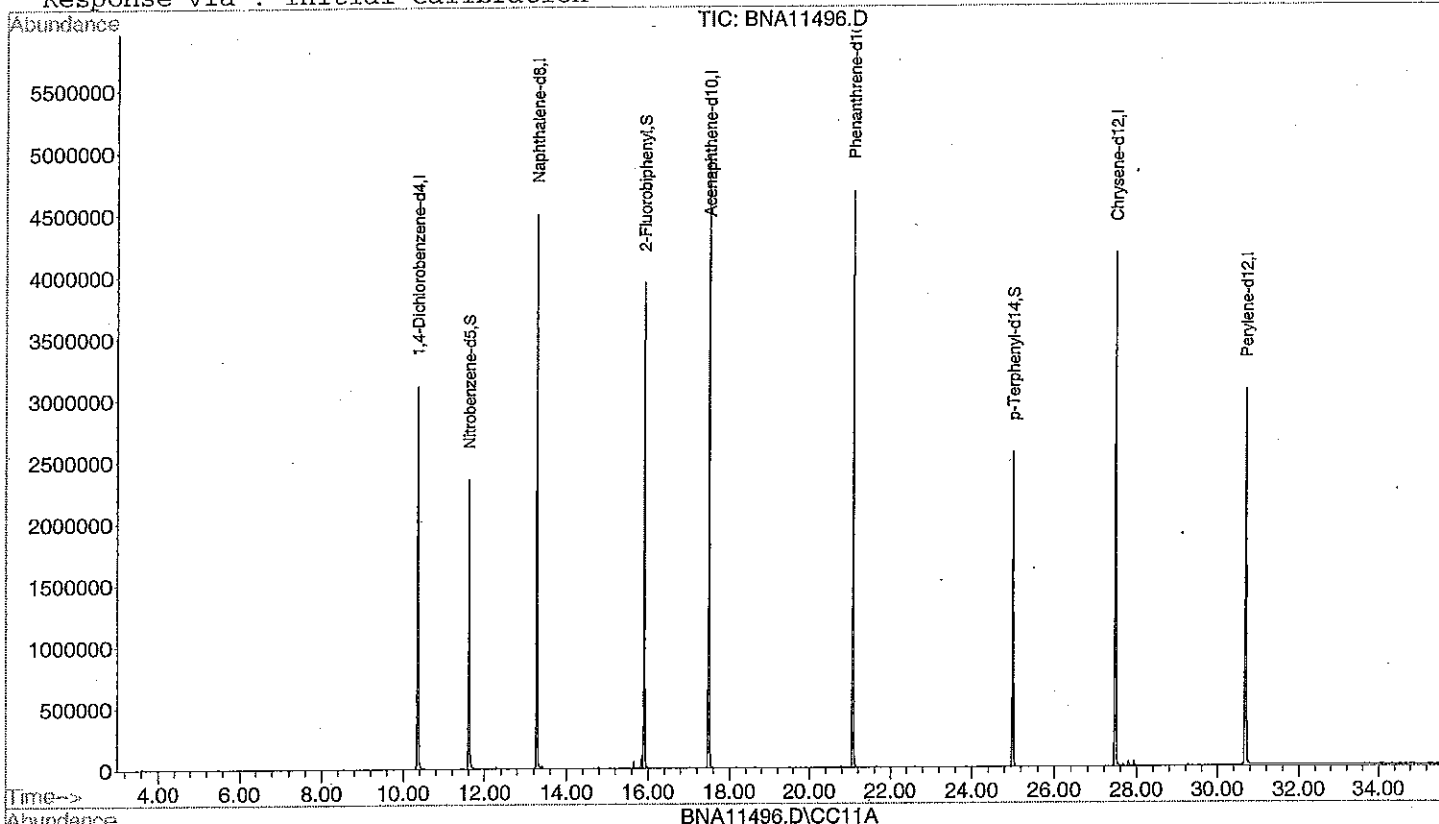
Qvalue

Quantitation Report

Data File : C:\HPCHEM\1\DATA\060202\BNA11496.D
 Acq On : 2 Feb 2006 3:46 pm
 Sample : 6006105
 Misc : 622C GW
 MS Integration Params: ODD.P
 Quant Time: Feb 2 16:22 2006

Vial: 5
 Operator: BPatel
 Inst : GC/MS Ins
 Multiplr: 1.00
 GC Integration Params: rteint2.p
 Quant Results File: M262593.RES

Method : C:\HPCHEM\1\METHODS\M262593.M (RTE Integrator)
 Title : BNA Calibration
 Last Update : Thu Nov 03 13:40:19 2005
 Response via : Initial Calibration



Data File : C:\HPCHEM\1\DATA\060202\BNA11508.D

Vial: 17

Acq On : 3 Feb 2006 8:35 am

Operator: BPatel

Sample : 6006105

Inst : GC/MS Ins

Misc : 622C GW

Multiplr: 1.00

MS Integration Params: ODD.P

GC Integration Params: rteint2.p

Quant Time: Feb 3 9:11 2006

Quant Results File: M262593.RES

Quant Method : C:\HPCHEM\1\METHODS\M262593.M (RTE Integrator)

Title : BNA Calibration

Last Update : Thu Nov 03 13:40:19 2005

Response via : Initial Calibration

DataAcq Meth : M262593

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.35	152	701038	40.00	ug/L	-0.04
19) Naphthalene-d8	13.27	136	2699290	40.00	ug/L	-0.05
34) Acenaphthene-d10	17.49	164	1671679	40.00	ug/L	-0.05
54) Phenanthrene-d10	21.07	188	3042131	40.00	ug/L	-0.05
66) Chrysene-d12	27.49	240	2732091	40.00	ug/L	-0.06
75) Perylene-d12	30.70	264	2070295	40.00	ug/L	-0.05

System Monitoring Compounds

4) 2-Fluorophenol	0.00	112	0	0.00	ug/L	
Spiked Amount	100.000	Range	20 - 110	Recovery	=	0.00%#
6) Phenol-d6	0.00	99	0	0.00	ug/L	
Spiked Amount	100.000	Range	10 - 115	Recovery	=	0.00%#
20) Nitrobenzene-d5	11.60	82	1218174	30.95	ug/L	-0.05
Spiked Amount	50.000	Range	40 - 110	Recovery	=	61.90%
38) 2-Fluorobiphenyl	15.90	172	1770005	32.51	ug/L	-0.05
Spiked Amount	50.000	Range	50 - 110	Recovery	=	65.02%
58) 2,4,6-Tribromophenol	0.00	330	0	0.00	ug/L	
Spiked Amount	100.000	Range	40 - 125	Recovery	=	0.00%#
69) p-Terphenyl-d14	25.00	244	1318210	22.94	ug/L	-0.05
Spiked Amount	50.000	Range	50 - 135	Recovery	=	45.88%#

