U.S. Army Garrison
Fort Monmouth, New Jersey

Underground Storage Tank Closure Report

Main Post – Bldg.63B
Riverside Ave.

NJDEP UST Registration No. 90010-2

February 2007

UNDERGROUND STORAGE TANK REPORT

MAIN POST –RIVERSIDE AVE., BUILDING 63B
NJDEP UST REGISTRATION NO. 90010-2

FEBRUARY 2007

PREPARED FOR:

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

PREPARED BY:

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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, sometime prior to January 1, 1991. The UST was located on the north side of Building 63B in the Main Post area of Fort Monmouth. UST No. 90010-2 was a 1,000-gallon No. 2 heating oil tank. The tank closure was performed by SMC.

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 the UST removal no closure soil samples were collected. Soil sampling was not required at that time. On December 5, 2005 a Geoprobe was utilized to collect samples 63B-A, 63B-B, 63B-C and 63B-D-Duplicate were collected from a total of three (3) locations along the tank centerline bottom. All samples were analyzed for total petroleum hydrocarbons (TPH). Groundwater was encountered at approximately six feet below surface grade in the borings and a sample of it was also collected.

Findings

The closure soil samples collected from the location associated with former UST No. 90010-2, 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 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 was analyzed for volatile organics and semi volatile organics. The sample did not contain compounds that exceed the NJDEP Class II Ground Water Quality Criteria.

No Further Action is proposed in regard to the closure and site assessment of UST No. 90010-2 at Building 63B.

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. 90010-2, was closed at Building 63B 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 closure of the UST was conducted by SMC, a government contracted consultant, prior to January 1, 1991.

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

Building 63B, Riverside Ave., is located in the eastern portion (400 Area) of the Main Post of Fort Monmouth, as shown on Figure 1. UST No. 90010-2 was located on the north side of Building 63B. A site map is provided on Figure 2. Historical maps were used to determine the exact location of the former tank.

1.2.1 Geological/Hydrogeological Setting

The following is a description of the geological/hydrogeological setting of the 400 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 (Zapecza, 1989). These sediments, predominantly derived from deltaic, shallow marine, and continental shelf environments, date from Cretaceous through the Quaternary Periods. The mineralogy ranges from quartz to glauconite.

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

Local Geology

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

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

Hydrogeology

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

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

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

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

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.

Building 63B is located approximately 450 feet west of Oceanport 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 63B is anticipated to be to the east.

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) 532-0986

- 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 to identify potentially contaminated material of which none were found.

2.3 SOIL SAMPLING

On December 5, 2005, closure soil samples 63B-A, 63B-B, 63B-C and 63B-D (Duplicate C) were collected from a total of three (3) locations along the tank centerline bottom of the former UST. Groundwater was encountered at approximately six feet below surface grade in the borings. All samples were analyzed for TPH.

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 closure 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 December 5, 2005, sample 63B-Groundwater was collected from soil borehole 63B-B to assess the groundwater quality in the vicinity of the former tank. 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 December 5, 2005 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 December 5, 2005 from UST 90010-2 contained concentrations of TPH below the NJDEP soil cleanup criteria. All soil samples were Not Detected above the method detection limits.

3.2 GROUNDWATER SAMPLING RESULTS

One groundwater sample was collected via temporary piezometer installed in soil borehole 63B-B. Methyl-tert-Butyl ether and Diethylphthalate were detected in sample 63B-Groundwater at .34 ug/L and 1.76 ug/L respectively. These results are below the NJDEP Ground Water Criteria of 70 ug/L for Methyl-tert-Butyl ether and 5,000 ug/L for Diethylphthalate .

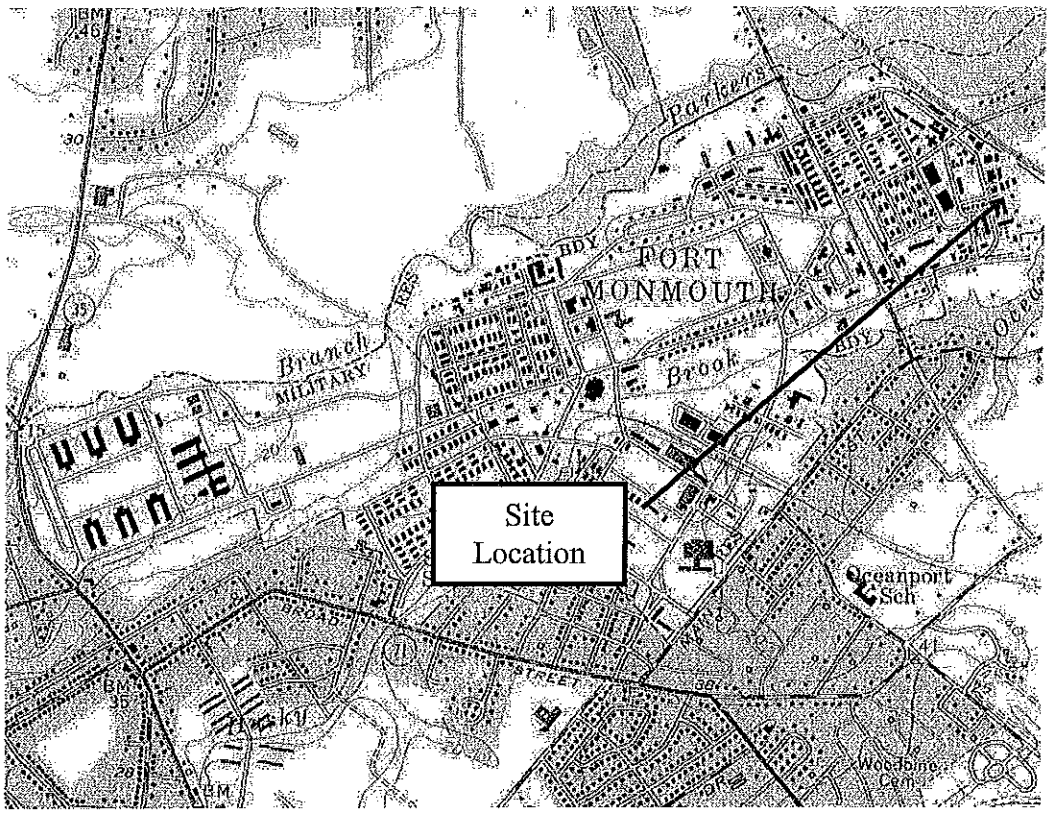
3.3 CONCLUSIONS AND RECOMMENDATIONS

The analytical results for all soil samples collected from the UST closure assessment at UST No. 90010-2 were Not Detected.

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. 90010-2.

No Further Action is proposed in regard to the closure and site assessment of UST No. 90010-2 at Building 63B.

FIGURES



SCALE 1:24,000

1 0.5 0 1 MILE

1 0.5 0 1 KILOMETER

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

CONTOUR INTERVAL 10 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

N

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

FIGURE 1

SITE LOCATION MAP
BUILDING 63B
UST NO. 90010-2
FT. MONMOUTH, NJ

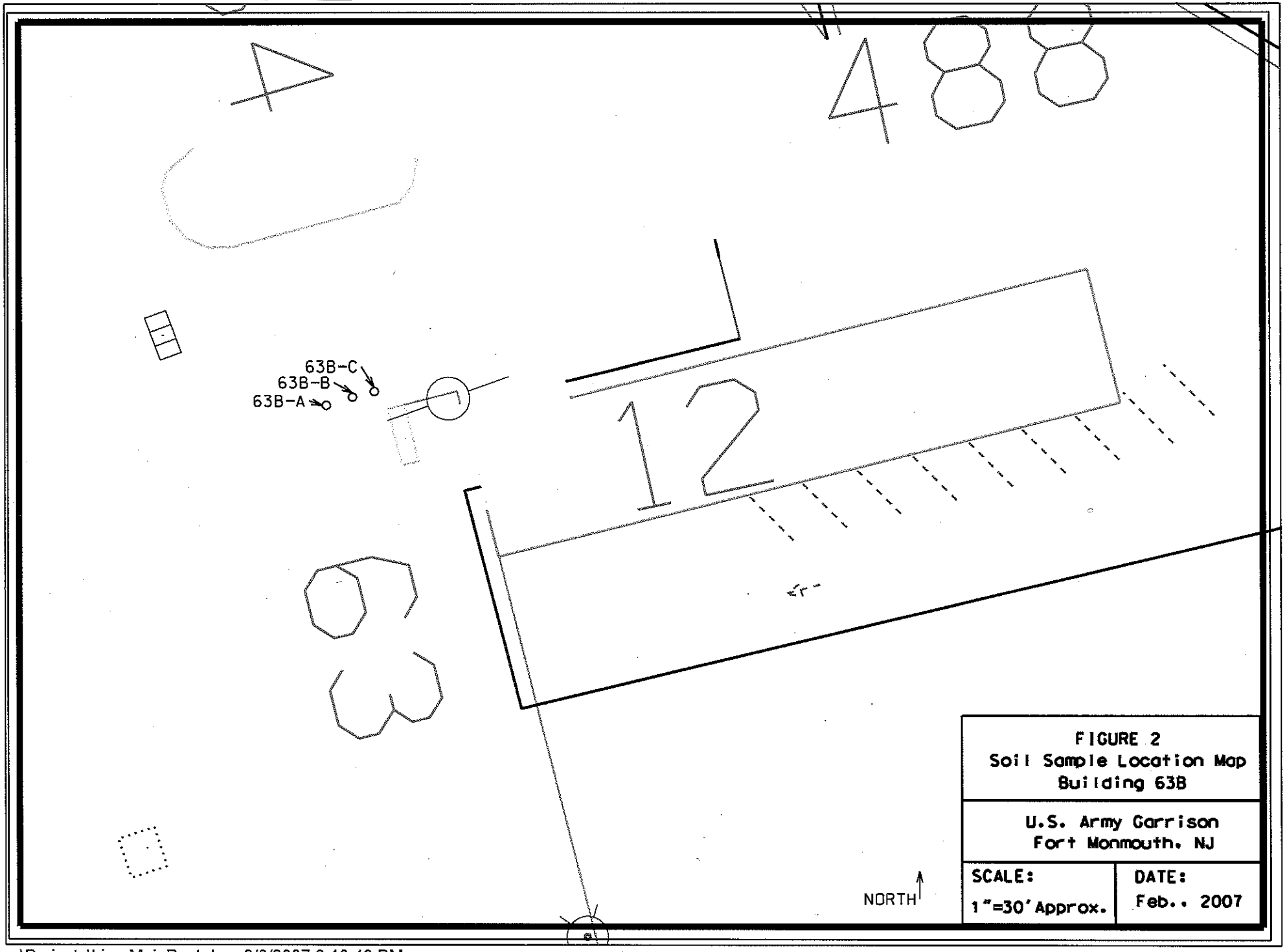


FIGURE 2
Soil Sample Location Map
Building 63B

U.S. Army Garrison
Fort Monmouth, NJ

SCALE:
1"=30' Approx.

DATE:
Feb.. 2007

...\Projects\bim_MainPost.dgn 2/8/2007 3:10:49 PM

TABLES

TABLE 1

SUMMARY OF LABORATORY ANALYSIS

FT. MONMOUTH, BUILDING 63B, UST No. 90010-2
05 December 2005

SAMPLE ID	LABORATORY SAMPLE ID	SAMPLE DATE	SAMPLE MATRIX	ANALYTICAL PARAMETER	ANALYTICAL METHOD
63B-A	5063101	05-Dec-05	SOIL	TPH	OQA-QAM-25
63B-B	5063102	05-Dec-05	SOIL	TPH	OQA-QAM-25
63B-C	5063103	05-Dec-05	SOIL	TPH	OQA-QAM-25
63B-D (dupl. C)	5063104	05-Dec-05	SOIL	TPH	OQA-QAM-25
63B-Groundwater	5063105	05-Dec-05	AQUEOUS	VOA, SVOA	SW-846, 8260 SW-846, 8270
TRIP BLANK	5063106	05-Dec-05	METHANOL	VOA	SW-846, 8260
TRIP BLANK	5063107	05-Dec-05	AQUEOUS	VOA	SW-846, 8260

ABBREVIATIONS:
TPH = Total Petroleum Hydrocarbons, Method NJDEP OQA-QAM-25
VOA = Volatile Organic Analysis, EPA SW-846 Method 8260
SVOA = Semi-Volatile Organic Analysis, EPA SW-846, Method 8270

TABLE 2

SUMMARY OF LABORATORY ANALYTICAL RESULTS-SOIL

FT. MONMOUTH, BUILDING 63B, UST No. 90010-2
05 December 2005

TOTAL PETROLEUM HYDROCARBONS

SAMPLE ID	LABORATORY SAMPLE ID	SAMPLE LOCATION	SAMPLE DEPTH	MATRIX	TPH RESULT S
			(in feet)		mg/kg
63B-A	5063101	WEST END UST	6.5 – 7.0	Soil	ND
63B-B	5063102	CENTER	6.5 – 7.0	Soil	ND
63B-C	5063103	EAST END UST	6.5 – 7.0	Soil	ND
63B-D (dupl. C)	5063104	DUPLICATE (EAST END)	6.5 – 7.0	Soil	ND
Trip Blank	5063106	---	---	Methanol	--

ABBREVIATIONS:
mg/kg = Milligrams Per Kilogram = parts per million
ND = Compound Not Detected
NA = Compound Not Analyzed
*= Further Analyzed for Volatiles

Notes:
Gray shading indicates exceedance of NJDEP
health based criterion of 10,000 ppm total organic contaminants

SUMMARY OF LABORATORY ANALYTICAL RESULTS-GROUNDWATER

FT. MONMOUTH, BUILDING 63B, UST No. 90010-2

05 December 2005

VOLATILE ORGANIC COMPOUNDS, SEMI-VOLATILE ORGANIC COMPOUNDS

SAMPLE ID	LAB SAMPLE ID	MTBE	Diethylphthalate
	UNITS	ug/L	ug/L
63B-Groundwater	5063105	0.34	1.76
Trip Blank	5063106	ND	NA
Trip Blank	5063107	ND	ND
NJDEP Criteria	Residential	70	5,000

ABBREVIATIONS:
ug/L = Micrograms Per Liter = parts per billion
ND = Compound Not Detected
NA = Compound Not Analyzed

Notes:
Gray shading indicates exceedance of NJDEP Direct Contact Soil Contact Criteria

APPENDIX A

CERTIFICATIONS

Site Remediation Program
UST Site Remedial Investigation Report

A. Facility Name: Building 63B

Facility Street Address: Riverside Ave.

Municipality: Oceanport County: Ft. 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: 173 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: Greg Zalaskus

UST Registration Number: 90010-02 (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: Frank Accorsi UST Cert. No.: 0010042

Firm: Tecom-Vinnell Services, Inc. Firm's UST Cert. Number: US252302

Firm Address: P.O. Box 60 City: Ft. Monmouth

State: NJ Zip: 07703 Telephone Number: 732-532-6223

(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. 63B

Bldg. 63B

Field Sample Location	Laboratory Sample ID#	Matrix	Date and Time of Collection	Date Received
63B-A, West End	5063101	Soil	05-Dec-05 12:40	12/06/05
63B-B, Center	5063102	Soil	05-Dec-05 13:30	12/06/05
63B-C, East End	5063103	Soil	05-Dec-05 14:50	12/06/05
63B-D, (Duplicate)	5063104	Soil	05-Dec-05 14:50	12/06/05
63B-Groundwater	5063105	Aqueous	05-Dec-05 15:30	12/06/05
Trip Blank	5063106	Methanol	05-Dec-05	12/06/05
Trip Blank	5063107	Aqueous	05-Dec-05	12/06/05

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

ENCLOSURE:
CHAIN OF CUSTODY
RESULTS

12-30-05
Daniel Wright/Date
Laboratory Director

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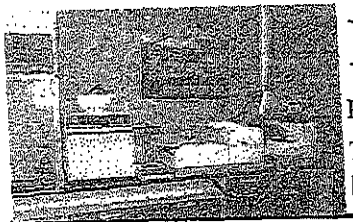
CHAIN OF CUSTODY



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

Customer: JOE FALLON
Phone: X26223
( )DERA ( )OMA (X)Other:

Project No:
Location: BLDG. 63

Samplers Name / Company: FRANK ACCORSI / TVS

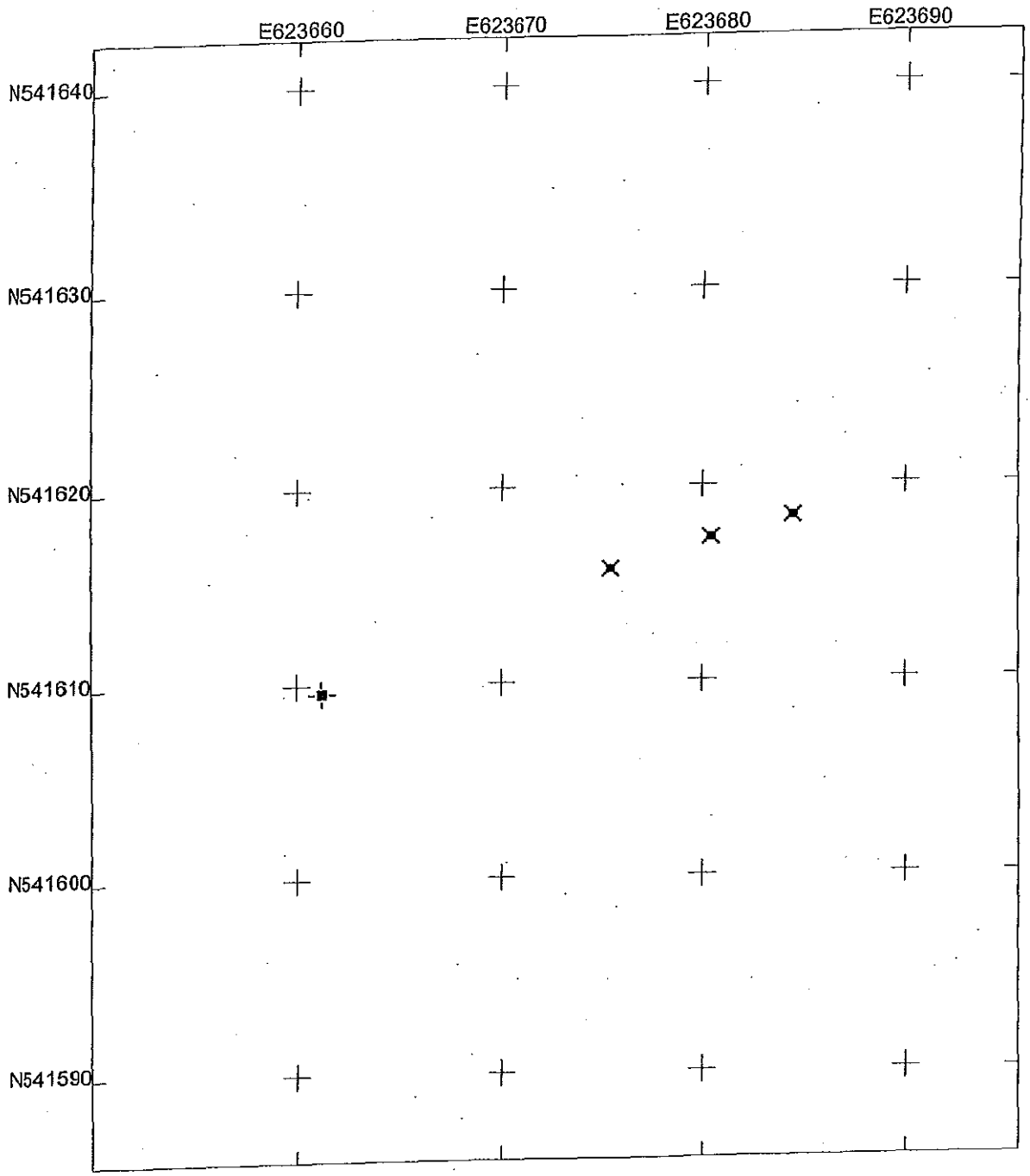
LIMS/Work Order #	Sample Location	Date	Time	Sample Type	# bottles	TPH	VOA's	BN's				OCHLP	VOA	Remarks / Preservation Method
5063101	63B-A, WEST END	12-5-05	1240	SOIL	2	X	*					65-7	4359	ICE
02	63B-B, CENTER		1330		2	X	*					65-7	4360	
03	63B-C, EAST END		1430		2	X	*					65-7	4361	
04	63B-D (DUPLICATE)		1450		2	X	*					65-7	4362	
05	63B-GROUNDWATER		1530	AQ.	3		X	X				5	4363	
06	TRIP BLANK		—	AQ.	2		X					—	4363	
07	TRIP BLANK		—	AQ.	1		X					—	—	

Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
Frank Accorsi	12-6-05 1120				
Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):

Report Type: ( )Full, (X)Reduced, ( )Standard, ( )Screen / non-certified, ( )EDD
Turnaround time: (X)Standard 3 wks, ( )Rush ___ Days, ( )ASAP Verbal ___ Hrs.

