



**DEPARTMENT OF THE ARMY**

HEADQUARTERS, U.S. ARMY GARRISON FORT MONMOUTH

FORT MONMOUTH, NEW JERSEY 07703-5101



August 26, 2009

From: Howard M. Syvarth, TVS Hydrogeologist  
To: UST file  
Subject: UST Closure Reports for Building 2238/Tank Registration #: 81515-8

Enclosed are the file review sheets for the closure of the Underground Storage Tank(s) (USTs) located at the above referenced location. After performing a file review to include submittals to NJDEP, I have determined that the tank closure and the subsequent report meet the minimum requirements established by NJDEP and as such are considered to be closed by both NJDEP and the Directorate of Public Works, US Army Garrison Fort Monmouth.

This document serves as the official site closure. All supporting documentation for the closure of this site can be found in the UST folder located in the library archive in Bldg. 173, Fort Monmouth, New Jersey.

Any questions regarding the information found in this or any other UST folder should be directed to:

Howard M. Syvarth  
TECOM-Vinnell Services (TVS)  
Staff Hydrogeologist, UST program  
Directorate of Public Works, Ft. Monmouth, NJ  
Email: [Howard.M.Syvarth@us.army.mil](mailto:Howard.M.Syvarth@us.army.mil)

Sincerely,

Howard M. Syvarth  
TVS Staff Hydrogeologist

Mr. Charles Appleby  
Subsurface Evaluator NJDEP #9974  
Environmental Protection Specialist  
Directorate of Public Works

U.S. ARMY FORT MONMOUTH  
UST DATABASE INPUT FORM

SELEM-EH-EV

CA

DATE: 11/9/94 BUILDING #: 2238  
NJDEPE REG. #: 81515 UST #: 8  
PRODUCT: 2, 6, DIESEL, GASOLINE, OTHER: 3  
STATUS: IN USE, NOT IN USE AS OF 11/9/94  
REASON NOT IN USE: GASIFICATION, LEAKER, DEMO  
GENERAL COMMENTS:

UST PRODUCT REMOVED: DATE: 11/9/94  
CONTRACTOR: SERVAIR P.O.L. T. Smythe  
MANIFEST #: NONE  
COMMENTS: 54 GALS WASTE IN TANK  
125 GALS TO BLDG 2700

NJDEPE DISCHARGE TO ENVIRONMENT NOTIFICATION  
(609) 292-7172:  
CALLER NAME: \_\_\_\_\_  
DATE: \_\_\_\_\_ TIME: \_\_\_\_\_  
NJDEPE CASE NUMBER: \_\_\_\_\_  
COMMENTS: \_\_\_\_\_

ATTACHMENTS (COPIES): HAZ-MAT MANIFEST,  
LAND BAN SERVICE ORDER PURCHASE REQ  
SPILL REPORT  
SUBMITTED BY: \_\_\_\_\_  
SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

# Port Monmouth UST Status Summary Report

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## UST REGISTRATION INFORMATION SUMMARY

*LOCATION:* 2238 *NJDEP REG ID:* 81515-8  
*RESIDENTIAL?* YES

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## UST CONSTRUCTION INFORMATION SUMMARY

*SIZE (GALLONS):* 550 *CONSTRUCTION:* FRP  
*PRODUCT:* #2 FUEL OIL *YEAR INSTALLED:* 1985

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## UST REMOVAL/INVESTIGATION SUMMARY

*REMOVAL DATE:* 12/1/1999 *REMOVAL CONTRACTOR:* TVS  
*SRF SEND DATE:* *TMS:*  
*DICAR NO.* *LEAK DETECT:* N/A

*REMEDIALION COMMENTS:* 11/09/94 SAI removed 125 gallons of oil; left 54 gallons of waste in tank. Residential UST with no DICAR and no contamination; no Closure Report required.

*REGISTRATION COMMENTS:*

*SAS DONE:* *CONSULTANT:* TVS

*MW's NEEDED:* 0 *MONITORING WELLS:* 0

*SUB-SURFACE EVALUATOR:* D. Desai

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## CURRENT UST STATUS

*UST STATUS:* Removed; Report Submitted/Not Nec. *CASE STATUS:* Case Closed  
*SUBMITTAL DATE:* *APPROVAL DATE:*

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# Fort Monmouth Underground Storage Tank Assessment Questionnaire

Site Name: 2238 -

Is the UST Residential: YES

There is / are 1 UST(s) located at this site.

CASE STATUS: *Case Closed*

NFA ISSUED:

File Review Date: 10/22/09

By: Howard Syvertsen

This NJDEP UST Registration # is: *81515 - 8* to \_\_\_\_\_

This UST was *550* Gallons in size, was made of *FRP* and contained *#2 FUEL OIL*.

The UST was installed in *1985* and removed by *TVS* on *12/1/1999*. A

Standard Reporting Form was sent to the NJDEP on \_\_\_\_\_, NJDEP Closure # \_\_\_\_\_

Subsurface Evaluator: *D. Desai* NJDEP # \_\_\_\_\_

A Site Investigation Report was completed by *TVS* and submitted to the NJDEP on \_\_\_\_\_

The Current Status is: *Removed; Report Submitted/Not Nec.*

The Revised Status as of \_\_\_\_\_ completed by \_\_\_\_\_ is:

The Current UST Database Comments are: *11/09/94 SAI removed 125 gallons of oil; left 54 gallons of waste in tank. Residential UST with no DICAR and no contamination; no Closure Report required.*

The Revised Comments as of 10/22/09 completed by Howard Syvertsen is:

No NFA issued, non leaking non regulated residential UST.

Database updated on \_\_\_\_\_ by \_\_\_\_\_

Remedial Phases:  PA  SI  RI  RAW  CEA  NFA

Project transferred to the Fort Monmouth Restoration Program

Project # FTMM- \_\_\_\_\_

# Fort Monmouth Underground Storage Tank Assessment Questionnaire

1. Has the property been or is the property currently the subject of any remediation with NJDEP oversight?  Yes  No

If Yes, provide the following:

Case Number \_\_\_\_\_

Case Lead (US Army) \_\_\_\_\_

Case Manager (NJDEP) \_\_\_\_\_

Case Status Data base " *Case Closed* ", As of this date: \_\_\_\_\_

2. Was a Preliminary Assessment (PA) performed in accordance with N.J.A.C. 7: 26E-3.1?  Yes  No

3. Were any Areas of Concern (AOCs) identified?  Yes  No  
If yes proceed to question 4. If no, proceed to Check List (page 8).

4. Were any potentially contaminated AOCs identified?  Yes  No

List and describe all **potentially contaminated** AOCs.