Target Compounds

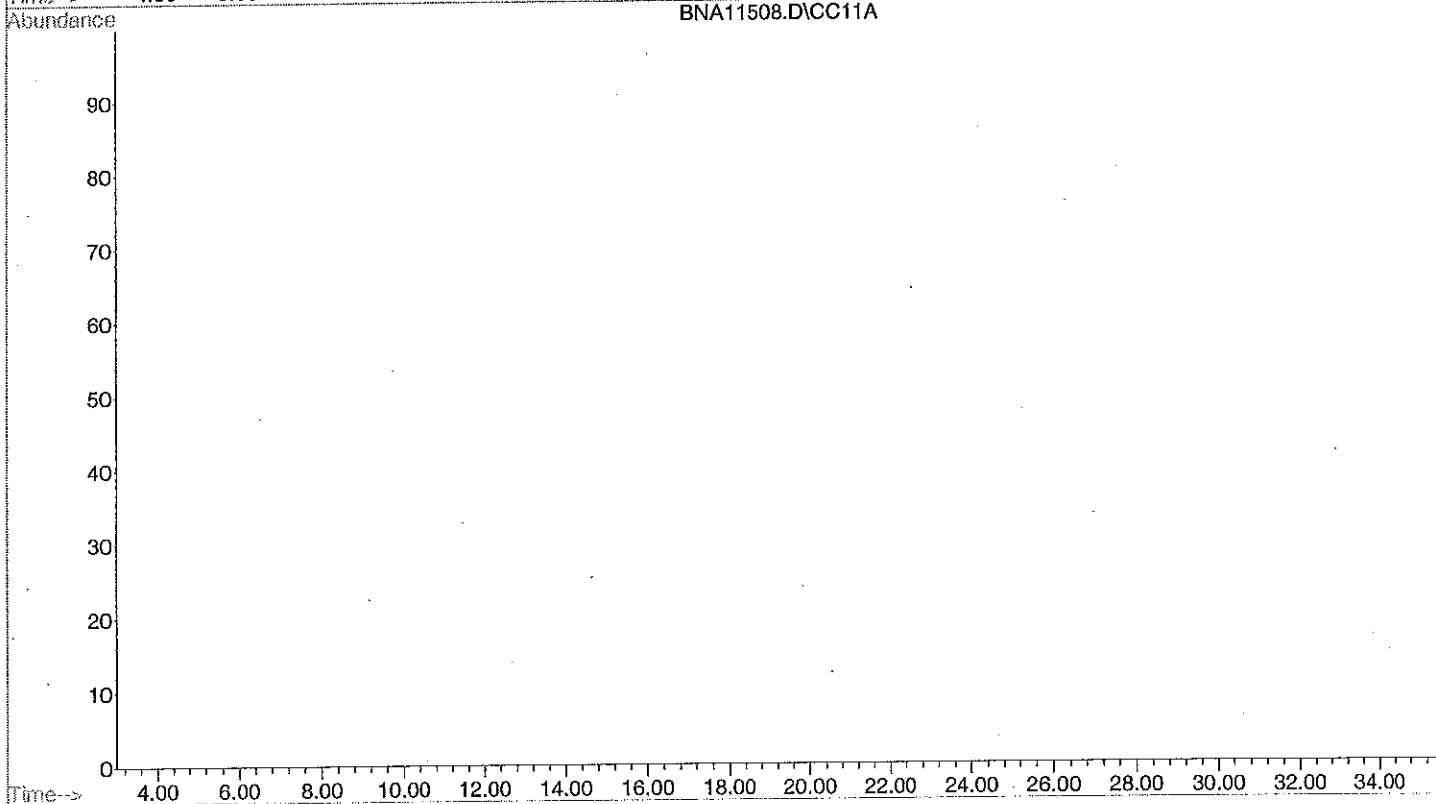
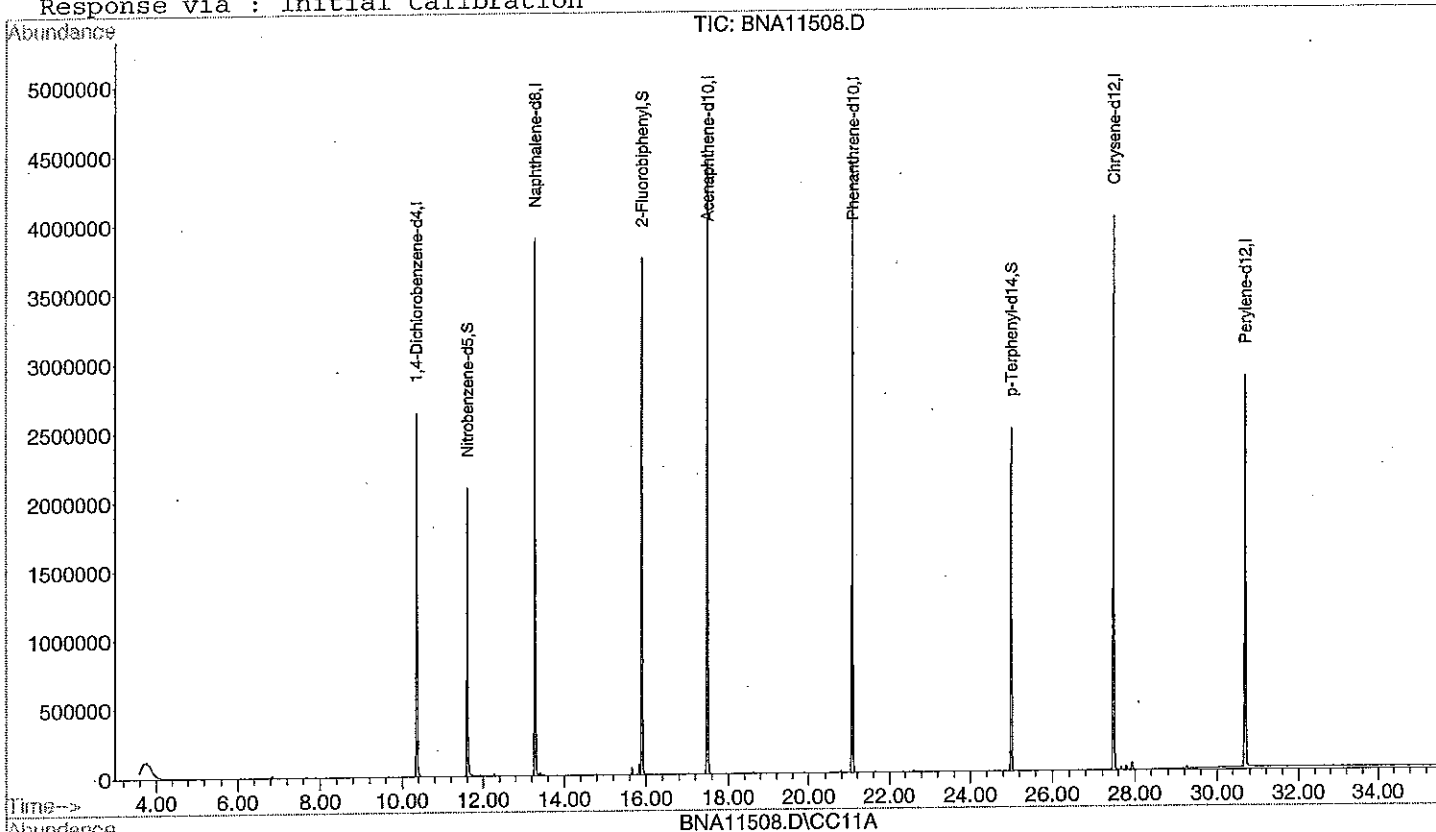
Qvalue

Quantitation Report

Data File : C:\HPCHEM\1\DATA\060202\BNA11508.D
 Acq On : 3 Feb 2006 8:35 am
 Sample : 6006105
 Misc : 622C GW
 MS Integration Params: ODD.P
 Quant Time: Feb 3 9:11 2006

Vial: 17
 Operator: BPatel
 Inst : GC/MS Ins
 Multiplr: 1.00
 GC Integration Params: rteint2.p
 Quant Results File: M262593.RES

Method : C:\HPCHEM\1\METHODS\M262593.M (RTE Integrator)
 Title : BNA Calibration
 Last Update : Thu Nov 03 13:40:19 2005
 Response via : Initial Calibration



TPHC

Date Received : 27-Jan-06
Date Extracted : 01-Feb-06
Extraction Method : Shake
Analysis Complete : 02-Feb-06
Analyst : B.Patel

Response Factor Report GC/MS Ins

Method : C:\HPCHEM\1\METHODS\TPHC003.M (Chemstation Integrator)

Title : GC TPH Method

Last Update : Tue Oct 25 07:55:20 2005

Calibration Files

5 =T018084.D 10 =T018086.D 20 =T018087.D
 50 =T018085.D 100 =T018083.D

Compound			5	10	20	50	100	Avg	%RSD
1) T	C8		2.837	2.664	2.724	2.668	2.626	2.704 E4	3.04
2) T	C10		2.862	2.806	2.878	2.839	2.794	2.836 E4	1.26
3) T	C12		2.861	2.790	2.853	2.839	2.805	2.829 E4	1.09
4) T	C14		2.865	2.809	2.889	2.875	2.845	2.857 E4	1.08
5) T	C16		2.927	2.880	2.956	2.945	2.915	2.925 E4	1.00
6) T	C18		2.795	2.759	2.843	2.847	2.828	2.814 E4	1.31
7) T	C20		2.897	2.846	2.928	2.922	2.892	2.897 E4	1.12
8) T	C22		2.992	2.936	3.009	3.003	2.970	2.982 E4	1.00
9) T	C24		3.026	2.980	3.055	3.044	3.006	3.022 E4	1.00
10) T	C26		3.216	3.070	3.115	3.098	3.050	3.110 E4	2.08
11) T	C28		3.078	3.037	3.095	3.106	3.066	3.076 E4	0.88
12) T	C30		3.118	3.072	3.150	3.175	3.135	3.130 E4	1.23
13) T	C32		3.094	3.044	3.113	3.144	3.116	3.102 E4	1.20
14) T	C34		3.248	3.097	3.149	3.147	3.107	3.150 E4	1.90
15) T	C36		3.976	3.287	3.224	3.183	3.150	3.364 E4	10.28
16) T	C38		3.069	3.060	3.095	3.119	3.056	3.080 E4	0.87
17) T	C40		2.977	2.957	3.041	3.094	2.970	3.008 E4	1.93
18) T	C42		2.826	2.803	2.869	2.901	2.755	2.831 E4	2.01
19) T	Pristane		2.969	2.903	2.962	2.931	2.883	2.930 E4	1.26
20) T	Phytane		3.126	2.988	3.046	3.008	2.956	3.025 E4	2.16
21) T	TPHC (Manual Integrat		4.144	3.652	3.499	3.390	3.275	3.592 E4	9.42
22) H	TPHC (Total)		3.259	3.047	3.076	3.045	2.981	3.082 E4	3.42
23) S	Chlorobenzene (SURR.)		1.947	2.014	2.104	2.103	2.064	2.046 E4	3.26
24) S	O-Terphenyl (SURR.)		3.327	3.260	3.347	3.333	3.289	3.311 E4	1.08

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\060201\T018298.D Vial: 1
 Acq On : 1 Feb 2006 11:40 am Operator: Skelton
 Sample : Tstd050 Inst : GC/MS Ins
 Misc : TP020106.01 Multiplr: 1.00
 IntFile : EVENTSBP.E

Method : C:\HPCHEM\1\METHODS\TPHC003.M (Chemstation Integrator)
 Title : GC TPH Method
 Last Update : Tue Oct 25 07:55:20 2005
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 150%

Compound		AvgRF	CCRF	%Dev	Area%	Dev(min)
1 T	C8	27.037	24.693 E3	8.7	93	0.00
2 T	C10	28.359	26.134 E3	7.8	92	0.00
3 T	C12	28.295	26.250 E3	7.2	92	0.00
4 T	C14	28.566	26.641 E3	6.7	93	0.00
5 T	C16	29.246	27.224 E3	6.9	92	0.00
6 T	C18	28.143	26.221 E3	6.8	92	0.00
7 T	C20	28.970	26.943 E3	7.0	92	0.00
8 T	C22	29.821	27.651 E3	7.3	92	0.00
9 T	C24	30.220	27.949 E3	7.5	92	0.00
10 T	C26	31.097	28.215 E3	9.3	91	0.00
11 T	C28	30.765	28.256 E3	8.2	91	0.00
12 T	C30	31.300	28.728 E3	8.2	90	0.00
13 T	C32	31.022	28.462 E3	8.3	91	0.00
14 T	C34	31.496	28.313 E3	10.1	90	0.00
15 T	C36	33.639	28.819 E3	14.3	91	0.00
16 T	C38	30.799	27.845 E3	9.6	89	0.00
17 T	C40	30.077	26.882 E3	10.6	87	0.00
18 T	C42	28.308	24.124 E3	14.8	83	-0.02
19 T	Pristane	29.297	27.312 E3	6.8	93	0.00
20 T	Phytane	30.249	27.862 E3	7.9	93	0.00
21 T	TPHC (Manual Integration)	35.921	31.039 E3	13.6	92	0.00
22 H	TPHC (Total)	30.816	27.450 E3	10.9	90	0.00
23 S	Chlorobenzene (SURR.)	20.465	19.253 E3	5.9	92	0.00
24 S	O-Terphenyl (SURR.)	33.111	31.074 E3	6.2	93	0.00

Data File : C:\HPCHEM\1\DATA\060201\T018298.D

Vial: 1

Acq On : 1 Feb 2006 11:40 am

Operator: Skelton

Sample : Tstd050

Inst : GC/MS Ins

Misc : TP020106.01

Multiplr: 1.00

IntFile : EVENTSBP.E

Quant Time: Feb 1 12:41 2006 Quant Results File: TPHC003.RES

Quant Method : C:\HPCHEM\1\METHODS\TPHC003.M (Chemstation Integrator)

Title : GC TPH Method

Last Update : Tue Oct 25 07:55:20 2005

Response via : Initial Calibration

DataAcq Meth : TPHC003.M

Volume Inj. :

Signal Phase :

Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
23) S Chlorobenzene (SURR.)	5.71	962666	46.446 mg/L
Spiked Amount 10.000		Recovery =	464.46%
24) S O-Terphenyl (SURR.)	13.00	1553677	47.034 mg/L
Spiked Amount 10.000		Recovery =	470.34%
Target Compounds			
1) T C8	4.76	1234666	45.665 mg/L
2) T C10	7.74	1306689	46.077 mg/L
3) T C12	9.36	1312486	46.386 mg/L
4) T C14	10.54	1332047	46.631 mg/L
5) T C16	11.55	1361180	46.542 mg/L
6) T C18	12.01	1311049	46.585 mg/L
7) T C20	12.44	1347146	46.501 mg/L
8) T C22	13.26	1382555	46.361 mg/L
9) T C24	14.00	1397457	46.243 mg/L
10) T C26	14.69	1410738	45.365 mg/L
11) T C28	15.32	1412814	45.923 mg/L
12) T C30	15.95	1436379	45.891 mg/L
13) T C32	16.68	1423085	45.873 mg/L
14) T C34	17.59	1415672	44.948 mg/L
15) T C36	18.80	1440946	42.835 mg/L
16) T C38	20.49	1392235	45.204 mg/L
17) T C40	22.88	1344104	44.689 mg/L
18) T C42	26.30	1206219	42.610 mg/L
19) T Pristane	12.04	1365604	46.612 mg/L
20) T Phytane	12.49	1393089	46.054 mg/L
21) T TPHC (Manual Integration)	13.00	31039250	864.097 mg/L m
22) H TPHC (Total)	12.00	27449715	890.767 mg/L

Data File : C:\HPCHEM\1\DATA\060201\T018298.D

Vial: 1

Acq On : 1 Feb 2006 11:40 am

Operator: Skelton

Sample : Tstd050

Inst : GC/MS Ins

Misc : TP020106.01

Multiplr: 1.00

IntFile : EVENTSBP.E

Quant Time: Feb 1 12:41 2006 Quant Results File: TPHC003.RES

Quant Method : C:\HPCHEM\1\METHODS\TPHC003.M (Chemstation Integrator)

Title : GC TPH Method

Last Update : Tue Oct 25 07:55:20 2005

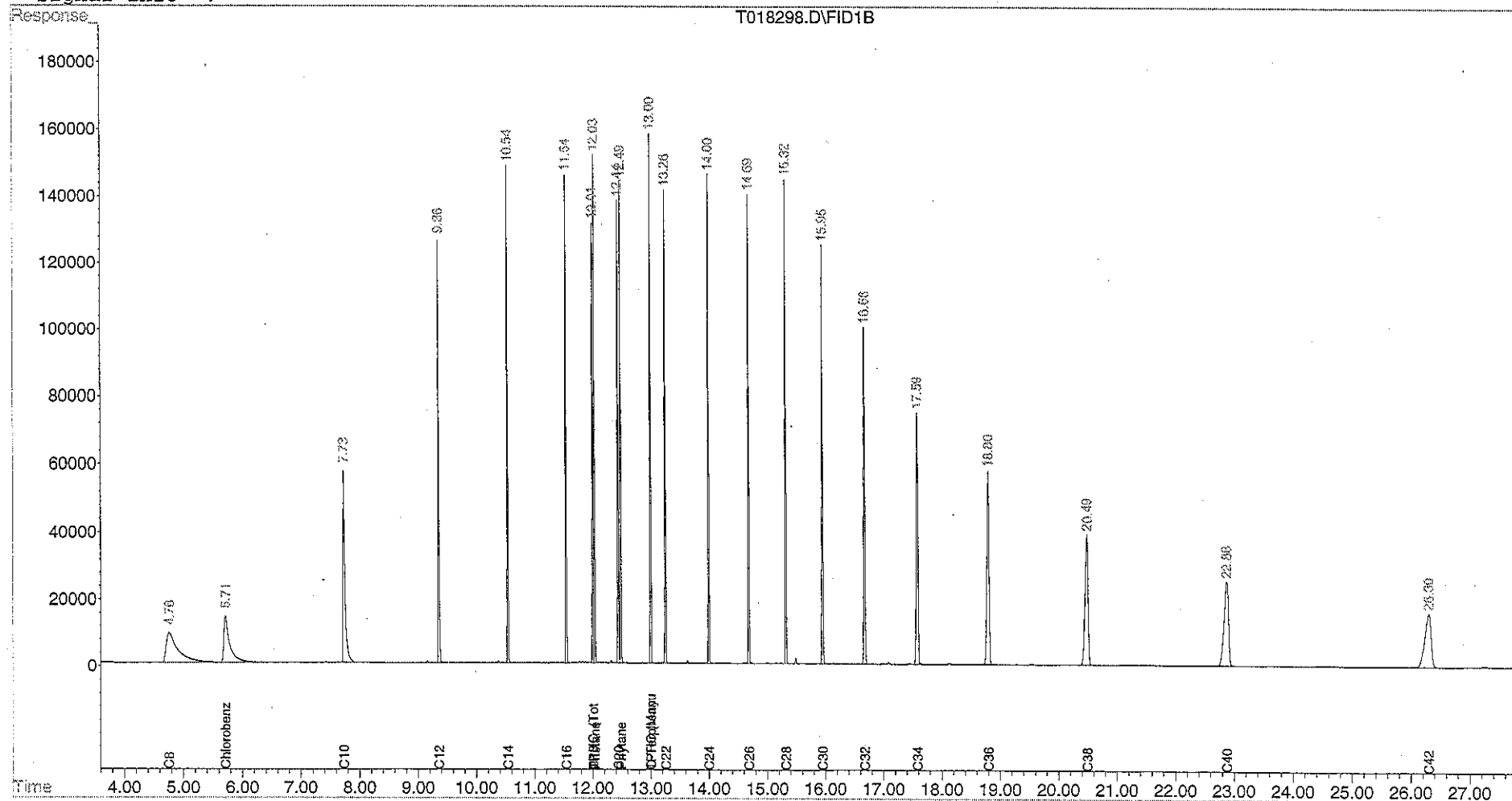
Response via : Multiple Level Calibration

DataAcq Meth : TPHC003.M

Volume Inj. :

Signal Phase :

Signal Info :



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\060201\T018309.D
 Acq On : 1 Feb 2006 6:33 pm
 Sample : Tstd050
 Misc : TP020106.01
 IntFile : EVENTSBP.E

Vial: 12
 Operator: B.Patel
 Inst : GC/MS Ins
 Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\TPHC003.M (Chemstation Integrator)
 Title : GC TPH Method
 Last Update : Tue Oct 25 07:55:20 2005
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 T	C8	27.037	26.076 E3	3.6	98	0.00
2 T	C10	28.359	27.696 E3	2.3	98	0.00
3 T	C12	28.295	27.877 E3	1.5	98	0.00
4 T	C14	28.566	28.321 E3	0.9	99	0.00
5 T	C16	29.246	28.989 E3	0.9	98	0.00
6 T	C18	28.143	27.919 E3	0.8	98	0.00
7 T	C20	28.970	28.711 E3	0.9	98	0.00
8 T	C22	29.821	29.579 E3	0.8	98	0.00
9 T	C24	30.220	29.937 E3	0.9	98	0.00
10 T	C26	31.097	30.323 E3	2.5	98	0.00
11 T	C28	30.765	30.295 E3	1.5	98	0.00
12 T	C30	31.300	30.786 E3	1.6	97	0.00
13 T	C32	31.022	30.510 E3	1.7	97	0.00
14 T	C34	31.496	30.468 E3	3.3	97	0.00
15 T	C36	33.639	31.002 E3	7.8	97	0.00
16 T	C38	30.799	30.194 E3	2.0	97	0.00
17 T	C40	30.077	29.648 E3	1.4	96	0.00
18 T	C42	28.308	27.536 E3	2.7	95	0.00
19 T	Pristane	29.297	29.047 E3	0.9	99	0.00
20 T	Phytane	30.249	29.695 E3	1.8	99	0.00
21 T	TPHC (Manual Integration)	35.921	33.304 E3	7.3	98	0.00
22 H	TPHC (Total)	30.816	29.514 E3	4.2	97	0.00
23 S	Chlorobenzene (SURR.)	20.465	20.247 E3	1.1	96	0.00
24 S	O-Terphenyl (SURR.)	33.111	32.962 E3	0.5	99	0.00

Data File : C:\HPCHEM\1\DATA\060201\T018309.D

Vial: 12

Acq On : 1 Feb 2006 6:33 pm

Operator: B.Patel

Sample : Tstd050

Inst : GC/MS Ins

Misc : TP020106.01

Multiplr: 1.00

IntFile : EVENTSBP.E

Quant Time: Feb 2 7:58 2006 Quant Results File: TPHC003.RES

Quant Method : C:\HPCHEM\1\METHODS\TPHC003.M (Chemstation Integrator)

Title : GC TPH Method

Last Update : Tue Oct 25 07:55:20 2005

Response via : Initial Calibration

DataAcq Meth : TPHC003.M

Volume Inj. :

Signal Phase :

Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
23) S Chlorobenzene (SURR.)	5.72	1012332	48.844 mg/L
Spiked Amount 10.000		Recovery =	488.44%
24) S O-Terphenyl (SURR.)	13.00	1648105	49.903 mg/L
Spiked Amount 10.000		Recovery =	499.03%
Target Compounds			
1) T C8	4.77	1303782	48.221 mg/L
2) T C10	7.74	1384777	48.830 mg/L
3) T C12	9.36	1393831	49.261 mg/L
4) T C14	10.54	1416046	49.571 mg/L
5) T C16	11.55	1449466	49.561 mg/L
6) T C18	12.01	1395972	49.603 mg/L
7) T C20	12.45	1435575	49.553 mg/L
8) T C22	13.26	1478932	49.593 mg/L
9) T C24	14.00	1496843	49.532 mg/L
10) T C26	14.69	1516148	48.755 mg/L
11) T C28	15.32	1514763	49.237 mg/L
12) T C30	15.95	1539306	49.179 mg/L
13) T C32	16.68	1525500	49.175 mg/L
14) T C34	17.59	1523405	48.368 mg/L
15) T C36	18.81	1550082	46.080 mg/L
16) T C38	20.50	1509682	49.018 mg/L
17) T C40	22.90	1482395	49.287 mg/L
18) T C42	26.33	1376811	48.637 mg/L
19) T Pristane	12.04	1452374	49.574 mg/L
20) T Phytane	12.49	1484735	49.084 mg/L
21) T TPHC (Manual Integration)	13.00	33303705	927.137 mg/L m
22) H TPHC (Total)	12.00	29514062	957.757 mg/L