Remarks: * VOA'S ON 25% > 1,000 PPM TPH, ON HIGHEST

000002



U.S. Army - Ft. Monmouth Bldg. 63B
UST Soil Sample GPS Map

US State Plane 1983
New Jersey 2900
NAD 1983 (Conus)

N

Scale 1:100
0 0.002
Miles

BLDG63B.cor
12/20/2005
GPS Pathfinder
Trimble

U.S. ARMY - FT. MONMOUTH, NJ

BLDG. 63B UST
SOIL SAMPLE GPS POSITIONS & COORDINATES

US STATE PLANE 1983, NJ (NY EAST) 2900, NAD 1983 (CONUS)

(IN US SURVEY FEET)

SAMPLE POINTS

POSITION/DESCRIPTION	Y COORDINATE (NORTHING)	X COORDINATE (EASTING)
63B-A WEST END UST	541615.808	623675.442
63B-B CENTER UST	541617.351	623680.354
63B-C EAST END UST	541618.383	623684.406

REFERENCE POINT

POSITION/DESCRIPTION	Y COORDINATE (NORTHING)	X COORDINATE (EASTING)
BLDG63 NW CORNER	541609.549	623661.216

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 as 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: 50631

Site: UST
Bldg. 63B

	Date	Hold Time
Date Sampled	12/05/05	NA
Receipt/Refrigeration	12/06/05	NA
Extractions		
1. BN	12/07/05	7 days
2. TPHC	12/08/05	14 days
Analyses		
1. VOA	12/07,08/05	14 days
2. BN	12/13/05	40 days
3. TPHC	12/09/05	40 days

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) — yes

2. Retention times for chromatograms provided — yes

3. GC/MS Tune Specifications

   a. BFB Meet Criteria — yes
   b. DFTPP Meet Criteria — yes

4. GC/MS Tuning Frequency – Performed every 24 hours for 600 series and 12 hours for 8000 series — yes

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 — yes

6. GC/MS Calibration requirements

   a. Calibration Check Compounds Meet Criteria — yes
   b. System Performance Check Compounds Meet Criteria — yes

7. Blank Contamination – If yes, List compounds and concentrations in each blank: — no

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

8. Surrogate Recoveries Meet Criteria — yes

   If not met, list those compounds and their recoveries, which fall outside the acceptable range:

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

   If not met, were the calculations checked and the results qualified as "estimated"? _____

9. Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria (If not met, list those compounds and their recoveries, which fall outside the acceptable range) — no

   a. VOA Fraction Chloroethane MS/MSD high Vinyl Acetate, Naphthalene MS/MSD low
   b. B/N Fraction Benzidine MSD low RPD high
   c. Acid Fraction NA

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

Indicate
Yes, No, N/A

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

    a. VOA Fraction _____
    b. B/N Fraction _____
    c. Acid Fraction N/A

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: 12-30-05

TPHC CONFORMANCE/NON-CONFORMANCE SUMMARY REPORT

		Indicate Yes, No, N/A
1.	Method Detection Limits Provided	Yes
2.	Method Blank Contamination – If yes, list the sample and the corresponding concentrations in each blank	NO
3.	Matrix Spike Results Summary Meet Criteria (If not met, list the sample and corresponding recovery which falls outside the acceptable range)	Yes
4.	Duplicate Results Summary Meet Criteria	Yes
5.	IR Spectra submitted for standards, blanks and samples	NA
6.	Chromatograms submitted for standards, blanks and samples if GC fingerprinting was conducted	Yes
7.	Analysis holding time met (If not met, list number of days exceeded for each sample)	Yes

Additional comments: _____

Laboratory Manager: _____ Date: 12-30-05

VOLATILE ORGANICS

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	VB020957.D	Sample Name	MB 07Dec2005
Operator	Skelton	Field ID	MB 07Dec2005
Date Acquired	7 Dec 2005. 5:26 pm	Sample Multiplier	1

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	RL	Qualifier
107028	Acrolein			not detected	10	1.57 ug/L	10.00 ug/L	
107131	Acrylonitrile			not detected	50	2.47 ug/L	10.00 ug/L	
75650	tert-Butyl alcohol			not detected	100	8.54 ug/L	20.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.30 ug/L	2.00 ug/L	
108203	Di-isopropyl ether			not detected	20000	0.37 ug/L	2.00 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	0.46 ug/L	2.00 ug/L	
74-87-3	Chloromethane			not detected	30	0.30 ug/L	2.00 ug/L	
75-01-4	Vinyl Chloride			not detected	5	0.20 ug/L	2.00 ug/L	
74-83-9	Bromomethane			not detected	10	0.25 ug/L	2.00 ug/L	
75-00-3	Chloroethane			not detected	100	0.27 ug/L	2.00 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.26 ug/L	2.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.27 ug/L	2.00 ug/L	
67-64-1	Acetone			not detected	700	2.00 ug/L	2.00 ug/L	
75-15-0	Carbon Disulfide			not detected	800	0.16 ug/L	2.00 ug/L	
75-09-2	Methylene Chloride			not detected	3	0.55 ug/L	2.00 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.25 ug/L	2.00 ug/L	
75-34-3	1,1-Dichloroethane			not detected	50	0.32 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	0.90 ug/L	2.00 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	70	0.28 ug/L	2.00 ug/L	
67-66-3	Chloroform			not detected	6	0.38 ug/L	2.00 ug/L	
71-55-6	1,1,1-Trichloroethane			not detected	30	0.27 ug/L	2.00 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.20 ug/L	2.00 ug/L	
71-43-2	Benzene			not detected	1	0.20 ug/L	2.00 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.22 ug/L	2.00 ug/L	
79-01-6	Trichloroethene			not detected	1	0.28 ug/L	2.00 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.33 ug/L	2.00 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.25 ug/L	2.00 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	100	0.25 ug/L	2.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.18 ug/L	2.00 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.38 ug/L	2.00 ug/L	
108-88-3	Toluene			not detected	1000	0.25 ug/L	2.00 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.14 ug/L	2.00 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.25 ug/L	2.00 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.26 ug/L	2.00 ug/L	
591-78-6	2-Hexanone			not detected	100	0.29 ug/L	2.00 ug/L	
124-48-1	Dibromochloromethane			not detected	10	0.24 ug/L	2.00 ug/L	
108-90-7	Chlorobenzene			not detected	50	0.30 ug/L	2.00 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.28 ug/L	2.00 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	0.63 ug/L	4.00 ug/L	
95-47-6	o-Xylene			not detected	nle	0.24 ug/L	2.00 ug/L	
100-42-5	Styrene			not detected	100	0.34 ug/L	2.00 ug/L	
75-25-2	Bromoform			not detected	4	0.24 ug/L	2.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	1	0.24 ug/L	2.00 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.24 ug/L	2.00 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.25 ug/L	2.00 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.27 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. 7:9-6.9 (c).

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 07Dec2005**

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 50631 Location: Bldg63 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: MB 07Dec2005

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB020957.D

Level: (low/med) LOW Date Received: 12/6/2005

% Moisture: not dec. Date Analyzed: 12/7/2005

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: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

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

Data File	VB020981.D	Sample Name	5063107
Operator	Skelton	Field ID	Trip Blank
Date Acquired	8 Dec 2005 9:41 am	Sample Multiplier	1

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	RL	Qualifier
107028	Acrolein			not detected	10	1.57 ug/L	10.00 ug/L	
107131	Acrylonitrile			not detected	50	2.47 ug/L	10.00 ug/L	
75650	tert-Butyl alcohol			not detected	100	8.54 ug/L	20.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.30 ug/L	2.00 ug/L	
108203	Di-isopropyl ether			not detected	20000	0.37 ug/L	2.00 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	0.46 ug/L	2.00 ug/L	
74-87-3	Chloromethane			not detected	30	0.30 ug/L	2.00 ug/L	
75-01-4	Vinyl Chloride			not detected	5	0.20 ug/L	2.00 ug/L	
74-83-9	Bromomethane			not detected	10	0.25 ug/L	2.00 ug/L	
75-00-3	Chloroethane			not detected	100	0.27 ug/L	2.00 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.26 ug/L	2.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.27 ug/L	2.00 ug/L	
67-64-1	Acetone			not detected	700	2.00 ug/L	2.00 ug/L	
75-15-0	Carbon Disulfide			not detected	800	0.16 ug/L	2.00 ug/L	
75-09-2	Methylene Chloride			not detected	3	0.55 ug/L	2.00 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.25 ug/L	2.00 ug/L	
75-34-3	1,1-Dichloroethane			not detected	50	0.32 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	0.90 ug/L	2.00 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	70	0.28 ug/L	2.00 ug/L	
67-66-3	Chloroform			not detected	6	0.38 ug/L	2.00 ug/L	
71-55-6	1,1,1-Trichloroethane			not detected	30	0.27 ug/L	2.00 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.20 ug/L	2.00 ug/L	
71-43-2	Benzene			not detected	1	0.20 ug/L	2.00 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.22 ug/L	2.00 ug/L	
79-01-6	Trichloroethene			not detected	1	0.28 ug/L	2.00 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.33 ug/L	2.00 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.25 ug/L	2.00 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	100	0.25 ug/L	2.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.18 ug/L	2.00 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.38 ug/L	2.00 ug/L	
108-88-3	Toluene			not detected	1000	0.25 ug/L	2.00 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.14 ug/L	2.00 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.25 ug/L	2.00 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.26 ug/L	2.00 ug/L	
591-78-6	2-Hexanone			not detected	100	0.29 ug/L	2.00 ug/L	
124-48-1	Dibromochloromethane			not detected	10	0.24 ug/L	2.00 ug/L	
108-90-7	Chlorobenzene			not detected	50	0.30 ug/L	2.00 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.28 ug/L	2.00 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	0.63 ug/L	4.00 ug/L	
95-47-6	o-Xylene			not detected	nle	0.24 ug/L	2.00 ug/L	
100-42-5	Styrene			not detected	100	0.34 ug/L	2.00 ug/L	
75-25-2	Bromoform			not detected	4	0.24 ug/L	2.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	1	0.24 ug/L	2.00 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.24 ug/L	2.00 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.25 ug/L	2.00 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.27 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. 7:9-6.9 (c).

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: UST Case No.: 50631 Location: Bldg63 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5063107

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB020981.D

Level: (low/med) LOW Date Received: 12/6/2005

% Moisture: not dec. Date Analyzed: 12/8/2005

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: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

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

Data File	VB020982.D	Sample Name	5063105
Operator	Skelton	Field ID	63B-Groundwater
Date Acquired	8 Dec 2005 10:23 am	Sample Multiplier	1

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	RL	Qualifier
107028	Acrolein			not detected	10	1.57 ug/L	10.00 ug/L	
107131	Acrylonitrile			not detected	50	2.47 ug/L	10.00 ug/L	
75650	tert-Butyl alcohol			not detected	100	8.54 ug/L	20.00 ug/L	
1634044	Methyl-tert-Butyl ether	12.78	21587	0.34 ug/L	70	0.30 ug/L	2.00 ug/L	
108203	Di-isopropyl ether			not detected	20000	0.37 ug/L	2.00 ug/L	
75718	Dichlorodifluoromethane			not detected	nle	0.46 ug/L	2.00 ug/L	
74-87-3	Chloromethane			not detected	30	0.30 ug/L	2.00 ug/L	
75-01-4	Vinyl Chloride			not detected	5	0.20 ug/L	2.00 ug/L	
74-83-9	Bromomethane			not detected	10	0.25 ug/L	2.00 ug/L	
75-00-3	Chloroethane			not detected	100	0.27 ug/L	2.00 ug/L	
75-69-4	Trichlorofluoromethane			not detected	nle	0.26 ug/L	2.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	2	0.27 ug/L	2.00 ug/L	
67-64-1	Acetone			not detected	700	2.00 ug/L	2.00 ug/L	
75-15-0	Carbon Disulfide			not detected	800	0.16 ug/L	2.00 ug/L	
75-09-2	Methylene Chloride			not detected	3	0.55 ug/L	2.00 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.25 ug/L	2.00 ug/L	
75-34-3	1,1-Dichloroethane			not detected	50	0.32 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	0.90 ug/L	2.00 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	70	0.28 ug/L	2.00 ug/L	
67-66-3	Chloroform			not detected	6	0.38 ug/L	2.00 ug/L	
71-55-6	1,1,1-Trichloroethane			not detected	30	0.27 ug/L	2.00 ug/L	
56-23-5	Carbon Tetrachloride			not detected	2	0.20 ug/L	2.00 ug/L	
71-43-2	Benzene			not detected	1	0.20 ug/L	2.00 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.22 ug/L	2.00 ug/L	
79-01-6	Trichloroethene			not detected	1	0.28 ug/L	2.00 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.33 ug/L	2.00 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.25 ug/L	2.00 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	100	0.25 ug/L	2.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	nle	0.18 ug/L	2.00 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	400	0.38 ug/L	2.00 ug/L	
108-88-3	Toluene			not detected	1000	0.25 ug/L	2.00 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	nle	0.14 ug/L	2.00 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.25 ug/L	2.00 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.26 ug/L	2.00 ug/L	
591-78-6	2-Hexanone			not detected	100	0.29 ug/L	2.00 ug/L	
124-48-1	Dibromochloromethane			not detected	10	0.24 ug/L	2.00 ug/L	
108-90-7	Chlorobenzene			not detected	50	0.30 ug/L	2.00 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.28 ug/L	2.00 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	0.63 ug/L	4.00 ug/L	
95-47-6	o-Xylene			not detected	nle	0.24 ug/L	2.00 ug/L	
100-42-5	Styrene			not detected	100	0.34 ug/L	2.00 ug/L	
75-25-2	Bromoform			not detected	4	0.24 ug/L	2.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	1	0.24 ug/L	2.00 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.24 ug/L	2.00 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.25 ug/L	2.00 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.27 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. 7:9-6.9 (c).

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

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD ID: **63B-GW**

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 50631 Location: Bldg63 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5063105

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VB020982.D

Level: (low/med) LOW Date Received: 12/6/2005

% Moisture: not dec. Date Analyzed: 12/8/2005

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: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 50631 Location: Bldg63 SDG No.:

Lab File ID: VB020949.D BFB Injection Date: 12/7/2005

Instrument ID: GCMS#2 BFB Injection Time: 12:09

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	20.4
75	30.0 - 66.0% of mass 95	53.9
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	75.1
175	4.0 - 9.0% of mass 174	5.7 (7.6)1
176	93.0 - 101.0% of mass 174	73.2 (97.4)1
177	5.0 - 9.0% of mass 176	4.7 (6.4)2

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

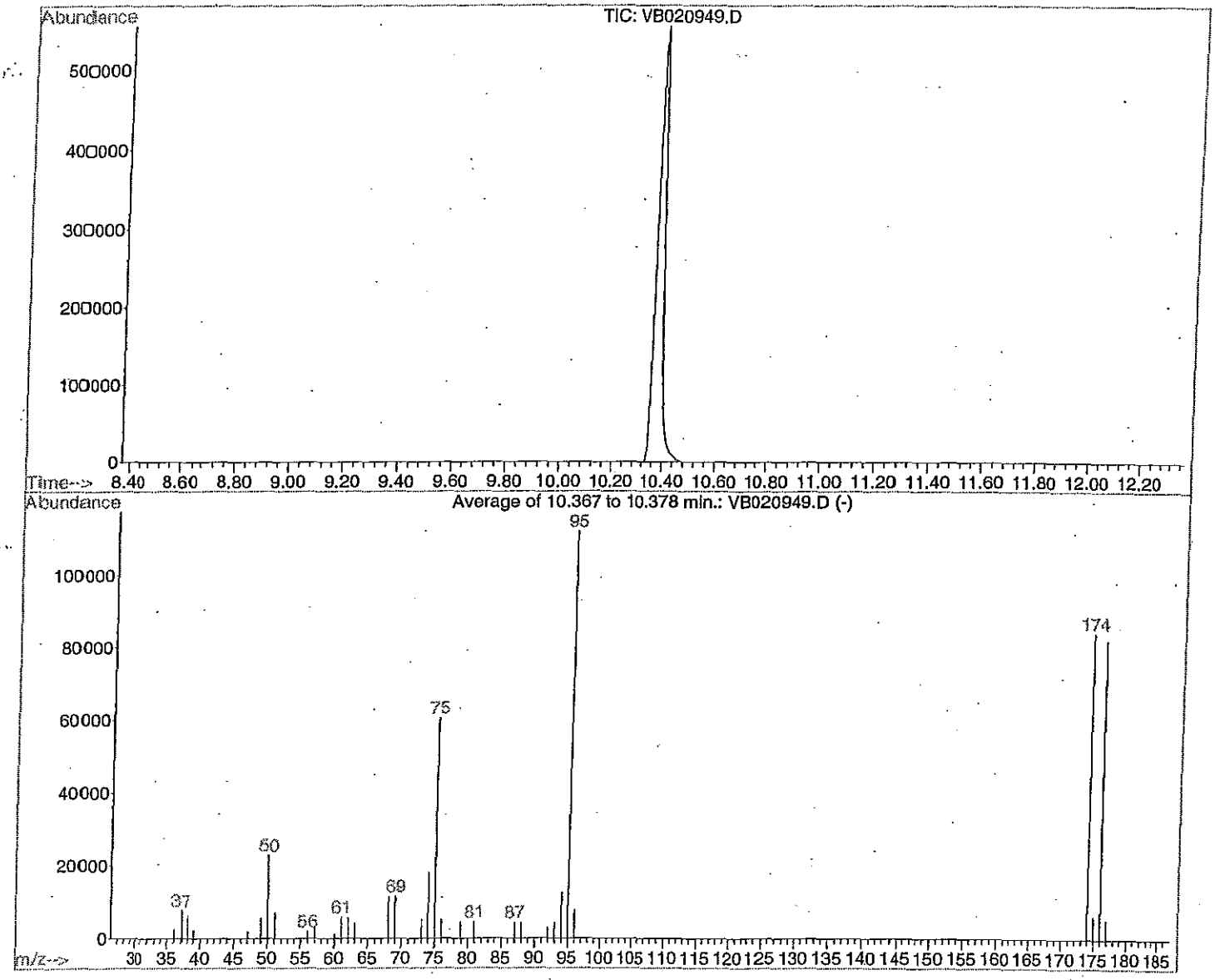
THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	FIELD ID:	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD010	VSTD010	VB020950.D	12/7/2005	12:39
02	VSTD005	VSTD005	VB020951.D	12/7/2005	13:21
03	VSTD002	VSTD002	VB020952.D	12/7/2005	14:02
04	VSTD050	VSTD050	VB020953.D	12/7/2005	14:43
05	VSTD020	VSTD020	VB020954.D	12/7/2005	15:24
06	MB 07DEC2005	MB 07DEC2005	VB020957.D	12/7/2005	17:26
07	TRIP BLANK	5063107	VB020981.D	12/8/2005	9:41
08	63B-GW	5063105	VB020982.D	12/8/2005	10:23

BFB

Data File : C:\HPCHEM\1\DATA\051207\VB020949.D
Acq On : 7 Dec 2005 12:09 pm
Sample : BFB Tune
Misc : BFB Tune
MS Integration Params: TBA.P
Method : C:\HPCHEM\1\METHODS\M2VO212.M (RTE Integrator)
Title : Volatile Organics by GC/MS Method 624/8260/TCLP

Vial: 4
Operator: Skelton
Inst : GC/MS Ins
Multiplr: 1.00



AutoFind: Scans 160, 161, 162; Background Corrected with Scan 151

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.4	22832	PASS
75	95	30	60	53.9	60491	PASS
95	95	100	100	100.0	112163	PASS
96	95	5	9	6.9	7689	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	75.1	84253	PASS
175	174	5	9	7.6	6379	PASS
176	174	95	101	97.4	82096	PASS
177	176	5	9	6.4	5284	PASS

VB020949.D M2VO212.M Thu Dec 29 10:05:51 2005

Response Factor Report GC/MS Ins

Method : C:\HPCHEM\1\METHODS\M2V0212.M (RTE Integrator)
Title : Volatile Organics by GC/MS Method 624/8260/TCLP
Last Update : Wed Dec 07 16:12:27 2005
Response via : Initial Calibration

Calibration Files
50 =VB020953.D 20 =VB020954.D 10 =VB020950.D
5 =VB020951.D 2 =VB020952.D

		Compound	50	20	10	5	2	Avg	%RSD
1)	I	Bromochloromethane	----------ISTD----------						
2)	tm	Acrolein	0.133	0.128	0.115	0.112	0.098	0.117	11.99
3)	tm	Acrylonitrile	1.075	1.076	1.012	0.981	0.949	1.018	5.56
4)	tm	tert-Butyl alcohol	0.160	0.162	0.140	0.136	0.149	0.149	7.87
5)	tm	Methyl-tert-Butyl eth	6.182	5.770	5.098	4.882	4.603	5.307	12.28
6)	tm	Di-isopropyl ether	1.907	1.786	1.545	1.492	1.314	1.609	14.75
7)	Tm	Dichlorodifluorometha	2.943	3.112	3.283	3.365	3.328	3.206	5.50
8)	TPm	Chloromethane	2.722	2.609	2.921	2.857	2.929	2.808	4.93
9)	TCm	Vinyl Chloride	2.838	2.783	2.905	2.915	2.948	2.878	2.31
10)	Tm	Bromomethane	1.441	1.505	1.443	1.474	1.501	1.473	2.10
11)	Tm	Chloroethane	0.811	1.105	1.194	1.330	1.340	1.156	18.72
12)	Tm	Trichlorofluoromethan	5.072	5.294	5.182	5.170	5.281	5.200	1.75
13)	MC	1,1-Dichloroethene	3.722	3.616	3.322	3.363	3.281	3.461	5.65
14)	Tm	Acetone	0.550	0.681	0.558	0.710	0.967	0.693	24.33
15)	Tm	Carbon Disulfide	7.247	7.128	6.723	6.565	6.288	6.790	5.84
16)	Tm	Methylene Chloride	2.600	2.618	2.507	2.607	2.694	2.605	2.56
17)	Tm	trans-1,2-Dichloroeth	3.520	3.420	3.166	3.216	3.143	3.293	5.09
18)	TPm	1,1-Dichloroethane	4.527	4.416	4.151	4.252	4.119	4.293	4.07
19)	Tm	Vinyl Acetate	1.931	1.724	1.467	1.403	1.290	1.563	16.65
20)	Tm	2-Butanone	0.964	0.987	0.944	0.823	0.881	0.920	7.27
21)	Tm	cis-1,2-Dichloroethen	3.612	3.488	3.203	3.180	3.073	3.311	6.88
22)	TCm	Chloroform	4.535	4.463	4.304	4.359	4.433	4.419	2.04
23)	Tm	1,1,1-Trichloroethane	4.026	3.855	3.515	3.420	3.248	3.613	8.85
24)	Tm	Carbon Tetrachloride	3.385	3.212	2.900	2.840	2.761	3.020	8.82
25)	S	1,2-Dichloroethane-d4	3.089	3.064	2.956	2.978	2.977	3.013	1.98
26)	I	1,4-Difluorobenzene	----------ISTD----------						
27)	TM	Benzene	1.542	1.505	1.451	1.446	1.387	1.466	4.06
28)	Tm	1,2-Dichloroethane	0.519	0.519	0.513	0.517	0.524	0.518	0.75
29)	TM	Trichloroethene	0.393	0.379	0.360	0.355	0.348	0.367	5.09
30)	TCm	1,2-Dichloropropane	0.368	0.356	0.343	0.344	0.332	0.348	3.96
31)	Tm	Bromodichloromethane	0.485	0.459	0.437	0.416	0.405	0.440	7.40
32)	Tm	2-Chloroethyl vinyl e	0.247	0.226	0.199	0.177	0.161	0.202	17.43
33)	Tm	cis-1,3-Dichloroprope	0.624	0.577	0.519	0.477	0.441	0.528	13.99
34)	Tm	4-Methyl-2-Pentanone	0.106	0.103	0.090	0.083	0.083	0.093	11.74
35)	S	Toluene-d8	1.340	1.287	1.211	1.163	1.126	1.225	7.19
36)	TCM	Toluene	1.709	1.650	1.582	1.538	1.446	1.585	6.41
37)	I	Chlorobenzene-d5	----------ISTD----------						
38)	Tm	trans-1,3-Dichloropro	2.213	2.036	1.767	1.606	1.482	1.821	16.57
39)	Tm	1,1,2-Trichloroethane	1.301	1.292	1.240	1.260	1.226	1.264	2.57
40)	Tm	Tetrachloroethene	1.628	1.580	1.493	1.531	1.507	1.548	3.60
41)	Tm	2-Hexanone	0.649	0.660	0.550	0.511	0.549	0.584	11.41
42)	Tm	Dibromochloromethane	1.323	1.230	1.108	1.043	1.012	1.143	11.44
43)	TMP	Chlorobenzene	4.018	3.894	3.752	3.834	3.891	3.878	2.51
44)	TCm	Ethylbenzene	7.148	6.815	6.402	6.360	6.208	6.587	5.86
45)	Tm	m+p-Xylenes	2.493	2.313	2.148	2.101	1.933	2.198	9.72
46)	Tm	o-Xylene	5.270	4.911	4.518	4.222	3.768	4.538	12.89
47)	Tm	Styrene	3.862	3.478	3.110	2.841	2.533	3.165	16.51
48)	TPm	Bromoform	0.978	0.892	0.794	0.733	0.730	0.825	13.04
49)	S	Bromofluorobenzene	2.022	1.928	1.747	1.654	1.676	1.805	8.96
50)	TPm	1,1,2,2-Tetrachloroet	1.572	1.623	1.510	1.454	1.467	1.525	4.70
51)	Tm	1,3-Dichlorobenzene	2.796	2.780	2.465	2.414	2.369	2.565	8.05
52)	Tm	1,4-Dichlorobenzene	2.962	2.955	2.638	2.575	2.529	2.732	7.71
53)	Tm	1,2-Dichlorobenzene	2.560	2.654	2.331	2.348	2.329	2.444	6.23
54)	Tm	Naphthalene	0.671	0.773	0.701	0.923	0.921	0.798	14.96