UST Area  Underground Piping Area  Dispenser Area  UST Fill Area

\_\_\_\_\_  
\_\_\_\_\_

5. List and describe all AOCs subject to the 7:26E Regulations.  
UST Area  Underground Piping Area  Dispenser Area  UST Fill Area

\_\_\_\_\_  
\_\_\_\_\_

6. Was a discharge of a hazardous substance, contaminant or pollutant identified?  Yes  No

If so, was the discharge to: (check all that apply)

Soil  Ground Water  Surface Water  Ecologically Sensitive Area

Other  (specify) \_\_\_\_\_

# Fort Monmouth Underground Storage Tank Assessment Questionnaire

7. How was the discharge identified? (check all that apply)

Sample Analysis [ ]    Olfactory [ ]    Visual [ ]    Record/ Loss of Product [ ]    Field Analysis [ ]  
Other [ ] (specify) \_\_\_\_\_

8. What was the source of the discharge?

UST Area [ ]    Underground Piping Area [ ]    Dispenser Area [ ]    UST Fill Area [ ]  
\_\_\_\_\_

9. Were any of the following conditions present? (Check all that apply.)

Soil Staining [ ]    Distressed or Dead Vegetation [ ]    Product Entering Storm Sewer [ ]  
Product Entering Basement [ ]    Off-site Migration [ ]    Product Observed on Surface Water [ ]  
Other [ ] (specify) \_\_\_\_\_

10. Were samples collected in accordance with the provisions of N.J.A.C. 7:26E and the Department's applicable Field Sampling Procedures Manual?

Yes    [ ] No

TPHC     VOA+10 [ ]    BN+15 [ ]    lead [ ]    PP+40 [ ]

Other: \_\_\_\_\_

11. Were soil samples collected at the appropriate depth as per N.J.A.C. 7:26E

Yes    [ ] No

12. Were samples biased toward the most contaminated areas using field instruments and/or visual and olfactory observations?

Yes    [ ] No

How was this accomplished? \_\_\_\_\_

13. If only TPHC samples taken, were samples >1000mg/kg run for VOA+10?

[ ] Yes     No

*all samples were < 1,000 ppm*

14. Was the vertical and horizontal extent of soil contamination delineated prior to remediation?

[ ] Yes     No

Explain: \_\_\_\_\_

*non leaking UST, no remediation needed.*

# Fort Monmouth Underground Storage Tank Assessment Questionnaire

15. Fully describe the method of remediation?

Source Removal and Disposal [ ] Free Product removal by Vacuum Truck [ ]

Other: \_\_\_\_\_

16. If excavation was performed, what was the depth of the bottom of the excavation? ~7 feet.

17. What is the approximate depth to saturated zone (seasonally high water table)? \_\_\_\_\_ feet.

How was this determined? Observed Measurement [ ] Monitoring Well [ ]

Other: \_\_\_\_\_

18. Is the Site Tidally Impacted? [ ] Yes [ ] No

19. What is the percentage of silt/clay in the soil between the contaminant and the saturated zone?

\_\_\_\_\_. How was this determined? \_\_\_\_\_

\_\_\_\_\_  Not Available

20. Was ground water present in the excavation? [ ] Yes  No

If yes, was there a sheen observed on ground water? [ ] Yes [ ] No

21. Are there any Public Supply Wells within 2,000 feet of confirmed soil contamination? [ ] Yes [ ] No

How was this determined? Well Search : [ ] \_\_\_\_\_

22. Was contaminated soil removed from the site? [ ] Yes  No

How much soil was removed? \_\_\_\_\_ tons/cubic yards (circle one)

To what facility was the soil taken? \_\_\_\_\_

Date taken: \_\_\_\_\_

23. Were the analytical results for all soil post excavation/remediation samples below the Department's ~~June~~ Sept. 2008 residential soil cleanup criteria?  Yes [ ] No

# Fort Monmouth Underground Storage Tank Assessment Questionnaire

**If No, describe in detail in Comments Page 6**

22. Was this an investigation pertaining to a non-regulated heating oil tank?  Yes  No  
**Fort Monmouth Database : : YES**  
**If yes, complete the following, If no go to 23**

Do on-site structures have a basement/crawl space?  Yes  No

Was staining observed on the basement/crawl space walls or floor?  Yes  No  NA

Were petroleum odors observed in the basement/crawl space?  Yes  No  NA

Is a sump present in the basement/crawl space?  Yes  No  NA

**If yes, please indicate location on site map.**

Was water observed in the sump?  Yes  No  NA

Was a sheen observed on the water in sump?  Yes  No  NA

If there was no water in the sump was the base of the sump investigated for a petroleum discharge?  Yes  No  NA

If the sump was investigated, was a discharge observed?  Yes  No  NA

23. Is a regulated underground storage tank the subject of the remediation?  Yes  No

**If yes, complete the following, If no, go to 24**

Was a closure approval or 14 day notification obtained prior to the closure of the tank?  Yes  No

List Closure Approval/Notification Numbers **NJDEP Closure #** \_\_\_\_\_

Was the closure or any remediation performed by an individual and firm certified in closure and subsurface evaluation?  Yes  No

**Subsurface Evaluator: D. Desai** \_\_\_\_\_

Individual certification number: \_\_\_\_\_

Firm certification number: \_\_\_\_\_

Was an Underground Storage Tank Facility Certification Questionnaire completed and submitted "delisting" the subject tanks?  Yes  No

24. Was a Baseline Ecological Evaluation conducted pursuant to N.J.A.C 7:26E?  Yes  No

If No, was the BEE a regulatory requirement at the time?  Yes  NA  
 (UST removed prior to 1997 or the UST is Residential?)

If Yes, is there a contaminant of concern present?  Yes  No



# Fort Monmouth Underground Storage Tank Assessment Questionnaire

- Are there environmentally sensitive natural resources within or surrounding the property?  Yes  No
- Are there potential contaminant migration pathways present?  Yes  No
- Were potential ecological impacts identified?  Yes  No
- Is a BEE planned to be completed for this site?  Yes  No
25. Was the site restored in accordance to N. J.A.C. 7:26E-6.4(b)?  Yes  No
26. Was the remedial investigation/action report prepared in accordance with N.J.A.C. 7:26E?  Yes  No
27. Remediation completed date: 12/11/99
28. Are there currently, or have there ever been, any Deed Notices or Declarations of Environmental Restriction pursuant to N.J.S.A. 58:10B-1 et seq. and N.J.A.C. 7:26E-1 et seq. for the Site?  Yes  No  
**If yes, Attach a copy of the Deed Notice or Declaration of Environmental Restriction.**
29. Has NJDEP ever issued a no further action letter ("NFA") for any portion of the Site?  Yes  No  
**NFA ISSUED:**
- If Yes, in accordance with N.J.S.A. 58:10B-13(e), is there an order of magnitude difference between the currently applicable remediation standard or criterion and the contaminant level approved under such previously issued NFA?**  Yes  No
31. **Subcontractors employed during the investigation/remediation (list all):**  
 Name/Address: TVS  
 Name/Address: TVS  
 Name/Address: \_\_\_\_\_  
 Name/Address: \_\_\_\_\_  
 Name/Address: \_\_\_\_\_

COMMENTS:

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# Fort Monmouth Underground Storage Tank Assessment Questionnaire

Site Investigation - Remedial Investigation/Action Report Checklist: DATE: \_\_\_\_\_