Data File : C:\HPCHEM\1\DATA\060201\T018309.D

Vial: 12

Acq On : 1 Feb 2006 6:33 pm

Operator: B.Patel

Sample : Tstd050

Inst : GC/MS Ins

Misc : TP020106.01

Multiplr: 1.00

IntFile : EVENTSBP.E

Quant Time: Feb 2 7:58 2006 Quant Results File: TPHC003.RES

Quant Method : C:\HPCHEM\1\METHODS\TPHC003.M (Chemstation Integrator)

Title : GC TPH Method

Last Update : Tue Oct 25 07:55:20 2005

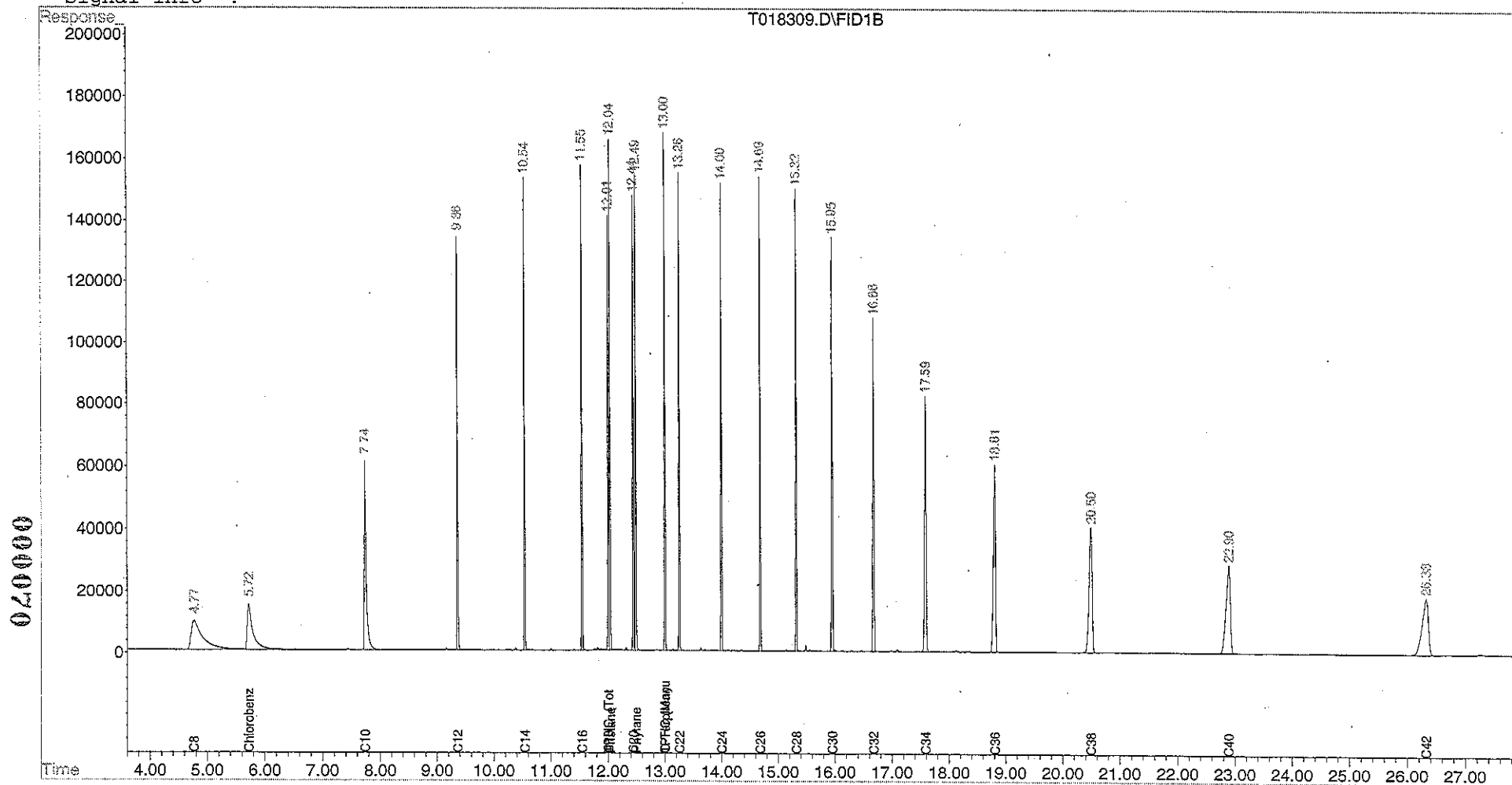
Response via : Multiple Level Calibration

DataAcq Meth : TPHC003.M

Volume Inj. :

Signal Phase :

Signal Info :



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\060201\T018318.D
 Acq On : 2 Feb 2006 12:13 am
 Sample : Tstd050
 Misc : TP020106.01
 IntFile : EVENTSBP.E

Vial: 21
 Operator: B.Patel
 Inst : GC/MS Ins
 Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\TPHC003.M (Chemstation Integrator)
 Title : GC TPH Method
 Last Update : Tue Oct 25 07:55:20 2005
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 150%

Compound		AvgRF	CCRF	%Dev	Area%	Dev(min)
1 T	C8	27.037	26.127 E3	3.4	98	0.00
2 T	C10	28.359	27.736 E3	2.2	98	0.00
3 T	C12	28.295	27.859 E3	1.5	98	0.00
4 T	C14	28.566	28.205 E3	1.3	98	0.00
5 T	C16	29.246	28.852 E3	1.3	98	0.00
6 T	C18	28.143	27.798 E3	1.2	98	0.00
7 T	C20	28.970	28.546 E3	1.5	98	0.00
8 T	C22	29.821	29.336 E3	1.6	98	0.00
9 T	C24	30.220	29.689 E3	1.8	98	0.00
10 T	C26	31.097	29.991 E3	3.6	97	0.00
11 T	C28	30.765	30.032 E3	2.4	97	0.00
12 T	C30	31.300	30.469 E3	2.7	96	0.00
13 T	C32	31.022	30.172 E3	2.7	96	0.00
14 T	C34	31.496	30.071 E3	4.5	96	0.00
15 T	C36	33.639	30.666 E3	8.8	96	0.00
16 T	C38	30.799	29.871 E3	3.0	96	0.00
17 T	C40	30.077	29.433 E3	2.1	95	0.00
18 T	C42	28.308	27.494 E3	2.9	95	0.00
19 T	Pristane	29.297	28.798 E3	1.7	98	0.00
20 T	Phytane	30.249	29.418 E3	2.7	98	0.00
21 T	TPHC (Manual Integration)	35.921	32.977 E3	8.2	97	0.00
22 H	TPHC (Total)	30.816	29.281 E3	5.0	96	0.00
23 S	Chlorobenzene (SURR.)	20.465	20.351 E3	0.6	97	0.00
24 S	O-Terphenyl (SURR.)	33.111	32.719 E3	1.2	98	0.00

Data File : C:\HPCHEM\1\DATA\060201\T018318.D

Vial: 21

Acq On : 2 Feb 2006 12:13 am

Operator: B.Patel

Sample : Tstd050

Inst : GC/MS Ins

Misc : TP020106.01

Multiplr: 1.00

IntFile : EVENTSBP.E

Quant Time: Feb 2 7:59 2006 Quant Results File: TPHC003.RES

Quant Method : C:\HPCHEM\1\METHODS\TPHC003.M (Chemstation Integrator)

Title : GC TPH Method

Last Update : Tue Oct 25 07:55:20 2005

Response via : Initial Calibration

DataAcq Meth : TPHC003.M

Volume Inj. :

Signal Phase :

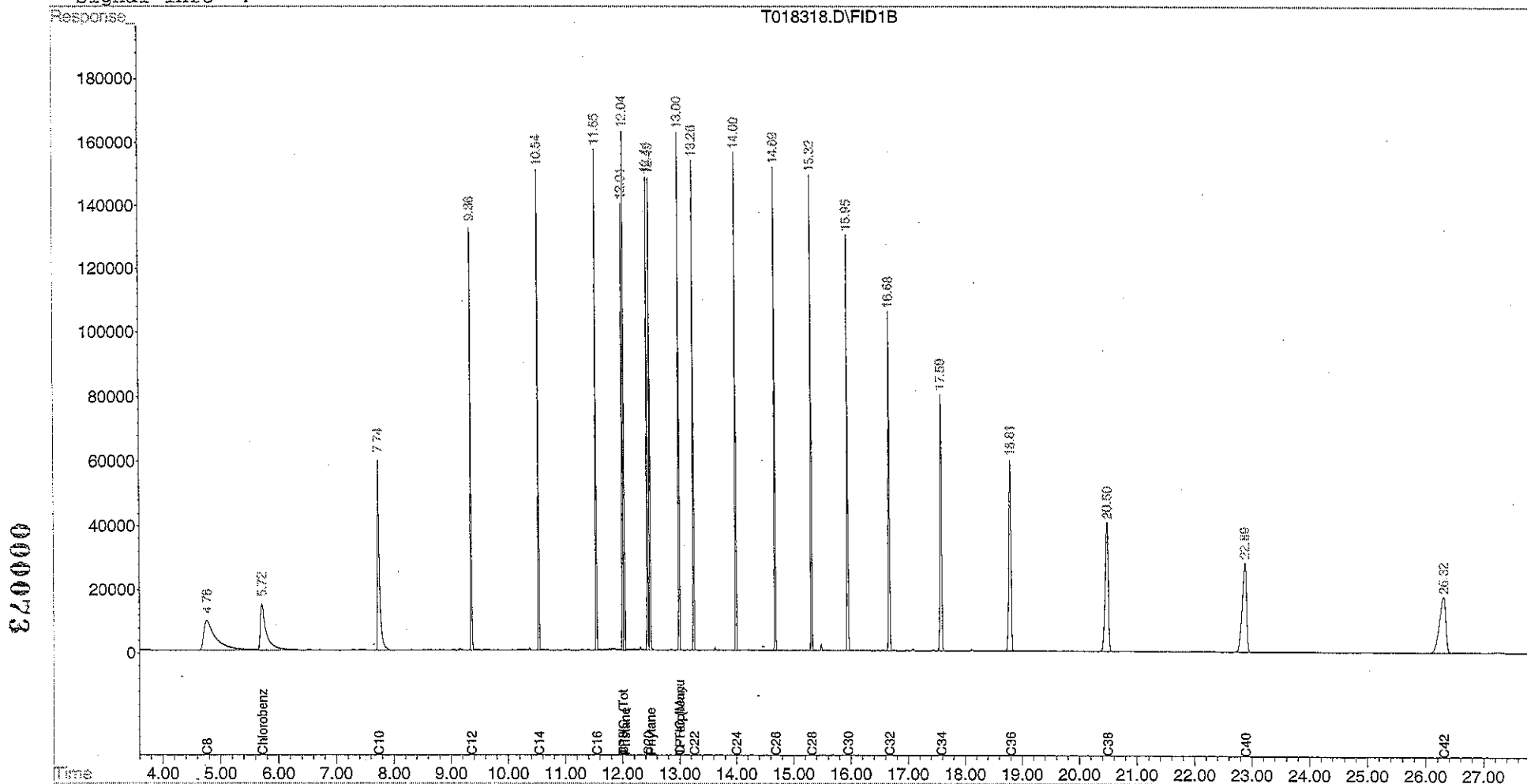
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
23) S Chlorobenzene (SURR.)	5.72	1017568	49.097 mg/L
Spiked Amount 10.000		Recovery =	490.97%
24) S O-Terphenyl (SURR.)	13.00	1635933	49.533 mg/L
Spiked Amount 10.000		Recovery =	495.33%
Target Compounds			
1) T C8	4.77	1306332	48.316 mg/L
2) T C10	7.74	1386808	48.902 mg/L
3) T C12	9.36	1392930	49.229 mg/L
4) T C14	10.54	1410228	49.368 mg/L
5) T C16	11.55	1442612	49.327 mg/L
6) T C18	12.01	1389900	49.387 mg/L
7) T C20	12.44	1427286	49.267 mg/L
8) T C22	13.26	1466822	49.187 mg/L
9) T C24	14.00	1484470	49.123 mg/L
10) T C26	14.69	1499526	48.220 mg/L
11) T C28	15.32	1501576	48.808 mg/L
12) T C30	15.95	1523445	48.673 mg/L
13) T C32	16.68	1508578	48.629 mg/L
14) T C34	17.59	1503549	47.738 mg/L
15) T C36	18.81	1533317	45.581 mg/L
16) T C38	20.50	1493535	48.493 mg/L
17) T C40	22.89	1471662	48.930 mg/L
18) T C42	26.32	1374706	48.562 mg/L
19) T Pristane	12.04	1439916	49.149 mg/L
20) T Phytane	12.49	1470896	48.626 mg/L
21) T TPHC (Manual Integration)	13.00	32977434	918.054 mg/L m
22) H TPHC (Total)	12.00	29281173	950.199 mg/L