(#) = Out of Range

4A

FIELD ID:

MB 07Dec2005

VOLATILE METHOD BLANK SUMMARY

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 50631 Location: Bldg63 SDG No.:

Lab File ID: VB020957.D Lab Sample ID: MB 07Dec2005

Date Analyzed: 12/7/2005 Time Analyzed: 17:26

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	TRIP BLANK	5063107	VB020981.D	9:41
02	63B-GW	5063105	VB020982.D	10:23

COMMENTS:

2A

WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 50631 Location: Bldg63 SDG No.: _____

	FIELD ID:	SMC1 DCE #	SMC2 TOL #	SMC3 BFB #	TOT OUT
01	MB 07DEC2005	82	89	82	0
02	TRIP BLANK	86	92	84	0
03	63B-GW	85	90	82	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\M2VO212.M (RTE Integrator)
Title : Volatile Organics by GC/MS Method 624/8260/TCLP
Last Update : Wed Dec 07 16:12:27 2005
Response via : Initial Calibration

Non-Spiked Sample: VB020978.D

	Spike Sample	Spike Duplicate Sample
File ID :	VB020979.D	VB020980.D
Sample :	5063003 MS	5063003 MSD
Acq Time:	8 Dec 2005 8:19 am	8 Dec 2005 8:59 am

Compound	Sample Conc	Spike Added	Spike Res	Dup Res	Spike %Rec	Dup %Rec	RPD	QC Limits RPD	QC Limits % Rec
Acrolein	0.0	50	41	43	83	85	3	20	59-137
Acrylonitrile	0.0	50	48	48	96	95	1	20	68-127
tert-Butyl alcohol	0.0	100	70	73	70	73	5	20	17-167
Methyl-tert-Butyl et	0.0	10	9	9	87	88	2	20	74-116
Di-isopropyl ether	0.0	10	10	9	95	95	1	20	77-117
Dichlorodifluorometh	0.0	10	10	10	98	95	2	20	50-131
Chloromethane	0.0	10	11	10	106	102	3	20	65-123
Vinyl Chloride	0.0	10	11	10	108	105	3	20	63-125
Bromomethane	0.0	10	11	11	110	107	3	20	72-118
Chloroethane	0.0	10	17	15	172#	155#	11	20	64-127
Trichlorofluorometha	0.0	10	10	10	97	95	2	20	60-122
1,1-Dichloroethene	0.0	10	10	10	98	95	3	20	68-116
Acetone	0.0	10	8	9	80	86	7	20	2-148
Carbon Disulfide	0.0	10	10	10	100	97	3	20	69-117
Methylene Chloride	0.0	10	10	10	103	101	2	20	79-110
trans-1,2-Dichloroet	0.0	10	10	10	99	98	1	20	73-113
1,1-Dichloroethane	0.0	10	10	10	103	101	2	20	77-112
Vinyl Acetate	0.0	10	4	3	39#	31#	22#	20	52-127
2-Butanone	0.0	10	8	8	77	80	4	20	12-162
cis-1,2-Dichloroethe	0.0	10	10	10	101	99	3	20	74-114
Chloroform	0.0	10	10	10	103	101	2	20	79-110
1,1,1-Trichloroethan	0.0	10	10	10	98	96	3	20	73-114
Carbon Tetrachloride	0.0	10	10	10	98	96	2	20	69-115
Benzene	0.0	10	10	10	99	100	1	20	78-112
1,2-Dichloroethane	0.0	10	10	10	98	100	2	20	78-115
Trichloroethene	0.0	10	10	11	102	106	4	20	74-114
1,2-Dichloropropane	0.0	10	10	10	98	101	3	20	77-113
Bromodichloromethane	0.0	10	10	10	98	99	1	20	77-113
2-Chloroethyl vinyl	0.0	10	9	9	86	90	4	20	67-117
cis-1,3-Dichloroprop	0.0	10	9	9	91	93	2	20	75-116
4-Methyl-2-Pentanone	0.0	10	8	8	77	81	6	20	33-146
Toluene	0.0	10	10	10	101	100	1	20	80-113
trans-1,3-Dichloropr	0.0	10	9	9	92	92	1	20	75-117
1,1,2-Trichloroethan	0.0	10	10	10	97	98	0	20	78-116
Tetrachloroethene	0.0	10	10	9	96	95	2	20	73-115
2-Hexanone	0.0	10	7	8	73	79	8	20	30-147
Dibromochloromethane	0.0	10	10	10	98	97	1	20	77-115
Chlorobenzene	0.0	10	10	10	99	99	1	20	78-112
Ethylbenzene	0.0	10	10	10	100	99	1	20	77-113
m+p-Xylenes	0.0	20	20	19	98	97	0	20	76-115
o-Xylene	0.0	10	10	10	98	98	0	20	74-118
Styrene	0.0	10	10	10	98	97	1	20	77-116
Bromoform	0.0	10	9	9	90	91	1	20	72-116
1,1,2,2-Tetrachloroe	0.0	10	8	8	81	81	0	20	73-120
1,3-Dichlorobenzene	0.0	10	9	9	88	93	5	20	75-114
1,4-Dichlorobenzene	0.0	10	9	9	87	94	8	20	75-116
1,2-Dichlorobenzene	0.0	10	9	9	87	92	6	20	76-115
Naphthalene	0.0	10	4	7	38#	68#	57#	20	70-120

- Fails Limit Check

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: FMETL NJDEP#: 13461

Project: UST Case No.: 50631 Location: Bldg63 SDG No.:

Lab File ID (Standard): VB020950.D Date Analyzed: 12/7/2005

Instrument ID: GCMS#2 Time Analyzed: 12:39

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	379889	16.43	2599095	19.63	685042	25.66
	UPPER LIMIT	759778	16.93	5198190	20.13	1370084	26.16
	LOWER LIMIT	189945	15.93	1299548	19.13	342521	25.16
	FIELD ID:						
01	MB 07DEC2005	366490	16.43	2476024	19.62	650744	25.65
02	TRIP BLANK	351386	16.43	2348796	19.63	621687	25.66
03	63B-GW	355413	16.43	2374955	19.63	630488	25.66

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\051207\VB020957.D Vial: 5
Acq On : 7 Dec 2005 5:26 pm Operator: Skelton
Sample : MB 07Dec2005 Inst : GC/MS Ins
Misc : MB 07Dec2005 Multiplr: 1.00
MS Integration Params: TBA.P
Quant Time: Dec 8 7:45 2005 Quant Results File: M2VO212.RES

Quant Method : C:\HPCHEM\1\METHODS\M2VO212.M (RTE Integrator)
Title : Volatile Organics by GC/MS Method 624/8260/TCLP
Last Update : Wed Dec 07 16:12:27 2005
Response via : Initial Calibration
DataAcq Meth : M2VO212

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	16.43	128	366490	30.00	ug/L	0.00
26) 1,4-Difluorobenzene	19.62	114	2476024	30.00	ug/L	-0.01
37) Chlorobenzene-d5	25.65	119	650744	30.00	ug/L	-0.01
System Monitoring Compounds						
25) 1,2-Dichloroethane-d4	18.47	65	906124	24.62	ug/L	0.00
Spiked Amount 30.000	Range 70 - 120		Recovery = 82.07%			
35) Toluene-d8	22.57	98	2687226	26.57	ug/L	0.00
Spiked Amount 30.000	Range 70 - 120		Recovery = 88.57%			
49) Bromofluorobenzene	27.99	95	958599	24.48	ug/L	-0.01
Spiked Amount 30.000	Range 70 - 120		Recovery = 81.60%			

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
VB020957.D M2VO212.M Thu Dec 08 09:54:19 2005

000029

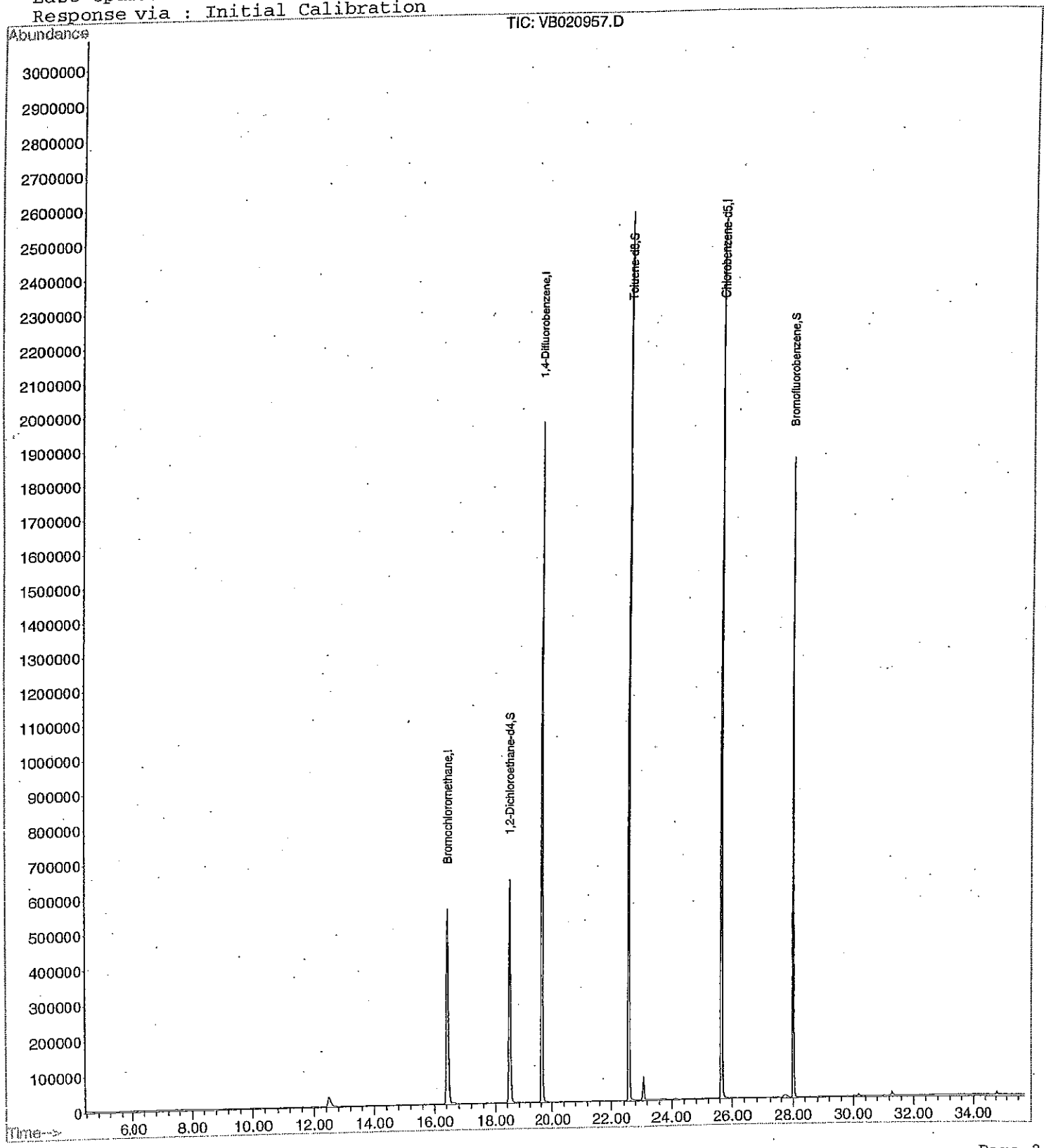
Quantitation Report

Data File : C:\HPCHEM\1\DATA\051207\VB020957.D
Acq On : 7 Dec 2005 5:26 pm
Sample : MB 07Dec2005
Misc : MB 07Dec2005
MS Integration Params: TBA.P
Quant Time: Dec 8 7:45 2005

Vial: 5
Operator: Skelton
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: M2VO212.RES

Method : C:\HPCHEM\1\METHODS\M2VO212.M (RTE Integrator)
Title : Volatile Organics by GC/MS Method 624/8260/TCLP
Last Update : Wed Dec 07 16:12:27 2005
Response via : Initial Calibration



000030

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\051207\VB020981.D Vial: 29
Acq On : 8 Dec 2005 9:41 am Operator: Skelton
Sample : 5063107 Inst : GC/MS Ins
Misc : Trip Blank Multiplr: 1.00
MS Integration Params: TBA.P
Quant Time: Dec 8 10:17 2005 Quant Results File: M2VO212.RES

Quant Method : C:\HPCHEM\1\METHODS\M2VO212.M (RTE Integrator)
Title : Volatile Organics by GC/MS Method 624/8260/TCLP
Last Update : Wed Dec 07 16:12:27 2005
Response via : Initial Calibration
DataAcq Meth : M2VO212

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	16.43	128	351386	30.00	ug/L	0.00
26) 1,4-Difluorobenzene	19.63	114	2348796	30.00	ug/L	0.00
37) Chlorobenzene-d5	25.66	119	621687	30.00	ug/L	0.00
System Monitoring Compounds						
25) 1,2-Dichloroethane-d4	18.48	65	905593	25.66	ug/L	0.01
Spiked Amount 30.000	Range 70 - 120		Recovery = 85.53%			
35) Toluene-d8	22.57	98	2654621	27.67	ug/L	0.00
Spiked Amount 30.000	Range 70 - 120		Recovery = 92.23%			
49) Bromofluorobenzene	28.00	95	937434	25.06	ug/L	0.00
Spiked Amount 30.000	Range 70 - 120		Recovery = 83.53%			

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
VB020981.D M2VO212.M Thu Dec 08 10:17:47 2005 Page 1

000031

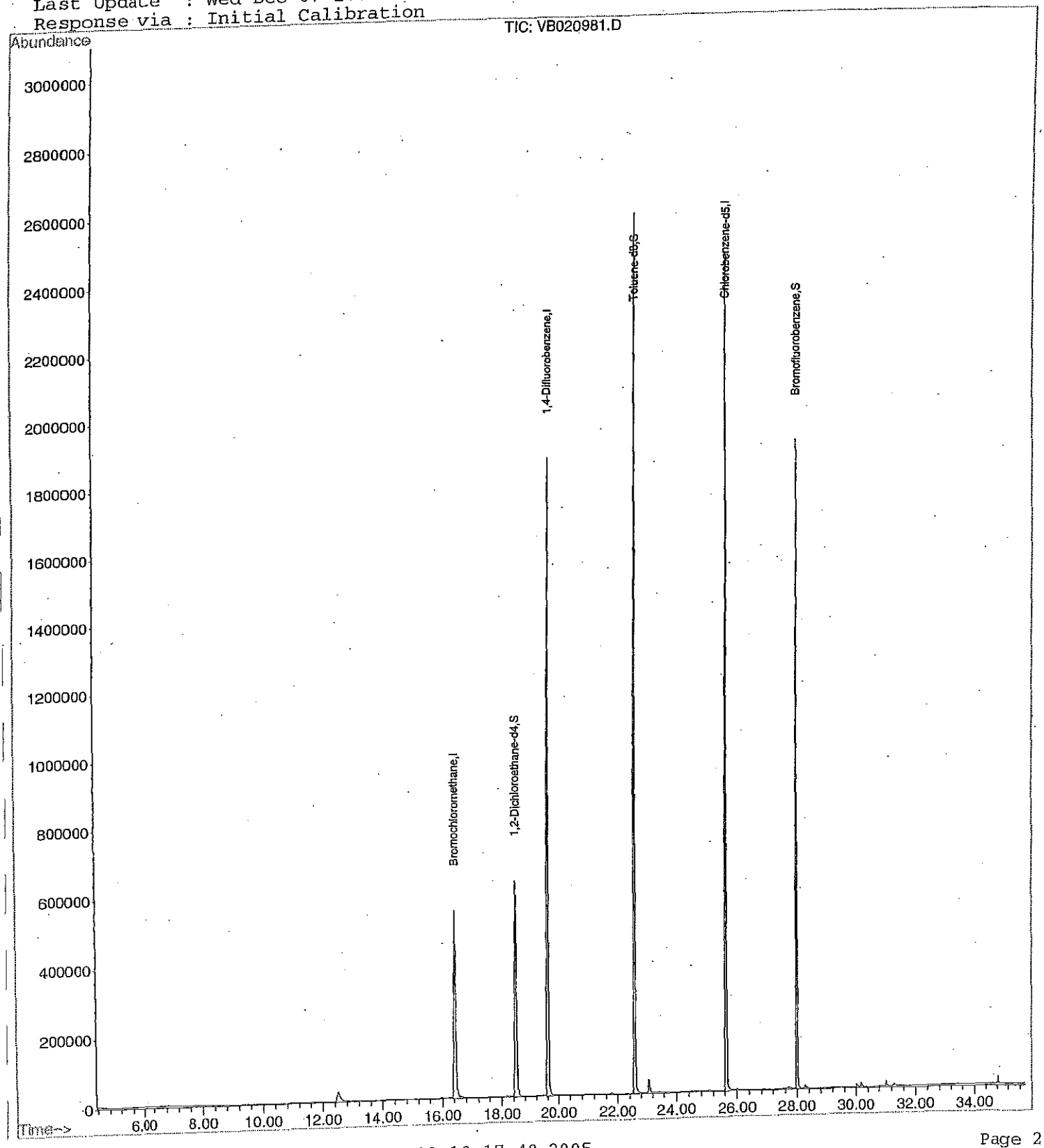
Quantitation Report

Data File : C:\HPCHEM\1\DATA\051207\VB020981.D
Acq On : 8 Dec 2005 9:41 am
Sample : 5063107
Misc : Trip Blank
MS Integration Params: TBA.P
Quant Time: Dec 8 10:17 2005

Vial: 29
Operator: Skelton
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: M2VO212.RES

Method : C:\HPCHEM\1\METHODS\M2VO212.M (RTE Integrator)
Title : Volatile Organics by GC/MS Method 624/8260/TCLP
Last Update : Wed Dec 07 16:12:27 2005
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\051207\VB020982.D Vial: 30
Acq On : 8 Dec 2005 10:23 am Operator: Skelton
Sample : 5063105 Inst : GC/MS Ins
Misc : 63B-Groundwater Multiplr: 1.00
MS Integration Params: TBA.P
Quant Time: Dec 8 10:59 2005 Quant Results File: M2VO212.RES

Quant Method : C:\HPCHEM\1\METHODS\M2VO212.M (RTE Integrator)
Title : Volatile Organics by GC/MS Method 624/8260/TCLP
Last Update : Wed Dec 07 16:12:27 2005
Response via : Initial Calibration
DataAcq Meth : M2VO212

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	16.43	128	355413	30.00	ug/L	0.00
26) 1,4-Difluorobenzene	19.63	114	2374955	30.00	ug/L	0.00
37) Chlorobenzene-d5	25.66	119	630488	30.00	ug/L	0.00
System Monitoring Compounds						
25) 1,2-Dichloroethane-d4	18.48	65	907868	25.44	ug/L	0.01
Spiked Amount 30.000	Range 70 - 120		Recovery = 84.80%			
35) Toluene-d8	22.57	98	2627931	27.09	ug/L	0.00
Spiked Amount 30.000	Range 70 - 120		Recovery = 90.30%			
49) Bromofluorobenzene	28.00	95	929272	24.49	ug/L	0.00
Spiked Amount 30.000	Range 70 - 120		Recovery = 81.63%			
Target Compounds						Qvalue
5) Methyl-tert-Butyl ether	12.78	73	21587	0.34	ug/L #	88