- Soil Contamination currently exists on site  Yes  No  JNA
- GW Contamination currently exists on site  Yes  No  JNA
- Contaminated Soil Disposal Receipt (fully executed manifest)  Yes  No  JNA
- Tank Disposal Certificate  Yes  No  JNA
- Tank Contents Disposal Receipt (fully executed manifest)  Yes  No  JNA
- Fill was "certified clean" in accordance with N.J.A.C.7:26E-6.4  Yes  No  JNA
- Scaled site map with AOCs and north arrow  Yes  No  JNA
- Sample Results Summary Tables (N.J.A.C.7:26E-4.8)  Yes  No  JNA
- Laboratory was certified to perform the required tests  Yes  No  JNA
- Chain of Custody forms submitted  Yes  No  JNA
- Signed laboratory deliverables checklist and Non-Conformance Summaries submitted  Yes  No  JNA
- Problems identified in the laboratory deliverables checklist and Non-Conformance summaries  Yes  No  JNA
- Holding times were met for all analyses  Yes  No  JNA
- MDLs below most stringent soil cleanup criteria  Yes  No  JNA
- Laboratory sample summary submitted  Yes  No  JNA
- QA/QC package (reduced deliverables) submitted  Yes  No  JNA
- VOC soil samples methanol preserved (sample weights included)  Yes  No  JNA
- Electronic data package (home heating oil tanks exempt)  Yes  No  JNA
- Well search submitted  Yes  No  JNA
- Baseline Environmental Evaluation (home heating oil tanks exempt)  Yes  No  JNA
- Closure approval notification enclosed  Yes  No  JNA
- No Further Action letter(s) enclosed  Yes  No  JNA

TVS  
UTILITY MARKING REQUEST

Request marking of circled utility lines in the area indicated below.

NJ Nat. Gas Co.	Post Telephone
NJ Bell	Post water/sewer
NJ American Water Co.	Post Electric
JCP&L	Co. Sewage Auth.
Cable TV Co.	

COUNTY: Monmouth

TOWNSHIP: TINTON FALLS (See municipality list)

TOWN: Fort Monmouth

BUILDING NUMBER: 2238

STREET ADDRESS: 22+24 HEMPHILL RD

NEAREST CROSS STREET: GUAM LANE, HOPE RD

LOCATION OF EXCAVATION: BUILDING FRONT  
(e.g. street, sidewalk, etc.)

DATE OF EXCAVATION: 11-2-99 0800

DEPTH OF EXCAVATION: 10 FT. MAX.

COMPANY NAME: TVS

COMPANY ADDRESS: P.O. Box 60  
Ft. Monmouth, NJ 07703

S.O. J.O. NUMBER: 100004

NAME OF REQUESTOR: FRANK ACCORSI

DATE OF REQUEST: 10-26-99

NAME OF CALLER: \_\_\_\_\_

DATE OF CALL: \_\_\_\_\_

MARKING NUMBER: 993000429

Approval for emergency digging without marking:

UNDERGROUND STORAGE TANK REMOVAL  
(550 G.)

*New # Fri 11/5 0800  
993000991*

New Jersey One Call System

SEQUENCE NUMBER 0005

CDC = FOM

Transmit: Date: 10/27/99 At: 0953

\*\*\* R O U T I N E

\*\*\* Request No.: 993000429

Operators Notified:

CC4=/COMCAS-MNMOUTH / NJN=/NJNG-UTILIQUEST/ NJA=/NJ AMER WTR /  
GP9=/GPU ENERGY-CLS / BAN=/BELL ATL NJ-CLS/ FOM=/FORT MONMOUTH /

Location Information:

County: MONMOUTH Municipality: TINTON FALLS  
Subdivision/Community: FORT MONMOUTH  
Street: 18 HEMPHILL RD  
Nearest Intersection: HOPE RD  
Other Intersection: GUAM LN  
Type of Work : REMOVE UST  
Extent of Work: ENTIRE FRONT  
Location Reference:

DEPTH: 10FT

FRONT-  
Start Date/Time: 11/02/99 At 0800

Remarks:  
EXPIRATION DATE 12/13/99  
1 BLDG 2 UNITS BLG 2238

Working For: TVS  
Address: PO BOX 60  
City: FORT MONMOUTH 07703  
Phone: 732-532-6955  
Contact: EILEEN MAIAR

Title:

Excavator Information:

Caller: EILEEN MAIAR  
Phone: 732-532-6955

Title: WORK CNTRL

Excavator: TVS  
Address: PO BOX 60  
City: FORT MONMOUTH, NJ 07703  
Phone: 732-532-6955  
Contact: EILEEN MAIAR  
Phone: 732-532-6955  
Cellular:

Fax: 732-542-1107  
Title: WORK CNTRL  
Best Time: 0800-1600

Alternate Field Contact:  
Name: FRANK ACCORSCK  
Phone: 732-532-2577  
Cellular:

Title: SUBSRFC EV  
Fax:  
Best Time: 0800-1600

End Request

*ACL*

New Jersey One Call System

SEQUENCE NUMBER 0010

CDC = FOM

Transmit: Date: 10/29/99 At: 1421

\*\*\* R O U T I N E

\*\*\* Request No.: 993020991

Operators Notified:

CC4=/COMCAS-MNMOUTH / NJN=/NJNG-UTILIQUEST/ NJA=/NJ AMER WTR /  
GP9=/GPU ENERGY-CLS / BAN=/BELL ATL NJ-CLS/ FOM=/FORT MONMOUTH /

Location Information:

County: MONMOUTH Municipality: TINTON FALLS

Subdivision/Community: FORT MONMOUTH

Street: 22 - 24 HEMPHILL RD

Nearest Intersection: HOPE RD

Other Intersection: GUAM LN

Type of Work : REMOVE UST

Extent of Work: ENTIRE FRONT

DEPTH: 10FT

Location Reference:

FRONT-

Start Date/Time: 11/05/99 At 0800

Remarks:

EXPIRATION DATE 12/15/99

1 BLOG 2 UNITS BLG 2238

Working For: TVS

Address: PO BOX 60

City: FORT MONMOUTH 07703

Phone: 732-532-6955

Contact: EILEEN MAIAR

Title: .

Excavator Information:

Caller: EILEEN MAIAR

Phone: 732-532-6955

Title: WORK CNTRL

Excavator: TVS

Address: PO BOX 60

City: FORT MONMOUTH, NJ 07703

Phone: 732-532-6955

Fax: 732-542-1107

Contact: EILEEN MAIER

Title: WORK CNTRL

Phone: 732-532-6955

Best Time: 0800-1600

Cellular:

Alternate Field Contact:

Name: FRANK ACCORSCK

Phone: 732-532-2577

Title: SUBSRFC EV

Cellular:

Fax:

Best Time: 0800-1600

End Request

**US ARMY, SELFM-PW-EV**  
**DAILY UST SUBSURFACE REMOVAL LOG**

BLDG.#: 2238 REG.#: 81515 - 8 CLOSURE#: \_\_\_\_\_  
 DATE: 11-30-99 TOA: \_\_\_\_\_ TOD: \_\_\_\_\_  
 GOV. SSE: \_\_\_\_\_ NJDEP CERT.#: 0010042

REMOVAL CONTRACTOR: SAI Inc.  
 CLOSURE SUPERVISOR: FRANK ACCORSI NJDEP CERT.#: 0010042  
 WEATHER: CLOUDY, WINDY, COOL, 30's.