Data File : C:\HPCHEM\1\DATA\060201\T018318.D Vial: 21
 Acq On : 2 Feb 2006 12:13 am Operator: B.Patel
 Sample : Tstd050 Inst : GC/MS Ins
 Misc : TP020106.01 Multiplr: 1.00
 IntFile : EVENTSBP.E
 Quant Time: Feb 2 7:59 2006 Quant Results File: TPHC003.RES

Quant Method : C:\HPCHEM\1\METHODS\TPHC003.M (Chemstation Integrator)
 Title : GC TPH Method
 Last Update : Tue Oct 25 07:55:20 2005
 Response via : Multiple Level Calibration
 DataAcq Meth : TPHC003.M

Volume Inj. :
 Signal Phase :
 Signal Info :



Surrogate Recovery Report
U.S.Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client : U.S. Army
 DPW. SELFM-PW-EV
 Bldg. 173
 Ft. Monmouth, NJ 07703

Project # : 60061
Location : 622
UST Reg. # : 06-34880

Analysis: OQA-QAM-025
Matrix: Soil
Inst. ID. GC TPHC INST. #1
Column Type : RTX-5, 0.32mm ID, 30M
Injection Volume : 1uL

Date Received : 27-Jan-06
Date Extracted : 1-Feb-06
Extraction Method : Shake
Analysis Complete : 2-Feb-06
Analyst : B.Patel

Lab ID	Surrogate Added (ppm)	Chlorobenzene Recovered (ppm)	Chlorobenzene % Recovery	O-Terphenyl Recovered (ppm)	O-Terphenyl % Recovery
6006101	10	9.16	91.6	9.02	90.2
6006102	10	9.05	90.5	8.93	89.3
6006103	10	9.57	95.7	9.32	93.2
6006104	10	9.12	91.2	8.95	89.5
METHOD BLANK	10	8.52	85.2	8.39	83.9

SURROGATE STANDARDS		Lower Control Limits	Upper Control Limits
Chlorobenzene	QC Limits	60	130
O-Terphenyl	QC Limits	62	133

Matrix Spike/ Duplicate Recovery Report
U.S.Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client : U.S. Army **Project # :** 60061
 DPW. SELFM-PW-EV **Location :** 622
 Bldg. 173 **UST Reg. # :** 06-34880
 Ft. Monmouth, NJ 07703

Analysis: OQA-QAM-025 **Date Received :** 27-Jan-06
Matrix: Soil **Date Extracted :** 1-Feb-06
Inst. ID. GC TPHC INST. #1 **Extraction Method :** Shake
Column Type : RTX-5, 0.32mm ID, 30M **Analysis Complete :** 2-Feb-06
Injection Volume : 1uL **Analyst :** B.Patel

Sample	Spike Amount Added (ppm)	Sample Amount (ppm)	Matrix Spike Amount (ppm)	Percent Recovery	QC Limits %
6005601MS	1000	0.13	942.53	94.24	55 - 129
6005601MSD	1000	0.13	993.58	99.35	55 - 129

RPD	5.27	20.00
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NC = Not Calculated due to values are over the calibration range.

Quality Control Check Standard Summary
U.S.Army, Fort Monmouth Environmental Laboratory
NJDEP Certification # 13461

Client :	U.S. Army	Project # :	60061
	DPW. SELFM-PW-EV	Location :	622
	Bldg. 173	UST Reg. # :	06-34880
	Ft. Monmouth, NJ 07703		
Analysis:	OQA-QAM-025	Date Received :	27-Jan-06
Matrix:	Soil	Date Extracted :	1-Feb-06
Inst. ID.	GC TPHC INST. #1	Extraction Method :	Shake
Column Type :	RTX-5, 0.32mm ID, 30M	Analysis Complete :	2-Feb-06
Injection Volume :	1uL	Analyst :	B.Patel

Sample	Date Extracted	Spike Amount Added (ppm)	Matrix Spike Amount (ppm)	Percent Recovery	QC Limits %
LCS-020106-01	01-Feb-06	1000	828.85	82.89	55 - 129

000076

Data File : C:\HPCHEM\1\DATA\060201\T018299.D

Vial: 2

Acq On : 1 Feb 2006 12:18 pm

Operator: Skelton

Sample : MB-020106-01

Inst : GC/MS Ins

Misc : TP020106.01

Multiplr: 1.00

IntFile : EVENTSBP.E

Quant Time: Feb 1 15:44 2006 Quant Results File: TPHC003.RES

Quant Method : C:\HPCHEM\1\METHODS\TPHC003.M (Chemstation Integrator)

Title : GC TPH Method

Last Update : Tue Oct 25 07:55:20 2005

Response via: Initial Calibration

DataAcq Meth : TPHC003.M

Volume Inj. :

Signal Phase :

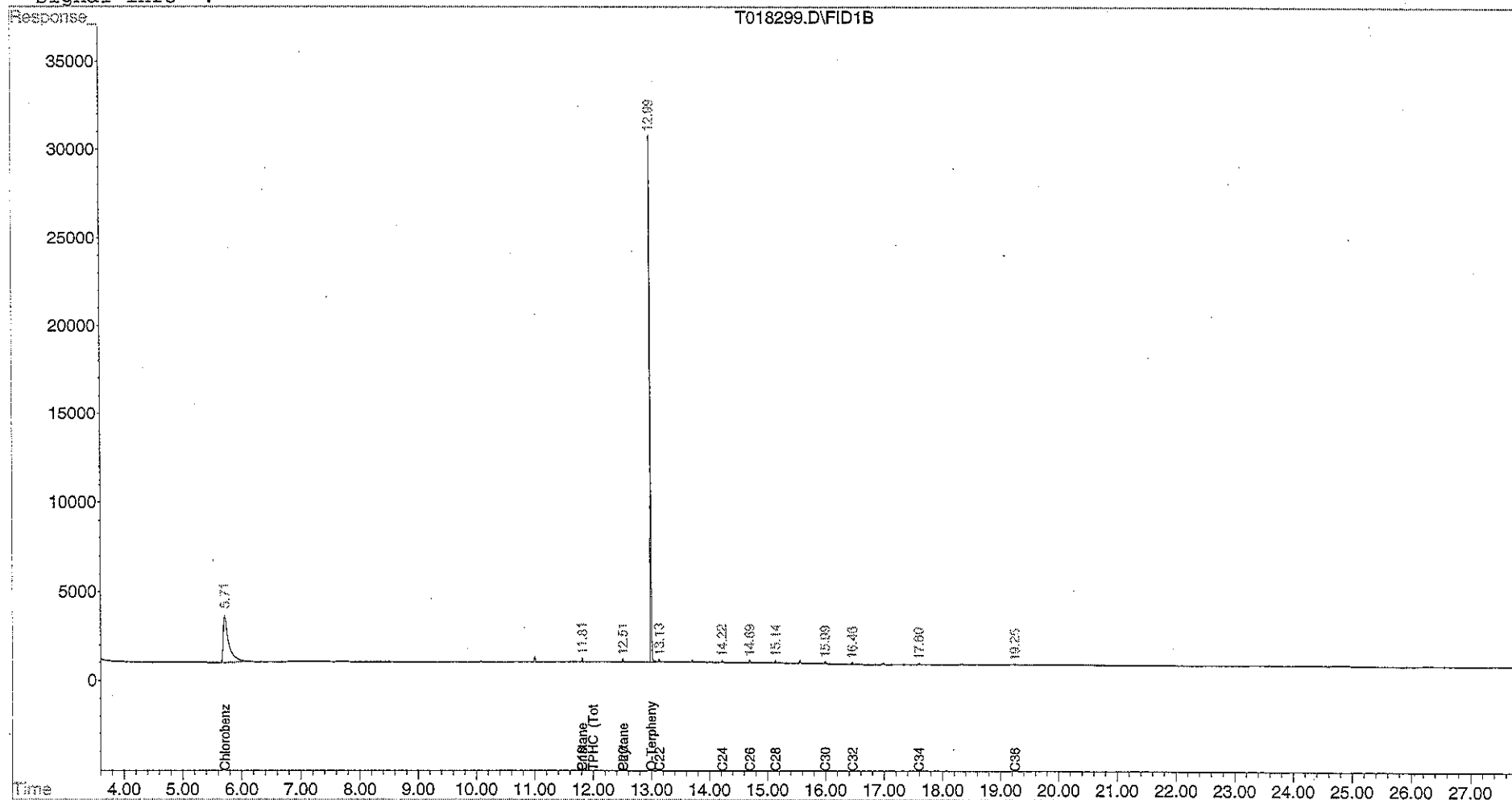
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
23) S Chlorobenzene (SURR.)	5.72	177063	8.515 mg/L
Spiked Amount 10.000		Recovery =	85.15%
24) S O-Terphenyl (SURR.)	13.00	281860	8.389 mg/L
Spiked Amount 10.000		Recovery =	83.89%
Target Compounds			
1) T C8	0.00	0	N.D. mg/L
2) T C10	0.00	0	N.D. mg/L
3) T C12	0.00	0	N.D. mg/L
4) T C14	0.00	0	N.D. mg/L
5) T C16	11.81f	2251	0.077 mg/L
6) T C18	11.81	2251	0.080 mg/L
7) T C20	12.51	1819	0.063 mg/L
8) T C22	13.13	1782	0.060 mg/L
9) T C24	14.22	1412	0.047 mg/L
10) T C26	14.70	1534	0.049 mg/L
11) T C28	15.14	1711	0.056 mg/L
12) T C30	15.99	1838	0.059 mg/L
13) T C32	16.46	1759	0.057 mg/L
14) T C34	17.60	1549	0.049 mg/L
15) T C36	19.25f	1003	0.030 mg/L
16) T C38	0.00	0	N.D. mg/L
17) T C40	0.00	0	N.D. mg/L
18) T C42	0.00	0	N.D. mg/L
19) T Pristane	11.81	2251	0.077 mg/L
20) T Phytane	12.51	1819	0.060 mg/L
21) T TPHC (Manual Integration)	0.00	0	N.D. mg/L d
22) H TPHC (Total)	12.00	26725	0.867 mg/L