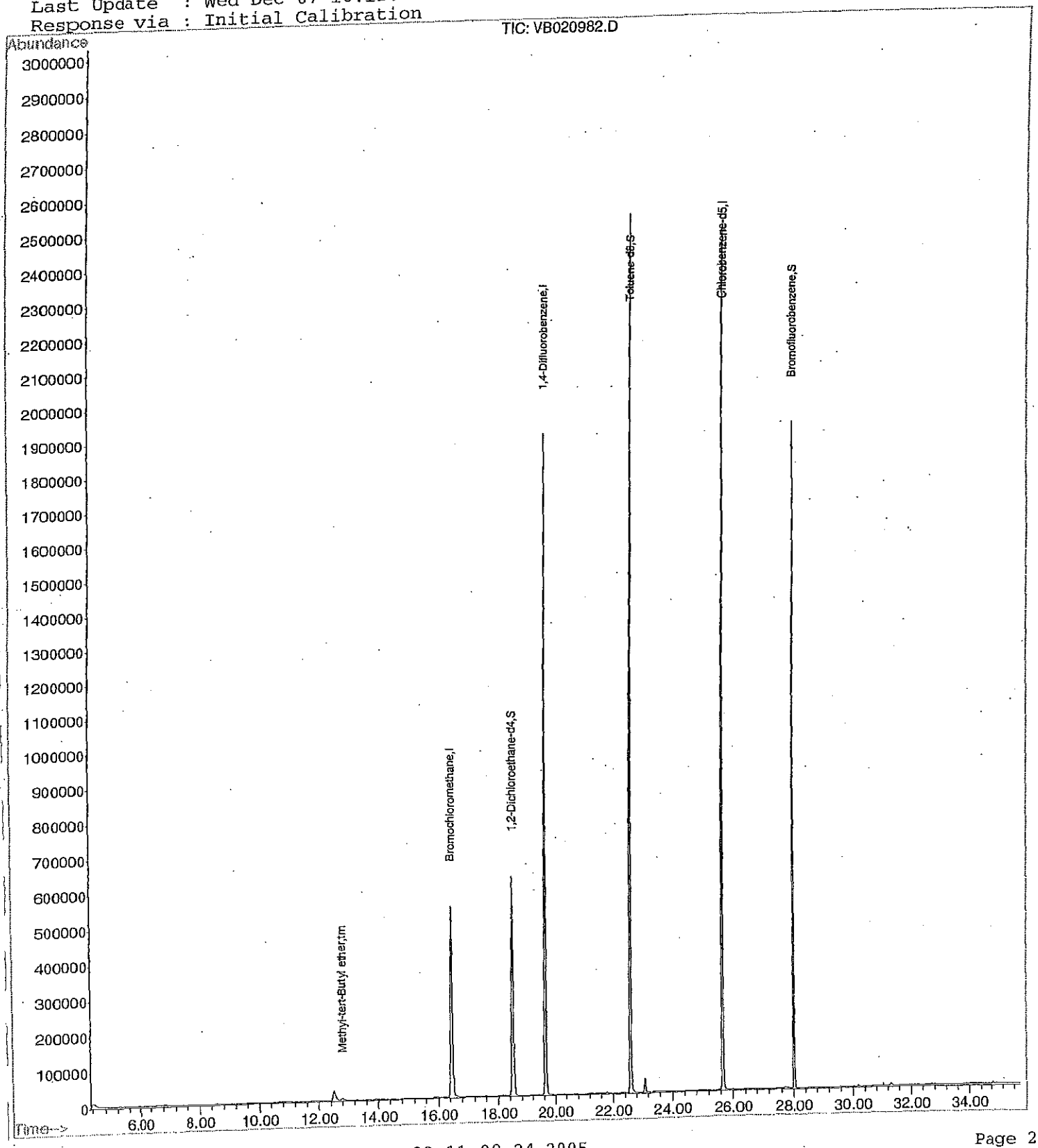
(#) = qualifier out of range (m) = manual integration

Data File : C:\HPCHEM\1\DATA\051207\VB020982.D
Acq On : 8 Dec 2005 10:23 am
Sample : 5063105
Misc : 63B-Groundwater
MS Integration Params: TBA.P
Quant Time: Dec 8 10:59 2005

Vial: 30
Operator: Skelton
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: M2VO212.RES

Method : C:\HPCHEM\1\METHODS\M2VO212.M (RTE Integrator)
Title : Volatile Organics by GC/MS Method 624/8260/TCLP
Last Update : Wed Dec 07 16:12:27 2005
Response via : Initial Calibration



000034

SEMI-VOLATILE ORGANICS

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	BNA11400.D	Sample Name	MB-120705-01
Operator	BPatel	Misc Info	MB-120705-01
Date Acquired	13-Dec-05	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	20	0.60	10.00	ug/L	
62-53-3	Aniline			not detected	NLE	2.38	10.00	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	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	NLE	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	20	0.76	10.00	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.96	10.00	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.86	10.00	ug/L	
78-59-1	Isophorone			not detected	100	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	NLE	0.76	10.00	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	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	50	0.92	10.00	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	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	7000	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	NLE	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	5000	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	20	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	10	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	900	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	**BNA11400.D**	Sample Name	**MB-120705-01**
Operator	**BPatel**	Misc Info	**MB-120705-01**
Date Acquired	**13-Dec-05**	Sample Multiplier	**1**

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL		Qualifiers
92-87-5	Benzidine			not detected	50	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	10	0.82	10.00	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.31	10.00	ug/L	
218-01-9	Chrysene			not detected	20	0.77	10.00	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	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	10	0.98	10.00	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	0.92	10.00	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	0.71	10.00	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	0.76	10.00	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	0.76	10.00	ug/L	
191-24-2	Benzo[g,h,i]perylene			not detected	NLB	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
NLB= No Limit Established
R.T.=Retention Time

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MB-120705-01

Lab Name: FMETL Lab Code 13461

Project: UST Case No.: 50631 Location: BL.63 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: MB-120705-01

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA11400.D

Level: (low/med) LOW Date Received: 12/6/2005

% Moisture: decanted: (Y/N) N Date Extracted: 12/7/2005

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 12/13/2005

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

Semi-Volatile Analysis Report

U.S. Army, Fort Monmouth Environmental Laboratory

NJDEP Certification #13461

Data File Name	BNA11406.D	Sample Name	5063105
Operator	BPatel	Misc Info	63B-Ground Water
Date Acquired	13-Dec-05	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	20	0.60	10.00	ug/L	
62-53-3	Aniline			not detected	NLE	2.38	10.00	ug/L	
111-44-4	bis(2-Chloroethyl)ether			not detected	10	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	NLE	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	20	0.76	10.00	ug/L	
67-72-1	Hexachloroethane			not detected	10	0.96	10.00	ug/L	
98-95-3	Nitrobenzene			not detected	10	0.86	10.00	ug/L	
78-59-1	Isophorone			not detected	100	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	NLE	0.76	10.00	ug/L	
106-47-8	4-Chloroaniline			not detected	NLE	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	50	0.92	10.00	ug/L	
91-58-7	2-Chloronaphthalene			not detected	NLE	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	7000	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	NLE	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	18.65	90809	1.76 ug/L	5000	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	20	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	10	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	900	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	BNA11406.D	Sample Name	5063105
Operator	BPatel	Misc Info	63B-Ground Water
Date Acquired	13-Dec-05	Sample Multiplier	1

CAS#	Name	R.T.	Response	Result	Regulatory Level (ug/L)*	MDL	RL		Qualifiers
92-87-5	Benzidine			not detected	50	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	10	0.82	10.00	ug/L	
91-94-1	3,3'-Dichlorobenzidine			not detected	60	1.31	10.00	ug/L	
218-01-9	Chrysene			not detected	20	0.77	10.00	ug/L	
117-81-7	bis(2-Ethylhexyl)phthalate			not detected	30	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	10	0.98	10.00	ug/L	
207-08-9	Benzo[k]fluoranthene			not detected	2	0.92	10.00	ug/L	
50-32-8	Benzo[a]pyrene			not detected	20	0.71	10.00	ug/L	
193-39-5	Indeno[1,2,3-cd]pyrene			not detected	20	0.76	10.00	ug/L	
53-70-3	Dibenz[a,h]anthracene			not detected	20	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
MDL= Method Detection Limit
NLE= No Limit Established
R.T.=Retention Time
RL=Reporting Limit. The values between the MDL and RL are considered estimated.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
63B-Ground Wate

Lab Name: FMETL Lab Code 13461

Project: UST Case No.: 50631 Location: BL.63 SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 5063105

Sample wt/vol: 1000 (g/ml) ML Lab File ID: BNA11406.D

Level: (low/med) LOW Date Received: 12/6/2005

% Moisture: decanted: (Y/N) N Date Extracted: 12/7/2005

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 12/13/2005

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: FMETL Lab Code 13461

Project: UST Case No.: 50631 Location: BL.63 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

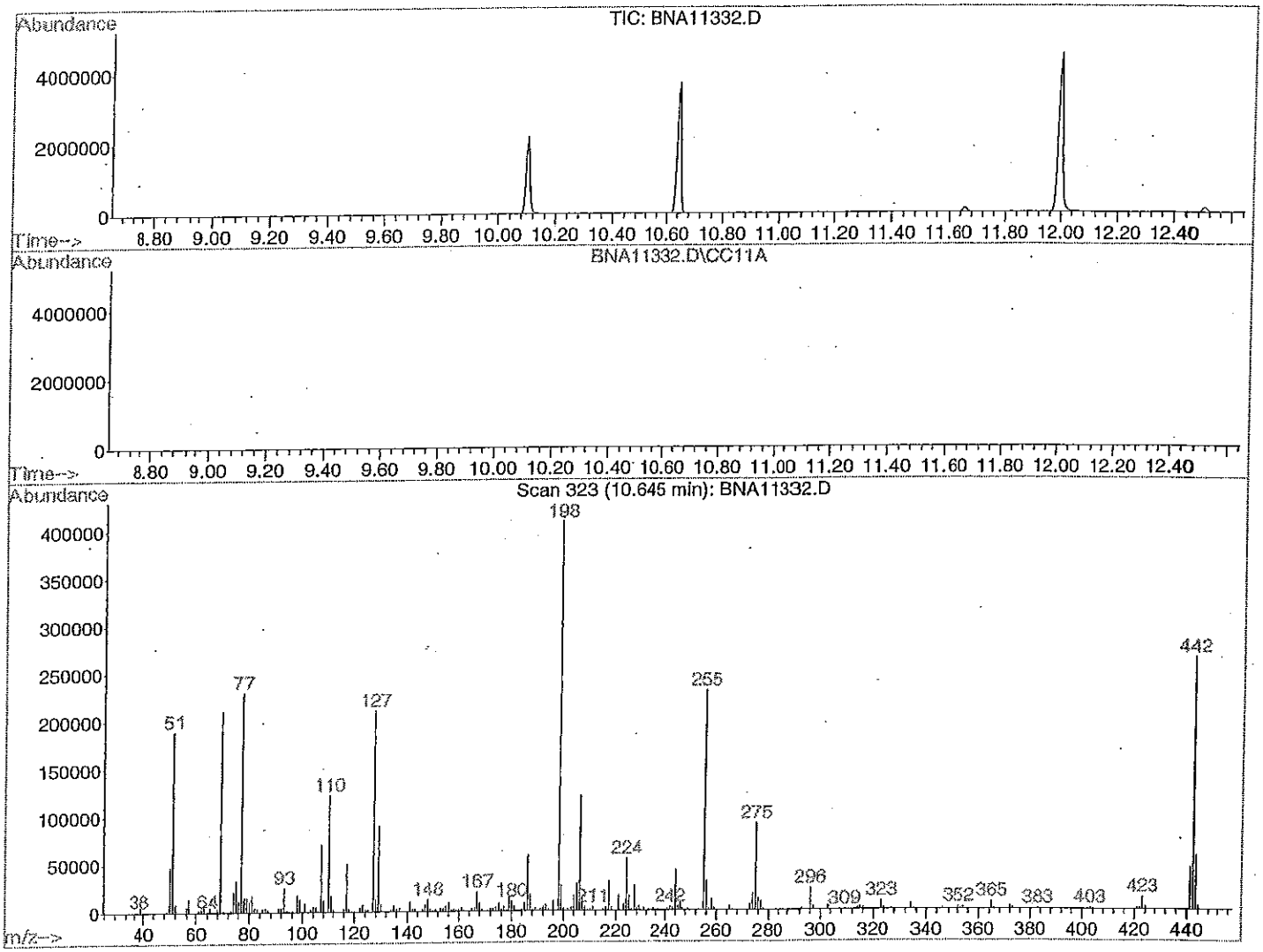
1-Value is % mass 69 2-Value is % mass 442

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

Data File : C:\HPCHEM\1\DATA\051103\BNA11332.D
Acq On : 3 Nov 2005 9:33 am
Sample : DFTPP Tune
Misc : SV080105.01
MS Integration Params: ODD.P
Method : C:\HPCHEM\1\METHODS\M262593.M (RTE Integrator)
Title : BNA Calibration

Vial: 99
Operator: BPatel
Inst : GC/MS Ins
Multiplr: 1.00
GC Integration Params: rteint2.p



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----------						

(#) = Out of Range

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
66)	I	Chrysene-d12	----------ISTD----------						
67)	T	Benzidine	0.471	0.473	0.501	0.583	0.691	0.544	17.27
68)	TM	Pyrene	1.214	1.225	1.246	1.253	1.259	1.239	1.54
69)	S	p-Terphenyl-d14	0.860	0.844	0.838	0.830	0.836	0.841	1.34
70)	T	Butylbenzylphthalate	0.596	0.597	0.608	0.611	0.608	0.604	1.17
71)	T	Benzo[a]anthracene	1.291	1.252	1.226	1.195	1.201	1.233	3.19
72)	T	3,3'-Dichlorobenzidin	0.484	0.436	0.427	0.435	0.470	0.450	5.57
73)	T	Chrysene	1.065	1.072	1.051	1.056	1.057	1.060	0.79
74)	T	bis(2-Ethylhexyl)phth	0.757	0.756	0.770	0.769	0.771	0.765	1.00
75)	I	Perylene-d12	----------ISTD----------						
76)	TC	Di-n-octylphthalate	2.119	2.089	2.119	2.064	2.028	2.084	1.87
77)	T	Benzo[b]fluoranthene	1.794	1.751	1.681	1.624	1.623	1.695	4.51
78)	T	Benzo[k]fluoranthene	1.790	1.725	1.710	1.648	1.607	1.696	4.17
79)	TC	Benzo[a]pyrene	1.607	1.564	1.524	1.474	1.445	1.523	4.31
80)	T	Indeno[1,2,3-cd]pyren	1.748	1.714	1.663	1.580	1.520	1.645	5.73
81)	T	Dibenz[a,h]anthracene	1.465	1.410	1.348	1.275	1.235	1.347	6.99
82)	T	Benzo[g,h,i]perylene	1.391	1.389	1.355	1.292	1.243	1.334	4.84

(#) = Out of Range

000045

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: FMETL Lab Code 13461

Project: UST Case No.: 50631 Location: BL.63 SDG No.:

Lab File ID: BNA11394.D DFTPP Injection Date: 12/13/2005

Instrument ID: GC_BNA_2 DFTPP Injection Time: 8:00

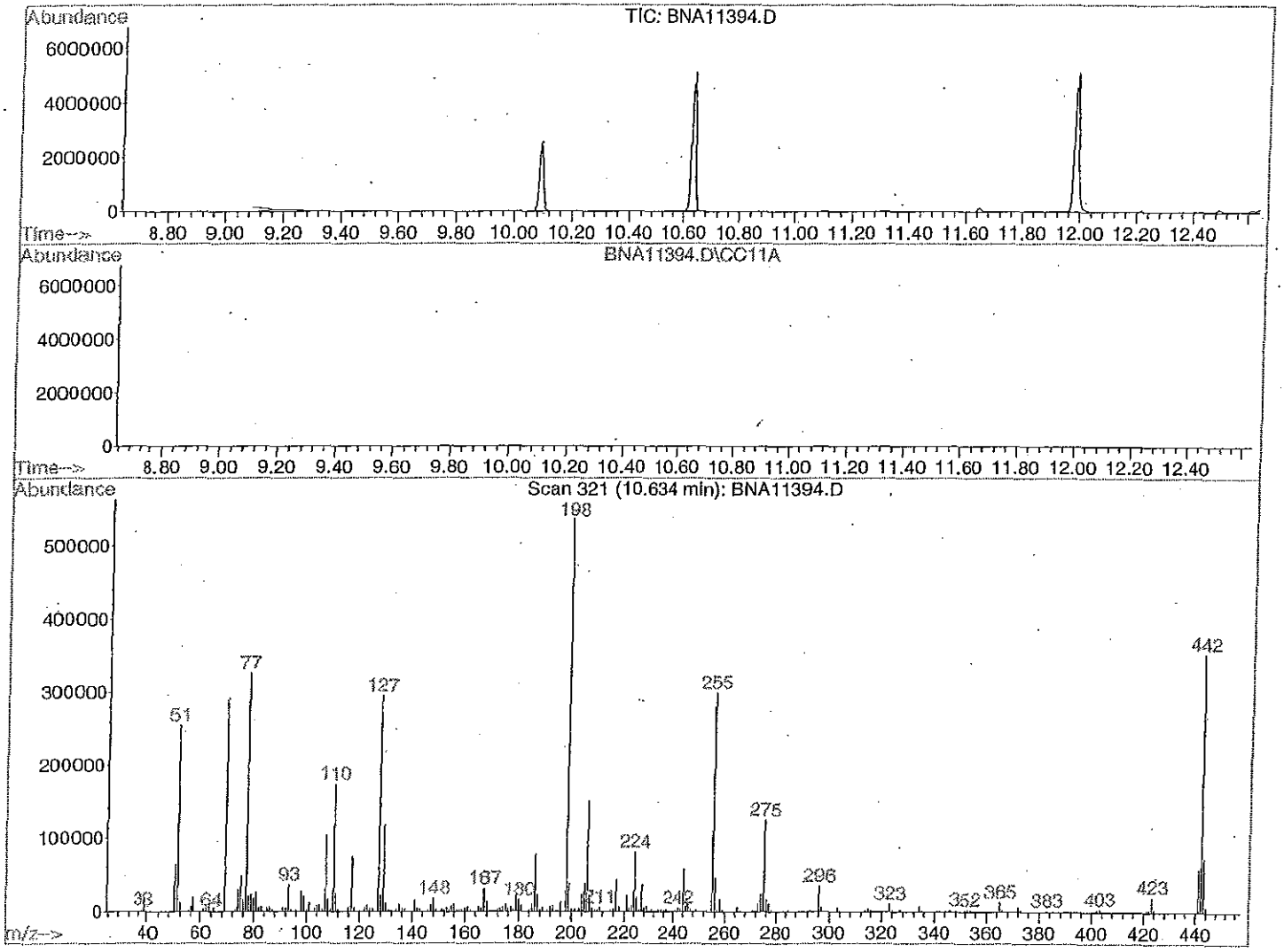
m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	47.5
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 Relative abundance	54.4
70	Less than 2.0% of mass 69	0.2 (0.4)1
127	25.0 - 75.0% of mass 198	55.0
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.9
275	10.0 - 30.0% of mass 198	23.3
365	Greater than 0.75% of mass 198	2.4
441	Present, but less than mass 443	10.7
442	40.0 - 110.0% of mass 198	65.8
443	15.0 - 24.0% of mass 442	13.6 (20.7)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	BNA11395.D	12/13/2005	8:24
02	MB-120705-01	MB-120705-01	BNA11400.D	12/13/2005	12:19
03	63B-GROUND WAT	5063105	BNA11406.D	12/13/2005	17:04

Data File : C:\HPCHEM\1\DATA\051213\BNA11394.D Vial: 99
Acq On : 13 Dec 2005 8:00 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 321

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result. Pass/Fail
51	198	30	60	47.5	254912	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	54.4	291968	PASS
70	69	0.00	2	0.4	1075	PASS
127	198	40	60	55.0	294976	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	536704	PASS
199	198	5	9	6.9	36968	PASS
275	198	10	30	23.3	124880	PASS
365	198	1	100	2.4	12999	PASS
441	443	1	99	78.5	57328	PASS
442	198	40	100	65.8	353408	PASS
443	442	17	23	20.7	73040	PASS

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\051213\BNA11395.D Vial: 100
Acq On : 13 Dec 2005 8:24 am Operator: BPatel
Sample : Sstd050 Inst : GC/MS Ins
Misc : SV121305.01 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	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	119	-0.02
2	T	Pyridine	1.536	1.451	5.5	113	0.00
3	T	N-nitroso-dimethylamine	0.824	0.775	5.9	112	0.01
4	S	2-Fluorophenol	1.255	1.258	-0.2	117	0.00
5	T	Aniline	2.308	2.149	6.9	111	0.00
6	S	Phenol-d6	1.736	1.703	1.9	116	0.00
7	TCM	Phenol	1.949	1.918	1.6	117	0.00
8	T	bis(2-Chloroethyl)ether	1.383	1.401	-1.3	119	0.00
9	TM	2-Chlorophenol	1.302	1.328	-2.0	122	0.00
10	T	1,3-Dichlorobenzene	1.501	1.496	0.3	118	-0.01
11	TCM	1,4-Dichlorobenzene	1.555	1.558	-0.2	119	-0.01
12	T	Benzyl alcohol	0.987	1.001	-1.4	118	0.00
13	T	1,2-Dichlorobenzene	1.418	1.432	-1.0	120	-0.01
14	T	2-Methylphenol	1.342	1.342	0.0	118	0.00
15	T	bis(2-chloroisopropyl)ether	1.697	1.681	0.9	116	-0.01
16	T	4-Methylphenol	1.402	1.404	-0.1	118	0.00
17	TPM	n-Nitroso-di-n-propylamine	0.244	0.237	2.9	115	0.00
18	T	Hexachloroethane	0.639	0.655	-2.5	120	-0.01
19	I	Naphthalene-d8	1.000	1.000	0.0	119	-0.01
20	S	Nitrobenzene-d5	0.583	0.587	-0.7	118	-0.01
21	T	Nitrobenzene	0.559	0.560	-0.2	118	-0.01
22	T	Isophorone	0.942	0.945	-0.3	118	-0.01
23	TC	2-Nitrophenol	0.194	0.200	-3.1	121	-0.01
24	T	2,4-Dimethylphenol	0.473	0.482	-1.9	120	-0.01
25	T	bis(2-Chloroethoxy)methane	0.497	0.504	-1.4	121	-0.01
26	TC	2,4-Dichlorophenol	0.322	0.333	-3.4	121	0.00
27	T	Benzoic Acid	0.212	0.221	-4.2	118	0.00
28	TM	1,2,4-Trichlorobenzene	0.356	0.368	-3.4	123	-0.01
29	T	Naphthalene	1.080	1.096	-1.5	120	-0.02
30	T	4-Chloroaniline	0.449	0.367	18.3	95	-0.01
31	TC	Hexachlorobutadiene	0.217	0.230	-6.0	125	-0.01
32	TCM	4-Chloro-3-methylphenol	0.417	0.424	-1.7	117	0.00
33	T	2-Methylnaphthalene	0.700	0.708	-1.1	119	-0.01
34	I	Acenaphthene-d10	1.000	1.000	0.0	121	-0.01
35	TP	Hexachlorocyclopentadiene	0.348	0.339	2.6	112	-0.02
36	TC	2,4,6-Trichlorophenol	0.393	0.403	-2.5	122	-0.01
37	T	2,4,5-Trichlorophenol	0.419	0.430	-2.6	122	-0.01
38	S	2-Fluorobiphenyl	1.303	1.318	-1.2	122	-0.01
39	T	2-Chloronaphthalene	1.138	1.140	-0.2	120	-0.01
40	T	2-Nitroaniline	0.373	0.375	-0.5	119	0.00
41	T	Dimethylphthalate	1.358	1.387	-2.1	122	0.00
42	T	Acenaphthylene	1.819	1.790	1.6	118	-0.01
43	T	2,6-Dinitrotoluene	0.308	0.322	-4.5	124	-0.01
44	T	3-Nitroaniline	0.310	0.255	17.7	98	0.00
45	TCM	Acenaphthene	1.110	1.102	0.7	121	-0.01
46	TP	2,4-Dinitrophenol	0.162	0.180	-11.1	120	0.00
47	T	Dibenzofuran	1.625	1.613	0.7	119	-0.01
48	TMP	4-Nitrophenol	0.395	0.396	-0.3	117	0.00
49	TM	2,4-Dinitrotoluene	0.446	0.459	-2.9	121	-0.01
50	T	Diethylphthalate	1.422	1.470	-3.4	123	-0.01
51	T	Fluorene	1.360	1.371	-0.8	120	0.00
52	T	4-Chlorophenyl-phenylether	0.651	0.669	-2.8	126	-0.01