ACTIVITY	YES / NO
THE SUPERVISOR (CLOSURE CERT.) WAS ON-SITE DURING ALL CLOSURE RELATED ACTIVITIES	Y
THE SSE WAS ON-SITE DURING UST REMOVAL AND SITE SCREENING AND SAMPLING ACTIVITIES	Y
ALL ON-SITE PERSONNEL HAD TRAINING IAW ALL SAFETY REQUIREMENTS (E.G. 29CFR)	Y
A CONFINED ENTRY PERMIT WAS COMPLETED AND POSTED ON-SITE BY THE CONTRACTOR	NA
THE UST WAS PLACED ONTO PLASTIC, SCRAPED OFF, INSPECTED FOR HOLES AND PHOTOGRAPHED	Y
A DISCHARGE WAS REPORTED TO THE NJDEP (609-292-7172), CASE# _____	N
PHOTOS HAVE UST#, BLDG. #, DATE, TIME, NAME OF SSE AND DESCR. WRITTEN ON BACK	Y
GROUNDWATER WAS ENCOUNTERED AT _____ FEET BG, A SHEEN (WAS/WAS NOT) OBSERVED ON GW	NA
IF OVA/Hnu WAS USED: WAS IT CAL. AND FOUND TO BE OPERATIONAL (cal. data on COC)	Y
IF SAMPLES WERE TAKEN: COC, SCALED SITE MAP (VERT. SOIL HORIZONS AND PLOT PLAN)	Y
ALL SAMPLE COLLECTION ACTIVITIES WERE AS DESCRIBED IN THE NJDEP FSPM, 1992	Y
ALL SAMPLING WAS BIASED TOWARD HIGHEST OVA/FID RECORDED SITES IAW 7:26E-3.6 et seq.	Y
ALL PETROL. CONT. SOILS WERE SECURED FROM THE WEATHER BY CLOSE OF BUSINESS TODAY	NA
THE SSE AUTHORIZED BACKFILLING THE EXCAVATION (STONE TO 1" ABOVE GROUNDWATER)	Y
ADDITIONAL NOTES WERE TAKEN AND ARE RECORDED ON THE BACK OF THIS FORM	N
THE FOLLOWING DOCUMENTS WERE ADDED TO THE PROJECT FOLDER TODAY: (CIRCLE EACH) SCRAP TICKET, CSE PERMIT, ACCIDENT REPORT, HAZ. WASTE MANIFEST, <u>DAILY UST CLOSURE LOG</u> , SCALED SITE MAP (SAMPLING), SRF-CLOSURE, <u>CHAIN OF CUSTODY</u> , <u>SOIL ANALYTICAL RESULTS</u> , CLEAN FILL TICKETS (IN YDS <sup>3</sup> ), PHOTOGRAPHS (UST, EXCAVATION, SAMPLING POINTS)	

CHECK ALL BOXES. LEAVE NO BLANKS

I certify under penalty of law that tank decommissioning activities were performed in compliance with N.J.A.C. 7:14B-9.2(b)3 and 7:26 et seq.. I am aware that there are significant penalties for submitting false, inaccurate, or incomplete information, including fines and/or imprisonment.

SIGNATURE: Frank Accorsi DATE: 11-30-99

**US ARMY, FORT MONMOUTH**

**DAILY UST CLOSURE LOG**

BLDG.#: 2238 REG.#: 81515 - 8 CLOSURE#: \_\_\_\_\_  
 DATE: 11-30-99 TOA: \_\_\_\_\_ TOD: \_\_\_\_\_  
 CLOSURE SUPERVISOR: FRANK ACCORSI NJDEP CERT.#: 0010042  
 PERSONNEL: ED CRAWLEY, MARK VETRE

ACTIVITY	YES / NO
THE SUPERVISOR (CLOSURE CERT.) WAS ON-SITE DURING ALL CLOSURE RELATED ACTIVITIES	Y
THE SSE WAS ON-SITE DURING UST REMOVAL AND SITE SCREENING AND SAMPLING ACTIVITIES	Y
ALL ON-SITE PERSONNEL HAVE CURRENT TRAINING IAW ALL SAFETY REQ. (E.G. 29CFR)	Y
ALL UTILITIES WERE MARKED OUT PRIOR TO ANY EXCAVATION (VISUAL CONFIRM <u>YES</u> /NO)	Y
HAND EXCAVATION WAS DONE WHEN EXCAVATING WITHIN 4 FT OF ANY UTILITIES	Y
ALL UST PIPING WAS BLOWN BACK AND DRAINED PRIOR TO ANY EXCAVATION WITH BACKHOE	Y
ALL UST PIPING WAS REMOVED PRIOR TO <del>UST EXCAVATION</del>	Y
A CONFINED ENTRY PERMIT WAS COMPLETED AND POSTED ON-SITE BY THE CONTRACTOR	NA
THE UST WAS CLEANED AND NO RESIDUAL LIQUIDS WERE LEFT IN THE TANK	N
THE UST WAS PLACED ONTO PLASTIC, SCRAPED OFF, INSPECTED FOR HOLES AND PHOTOGRAPHED	Y
_____ DRUMS OF WASTE WERE GENERATED AT THIS SITE TODAY (ID CARDS COMPLETED)	N
_____ DRUMS OF WASTE WERE TRANSPORTED TO THE (MP, CW, EV) HWSA	N
_____ GALLONS OF X _____ WASTE WERE REMOVED (MANIFEST#: _____)	N
_____ CUBIC YARDS OF PETROL. CONT. SOIL WERE EXCAVATED+TRANS TO (T-80, 2624)	N
THE DPW WAS NOTIFIED OF ANY DISCHARGE TO THE ENVIRONMENT. (WHO) _____	NA
ALL PETROL. CONT. SOILS WERE SECURED FROM THE WEATHER BY CLOSE OF BUSINESS TODAY	NA
THE SSE AUTHORIZED BACKFILLING THE EXCAVATION. SSE INITIAL REQUIRED: <u>FA</u>	Y
THE UST WAS TRANSPORTED TO <u>BLDG. 166 YARD</u> FOR DISPOSAL (ATTACH SCRAP TICKET)	Y
ADDITIONAL NOTES WERE TAKEN AND RECORDED ON THE BACK OF THIS FORM	N
THE FOLLOWING DOCUMENTS WERE GIVEN TO THE SSE TODAY: (CIRCLE EACH OR ADD ITEMS)	N
SCRAP TICKET, CSE PERMIT, ACCIDENT REPORT, _____	N

**CHECK ALL BOXES, LEAVE NO BLANK**

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

SIGNATURE: Frank Accorsi DATE: 11-30-99



DIRECTORATE OF PUBLIC WORKS  
FORT MONMOUTH, NEW JERSEY 07703

Contract Management Division

SUBJECT: PWS-007, Residential UST Removal  
Contractor: TVS Inc.