Data File : C:\HPCHEM\1\DATA\060201\T018299.D Vial: 2
 Acq On : 1 Feb 2006 12:18 pm Operator: Skelton
 Sample : MB-020106-01 Inst : GC/MS Ins
 Misc : TP020106.01 Multiplr: 1.00
 IntFile : EVENTSBP.E
 Quant Time: Feb 1 15:44 2006 Quant Results File: TPHC003.RES

Quant Method : C:\HPCHEM\1\METHODS\TPHC003.M (Chemstation Integrator)
 Title : GC TPH Method
 Last Update : Tue Oct 25 07:55:20 2005
 Response via : Multiple Level Calibration
 DataAcq Meth : TPHC003.M

Volume Inj. :
 Signal Phase :
 Signal Info :



Data File : C:\HPCHEM\1\DATA\060201\T018311.D Vial: 14
 Acq On : 1 Feb 2006 7:49 pm Operator: B.Patel
 Sample : 6006101s Inst : GC/MS Ins
 Misc : Multiplr: 1.00
 IntFile : EVENTSBBP.E
 Quant Time: Feb 2 8:02 2006 Quant Results File: TPHC003.RES

Quant Method : C:\HPCHEM\1\METHODS\TPHC003.M (Chemstation Integrator)
 Title : GC TPH Method
 Last Update : Tue Oct 25 07:55:20 2005
 Response via : Initial Calibration
 DataAcq Meth : TPHC003.M

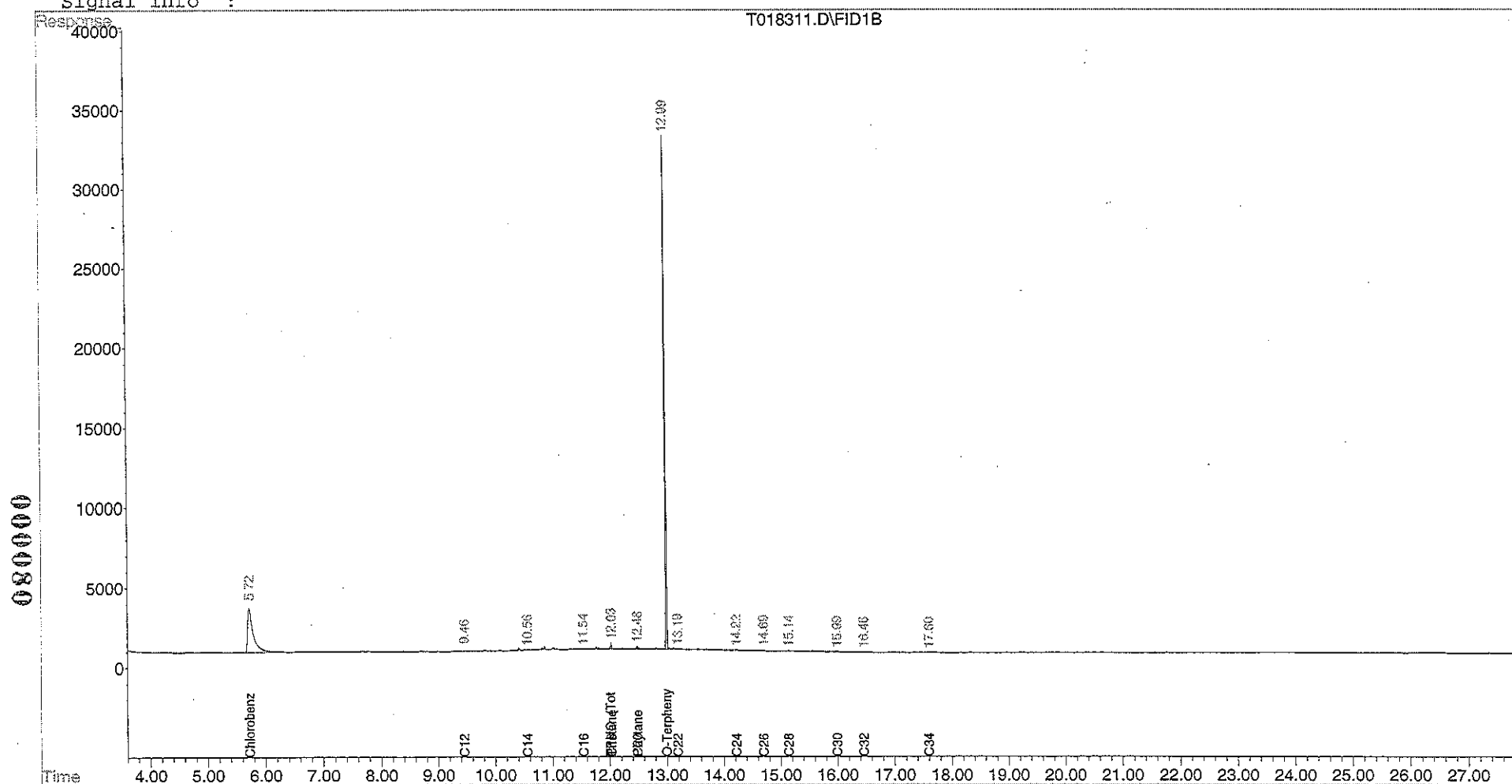
Volume Inj. :
 Signal Phase :
 Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
23) S Chlorobenzene (SURR.)	5.72	190435	9.161 mg/L
Spiked Amount 10.000		Recovery =	91.61%
24) S O-Terphenyl (SURR.)	13.00	302624	9.020 mg/L
Spiked Amount 10.000		Recovery =	90.20%
Target Compounds			
1) T C8	0.00	0	N.D. mg/L
2) T C10	0.00	0	N.D. mg/L
3) T C12	9.46	241	0.009 mg/L
4) T C14	10.56	859	0.030 mg/L
5) T C16	11.54	281	0.010 mg/L
6) T C18	12.03	4597	0.163 mg/L
7) T C20	12.48	1880	0.065 mg/L
8) T C22	13.19	523	0.018 mg/L
9) T C24	14.22	533	0.018 mg/L
10) T C26	14.70	535	0.017 mg/L
11) T C28	15.14	572	0.019 mg/L
12) T C30	15.99	805	0.026 mg/L
13) T C32	16.46	721	0.023 mg/L
14) T C34	17.60	601	0.019 mg/L
15) T C36	0.00	0	N.D. mg/L
16) T C38	0.00	0	N.D. mg/L
17) T C40	0.00	0	N.D. mg/L
18) T C42	0.00	0	N.D. mg/L
19) T Pristane	12.03	4597	0.157 mg/L
20) T Phytane	12.48	1880	0.062 mg/L
21) T TPHC (Manual Integration)	0.00	0	N.D. mg/L d
22) H TPHC (Total)	12.00	37976	1.232 mg/L

Data File : C:\HPCHEM\1\DATA\060201\T018311.D Vial: 14
Acq On : 1 Feb 2006 7:49 pm Operator: B.Patel
Sample : 6006101s Inst : GC/MS Ins
Misc : Multiplr: 1.00
IntFile : EVENTSBP.E
Quant Time: Feb 2 8:02 2006 Quant Results File: TPHC003.RES

Quant Method : C:\HPCHEM\1\METHODS\TPHC003.M (Chemstation Integrator)
Title : GC TPH Method
Last Update : Tue Oct 25 07:55:20 2005
Response via : Multiple Level Calibration
DataAcq Meth : TPHC003.M

Volume Inj. :
Signal Phase :
Signal Info :



Data File : C:\HPCHEM\1\DATA\060201\T018312.D

Vial: 15

Acq On : 1 Feb 2006 8:27 pm

Operator: B.Patel

Sample : 6006102s

Inst : GC/MS Ins

Misc :

Multiplr: 1.00

IntFile : EVENTSBP.E

Quant Time: Feb 2 8:03 2006 Quant Results File: TPHC003.RES

Quant Method : C:\HPCHEM\1\METHODS\TPHC003.M (Chemstation Integrator)

Title : GC TPH Method

Last Update : Tue Oct 25 07:55:20 2005

Response via : Initial Calibration

DataAcq Meth : TPHC003.M

Volume Inj. :

Signal Phase :

Signal Info :