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\051213\BNA11395.D Vial: 100
Acq On : 13 Dec 2005 8:24 am Operator: BPatel
Sample : Sstd050 Inst : GC/MS Ins
Misc : SV121305.01 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	AvgRF	CCRF	%Dev	Area%	Dev(min)
3	T	4-Nitroaniline	0.312	0.293	6.1	111	-0.01
54	I	Phenanthrene-d10	1.000	1.000	0.0	121	-0.01
55	T	4,6-Dinitro-2-methylphenol	0.145	0.158	-9.0	124	0.00
6	TC	n-Nitrosodiphenylamine	0.559	0.558	0.2	120	0.00
7	T	Azobenzene	1.015	0.994	2.1	118	-0.01
58	S	2,4,6-Tribromophenol	0.097	0.101	-4.1	124	0.00
59	T	4-Bromophenyl-phenylether	0.219	0.225	-2.7	125	-0.01
0	T	Hexachlorobenzene	0.233	0.236	-1.3	124	0.00
1	TCM	Pentachlorophenol	0.109	0.132	-21.1	138	0.00
62	T	Phenanthrene	1.190	1.168	1.8	120	-0.01
63	T	Anthracene	1.151	1.139	1.0	120	0.00
4	T	Di-n-butylphthalate	1.322	1.335	-1.0	122	-0.01
5	TC	Fluoranthene	1.235	1.207	2.3	118	0.00
66	I	Chrysene-d12	1.000	1.000	0.0	114	0.00
7	T	Benzidine	0.544	0.468	14.0	107	-0.01
8	TM	Pyrene	1.239	1.282	-3.5	117	0.00
69	S	p-Terphenyl-d14	0.841	0.895	-6.4	122	0.00
70	T	Butylbenzylphthalate	0.604	0.641	-6.1	120	0.00
71	T	Benzo[a]anthracene	1.233	1.248	-1.2	116	0.00
2	T	3,3'-Dichlorobenzidine	0.450	0.410	8.9	110	0.00
3	T	Chrysene	1.060	1.077	-1.6	117	0.00
74	T	bis(2-Ethylhexyl)phthalate	0.765	0.804	-5.1	119	0.00
5	I	Perylene-d12	1.000	1.000	0.0	109	0.00
6	TC	Di-n-octylphthalate	2.084	2.207	-5.9	114	0.00
77	T	Benzo[b]fluoranthene	1.695	1.749	-3.2	114	0.00
78	T	Benzo[k]fluoranthene	1.696	1.696	0.0	109	0.00
9	TC	Benzo[a]pyrene	1.523	1.534	-0.7	110	0.00
0	T	Indeno[1,2,3-cd]pyrene	1.645	1.590	3.3	105	-0.01
81	T	Dibenz[a,h]anthracene	1.347	1.317	2.2	107	-0.02
82	T	Benzo[g,h,i]perylene	1.334	1.295	2.9	105	0.00

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

000049

4B

EPA SAMPLE NO.

SEMIVOLATILE METHOD BLANK SUMMARY

MB-120705-01

Lab Name: FMETL Lab Code 13461

Project: UST Case No.: 50631 Location: BL.63 SDG No.:

Lab File ID: BNA11400.D Lab Sample ID: MB-120705-01

Instrument ID: GC/MS Ins Date Extracted: 12/7/2005

Matrix: (soil/water) WATER Date Analyzed: 12/13/2005

Level: (low/med) LOW Time Analyzed: 12:19

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	63B-GROUND WAT	5063105	BNA11406.D	12/13/2005

COMMENTS:

2C

WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: FMETL Lab Code 13461

Project: UST Case No.: 50631 Location: BL.63 SDG No.: _____

	EPA SAMPLE NO.	S1 NBZ #	S2 2FP #	S3 TPL #	TOT OUT
01	MB-120705-01	81	83	93	0
02	63B-GROUND	81	84	76	0

				QC LIMITS
S1	NBZ	=	Nitrobenzene-d5	(47-115)
S2	2FP	=	2-Fluorobiphenyl	(49-108)
S3	TPL	=	p-Terphenyl-d14	(46-116)

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:	5060603MS	MS Sample ID:	4404GW1MS
MSD Lab ID:	5060603MSD	MSD Sample ID:	4404GW1MSD
Matrix:	Aqueous	Sample File ID:	BNA11366.D
Date Extracted:	11/21/05	MS File ID:	BNA11367.D
Date Analyzed:	11/25/05	MSD File ID:	BNA11368.D

Compound Name	MS % Rec.	MSD % Rec.	% RPD	RPD Limits	Lower Control Limits	Upper Control Limits	Qualifier
Pyridine	30.4	24.1	23.1	30.0	5	58	
N-nitroso-dimethylamine	44.5	46.5	4.4	30.0	25	110	
Aniline	46.7	35.3	27.7	30.0	4	90	
Phenol	30.1	31.0	3.0	30.0	10	115	
bis(2-Chloroethyl)ether	80.8	83.6	3.3	30.0	35	110	
2-Chlorophenol	77.4	80.4	3.8	30.0	35	105	
1,3-Dichlorobenzene	77.0	79.3	3.0	30.0	30	100	
1,4-Dichlorobenzene	76.2	78.7	3.2	30.0	30	100	
Benzyl alcohol	62.2	64.2	3.1	30.0	30	110	
1,2-Dichlorobenzene	77.1	80.4	4.2	30.0	35	100	
2-Methylphenol	64.0	64.5	0.7	30.0	40	110	
bis(2-chloroisopropyl)ether	80.8	88.6	9.2	30.0	25	130	
4-Methylphenol	57.5	59.2	2,8	30.0	30	110	
n-Nitroso-di-n-propylamine	77.3	78.7	1.8	30.0	35	130	
Hexachloroethane	75.1	77.5	3.2	30.0	30	95	
Nitrobenzene	76.1	82.5	8.0	30.0	45	110	
Isophorone	79.2	81.8	3.2	30.0	50	110	
2-Nitrophenol	78.2	83.5	6.6	30.0	40	115	
2,4-Dimethylphenol	76.4	75.9	0.7	30.0	30	110	
bis(2-Chloroethoxy)methane	74.8	78.7	5.0	30.0	45	105	
2,4-Dichlorophenol	76.9	81.0	5.2	30.0	50	105	
Benzoic Acid	30.6	26.1	15.7	30.0	0	125	
1,2,4-Trichlorobenzene	74.1	80.8	8.6	30.0	35	105	
Naphthalene	74.3	81.5	9.3	30.0	40	100	
4-Chloroaniline	56.6	46.8	19.0	30.0	15	110	
Hexachlorobutadiene	77.2	83.1	7.4	30.0	25	105	
4-Chloro-3-methylphenol	74.5	78.6	5.4	30.0	45	110	
2-Methylnaphthalene	76.9	81.9	6.3	30.0	45	105	
Hexachlorocyclopentadiene	48.6	49.7	2.1	30.0	5	67	
2,4,6-Trichlorophenol	83.7	88.9	6.0	30.0	50	115	
2,4,5-Trichlorophenol	81.4	90.6	10.7	30.0	50	110	
2-Chloronaphthalene	80.4	87.4	8.3	30.0	50	105	
2-Nitroaniline	84.2	89.6	6.3	30.0	50	115	
Dimethylphthalate	85.8	90.3	5.1	30.0	25	125	
Acenaphthylene	76.3	80.4	5.2	30.0	50	105	
2,6-Dinitrotoluene	81.7	84.9	3.8	30.0	50	115	
3-Nitroaniline	67.7	68.4	1.1	30.0	20	125	
Acenaphthene	77.6	82.0	5.6	30.0	45	110	

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

MS Lab ID:	5060603MS	MS Sample ID:	5060603MS
MSD Lab ID:	5060603MSD	MSD Sample ID:	5060603MSD
Matrix:	Aqueous	Sample File ID:	BNA11366.D
Date Extracted:	11/21/05	MS File ID:	BNA11367.D
Date Analyzed:	11/25/05	MSD File ID:	BNA11368.D

Compound Name	MS % Rec.	MSD % Rec.	% RPD	RPD Limits	Lower Control Limits	Upper Control Limits	Qualifier		
2,4-Dinitrophenol	71.0	73.5	3.4	30.0	15	140			
Dibenzofuran	81.3	85.6	5.2	30.0	55	105			
4-Nitrophenol	31.4	33.7	6.9	30.0	0	125			
2,4-Dinitrotoluene	79.6	83.6	4.9	30.0	50	120			
Diethylphthalate	83.7	87.6	4.6	30.0	40	120			
Fluorene	78.8	83.0	5.3	30.0	50	110			
4-Chlorophenyl-phenylether	79.7	83.9	5.1	30.0	50	110			
4-Nitroaniline	70.5	72.6	2.9	30.0	35	120			
4,6-Dinitro-2-methylphenol	69.3	76.1	9.4	30.0	40	130			
n-Nitrosodiphenylamine	71.9	76.9	6.8	30.0	50	110			
Azobenzene	73.4	78.8	7.0	30.0	58	102			
4-Bromophenyl-phenylether	73.9	81.0	9.2	30.0	50	115			
Hexachlorobenzene	70.6	74.5	5.4	30.0	50	110			
Pentachlorophenol	85.4	89.3	4.5	30.0	40	115			
Phenanthrene	72.2	77.8	7.4	30.0	50	115			
Anthracene	73.6	79.0	7.1	30.0	55	110			
Di-n-butylphthalate	79.8	85.6	7.0	30.0	55	115			
Fluoranthene	72.8	78.4	7.4	30.0	55	115			
Benzidine	11.8	3.0	120.1	30.0	5	100		**	^
Pyrene	86.4	93.0	7.4	30.0	50	130			
Butylbenzylphthalate	87.1	93.8	7.4	30.0	45	115			
Benzo[a]anthracene	80.2	86.8	8.0	30.0	55	110			
3,3'-Dichlorobenzidine	63.9	63.9	0.0	30.0	20	110			
Chrysene	86.8	93.5	7.5	30.0	55	110			
bis(2-Ethylhexyl)phthalate	86.6	91.7	5.7	30.0	40	125			
Di-n-octylphthalate	65.9	69.5	5.2	30.0	35	135			
Benzo[b]fluoranthene	60.7	65.1	7.1	30.0	45	120			
Benzo[k]fluoranthene	59.9	63.6	5.9	30.0	45	125			
Benzo[a]pyrene	59.1	64.1	8.1	30.0	55	110			
Indeno[1,2,3-cd]pyrene	55.1	59.1	7.1	30.0	45	125			
Dibenz[a,h]anthracene	53.0	56.2	5.9	30.0	40	125			
Benzo[g,h,i]perylene	55.5	59.1	6.3	30.0	40	125			

Qualifiers :

**	% Recovery is Outside QC Limits
^	% RPD is Outside QC Limits

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: FMETL Lab Code 13461

Project: UST Case No.: 50631 Location: BL.63 SDG No.:

Lab File ID (Standard): BNA11395.D Date Analyzed: 12/13/2005

Instrument ID: GC_BNA_2 Time Analyzed: 8:24

		IS1DCB AREA #	RT #	IS2NAP AREA #	RT #	IS3ANE AREA #	RT #
	12 HOUR STD	651871	10.38	2276212	13.31	1469253	17.52
	UPPER LIMIT	1303742	10.88	4552424	13.81	2938506	18.02
	LOWER LIMIT	325936	9.88	1138106	12.81	734627	17.02
	EPA SAMPLE NO.						
01	MB-120705-01	703134	10.38	2625800	13.31	1634711	17.52
02	63B-GROUND W	655912	10.38	2392941	13.31	1450240	17.52

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: UST Case No.: 50631 Location: BL.63 SDG No.:

Lab File ID (Standard): BNA11395.D Date Analyzed: 12/13/05

Instrument ID: GC_BNA_2 Time Analyzed: 08:24

		IS4PNE AREA #	RT #	IS5CYS AREA #	RT #	IS6PRL AREA #	RT #
	12 HOUR STD	2504322	21.11	2355440	27.54	1356311	30.73
	UPPER LIMIT	5008644	20.61	4710880	27.04	2712622	30.23
	LOWER LIMIT	1252161	21.61	1177720	28.04	678156	31.23
	EPA SAMPLE NO.						
01	MB-120705-01	3085364	21.11	2873932	27.52	2279074	30.72
02	63B-GROUND	2626035	21.10	2391480	27.52	2012554	30.73

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\051213\BNA11400.D Vial: 5
Acq On : 13 Dec 2005 12:19 pm Operator: BPatel
Sample : MB-120705-01 Inst : GC/MS Ins
Misc : MB-120705-01 Multiplr: 1.00
MS Integration Params: ODD.P GC Integration Params: rteint2.p
Quant Time: Dec 13 13:02 2005 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	10.38	152	703134	40.00	ug/L	-0.01
19) Naphthalene-d8	13.31	136	2625800	40.00	ug/L	-0.02
34) Acenaphthene-d10	17.52	164	1634711	40.00	ug/L	-0.02
54) Phenanthrene-d10	21.11	188	3085364	40.00	ug/L	-0.02
66) Chrysene-d12	27.52	240	2873932	40.00	ug/L	-0.03
75) Perylene-d12	30.72	264	2279074	40.00	ug/L	-0.02
System Monitoring Compounds						
4) 2-Fluorophenol	7.59	112	1083312	49.12	ug/L	0.00
Spiked Amount 100.000	Range 20 - 110		Recovery = 49.12%			
6) Phenol-d6	9.63	99	912809	29.92	ug/L	-0.02
Spiked Amount 100.000	Range 10 - 115		Recovery = 29.92%			
20) Nitrobenzene-d5	11.64	82	1548058	40.44	ug/L	-0.02
Spiked Amount 50.000	Range 40 - 110		Recovery = 80.88%			
38) 2-Fluorobiphenyl	15.93	172	2205125	41.42	ug/L	-0.01
Spiked Amount 50.000	Range 50 - 110		Recovery = 82.84%			
58) 2,4,6-Tribromophenol	19.44	330	589984	78.84	ug/L	-0.01
Spiked Amount 100.000	Range 40 - 125		Recovery = 78.84%			
69) p-Terphenyl-d14	25.04	244	2801969	46.35	ug/L	0.00
Spiked Amount 50.000	Range 50 - 135		Recovery = 92.70%			

Target Compounds Qvalue

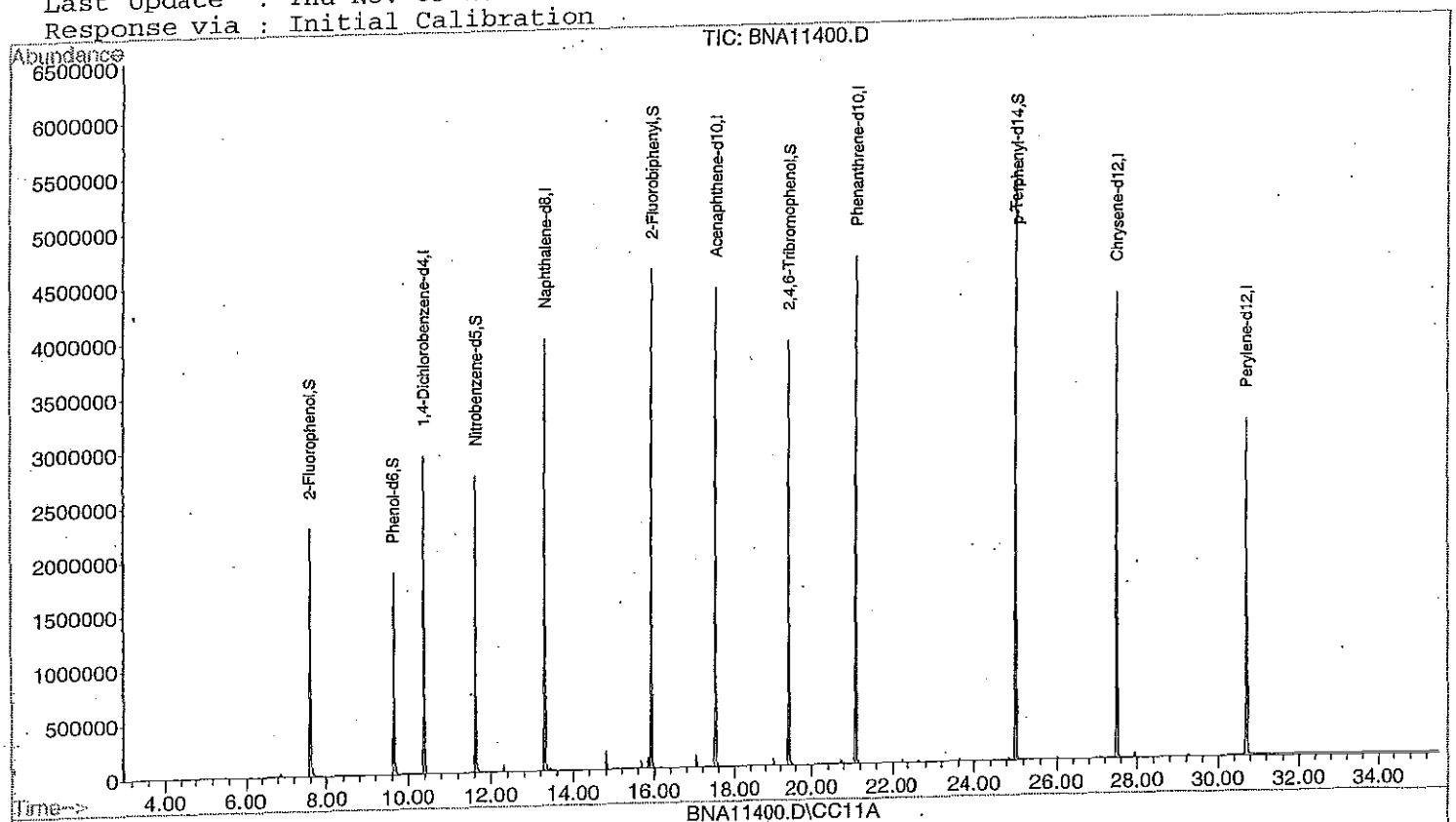
(#) = qualifier out of range (m) = manual integration

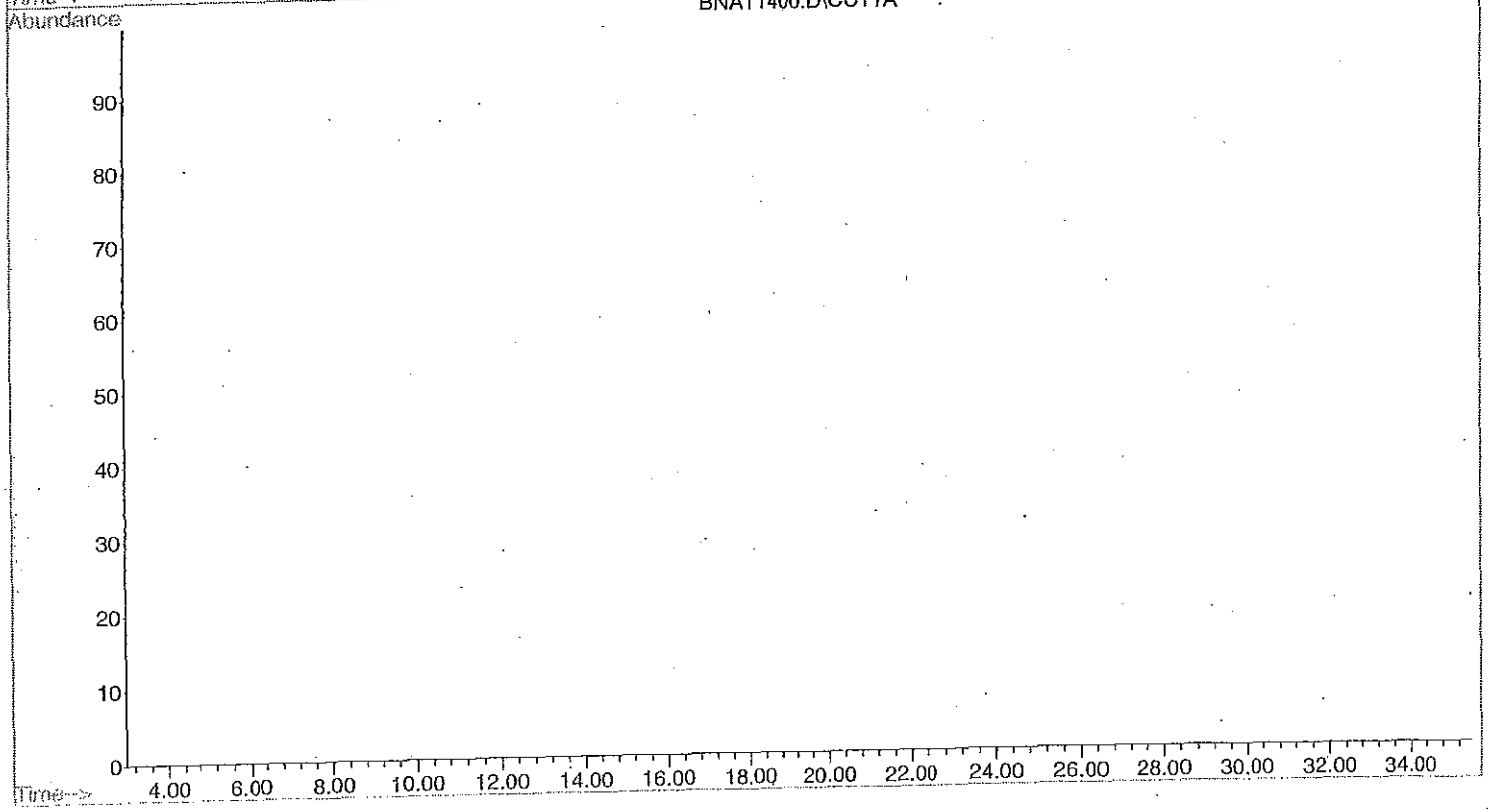
000056

Data File : C:\HPCHEM\1\DATA\051213\BNA11400.D
Acq On : 13 Dec 2005 12:19 pm
Sample : MB-120705-01
Misc : MB-120705-01
MS Integration Params: ODD.P
Quant Time: Dec 13 13:02 2005