RE: Backfilling of excavation,

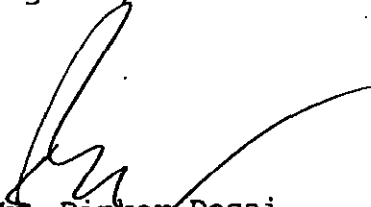
BUILDING #: 2238 (HEMPHILL RD.)

TVS Inc.  
Field Supervisor, PWS-007  
ATTN: Brian Finch  
Building 166  
Fort Monmouth, New Jersey 07703-5000

Dear Mr. Finch:

The above referenced area has been sampled and analyzed as described in the NJDEP Regulations. The results indicate levels of petroleum contamination below the NJDEP allowable limits ~~or that the site requires further investigation outside the scope of this contract.~~ The contractor may proceed with the backfilling of the excavation with stone to groundwater and clean fill to grade as required in the above referenced contract specification.

Regards,

  
Mr. Dinkar Desai  
Environmental Engineer  
Directorate of Public Works

CC: UST file copy

**Report of Analysis**  
 Army, Fort Monmouth Environmental Laboratory  
 NJDEP Certification # 13461

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

**Lab. ID # :** 4970  
**Date Rec'd:** 01-Dec-99  
**Analysis Start:** 01-Dec-99  
**Analysis Complete:** 01-Dec-99

**Analysis:** OQA-QAM-025  
**Matrix:** Soil  
**Analyst:** B.Patel  
**Inst. ID.** GC TPHC INST. #1  
**Column Type** RTX 5  
**Ext. Meth:** Shake

**UST Reg. #:** 81515-8  
**Closure #:**  
**DICAR #:**  
**Injection Volume** 1 ul  
**Column ID** 0.32 mm  
**Location #:** Bldg. 2238

Sample	Field ID	Dilution Factor	Weight (g)	% Solid	MDL (mg/kg)	TPHC Result (mg/kg)
4970.01	2238-A	1.00	15.53	91.75	165	ND
4970.02	2238-B	1.00	14.99	83.42	188	ND
4970.03	2238-C	1.00	15.79	88.43	168	ND
4970.04	2238-D	1.00	15.69	83.66	179	ND
4970.05	2238-E Duplicate	1.00	15.23	93.56	165	ND
<b>METHOD BLANK</b>	TBLK287	1.00	15.00	100.00	157	ND

ND = Not Detected  
 MDL = Method Detection Limit

  
 Daniel K. Wright  
 Laboratory Director

# Fort Monmouth Environmental Testing Laboratory

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

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

NJDEP Certification #13461

## Chain of Custody Record

Customer: Dinker Desai				Project No: 100004			Analysis Parameters					Comments:	
Phone #: X21475				Location: B-06, 2238								* = Samples Kept <4°C	
<input type="checkbox"/> DERA <input checked="" type="checkbox"/> OMA UST Assessment				UST#: 81515-8									
Samplers Name / Company : Frank Accorsi/TVS							Sample #	TPHC	% SOLIDS*	VOA+10*	VOA ID #	PID Reading	Remarks / Preservation Method
Lab Sample I.D.	Sample Location	Date	Time	Type	bottles								
4970. 01	2238-A, WEST END, 7-7.5 FT	12-1-99	1050	SOIL	2	X	X	X	024	0	ICE		
02	2238-B, EAST END, 7-7.5 FT		1100		2	X	X	X	025	0			
03	2238-C, PIPING, 1-1.5 FT		1110		2	X	X	X	026	0			
04	2238-D, PIPING, 1.5-2 FT		1130		2	X	X	X	027	0			
05	2238-E, DUPLICATE		1050		2	X	X	X	028	0			
06	TRIP BLANK		-	AQ	1		X	X	029	-			
OVM sn#580U-64455.343 was calibrated with zero air & w/ 245 ppm Isobutylene read 244 ppm. 0950 12-1-99 FA (time/date & initial)													
Relinquished by (signature):		Date/Time:		Received by (signature):		Relinquished by (signature):		Date/Time:					
<i>Frank Accorsi</i>		12-1-99 1145		<i>[Signature]</i>									
Relinquished by (signature):		Date/Time:		Received by (signature):		Relinquished by (signature):		Date/Time:					
Report Type: <input type="checkbox"/> Full, <input type="checkbox"/> Reduced, <input checked="" type="checkbox"/> Standard, <input type="checkbox"/> Screen / non-certified, <input type="checkbox"/> EDD							Remarks: * VOTIC ON 2590 > 1000 PPM TPH, ON HIGHEST, MIN. ONE All sample points have been GPS? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> NA						
Turnaround time: <input type="checkbox"/> Standard 2 wks, <input checked="" type="checkbox"/> Rush 1 Days, <input type="checkbox"/> ASAP Verbal Hrs.							Dedicated Sampling Tools Used						



ENVIRONMENTAL

WIDEFIELD CAMPILING  
01, NYSDOC# 21093

DATA REPORT  
Environmental Laboratory  
DIVISION  
Fort Monmouth, New Jersey  
PROJECT NO# 100004

Inventory Sample ID#	Matrix	Date and Time of Collection	Date Received
970-01	S	01-Dec-99 10:50	12/01/99
970-02	S	01-Dec-99 11:00	12/01/99
3	S	01-Dec-99 11:10	12/01/99
4	S	01-Dec-99 11:20	12/01/99
4970	S	01-Dec-99 10:50	12/01/99
	S	01-Dec-99	12/01/99

ENVIRONMENTAL LAB  
FIC, Fort Monmouth

STUDY

 01/03/00  
Daniel Wright/Date  
Laboratory Director



## Table of Contents

<u>Section</u>	<u>Pages</u>
Method Summary	1
Conformance/Non-Conformance	2
Chain of Custody	3
Results Summary	4
Initial Calibration Summary	5
Continuing Calibration Summary	6
Surrogate Results Summary	7
MS/MSD Results Summary	8
Blank Spike Summary	9
Raw Sample Data	10-21
Laboratory Deliverable Checklist	22
Laboratory Authentication Statement	23

## Method Summary

NJDEP Method OQA-QAM-025-10/97

### Gas Chromatographic Determination of Total Petroleum Hydrocarbons in Soil

Fifteen grams (15g)(wet weight) of a soil sample is added to a 125 mL acid cleaned, solvent rinsed, capped Erlenmeyer flask. 15g anhydrous sodium sulfate is added to dry sample. Surrogate standard spiking solution is then added to the flask.

Twenty five milliliters(25mL) Methylene Chloride is added to the flask and it is secured on a orbital shaker table. The agitation rate is set to 400rpm and the sample is shaken for 30 minutes. The flask is the removed from the table and the particulate matter is allowed to settle. The extract is transferred to a Teflon capped vial. A second 25mL 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 1mL autosampler 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 solid, sample weight and concentration.