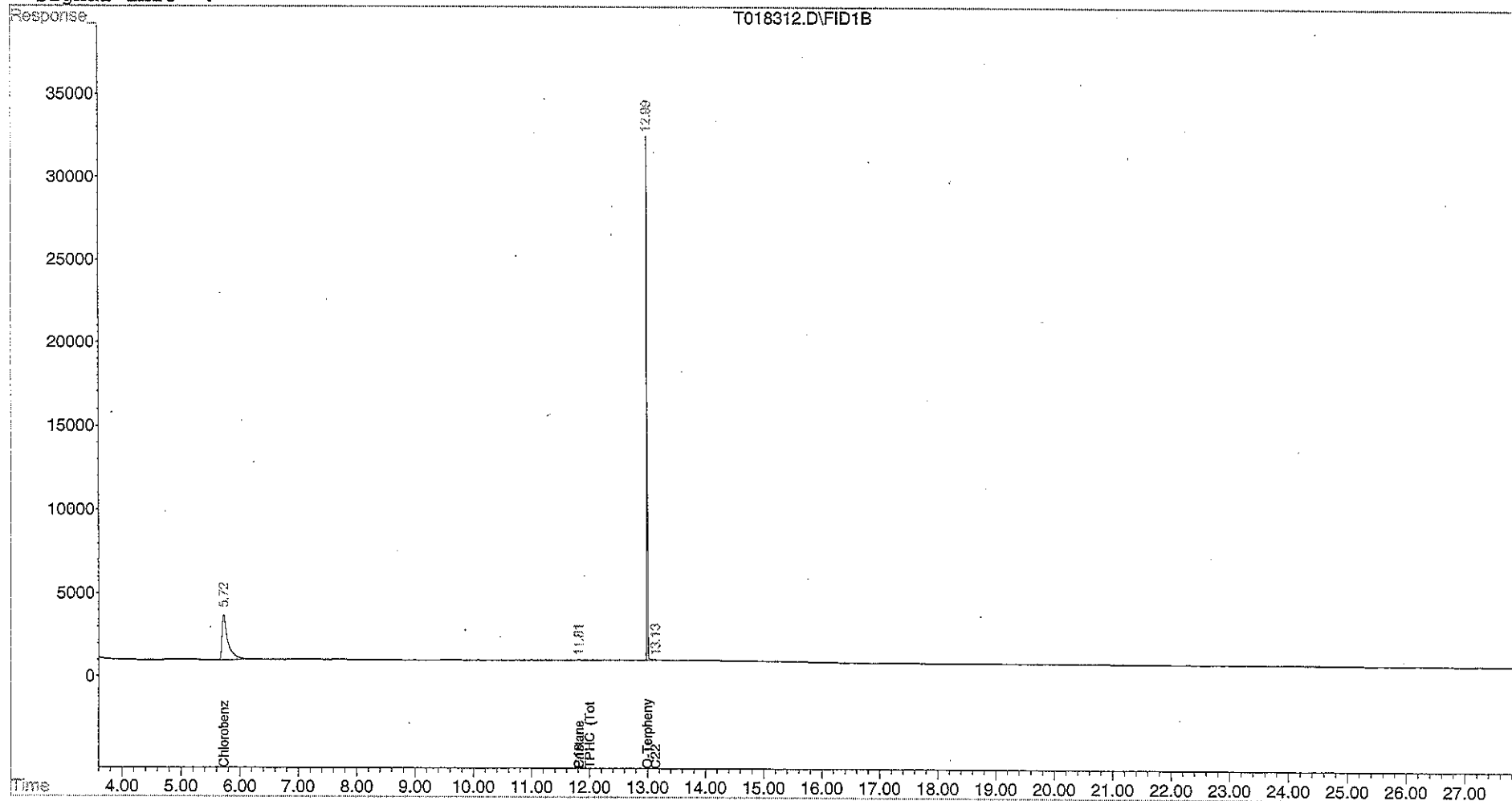
Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
23) S Chlorobenzene (SURR.)	5.72	188040	9.045 mg/L
Spiked Amount 10.000		Recovery =	90.45%
24) S O-Terphenyl (SURR.)	13.00	299616	8.928 mg/L
Spiked Amount 10.000		Recovery =	89.28%
Target Compounds			
1) T C8	0.00	0	N.D. mg/L
2) T C10	0.00	0	N.D. mg/L
3) T C12	0.00	0	N.D. mg/L
4) T C14	0.00	0	N.D. mg/L
5) T C16	11.81f	398	0.014 mg/L
6) T C18	11.81	398	0.014 mg/L
7) T C20	0.00	0	N.D. mg/L
8) T C22	13.14	421	0.014 mg/L
9) T C24	0.00	0	N.D. mg/L
10) T C26	0.00	0	N.D. mg/L
11) T C28	0.00	0	N.D. mg/L
12) T C30	0.00	0	N.D. mg/L
13) T C32	0.00	0	N.D. mg/L
14) T C34	0.00	0	N.D. mg/L
15) T C36	0.00	0	N.D. mg/L
16) T C38	0.00	0	N.D. mg/L
17) T C40	0.00	0	N.D. mg/L
18) T C42	0.00	0	N.D. mg/L
19) T Pristane	11.81	398	0.014 mg/L
20) T Phytane	0.00	0	N.D. mg/L
21) T TPHC (Manual Integration)	0.00	0	N.D. mg/L d
22) H TPHC (Total)	12.00	1980	0.064 mg/L

Data File : C:\HPCHEM\1\DATA\060201\T018312.D Vial: 15
 Acq On : 1 Feb 2006 8:27 pm Operator: B.Patel
 Sample : 6006102s Inst : GC/MS Ins
 Misc : Multiplr: 1.00
 IntFile : EVENTSBP.E
 Quant Time: Feb 2 8:03 2006 Quant Results File: TPHC003.RES

Quant Method : C:\HPCHEM\1\METHODS\TPHC003.M (Chemstation Integrator)
 Title : GC TPH Method
 Last Update : Tue Oct 25 07:55:20 2005
 Response via : Multiple Level Calibration
 DataAcq Meth : TPHC003.M

Volume Inj. :
 Signal Phase :
 Signal Info :



Data File : C:\HPCHEM\1\DATA\060201\T018313.D

Vial: 16

Acq On : 1 Feb 2006 9:05 pm

Operator: B.Patel

Sample : 6006103s

Inst : GC/MS Ins

Misc :

Multiplr: 1.00

IntFile : EVENTSBP.E

Quant Time: Feb 2 8:03 2006 Quant Results File: TPHC003.RES

Quant Method : C:\HPCHEM\1\METHODS\TPHC003.M (Chemstation Integrator)

Title : GC TPH Method

Last Update : Tue Oct 25 07:55:20 2005

Response via : Initial Calibration

DataAcq Meth : TPHC003.M

Volume Inj. :

Signal Phase :

Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
23) S Chlorobenzene (SURR.)	5.72	198874	9.569 mg/L
Spiked Amount 10.000		Recovery =	95.69%
24) S O-Terphenyl (SURR.)	13.00	312606	9.323 mg/L
Spiked Amount 10.000		Recovery =	93.23%
Target Compounds			
1) T C8	0.00	0	N.D. mg/L
2) T C10	0.00	0	N.D. mg/L
3) T C12	0.00	0	N.D. mg/L
4) T C14	0.00	0	N.D. mg/L
5) T C16	11.81f	344	0.012 mg/L
6) T C18	11.81	344	0.012 mg/L
7) T C20	0.00	0	N.D. mg/L
8) T C22	13.13	421	0.014 mg/L
9) T C24	0.00	0	N.D. mg/L
10) T C26	14.70	303	0.010 mg/L
11) T C28	15.56	409	0.013 mg/L
12) T C30	15.99	502	0.016 mg/L
13) T C32	0.00	0	N.D. mg/L
14) T C34	0.00	0	N.D. mg/L
15) T C36	0.00	0	N.D. mg/L
16) T C38	0.00	0	N.D. mg/L
17) T C40	0.00	0	N.D. mg/L
18) T C42	0.00	0	N.D. mg/L
19) T Pristane	11.81	344	0.012 mg/L
20) T Phytane	0.00	0	N.D. mg/L
21) T TPHC (Manual Integration)	0.00	0	N.D. mg/L d
22) H TPHC (Total)	12.00	3114	0.101 mg/L

Data File : C:\HPCHEM\1\DATA\060201\T018313.D

Vial: 16

Acq On : 1 Feb 2006 9:05 pm

Operator: B.Patel

Sample : 6006103s

Inst : GC/MS Ins

Misc :

Multiplr: 1.00

IntFile : EVENTSBP.E

Quant Time: Feb 2 8:03 2006 Quant Results File: TPHC003.RES

Quant Method : C:\HPCHEM\1\METHODS\TPHC003.M (Chemstation Integrator)

Title : GC TPH Method

Last Update : Tue Oct 25 07:55:20 2005

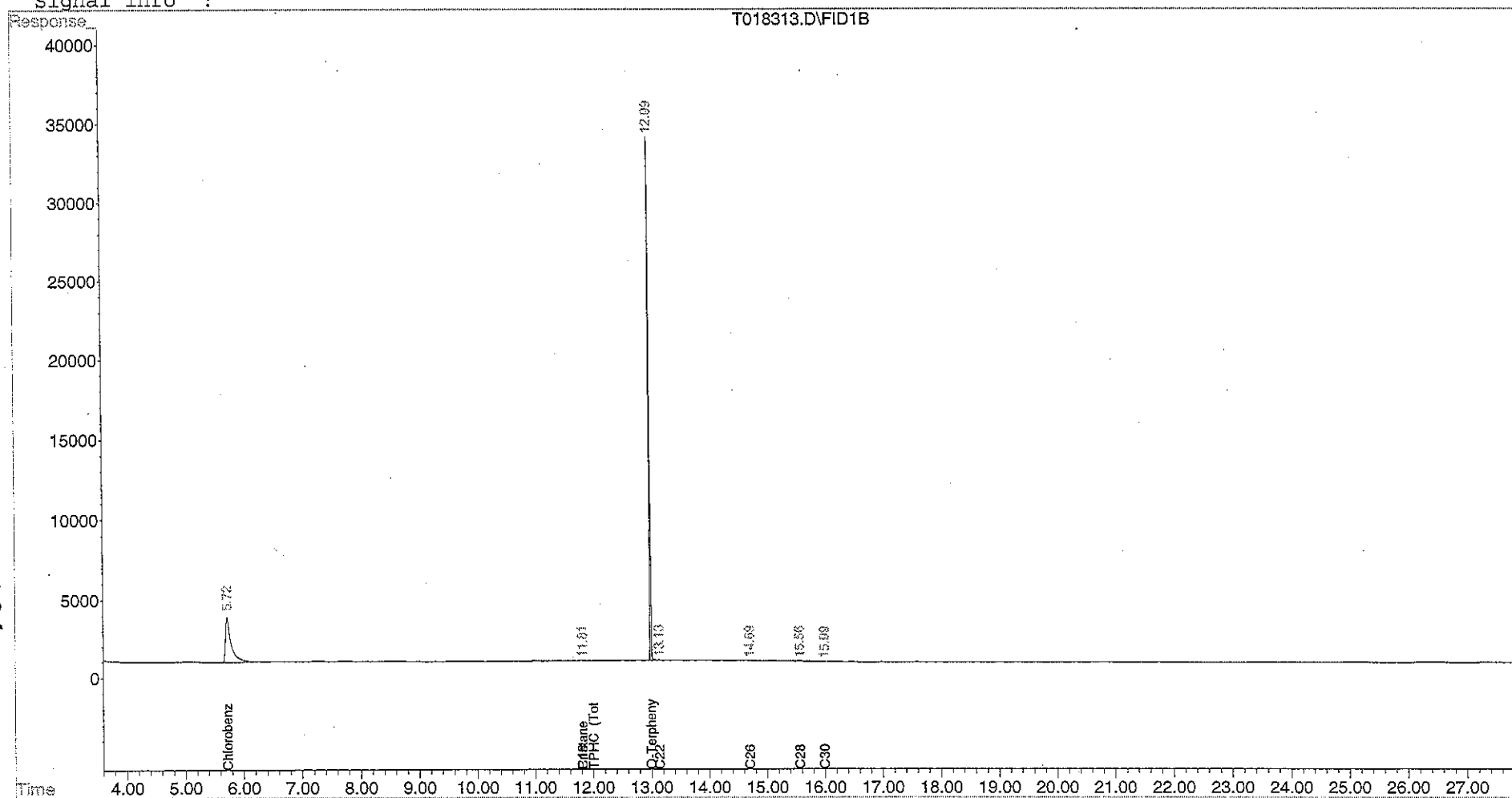
Response via : Multiple Level Calibration