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





Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\051213\BNA11406.D Vial: 11
Acq On : 13 Dec 2005 5:04 pm Operator: BPatel
Sample : 5063105 Inst : GC/MS Ins
Misc : 63B-Ground Water Multiplr: 1.00
MS Integration Params: ODD.P GC Integration Params: rteint2.p
Quant Time: Dec 14 7:50 2005 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	10.38	152	655912	40.00	ug/L	-0.02
19) Naphthalene-d8	13.31	136	2392941	40.00	ug/L	-0.02
34) Acenaphthene-d10	17.52	164	1450240	40.00	ug/L	-0.02
54) Phenanthrene-d10	21.10	188	2626035	40.00	ug/L	-0.02
66) Chrysene-d12	27.52	240	2391480	40.00	ug/L	-0.03
75) Perylene-d12	30.73	264	2012554	40.00	ug/L	-0.02
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	11.64	82	1410074	40.42	ug/L	-0.02
Spiked Amount 50.000	Range 40 - 110		Recovery = 80.84%			
38) 2-Fluorobiphenyl	15.93	172	1975257	41.82	ug/L	-0.02
Spiked Amount 50.000	Range 50 - 110		Recovery = 83.64%			
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	25.03	244	1906380	37.89	ug/L	-0.01
Spiked Amount 50.000	Range 50 - 135		Recovery = 75.78%			
Target Compounds						Qvalue
50) Diethylphthalate	18.65	149	90809	1.76	ug/L	97

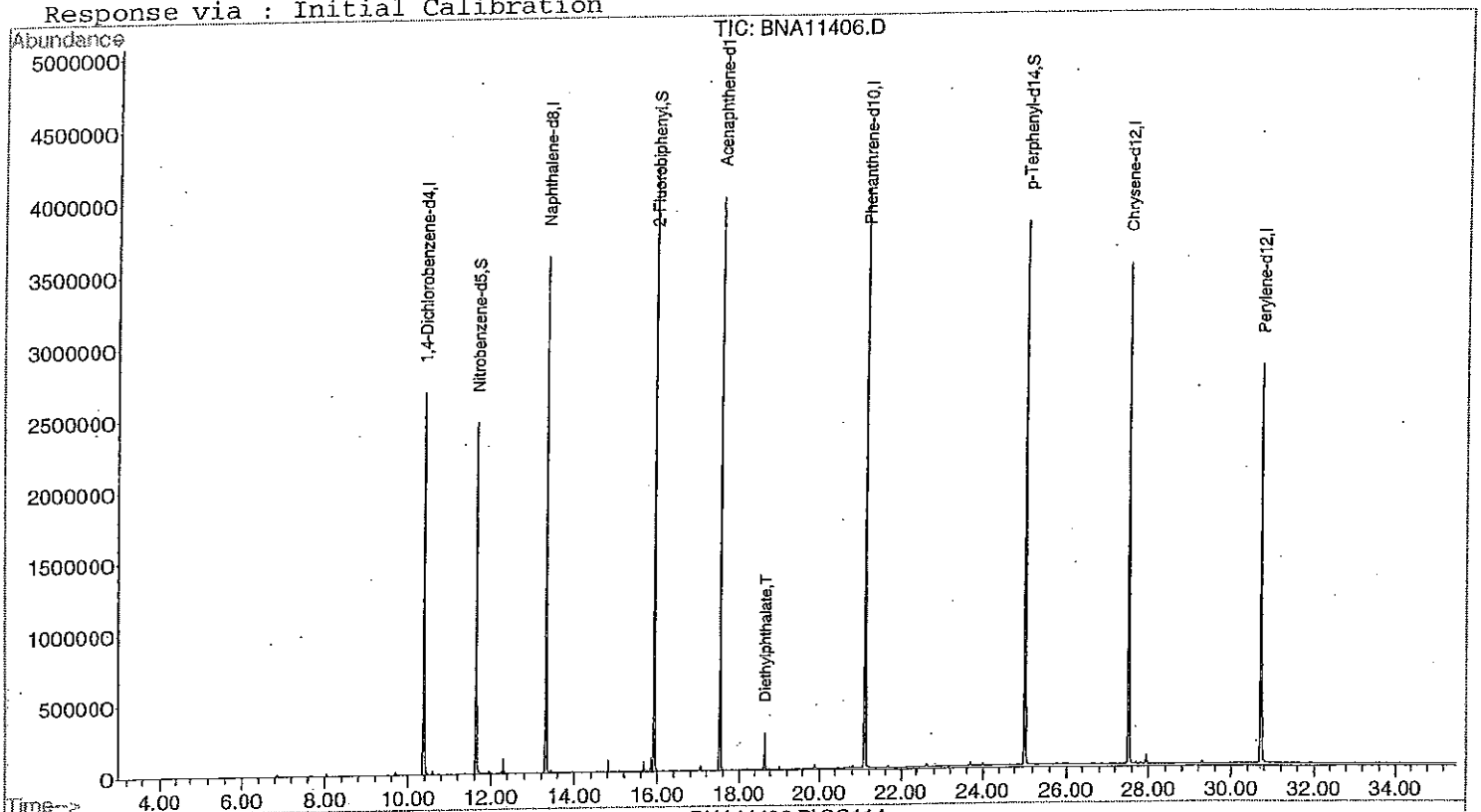
(#) = qualifier out of range (m) = manual integration

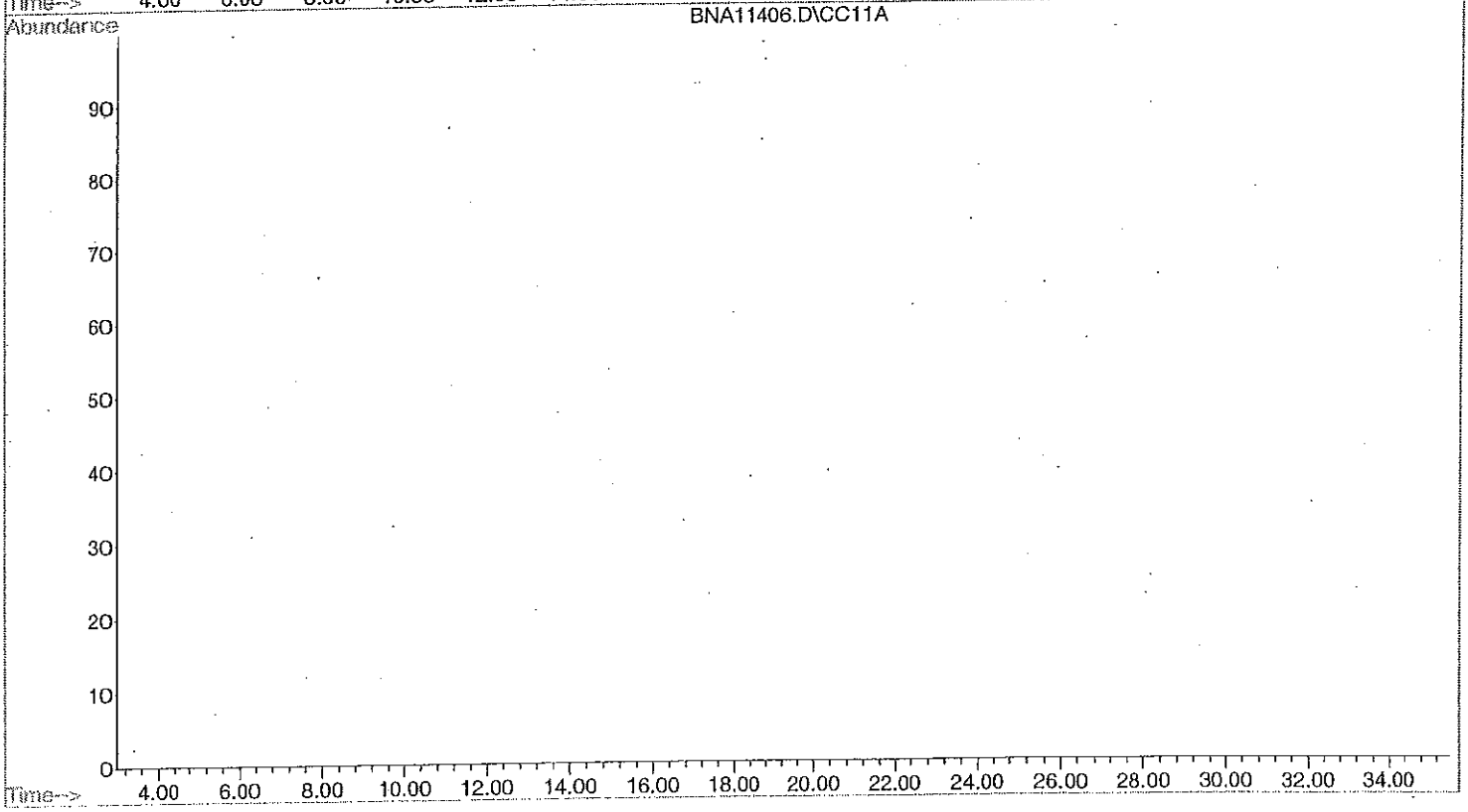
000058

Data File : C:\HPCHEM\1\DATA\051213\BNA11406.D
Acq On : 13 Dec 2005 5:04 pm
Sample : 5063105
Misc : 63B-Ground Water
MS Integration Params: ODD.P
Quant Time: Dec 14 7:50 2005

Vial: 11
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





000059

TPHC

Report of Analysis
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 # :**	50631
		Location :	Bldg.63
		UST Reg. # :	
Analysis :	OQA-QAM-025	**Date Received :**	05-Dec-05
Matrix :	Soil	**Date Extracted :**	08-Dec-05
Inst. ID. :	GC TPHC INST. #1	**Extraction Method :**	Shake
Column Type :	RTX-5, 0.32mm ID, 30M	**Analysis Complete :**	09-Dec-05
Injection Volume :	1uL	**Analyst :**	B.Patel

Lab ID	Field ID	Dilution Factor	Weight (g)	% Solid	MDL (mg/kg)	RL	TPHC Result (mg/kg)
5063101	63B-A	1.00	15.24	87.37	72	375	ND
5063102	63B-B	1.00	15.17	90.02	71	366	ND
5063103	63B-C	1.00	15.24	85.93	74	382	ND
5063104	63B-D	1.00	15.40	86.03	73	377	ND
METHOD BLANK	MB-120805-01	1.00	15.00	100.00	64	333	ND

ND = Not Detected

MDL = Method Detection Limit

RL = Reporting Limits

Note : The TPHC result between the MDL and RL are considered an estimated value

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

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\051208\T018145.D Vial: 1
Acq On : 8 Dec 2005 9:10 am Operator: BPatel
Sample : Tstd050 Inst : GC/MS Ins
Misc : TP120805.01 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	25.236 E3	6.7	95	0.00
2	T	C10	28.359	26.523 E3	6.5	93	0.00
3	T	C12	28.295	26.323 E3	7.0	93	0.00
4	T	C14	28.566	26.580 E3	7.0	92	0.00
5	T	C16	29.246	27.158 E3	7.1	92	0.00
6	T	C18	28.143	26.279 E3	6.6	92	0.00
7	T	C20	28.970	26.923 E3	7.1	92	0.00
8	T	C22	29.821	27.620 E3	7.4	92	0.00
9	T	C24	30.220	27.884 E3	7.7	92	0.00
10	T	C26	31.097	28.251 E3	9.2	91	0.00
11	T	C28	30.765	28.170 E3	8.4	91	0.00
12	T	C30	31.300	28.547 E3	8.8	90	0.00
13	T	C32	31.022	28.083 E3	9.5	89	0.00
14	T	C34	31.496	27.654 E3	12.2	88	0.00
15	T	C36	33.639	27.326 E3	18.8	86	-0.01
16	T	C38	30.799	25.441 E3	17.4	82	-0.02
17	T	C40	30.077	22.879 E3	23.9	74	-0.03
18	T	C42	28.308	18.625 E3	34.2#	64	-0.06
19	T	Pristane	29.297	27.378 E3	6.6	93	0.00
20	T	Phytane	30.249	28.107 E3	7.1	93	0.00
21	T	TPHC (Manual Integration)	35.921	30.139 E3	16.1	89	0.00
22	H	TPHC (Total)	30.816	26.920 E3	12.6	88	0.00
23	S	Chlorobenzene (SURR.)	20.465	19.617 E3	4.1	93	0.00
24	S	O-Terphenyl (SURR.)	33.111	31.373 E3	5.2	94	0.00

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\051208\T018145.D Vial: 1
Acq On : 8 Dec 2005 9:10 am Operator: BPatel
Sample : Tstd050 Inst : GC/MS Ins
Misc : TP120805.01 Multiplr: 1.00
IntFile : EVENTSBP.E
Quant Time: Dec 8 11:04 2005 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	980841	47.324 mg/L
	Spiked Amount 10.000		Recovery =	473.24%
24)	S O-Terphenyl (SURR.)	13.00	1568641	47.489 mg/L
	Spiked Amount 10.000		Recovery =	474.89%
	Target Compounds			
1)	T C8	4.75	1261788	46.668 mg/L
2)	T C10	7.73	1326152	46.763 mg/L
3)	T C12	9.36	1316175	46.516 mg/L
4)	T C14	10.54	1328988	46.524 mg/L
5)	T C16	11.55	1357910	46.430 mg/L
6)	T C18	12.01	1313965	46.689 mg/L
7)	T C20	12.44	1346128	46.466 mg/L
8)	T C22	13.26	1380982	46.308 mg/L
9)	T C24	14.00	1394219	46.136 mg/L
10)	T C26	14.69	1412533	45.423 mg/L
11)	T C28	15.32	1408517	45.783 mg/L
12)	T C30	15.95	1427337	45.602 mg/L
13)	T C32	16.67	1404153	45.263 mg/L
14)	T C34	17.58	1382700	43.901 mg/L
15)	T C36	18.79	1366320	40.617 mg/L
16)	T C38	20.48	1272048	41.302 mg/L
17)	T C40	22.86	1143930	38.034 mg/L
18)	T C42	26.26	931262	32.897 mg/L
19)	T Pristane	12.03	1368912	46.725 mg/L
20)	T Phytane	12.49	1405361	46.460 mg/L
21)	T TPHC (Manual Integration)	13.00	30139109	839.038 mg/L m
22)	H TPHC (Total)	12.00	26919790	873.570 mg/L

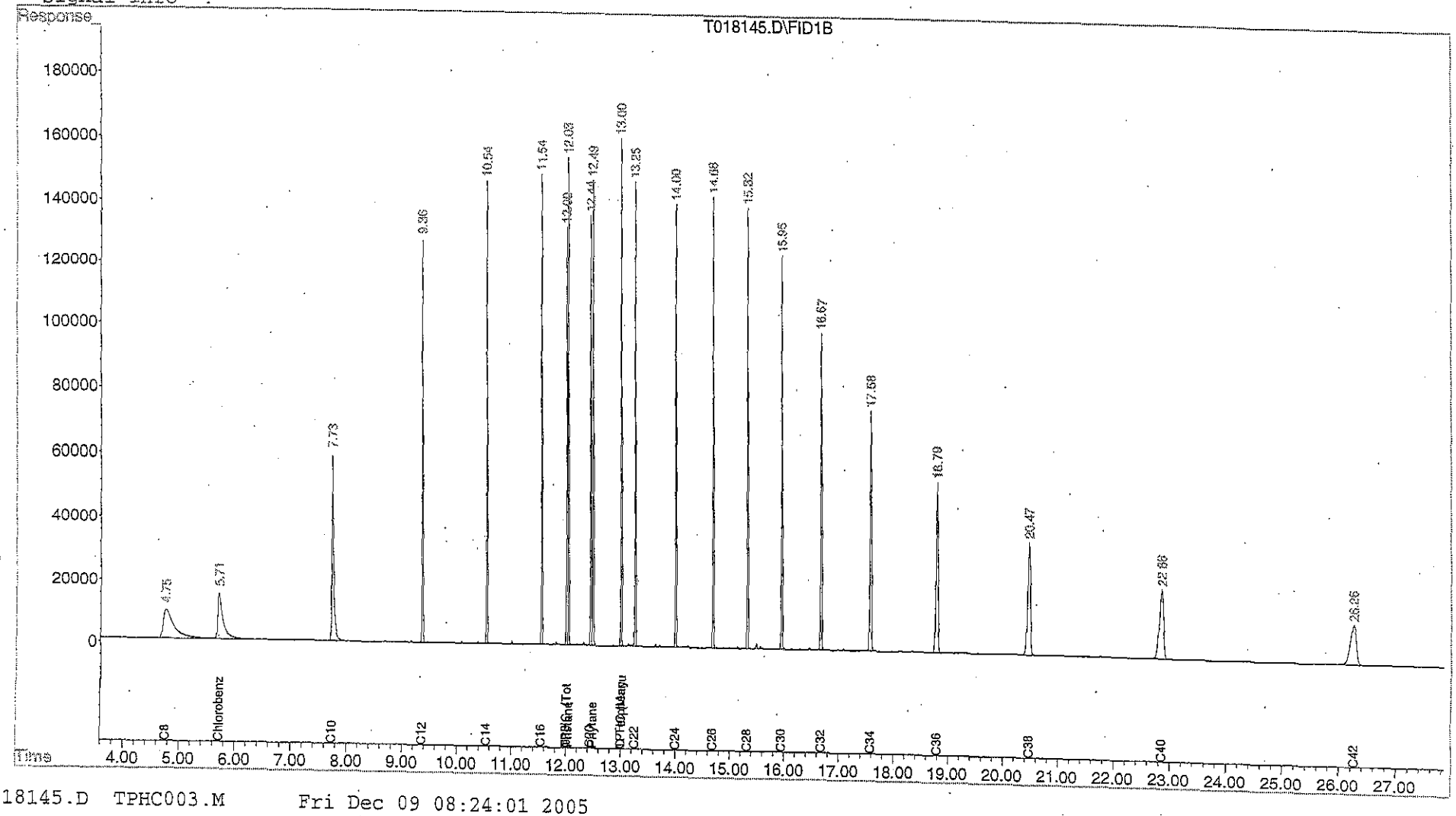
(f)=RT Delta > 1/2 Window (m)=manual int.

Data File : C:\HPCHEM\1\DATA\051208\T018145.D
Acq On : 8 Dec 2005 9:10 am
Sample : Tstd050
Misc : TP120805.01
IntFile : EVENTSBP.E
Quant Time: Dec 8 11:04 2005 Quant Results File: TPHC003.RES

Vial: 1
Operator: BPatel
Inst : GC/MS Ins
Multiplr: 1.00

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 :



990065

T018145.D TPHC003.M Fri Dec 09 08:24:01 2005

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\051208\T018156.D Vial: 12
Acq On : 8 Dec 2005 3:56 pm Operator: BPatel
Sample : Tstd050 Inst : GC/MS Ins
Misc : TP120805.01 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	28.314 E3	-4.7	106	0.00
2	T	C10	28.359	30.366 E3	-7.1	107	0.00
3	T	C12	28.295	30.417 E3	-7.5	107	0.00
4	T	C14	28.566	30.710 E3	-7.5	107	0.00
5	T	C16	29.246	31.428 E3	-7.5	107	0.00
6	T	C18	28.143	30.363 E3	-7.9	107	0.00
7	T	C20	28.970	31.172 E3	-7.6	107	0.00
8	T	C22	29.821	32.034 E3	-7.4	107	0.00
9	T	C24	30.220	32.504 E3	-7.6	107	0.00
10	T	C26	31.097	32.859 E3	-5.7	106	0.00
11	T	C28	30.765	32.927 E3	-7.0	106	0.00
12	T	C30	31.300	33.463 E3	-6.9	105	0.00
13	T	C32	31.022	33.092 E3	-6.7	105	0.00
14	T	C34	31.496	32.858 E3	-4.3	104	0.00
15	T	C36	33.639	33.397 E3	0.7	105	0.00
16	T	C38	30.799	32.208 E3	-4.6	103	0.00
17	T	C40	30.077	31.286 E3	-4.0	101	0.00
18	T	C42	28.308	28.612 E3	-1.1	99	-0.02
19	T	Pristane	29.297	31.503 E3	-7.5	107	0.00
20	T	Phytane	30.249	32.172 E3	-6.4	107	0.00
21	T	TPHC (Manual Integration)	35.921	35.483 E3	1.2	105	0.00
22	H	TPHC (Total)	30.816	31.842 E3	-3.3	105	0.00
23	S	Chlorobenzene (SURR.)	20.465	22.115 E3	-8.1	105	0.00
24	S	O-Terphenyl (SURR.)	33.111	35.778 E3	-8.1	107	0.00

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\051208\T018156.D Vial: 12
Acq On : 8 Dec 2005 3:56 pm Operator: BPatel
Sample : Tstd050 Inst : GC/MS Ins
Misc : TP120805.01 Multiplr: 1.00
IntFile : EVENTSBP.E
Quant Time: Dec 9 8:21 2005 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	1105755	53.355 mg/L
	Spiked Amount 10.000		Recovery =	533.55%
24)	S O-Terphenyl (SURR.)	13.00	1788876	54.181 mg/L
	Spiked Amount 10.000		Recovery =	541.81%
	Target Compounds			
1)	T C8	4.77	1415688	52.360 mg/L
2)	T C10	7.74	1518297	53.539 mg/L
3)	T C12	9.36	1520867	53.751 mg/L
4)	T C14	10.54	1535511	53.754 mg/L
5)	T C16	11.55	1571390	53.730 mg/L
6)	T C18	12.01	1518135	53.944 mg/L
7)	T C20	12.45	1558620	53.801 mg/L
8)	T C22	13.26	1601704	53.710 mg/L
9)	T C24	14.00	1625219	53.780 mg/L
10)	T C26	14.69	1642925	52.831 mg/L
11)	T C28	15.32	1646348	53.514 mg/L
12)	T C30	15.95	1673151	53.456 mg/L
13)	T C32	16.68	1654591	53.336 mg/L
14)	T C34	17.59	1642924	52.163 mg/L
15)	T C36	18.80	1669844	49.640 mg/L
16)	T C38	20.49	1610379	52.287 mg/L
17)	T C40	22.89	1564304	52.011 mg/L
18)	T C42	26.31	1430615	50.537 mg/L
19)	T Pristane	12.04	1575172	53.766 mg/L
20)	T Phytane	12.49	1608605	53.179 mg/L
21)	T TPHC (Manual Integration)	13.00	35482617	987.795 mg/L m
22)	H TPHC (Total)	12.00	31842412	1033.314 mg/L