000001

Summary Report

Indicate  
Yes, No, N/A

Continuation - If yes, list the sample and the concentrations in each blank.

yes  
NO

Summarize Meet Criteria  
sample and corresponding recovery which  
(table range).

yes

Meet Criteria  
corresponding recovery which  
(range).

yes

blanks and samples  
include blanks and samples  
remaining were noted.

NA  
yes

holding time met.  
fact, list number of days exceeded for each sample).

yes



Date 01/03/00





# Fort Monmouth Environmental Testing Laboratory

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

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

NJDEP Certification #13461

## Chain of Custody Record

Customer: Dinker Desai				Project No: 100004		Analysis Parameters				Comments:		
Phone #: X21475				Location: BL06, 2238		TPHC	% SOLIDS*	VOA+10*	VOA ID #	PID Reading	* = Samples Kept <4°C	
( ) DERA (X) OMA UST Assessment				UST# 81515-8							Remarks / Preservation Method	
Samplers Name / Company : Frank Accorsi/TVS						Sample #						
Lab Sample I.D.	Sample Location	Date	Time	Type	bottles							
4970, Q1	2238-A, WEST END, 7-7.5 FT	12-1-99	1050	SOIL	2	X	X	X	024	0	ICE	
Q2	2238-B, EAST END, 7-7.5 FT		1100		2	X	X	X	025	0		
Q3	2238-C, PIPING, 1-1.5 FT		1110		2	X	X	X	026	0		
Q4	2238-D, PIPING, 1.5-2 FT		1120		2	X	X	X	027	0		
Q5	2238-E, DUPLICATE		1050		2	X	X	X	028	0		
Q6	TRIP BLANK		-	AQ	1		X	X	029	-		

OVM sn#580U-64455.343 was calibrated with zero air & w/ 245 ppm Isobutylene read 244 ppm. 0950 12-1-99 FA (time/date & initial)

Relinquished by (signature): <i>Frank Accorsi</i>	Date/Time: 12-1-99 1145	Received by (signature): <i>[Signature]</i>	Relinquished by (signature):	Date/Time:
Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:

Report Type: ( ) Full, ( ) Reduced, (X) Standard, ( ) Screen / non-certified, ( ) EDD  
 Turnaround time: ( ) Standard 2 wks, (X) Rush 1 Days, ( ) ASAP Verbal Hrs.

Remarks: \* VOT10 on 2590 > 1000 PPM TPH, ON HIGHEST, MIN. ONE  
 Dedicated Sampling Tools Used  
 All sample points have been GPS? (X) YES ( ) NO ( ) NA

000003

## SAMPLE RECEIPT FORM

Date Received: 12-1-99

Lab Project ID#: 4970

Site/Project Name: Bldg 2238

Cooler Temp (°C): 1.0c

Received By: J. Verquira  
(print name)

Sign: [Signature]

**Check the appropriate answer**

- |   |   |                             |  |
|---|---|-----------------------------|--|
| 1. Did the samples come in a cooler?  | <input checked="" type="checkbox"/> yes | <input type="checkbox"/> no | <input type="checkbox"/> NA            |
| 2. Were the chain of custody papers filled out correctly and legibly?             | <input checked="" type="checkbox"/> yes | <input type="checkbox"/> no |  |
| 3. Did you sign the chain of custody in the appropriate place?                    | <input checked="" type="checkbox"/> yes | <input type="checkbox"/> no |  |
| 4. Did all the labels agree with the chain of custody and in good condition?      | <input checked="" type="checkbox"/> yes | <input type="checkbox"/> no |  |
| 5. Were the correct containers and/or preservatives used for the tests indicated? | <input checked="" type="checkbox"/> yes | <input type="checkbox"/> no |  |
| 6. Was a sufficient amount of sample sent for the tests indicated?                | <input checked="" type="checkbox"/> yes | <input type="checkbox"/> no |  |
| 7. Were bubbles absent from aqueous VOC sample containers?                        | <input type="checkbox"/> yes            | <input type="checkbox"/> no | <input checked="" type="checkbox"/> NA |
| 8. Were samples received on ice?  | <input checked="" type="checkbox"/> yes | <input type="checkbox"/> no |  |

**Fill out the following table for each sample bottle**

Sample ID	pH	Preservative	Sample ID	pH	Preservative

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_





**Report of Analysis**  
 Army, Fort Monmouth Environmental Lab  
 NJDEP Certification # 13461



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


**Lab. ID # :** 4970  
**Date Rec'd:** 01-Dec-99  
**Analysis Start:** 01-Dec-99  
**Analysis Complete:** 01-Dec-99

**Analysis:** OQA-QAM-025  
**Matrix:** Soil  
**Analyst:** B.Patel  
**Inst. ID.** GC TPHC INST. #1  
**Column Type** RTX 5  
**Ext. Meth:** Shake

**UST Reg. #:** 81515-8  
**Closure #:**  
**DICAR #:**  
**Injection Volume** 1 ul  
**Column ID** 0.32 mm  
**Location #:** Bldg. 2238

Sample	Field ID	Dilution Factor	Weight (g)	% Solid	MDL (mg/kg)	TPHC Result (mg/kg)
4970.01	2238-A	1.00	15.53	91.75	165	ND
4970.02	2238-B	1.00	14.99	83.42	188	ND
4970.03	2238-C	1.00	15.79	88.43	168	ND
4970.04	2238-D	1.00	15.69	83.66	179	ND
4970.05	2238-E Duplicate	1.00	15.23	93.56	165	ND
<b>METHOD BLANK</b>	TBLK287	1.00	15.00	100.00	157	ND

ND = Not Detected  
 MDL = Method Detection Limit

  
 Daniel K. Wright  
 Laboratory Director

Method : C:\HPCHEM\1\METHODS\TPH66.M (Chemstation Integrator)  
 Title : TPHC Calibration 06/05/97 21 peaks  
 Last Update : Wed Nov 17 14:48:28 1999