DataAcq Meth : TPHC003.M

Volume Inj. :

Signal Phase :

Signal Info :



Data File : C:\HPCHEM\1\DATA\060201\T018314.D

Vial: 17

Acq On : 1 Feb 2006 9:43 pm

Operator: B.Patel

Sample : 6006104s

Inst. : GC/MS Ins

Misc :

Multiplr: 1.00

IntFile : EVENTSBP.E

Quant Time: Feb 2 8:03 2006 Quant Results File: TPHC003.RES

Quant Method : C:\HPCHEM\1\METHODS\TPHC003.M (Chemstation Integrator)

Title : GC TPH Method

Last Update : Tue Oct 25 07:55:20 2005

Response via : Initial Calibration

DataAcq Meth : TPHC003.M

Volume Inj. :

Signal Phase :

Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
23) S Chlorobenzene (SURR.)	5.72	189539	9.118 mg/L
Spiked Amount 10.000		Recovery =	91.18%
24) S O-Terphenyl (SURR.)	13.00	300149	8.945 mg/L
Spiked Amount 10.000		Recovery =	89.45%
Target Compounds			
1) T C8	0.00	0	N.D. mg/L
2) T C10	0.00	0	N.D. mg/L
3) T C12	0.00	0	N.D. mg/L
4) T C14	0.00	0	N.D. mg/L
5) T C16	11.81f	1223	0.042 mg/L
6) T C18	11.81	1223	0.043 mg/L
7) T C20	12.51	973	0.034 mg/L
8) T C22	13.14	1202	0.040 mg/L
9) T C24	14.22	774	0.026 mg/L
10) T C26	14.70	934	0.030 mg/L
11) T C28	15.14	952	0.031 mg/L
12) T C30	15.99	1091	0.035 mg/L
13) T C32	16.46	1044	0.034 mg/L
14) T C34	17.60	792	0.025 mg/L
15) T C36	0.00	0	N.D. mg/L
16) T C38	0.00	0	N.D. mg/L
17) T C40	0.00	0	N.D. mg/L
18) T C42	0.00	0	N.D. mg/L
19) T Pristane	11.81	1223	0.042 mg/L
20) T Phytane	12.51	973	0.032 mg/L
21) T TPHC (Manual Integration)	0.00	0	N.D. mg/L d
22) H TPHC (Total)	12.00	14620	0.474 mg/L

Data File : C:\HPCHEM\1\DATA\060201\T018314.D

Vial: 17

Acq On : 1 Feb 2006 9:43 pm

Operator: B.Patel

Sample : 6006104s

Inst : GC/MS Ins

Misc :

Multiplr: 1.00

IntFile : EVENTSBP.E

Quant Time: Feb 2 8:03 2006 Quant Results File: TPHC003.RES

Quant Method : C:\HPCHEM\1\METHODS\TPHC003.M (Chemstation Integrator)

Title : GC TPH Method

Last Update : Tue Oct 25 07:55:20 2005

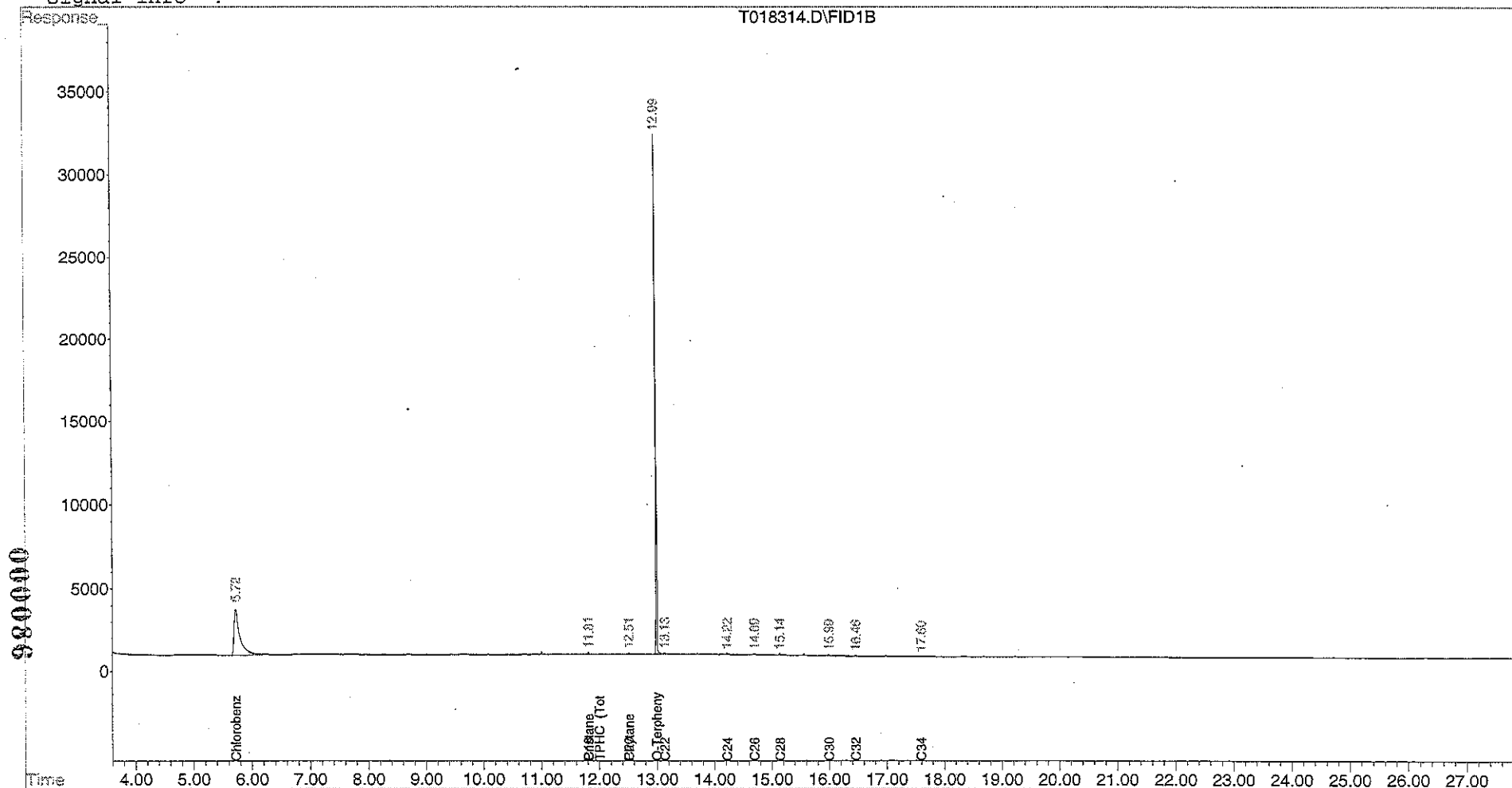
Response via : Multiple Level Calibration

DataAcq Meth : TPHC003.M

Volume Inj. :

Signal Phase :

Signal Info :



LABORATORY DELIVERABLES CHECKLIST AND NON-CONFORMANCE SUMMARY

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

The following Laboratory Deliverables Checklist and Non-Conformance Summary shall be included in the data submission. All deviations from the accepted methodology and procedures, of performance values outside acceptable ranges shall be summarized in the Non-Conformance Summary. The Technical Requirements for Site Remediation, effective June 7, 1993, provides further details. The document shall be bound and paginated, contain a table of contents, and all pages shall be legible. Incomplete data 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, practical quantitation limits, and the laboratory and/or sample numbers be included in one section of the data package and in the main body of the report.

1. Cover Page, Title Page listing Lab Certification #, facility name and address, & date of report submitted. ✓
2. Table of Contents submitted. ✓
3. Summary Sheets listing analytical results for all targeted and non-targeted compounds submitted. ✓
4. Document paginated and legible. ✓
5. Chain of Custody submitted. ✓
6. Samples submitted to lab within 48 hours of sample collection. ✓
7. Methodology Summary submitted. ✓
8. Laboratory Chronicle and Holding Time Check submitted. ✓
9. Results submitted on a dry weight basis. ✓
10. Method Detection Limits submitted. ✓
11. Lab certified by NJDEP for parameters of appropriate category of parameters or a member of the USEPA CLP. ✓

Laboratory Manager or Environmental Consultant's Signature

Date: 3/10/06

Laboratory Certification # 13461

*Refer to NJAC 7:26E – Appendix A, Section IV – Reduced Data Deliverables – Non-USEPA/CLP Methods for further guidance.

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Laboratory Authentication Statement

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

A handwritten signature in black ink, appearing to read 'Daniel K. Wright', is written over a horizontal line.

Daniel K. Wright
Laboratory Manager