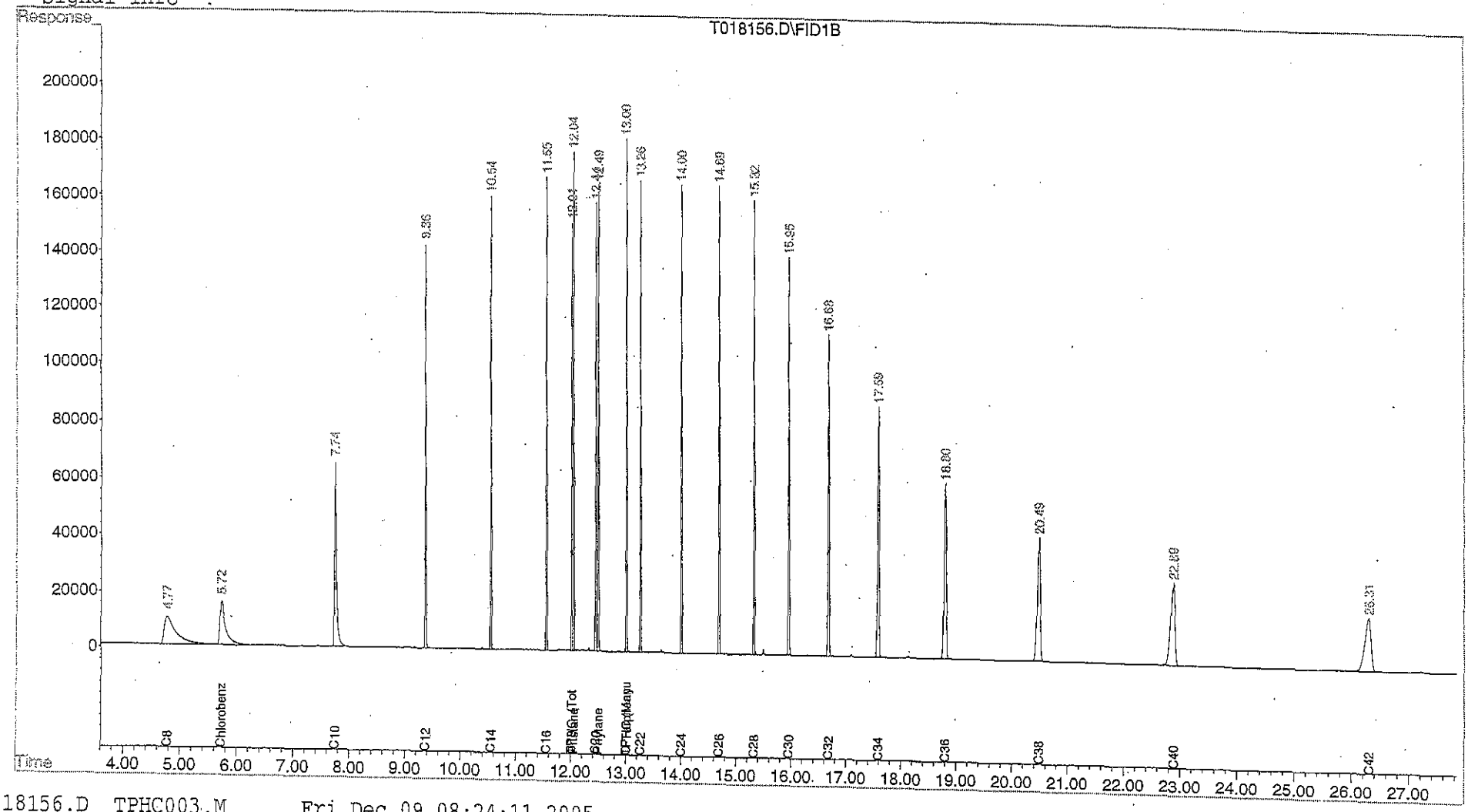
(f)=RT Delta > 1/2 Window (m)=manual int.

Data File : C:\HPCHEM\1\DATA\051208\T018156.D
Acq On : 8 Dec 2005 3:56 pm
Sample : Tstd050
Misc : TP120805.01
IntFile : EVENTSBP.E
Quant Time: Dec 9 8:21 2005 Quant Results File: TPHC003.RES

Vial: 12
Operator: BPatel
Inst : GC/MS Ins
Multiplr: 1.00

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 :



890000

T018156.D TPHC003.M Fri Dec 09 08:24:11 2005

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\051208\T018159.D Vial: 12
Acq On : 8 Dec 2005 5:46 pm Operator: BPatel
Sample : Tstd050 Inst : GC/MS Ins
Misc : TP120805.01 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	27.762 E3	-2.7	104	0.00
2	T	C10	28.359	30.038 E3	-5.9	106	0.00
3	T	C12	28.295	30.036 E3	-6.2	106	0.00
4	T	C14	28.566	30.205 E3	-5.7	105	0.00
5	T	C16	29.246	30.865 E3	-5.5	105	0.00
6	T	C18	28.143	29.784 E3	-5.8	105	0.00
7	T	C20	28.970	30.558 E3	-5.5	105	0.00
8	T	C22	29.821	31.338 E3	-5.1	104	0.00
9	T	C24	30.220	31.791 E3	-5.2	104	0.00
10	T	C26	31.097	32.114 E3	-3.3	104	0.00
11	T	C28	30.765	32.146 E3	-4.5	103	0.00
12	T	C30	31.300	32.603 E3	-4.2	103	0.00
13	T	C32	31.022	32.222 E3	-3.9	102	0.00
14	T	C34	31.496	31.976 E3	-1.5	102	0.00
15	T	C36	33.639	32.443 E3	3.6	102	0.00
16	T	C38	30.799	31.322 E3	-1.7	100	0.00
17	T	C40	30.077	30.473 E3	-1.3	99	-0.02
18	T	C42	28.308	27.967 E3	1.2	96	-0.03
19	T	Pristane	29.297	30.875 E3	-5.4	105	0.00
20	T	Phytane	30.249	31.542 E3	-4.3	105	0.00
21	T	TPHC (Manual Integration)	35.921	34.744 E3	3.3	102	0.00
22	H	TPHC (Total)	30.816	31.192 E3	-1.2	102	0.00
23	S	Chlorobenzene (SURR.)	20.465	21.877 E3	-6.9	104	0.00
24	S	O-Terphenyl (SURR.)	33.111	35.079 E3	-5.9	105	0.00

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

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\051208\T018159.D Vial: 12
Acq On : 8 Dec 2005 5:46 pm Operator: BPatel
Sample : Tstd050 Inst : GC/MS Ins
Misc : TP120805.01 Multiplr: 1.00
IntFile : EVENTSBP.E
Quant Time: Dec 9 8:22 2005 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	1093867	52.781 mg/L
Spiked Amount 10.000		Recovery =	527.81%
24) S O-Terphenyl (SURR.)	13.00	1753934	53.119 mg/L
Spiked Amount 10.000		Recovery =	531.19%
Target Compounds			
1) T C8	4.76	1388101	51.340 mg/L
2) T C10	7.74	1501881	52.960 mg/L
3) T C12	9.36	1501816	53.077 mg/L
4) T C14	10.54	1510230	52.869 mg/L
5) T C16	11.55	1543238	52.767 mg/L
6) T C18	12.01	1489181	52.915 mg/L
7) T C20	12.44	1527896	52.740 mg/L
8) T C22	13.26	1566905	52.543 mg/L
9) T C24	14.00	1589546	52.600 mg/L
10) T C26	14.69	1605710	51.635 mg/L
11) T C28	15.32	1607292	52.245 mg/L
12) T C30	15.95	1630157	52.082 mg/L
13) T C32	16.67	1611084	51.933 mg/L
14) T C34	17.58	1598798	50.762 mg/L
15) T C36	18.80	1622156	48.222 mg/L
16) T C38	20.48	1566086	50.849 mg/L
17) T C40	22.87	1523656	50.659 mg/L
18) T C42	26.29	1398370	49.398 mg/L
19) T Pristane	12.04	1543762	52.693 mg/L
20) T Phytane	12.49	1577109	52.137 mg/L
21) T TPHC (Manual Integration)	13.00	34743522	967.220 mg/L m
22) H TPHC (Total)	12.00	31192497	1012.223 mg/L

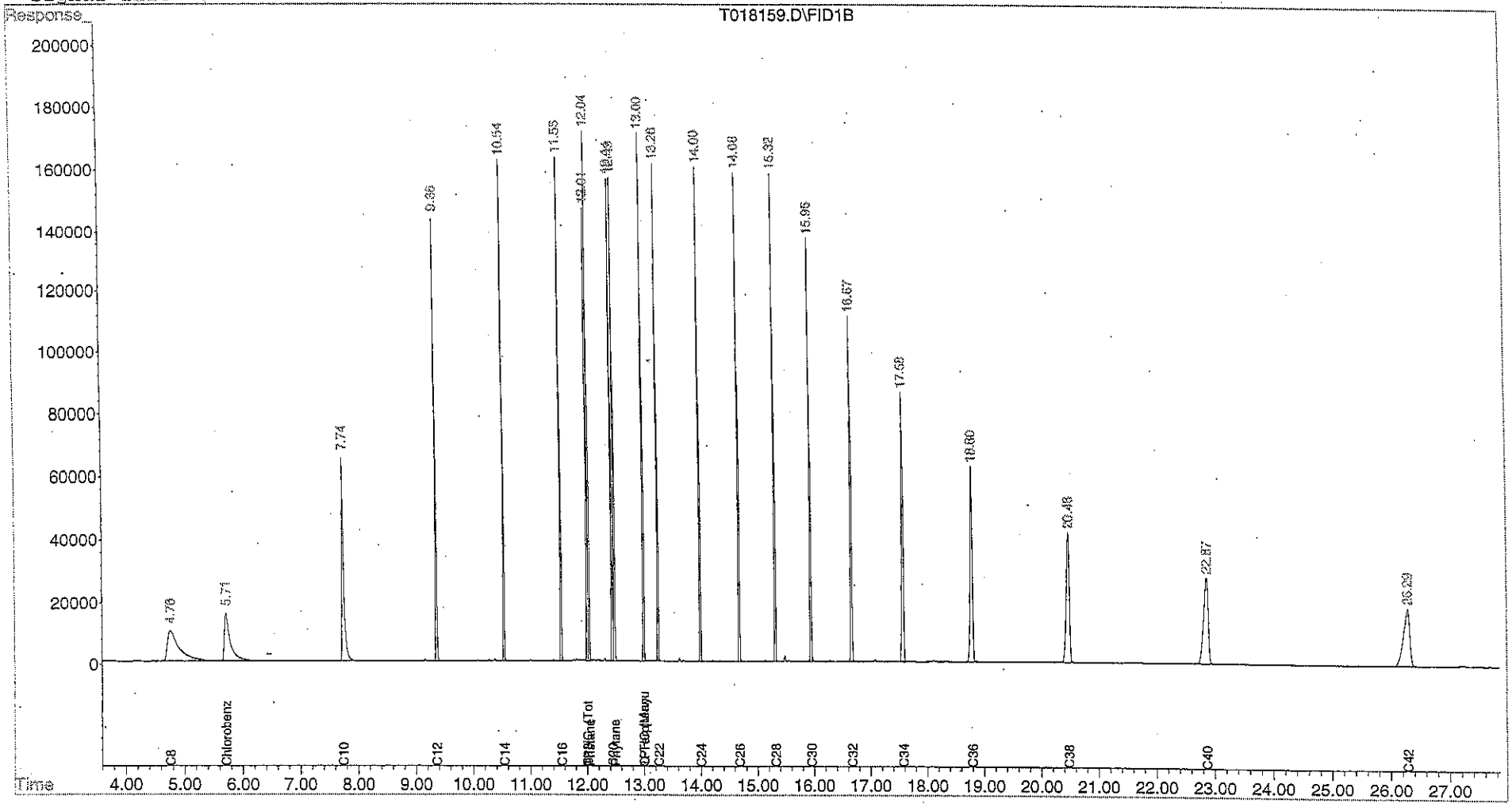
(f)=RT Delta > 1/2 Window (m)=manual int.

Data File : C:\HPCHEM\1\DATA\051208\T018159.D
Acq On : 8 Dec 2005 5:46 pm
Sample : Tstd050
Misc : TP120805.01
IntFile : EVENTSBP.E
Quant Time: Dec 9 8:22 2005 Quant Results File: TPHC003.RES

Vial: 12
Operator: BPatel
Inst : GC/MS Ins
Multiplr: 1.00

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 :



T20000

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

Client :	U.S. Army	**Project # :**	50631
	DPW. SELFM-PW-EV	**Location :**	Bldg.63
	Bldg. 173	**UST Reg. # :**	
	Ft. Monmouth, NJ 07703		
Analysis:	OQA-QAM-025	**Date Received :**	5-Dec-05
Matrix:	Soil	**Date Extracted :**	8-Dec-05
Inst. ID.	GC TPHC INST. #1	**Extraction Method :**	Shake
Column Type :	RTX-5, 0.32mm ID, 30M	**Analysis Complete :**	9-Dec-05
Injection Volume :	1uL	**Analyst :**	B.Patel

Lab ID	Surrogate Added (ppm)	Chlorobenzene Recovered (ppm)	Chlorobenzene % Recovery	O-Terphenyl Recovered (ppm)	O-Terphenyl % Recovery
5063101	10	8.48	84.8	8.50	85.0
5063102	10	9.10	91.0	9.04	90.4
5063103	10	8.67	86.7	8.65	86.5
5063104	10	9.24	92.4	9.19	91.9
METHOD BLANK	10	8.76	87.6	8.67	86.7

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 # :**	50631
	DPW. SELFM-PW-EV	**Location :**	Bldg.63
	Bldg. 173	**UST Reg. # :**	
	Ft. Monmouth, NJ 07703		
Analysis:	OQA-QAM-025	**Date Received :**	5-Dec-05
Matrix:	Soil	**Date Extracted :**	8-Dec-05
Inst. ID.	GC TPHC INST. #1	**Extraction Method :**	Shake
Column Type :	RTX-5, 0.32mm ID, 30M	**Analysis Complete :**	9-Dec-05
Injection Volume :	1uL	**Analyst :**	B.Patel

Sample	Spike Amount Added (ppm)	Sample Amount (ppm)	Matrix Spike Amount (ppm)	Percent Recovery	QC Limits %
5063101MS	1000	1.19	737.27	73.61	55 - 129
5063101MSD	1000	1.19	820.06	81.89	55 - 129
			RPD	**10.65**	**20.00**

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 # :**	50631
	DPW. SELFM-PW-EV	**Location :**	Bldg.63
	Bldg. 173	**UST Reg. # :**	
	Ft. Monmouth, NJ 07703		
Analysis:	OQA-QAM-025	**Date Received :**	5-Dec-05
Matrix:	Soil	**Date Extracted :**	8-Dec-05
Inst. ID.	GC TPHC INST. #1	**Extraction Method :**	Shake
Column Type :	RTX-5, 0.32mm ID, 30M	**Analysis Complete :**	9-Dec-05
Injection Volume :	1uL	**Analyst :**	B.Patel

Sample	Date Extracted	Spike Amount Added (ppm)	Matrix Spike Amount (ppm)	Percent Recovery	QC Limits %
LCS-120805-01	08-Dec-05	1000	877.22	87.72	55 - 129

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\051208\T018150.D Vial: 6
Acq On : 8 Dec 2005 12:14 pm Operator: BPatel
Sample : MB-120805-01 Inst : GC/MS Ins
Misc : Multiplr: 1.00
IntFile : EVENTSBP.E
Quant Time: Dec 8 13:58 2005 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	182042	8.756	mg/L
	Spiked Amount 10.000	Recovery	=	87.56%	
24)	S O-Terphenyl (SURR.)	12.99	291255	8.674	mg/L
	Spiked Amount 10.000	Recovery	=	86.74%	
	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	600	0.020	mg/L
6)	T C18	11.81	600	0.021	mg/L
7)	T C20	12.51	492	0.017	mg/L
8)	T C22	13.13	616	0.021	mg/L
9)	T C24	14.22	438	0.015	mg/L
10)	T C26	14.69	608	0.020	mg/L
11)	T C28	15.14	611	0.020	mg/L
12)	T C30	15.99	2555	0.082	mg/L
13)	T C32	16.45	706	0.023	mg/L
14)	T C34	17.59	1093	0.035	mg/L
15)	T C36	18.69	3758	0.112	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	600	0.020	mg/L
20)	T Phytane	12.51	492	0.016	mg/L
21)	T TPHC (Manual Integration)	0.00	0	N.D.	mg/L d
22)	H TPHC (Total)	12.00	75767	2.459	mg/L

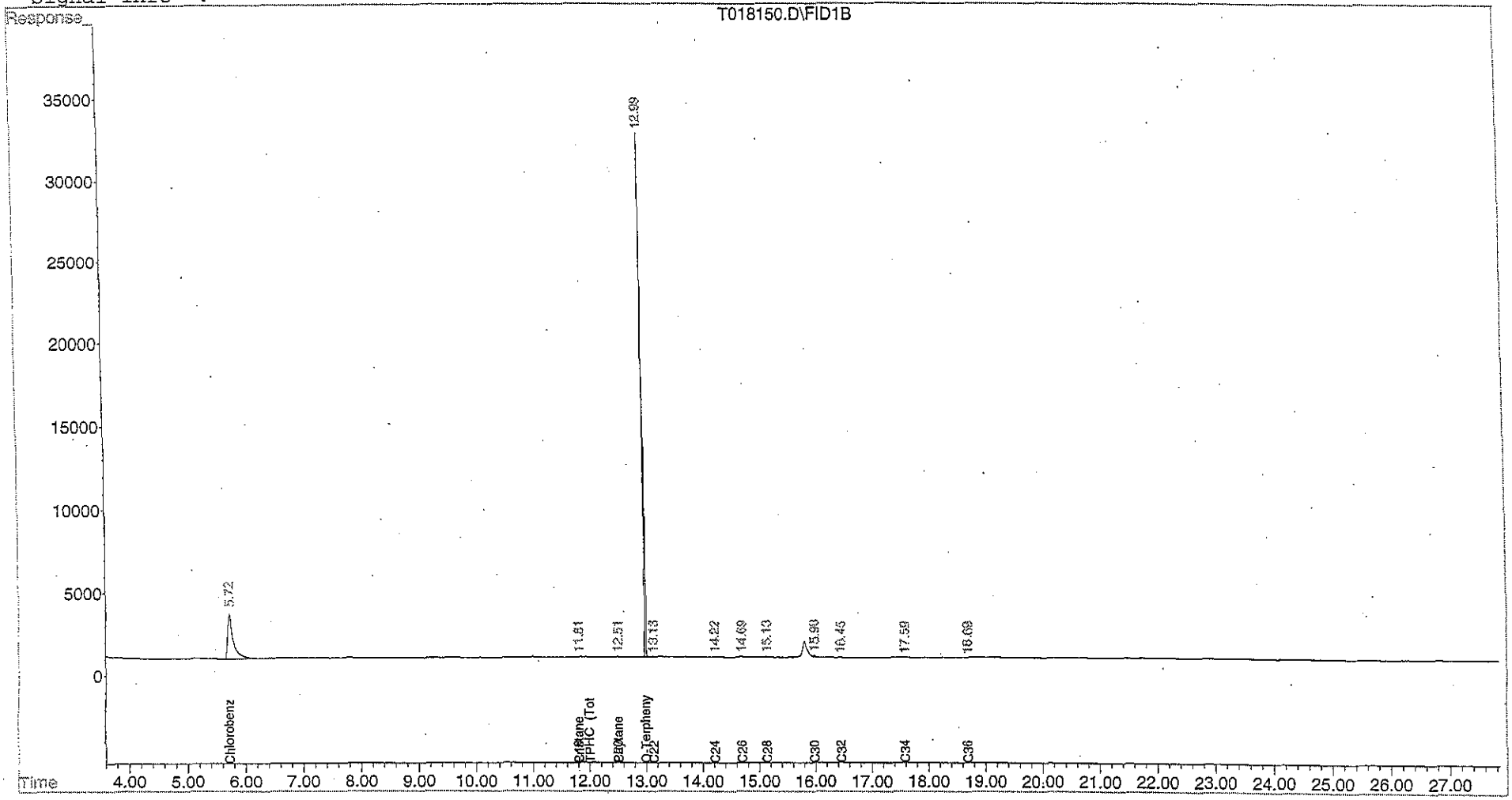
(f)=RT Delta > 1/2 Window (m)=manual int.