Calibration Files

100 =T009137.D 50 =T009138.D 20 =T009139.D  
 10 =T009140.D 5 =T009141.D

Compound	100	50	20	10	5	Avg		%RSD
1) tC C8	2.564	2.455	2.647	2.599	2.646	2.582	E4	3.07
2) tC C10	2.605	2.600	2.721	2.834	2.715	2.695	E4	3.60
3) TC C12	2.594	2.590	2.710	2.817	2.833	2.709	E4	4.30
4) tC C14	2.574	2.561	2.696	2.793	2.875	2.700	E4	5.06
5) tC C16	2.583	2.576	2.713	2.829	2.971	2.734	E4	6.16
6) tC C18	2.699	2.599	2.963	2.817	3.006	2.817	E4	6.11
7) tC C20	2.712	2.706	2.838	2.973	3.094	2.865	E4	5.88
8) tC C22	2.754	2.748	2.898	3.040	3.183	2.925	E4	6.42
9) tC C24	2.787	2.778	2.932	3.069	3.207	2.955	E4	6.26
10) tC C26	2.752	2.741	2.899	3.051	3.259	2.940	E4	7.43
11) tC C28	2.742	2.727	2.865	2.982	3.103	2.884	E4	5.55
12) tC C30	2.826	2.804	2.913	3.050	3.153	2.949	E4	5.07
13) tC C32	2.730	2.698	2.755	2.833	2.881	2.779	E4	2.73
14) tC C34	2.709	2.724	2.786	2.839	3.016	2.815	E4	4.39
15) tC C36	2.288	2.331	2.386	2.407	2.550	2.392	E4	4.17
16) tC C38	2.040	2.295	2.361	2.436	2.660	2.358	E4	9.53
17) tC C40	1.509	1.830	1.857	1.896	2.378	1.894	E4	16.43
18) tC c42	1.390	1.737	1.749	1.808	2.407	1.818	E4	20.23
19) TC Pristane	2.788	2.686	2.832	2.995	3.198	2.900	E4	6.91
20) TC Phytane	2.764	2.647	2.881	3.053	3.274	2.924	E4	8.43
21) sC o-terphenyl	3.025	3.001	3.183	3.348	3.491	3.209	E4	6.54
22) tC TPHC - total	2.999	3.013	3.157	3.729	4.416	3.463	E4	17.63

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\91201\T009190.D  
 Acq On : 1 Dec 1999 2:11 pm  
 Sample : Tstd050  
 Misc :  
 IntFile : TPHCINT.E

Via  
 Operator: Bhaskar  
 Inst : GC/MS Ins  
 Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\TPH66.M (Chemstation Integrator)  
 Title : TPHC Calibration 06/05/97 21 peaks  
 Last Update : Wed Nov 17 14:48:28 1999  
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 15% Max. Rel. Area : 200%

Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 tC C8	25.823	24.775 E3	4.1	101	-0.04
2 tC C10	26.950	28.388 E3	-5.3	109	0.00
3 TC C12	27.089	27.727 E3	-2.4	107	0.00
4 tC C14	26.999	26.815 E3	0.7	105	0.00
5 tC C16	27.344	26.535 E3	3.0	103	0.00
6 tC C18	28.171	28.352 E3	-0.6	109	0.00
7 tC C20	28.647	27.170 E3	5.2	100	0.00
8 tC C22	29.246	27.756 E3	5.1	101	0.00
9 tC C24	29.548	27.849 E3	5.7	100	0.00
10 tC C26	29.402	27.339 E3	7.0	100	0.00
11 tC C28	28.837	27.091 E3	6.1	99	0.00
12 tC C30	29.493	27.704 E3	6.1	99	0.00
13 tC C32	27.794	26.743 E3	3.8	99	0.00
14 tC C34	28.148	26.741 E3	5.0	98	0.00
15 tC C36	23.924	23.312 E3	2.6	100	0.00
16 tC C38	23.584	23.093 E3	2.1	101	0.00
17 tC C40	18.939	18.883 E3	0.3	103	0.00
18 tC c42	18.180	17.628 E3	3.0	101	0.00
19 TC Pristane	28.998	27.968 E3	3.6	104	0.00
20 TC Phytane	29.238	27.017 E3	7.6	102	0.00
21 sC o-terphenyl	32.093	31.382 E3	2.2	105	0.00
22 tC TPHC - total	34.629	29.580 E3	14.6	98	0.61#



**Surrogate Recovery Report**  
 Army, Fort Monmouth Environmental Labor  
 NJDEP Certification # 13461

<b>Client :</b>	U.S. Army	<b>Lab. ID # :</b>	4970
	DPW. SELFM-PW-EV	<b>Date Rec'd:</b>	01-Dec-99
	Bldg. 173	<b>Analysis Start:</b>	01-Dec-99
	Ft. Monmouth, NJ 07703	<b>Analysis Complete:</b>	01-Dec-99
		<b>UST Reg. #:</b>	81515-8
<b>Analysis:</b>	OQA-QAM-025	<b>Closure #:</b>	
<b>Matrix:</b>	Soil	<b>DICAR #:</b>	
<b>Analyst:</b>	B.Patel	<b>Injection Volume</b>	1 ul
<b>Inst. ID.</b>	GC TPHC INST. #1	<b>Column ID</b>	0.32 mm
<b>Column Type</b>	RTX 5	<b>Location #:</b>	Bldg. 2238
<b>Ext. Meth:</b>	Shake		

Sample			Surrogate Added (ppm)	Amount Recovered (ppm)	Percent Recovery
4970.01			10.00	8.88	88.76
4970.02			10.00	8.45	84.52
4970.03			10.00	8.55	85.54
4970.04			10.00	9.05	90.52
4970.05			10.00	8.51	85.08
<b>METHOD BLANK</b>	TBLK285		10.00	8.40	83.95

Surrogate Added : o-Terphenyl

Matrix Spike / Duplicate Recovery Report  
 Army, Fort Monmouth Environmental Lab  
 NJDEP Certification # 13461

<b>Client:</b>	U.S. Army	<b>Lab. ID #:</b>	4970
	DPW. SELFM-PW-EV	<b>Date Rec'd:</b>	01-Dec-99
	Bldg. 173	<b>Analysis Start:</b>	01-Dec-99
	Ft. Monmouth, NJ 07703	<b>Analysis Complete:</b>	01-Dec-99
<b>Analysis:</b>	OQA-QAM-025	<b>UST Reg. #:</b>	81515-8
<b>Matrix:</b>	Soil	<b>Closure #:</b>	
<b>Analyst:</b>	B.Patel	<b>DICAR #:</b>	
<b>Inst. ID:</b>	GC TPHC INST. #1	<b>Injection Volume</b>	1 ul
<b>Column Type</b>	RTX 5	<b>Column ID</b>	0.32 mm
<b>Ext. Meth:</b>	Shake	<b>Location #:</b>	Bldg. 2238

Sample	Spike Amount Added (ppm)	Sample Amount (ppm)	Matrix Spike Amount (ppm)	Percent Recovery	QC Limits %
4970.05MS	1000	0.00	718.20	71.82	75-125
4970.05MSD	1000	0.00	739.87	73.99	75-125

RPD	2.97	20.00
-----	------	-------

Quality Control Check Standard Summary  
 Army, Fort Monmouth Environmental Lab  
 NJDEP Certification # 13461

<b>Client:</b>	U.S. Army	<b>Lab. ID #:</b>	4970
	DPW. SELFM-PW-EV	<b>Date Rec'd:</b>	01-Dec-99
	Bldg. 173	<b>Analysis Start:</b>	01-Dec-99
	Ft. Monmouth, NJ 07703	<b>Analysis Complete:</b>	01-Dec-99
<b>Analysis:</b>	OQA-QAM-025	<b>UST Reg. #:</b>	81515-8
<b>Matrix:</b>	Soil	<b>Closure #:</b>	
<b>Analyst:</b>	B.Patel	<b>DICAR #:</b>	
<b>Inst. ID.</b>	GC TPHC INST. #1	<b>Injection Volume</b>	1 ul
<b>Column Type</b>	RTX 5	<b>Column ID</b>	0.32 mm
<b>Ext. Meth:</b>	Shake	<b>Location #:</b>	Bldg. 2238