Data File : C:\HPCHEM\1\DATA\051208\T018150.D
Acq On : 8 Dec 2005 12:14 pm
Sample : MB-120805-01
Misc :
IntFile : EVENTSBP.E
Quant Time: Dec 8 13:58 2005 Quant Results File: TPHC003.RES

Vial: 6
Operator: BPatel
Inst : GC/MS Ins
Multiplr: 1.00

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 :



920000

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\051208\T018152.D Vial: 8
Acq On : 8 Dec 2005 1:28 pm Operator: BPatel
Sample : 5063101s Inst : GC/MS Ins
Misc : Multiplr: 1.00
IntFile : EVENTSBP.E
Quant Time: Dec 8 13:58 2005 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	176380	8.482 mg/L
Spiked Amount 10.000	Recovery	=	84.82%
24) S O-Terphenyl (SURR.)	12.99	285409	8.497 mg/L
Spiked Amount 10.000	Recovery	=	84.97%
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	2996	0.102 mg/L
6) T C18	11.81	2996	0.106 mg/L
7) T C20	12.51	2379	0.082 mg/L
8) T C22	13.13	1998	0.067 mg/L
9) T C24	14.22	3155	0.104 mg/L
10) T C26	14.69	1709	0.055 mg/L
11) T C28	15.14	1866	0.061 mg/L
12) T C30	15.99	2107	0.067 mg/L
13) T C32	16.45	1922	0.062 mg/L
14) T C34	17.59	1556	0.049 mg/L
15) T C36	19.23f	1242	0.037 mg/L
16) T C38	20.35	1186	0.038 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	2996	0.102 mg/L
20) T Phytane	12.51	2379	0.079 mg/L
21) T TPHC (Manual Integration)	0.00	0	N.D. mg/L d
22) H TPHC (Total)	12.00	36806	1.194 mg/L

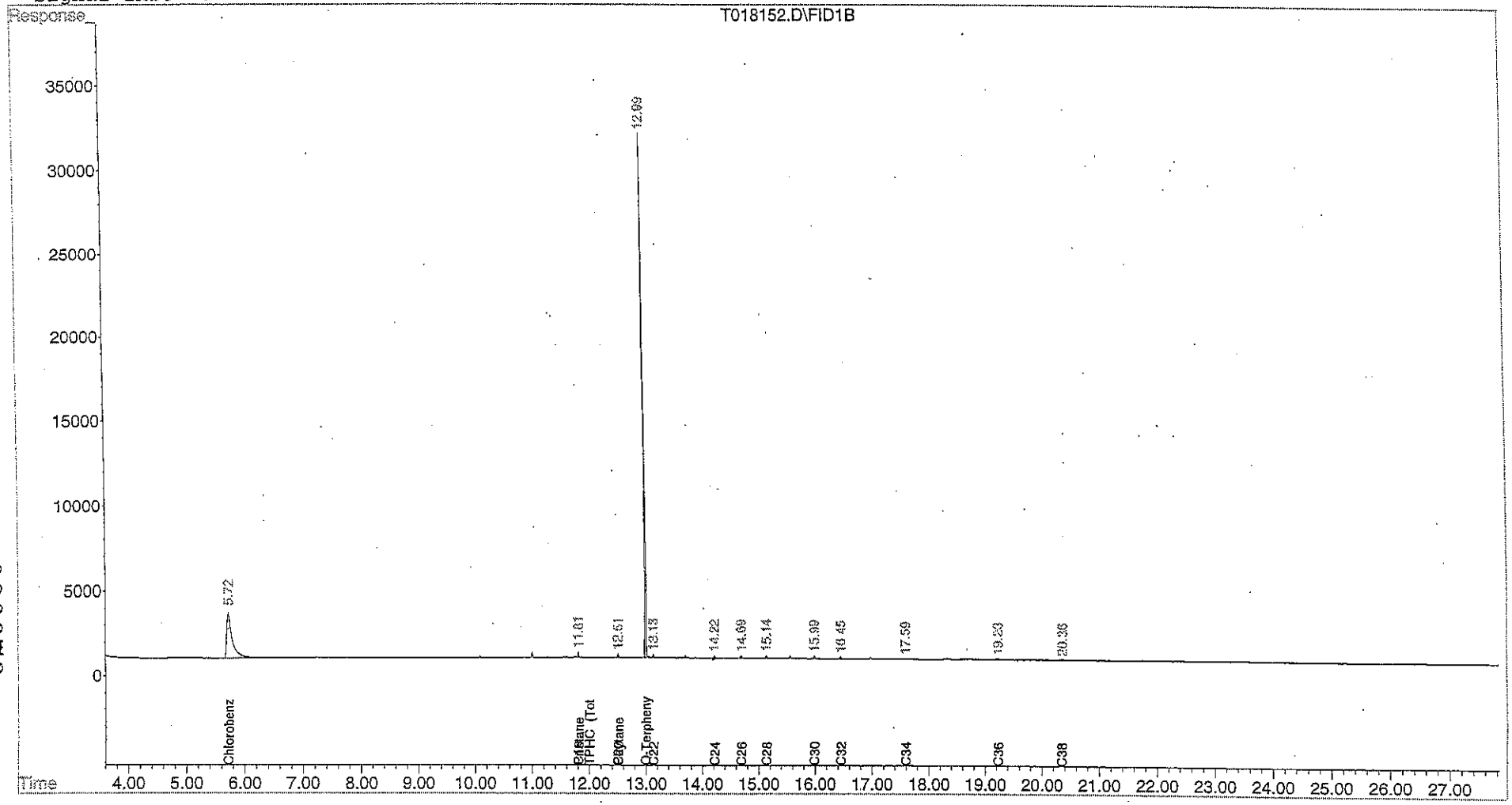
(f)=RT Delta > 1/2 Window (m)=manual int.

Data File : C:\HPCHEM\1\DATA\051208\T018152.D
Acq On : 8 Dec 2005 1:28 pm
Sample : 5063101s
MiSC :
IntFile : EVENTSBP.E
Quant Time: Dec 8 13:58 2005 Quant Results File: TPHC003.RES

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

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 :



8400078

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\051208\T018155.D Vial: 11
Acq On : 8 Dec 2005 3:19 pm Operator: BPatel
Sample : 5063102s Inst : GC/MS Ins
Misc : Multiplr: 1.00
IntFile : EVENTSBP.E
Quant Time: Dec 8 15:49 2005 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	189146	9.099 mg/L
Spiked Amount	10.000	Recovery	=	90.99%
24) S	O-Terphenyl (SURR.)	12.99	303114	9.035 mg/L
Spiked Amount	10.000	Recovery	=	90.35%
	Target Compounds			
1) T	C8	0.00	0	N.D. mg/L
2) T	C10	7.69	334	0.012 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	2972	0.102 mg/L
6) T	C18	11.81	2972	0.106 mg/L
7) T	C20	12.51	2584	0.089 mg/L
8) T	C22	13.13	2481	0.083 mg/L
9) T	C24	14.22	2412	0.080 mg/L
10) T	C26	14.69	2877	0.093 mg/L
11) T	C28	15.14	3275	0.106 mg/L
12) T	C30	15.99	3687	0.118 mg/L
13) T	C32	16.45	3716	0.120 mg/L
14) T	C34	17.59	3693	0.117 mg/L
15) T	C36	19.23f	2232	0.066 mg/L
16) T	C38	20.36	1908	0.062 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	2972	0.101 mg/L
20) T	Phytane	12.51	2584	0.085 mg/L
21) T	TPHC (Manual Integration)	0.00	0	N.D. mg/L d
22) H	TPHC (Total)	12.00	55001	1.785 mg/L

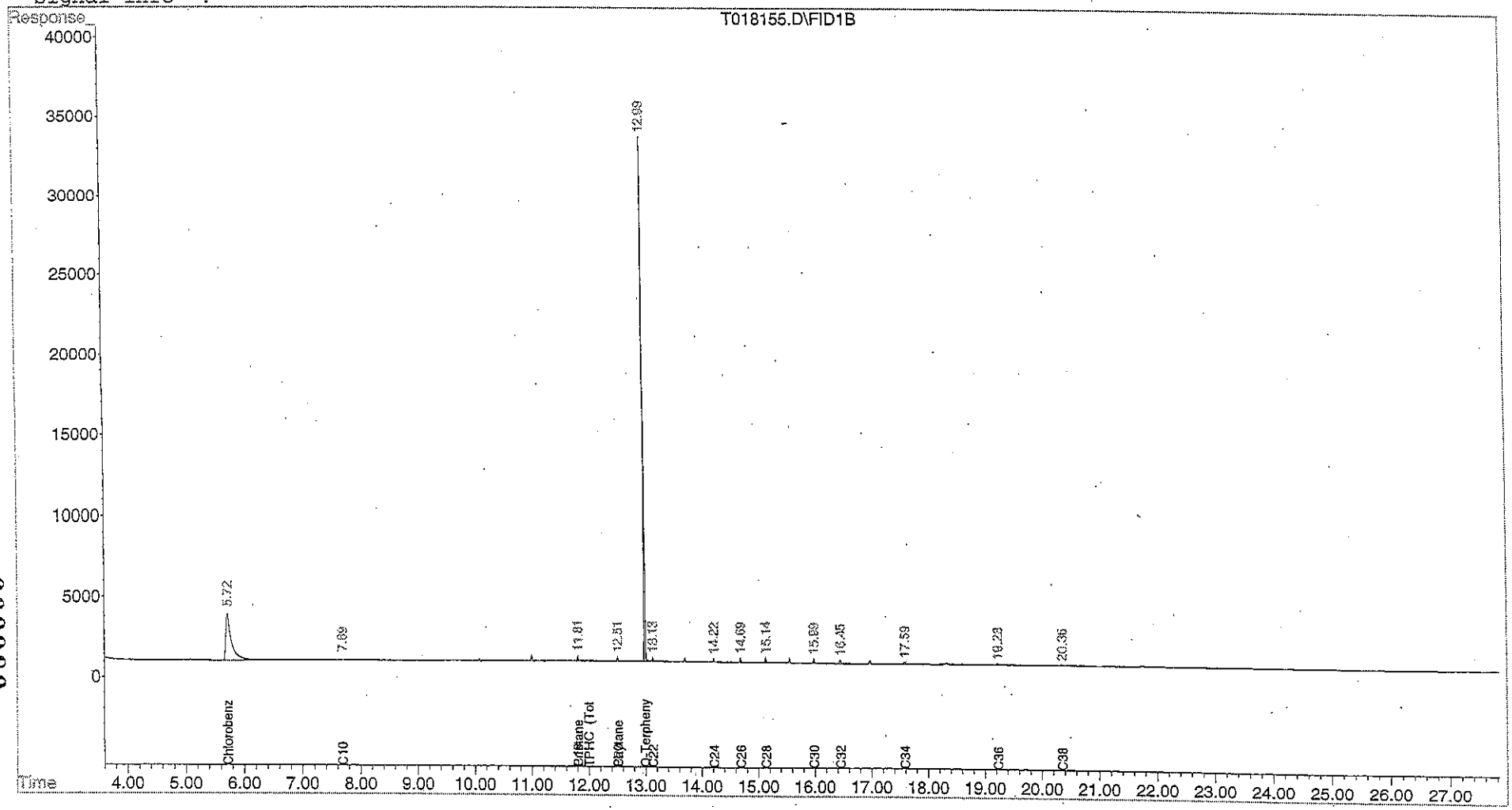
(f)=RT Delta > 1/2 Window (m)=manual int.

Data File : C:\HPCHEM\1\DATA\051208\T018155.D
Acq On : 8 Dec 2005 3:19 pm
Sample : 5063102s
Misc :
IntFile : EVENTSBP.E
Quant Time: Dec 8 15:49 2005 Quant Results File: TPHC003.RES

Vial: 11
Operator: BPatel
Inst : GC/MS Ins
Multiplr: 1.00

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 :



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Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\051208\T018157.D Vial: 13
Acq On : 8 Dec 2005 4:33 pm Operator: BPatel
Sample : 5063103s Inst : GC/MS Ins
Misc : Multiplr: 1.00
IntFile : EVENTSBP.E
Quant Time: Dec 9 8:21 2005 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 :

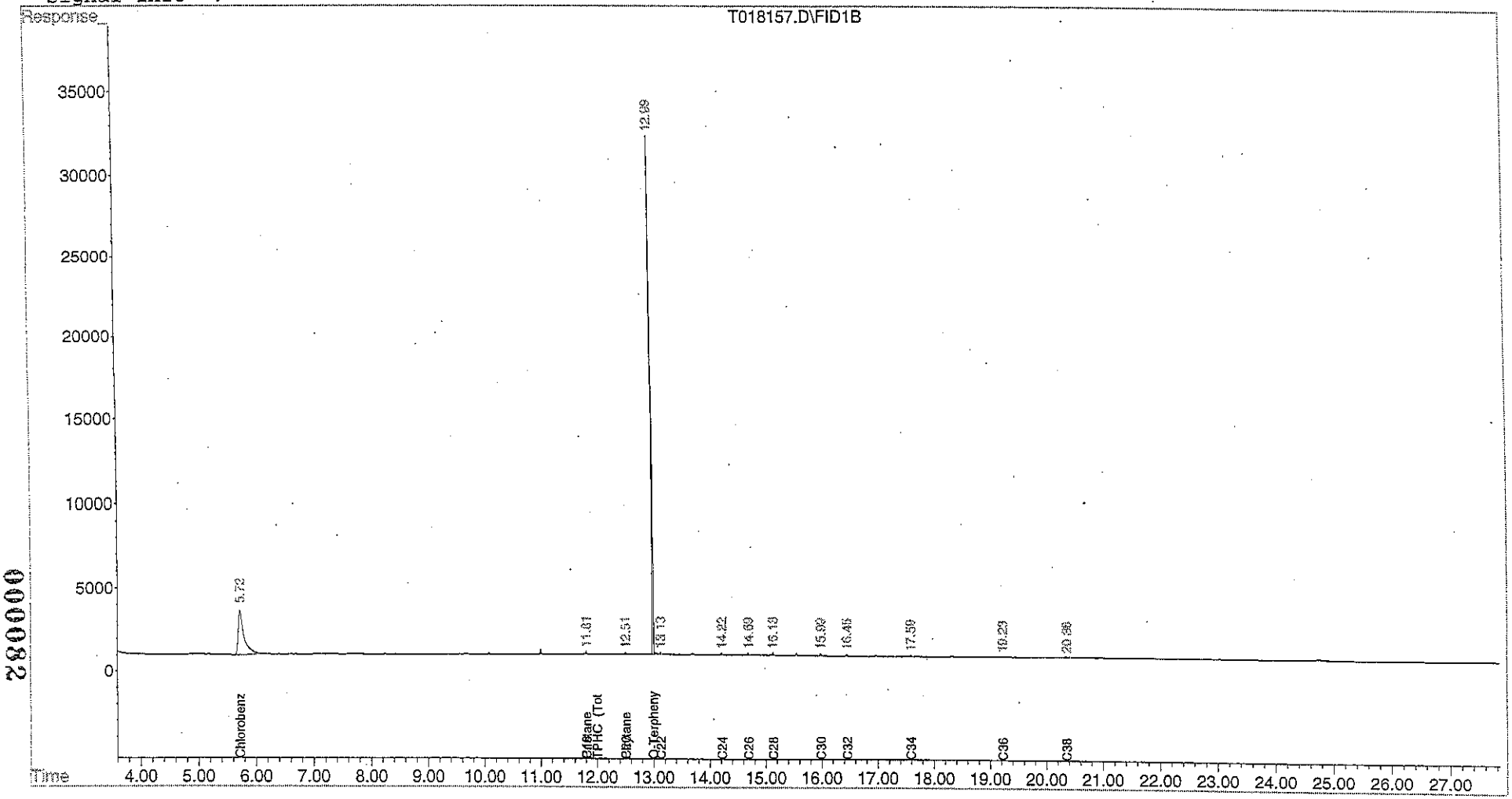
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
23) S Chlorobenzene (SURR.)	5.72	180151	8.665 mg/L
Spiked Amount 10.000	Recovery =		86.65%
24) S O-Terphenyl (SURR.)	12.99	290378	8.648 mg/L
Spiked Amount 10.000	Recovery =		86.48%
Target Compounds			
1) T C8	0.00	0	N.D. mg/L
2) T C10	0.00	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	1404	0.048 mg/L
6) T C18	11.81	1404	0.050 mg/L
7) T C20	12.51	1194	0.041 mg/L
8) T C22	13.13	1097	0.037 mg/L
9) T C24	14.22	1189	0.039 mg/L
10) T C26	14.69	1347	0.043 mg/L
11) T C28	15.14	1642	0.053 mg/L
12) T C30	15.99	1856	0.059 mg/L
13) T C32	16.45	1740	0.056 mg/L
14) T C34	17.59	1895	0.060 mg/L
15) T C36	19.23f	1076	0.032 mg/L
16) T C38	20.36	1315	0.043 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	1404	0.048 mg/L
20) T Phytane	12.51	1194	0.039 mg/L
21) T TPHC (Manual Integration)	0.00	0	N.D. mg/L d
22) H TPHC (Total)	12.00	32777	1.064 mg/L

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File : C:\HPCHEM\1\DATA\051208\T018157.D Vial: 13
Acq On : 8 Dec 2005 4:33 pm Operator: BPatel
Sample : 5063103s Inst : GC/MS Ins
Misc : Multiplr: 1.00
IntFile : EVENTSBP.E
Quant Time: Dec 9 8:21 2005 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 :



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\051208\T018158.D Vial: 14
Acq On : 8 Dec 2005 5:09 pm Operator: BPatel
Sample : 5063104s Inst : GC/MS Ins
Misc : Multiplr: 1.00
IntFile : EVENTSBP.E
Quant Time: Dec 9 8:21 2005 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 :

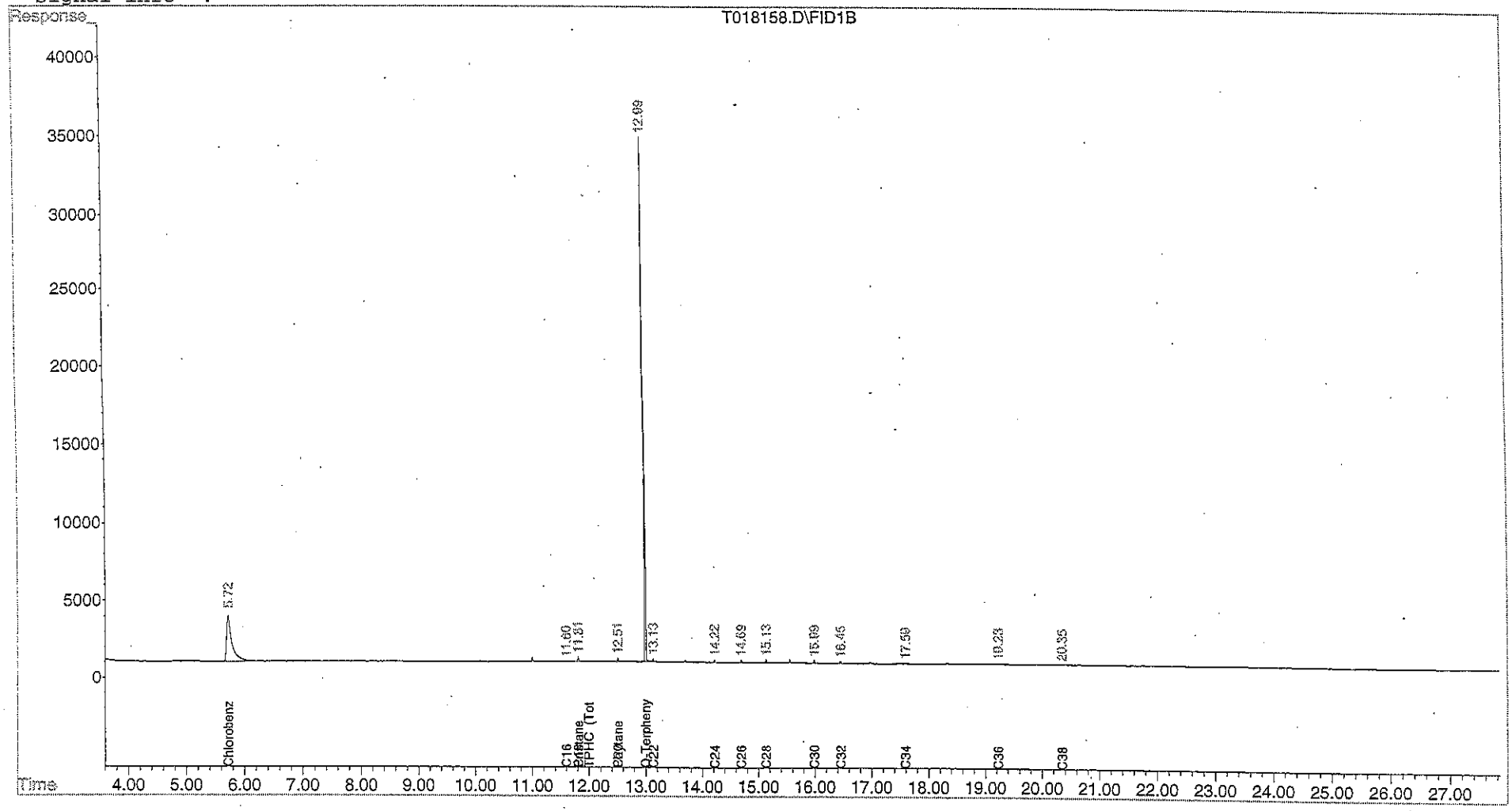
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
23) S Chlorobenzene (SURR.)	5.72	192010	9.237 mg/L
Spiked Amount 10.000	Recovery	=	92.37%
24) S O-Terphenyl (SURR.)	12.99	308321	9.193 mg/L
Spiked Amount 10.000	Recovery	=	91.93%
Target Compounds			
1) T C8	0.00	0	N.D. mg/L
2) T C10	0.00	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	11.60	303	0.010 mg/L
6) T C18	11.81	3130	0.111 mg/L
7) T C20	12.51	2735	0.094 mg/L
8) T C22	13.13	2152	0.072 mg/L
9) T C24	14.22	1755	0.058 mg/L
10) T C26	14.69	1981	0.064 mg/L
11) T C28	15.14	2193	0.071 mg/L
12) T C30	15.99	2419	0.077 mg/L
13) T C32	16.45	2150	0.069 mg/L
14) T C34	17.59	2036	0.065 mg/L
15) T C36	19.23f	1393	0.041 mg/L
16) T C38	20.35	1088	0.035 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	3130	0.107 mg/L
20) T Phytane	12.51	2735	0.090 mg/L
21) T TPHC (Manual Integration)	0.00	0	N.D. mg/L d
22) H TPHC (Total)	12.00	35417	1.149 mg/L

(f)=RT Delta > 1/2 Window (m)=manual int.

Data File : C:\HPCHEM\1\DATA\051208\T018158.D Vial: 14
Acq On : 8 Dec 2005 5:09 pm Operator: BPatel
Sample : 5063104s Inst : GC/MS Ins
Misc : Multiplr: 1.00
IntFile : EVENTSBP.E
Quant Time: Dec 9 8:21 2005 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 :



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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 _____

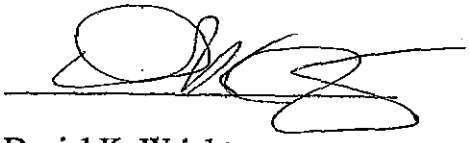
Date: 12/30/05

Laboratory Certification # 13461

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

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.



Daniel K. Wright
Laboratory Manager