Sample	Date Extracted	Spike Amount Added (ppm)	Matrix Spike Amount (ppm)	Percent Recovery	QC Limits %
TBLK287BS	1-Dec-99	1000	720.43	72.04	75-125



Data File : C:\HPCHEM\1\991201\T009191.D  
 Acq On : 1 Dec 1999 4:33 pm  
 Sample : Tblk287  
 Misc :  
 IntFile : TPHCINT.E  
 Quant Time: Dec 2 7:44 1999 Quant Results File: TPH66.RES

Operator: Bhaskar  
 Inst : GC/MS Ins  
 Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\TPH66.M (Chemstation Integrator)  
 Title : TPHC Calibration 06/05/97 21 peaks  
 Last Update : Wed Nov 17 14:48:28 1999  
 Response via : Initial Calibration  
 DataAcq Meth : TPH66.M

Volume Inj. : 1 ul  
 Signal Phase : HP-5  
 Signal Info : 30m x 0.32mm

Compound	R.T.	Response	Conc Units
----------	------	----------	------------

System Monitoring Compounds			
21) sC o-terphenyl	12.61	269433	8.395 mg/L
Spiked Amount	10.000	Range 8 - 13	Recovery = 83.95%#

Target Compounds

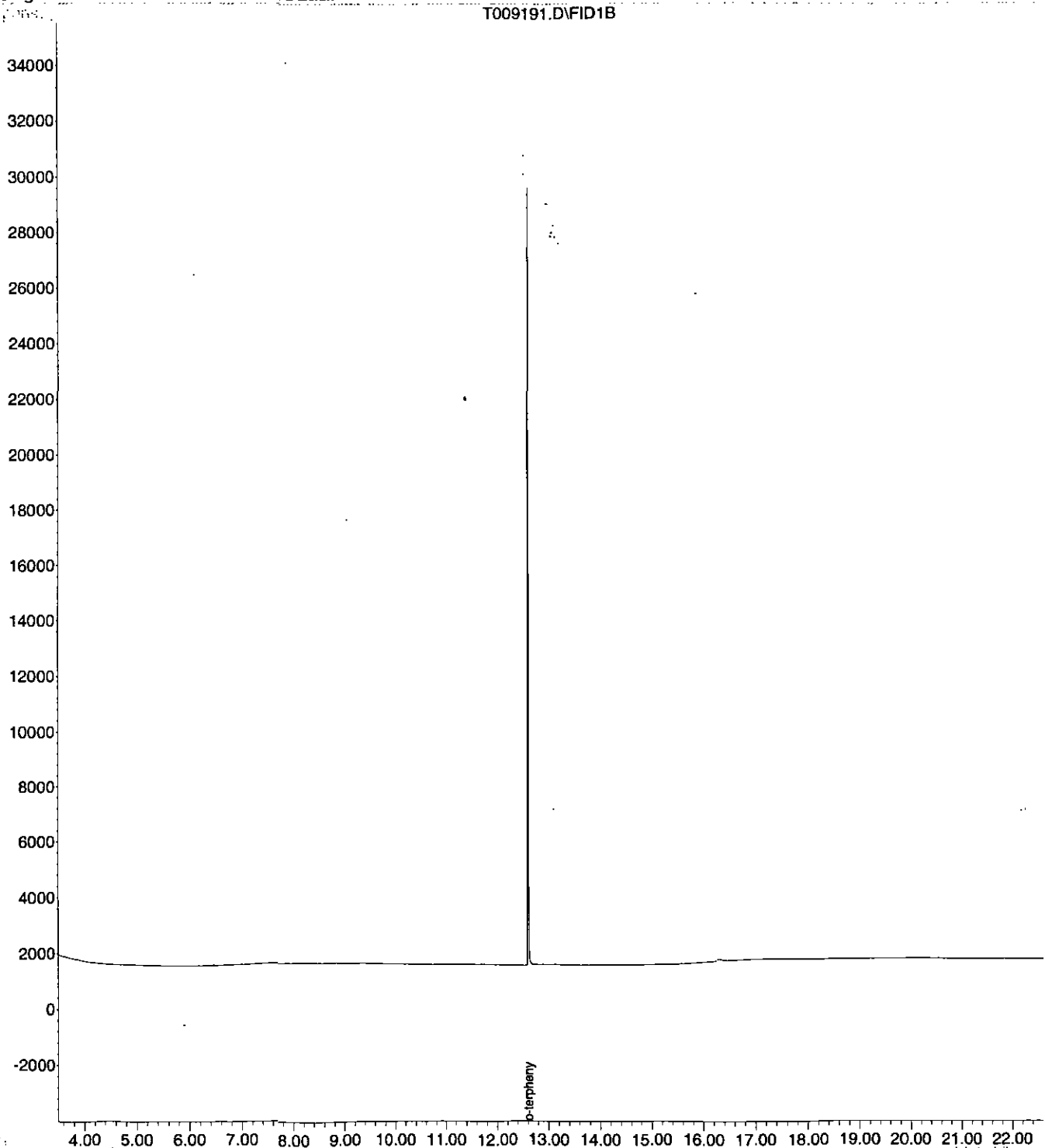
Quantitation Report

Data File : C:\HPCHEM\1\991201\T009191.D  
Acq On : 1 Dec 1999 4:33 pm  
Sample : Tblk287  
Misc :  
IntFile : TPHCINT.E  
Quant Time: Dec 2 7:44 1999 Quant Results File: TPH66.RES

3  
Operator: Bhaskar  
Inst : GC/MS Ins  
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\TPH66.M (Chemstation Integrator)  
Title : TPHC Calibration 06/05/97 21 peaks  
Last Update : Wed Nov 17 14:48:28 1999  
Response via : Multiple Level Calibration  
DataAcq Meth : TPH66.M

Volume Inj. : 1 ul  
Signal Phase : HP-5  
Signal Info : 30m x 0.32mm



Data File : C:\HPCHEM\1\DATA\991201\T009193.D  
Acq On : 1 Dec 1999 5:40 pm  
Sample : 4970.01s  
Misc :  
IntFile : TPHCINT.E  
Quant Time: Dec 2 7:44 1999 Quant Results File: TPH66.RES

5  
Operator: Bhaskar  
Inst : GC/MS Ins  
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\TPH66.M (Chemstation Integrator)  
Title : TPHC Calibration 06/05/97 21 peaks  
Last Update : Wed Nov 17 14:48:28 1999  
Response via : Initial Calibration  
DataAcq Meth : TPH66.M

Volume Inj. : 1 ul  
Signal Phase : HP-5  
Signal Info : 30m x 0.32mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
21) sC o-terphenyl	12.61	284851	8.876 mg/L
Spiked Amount	10.000	Range 8 - 13	Recovery = 88.76%#

Target Compounds

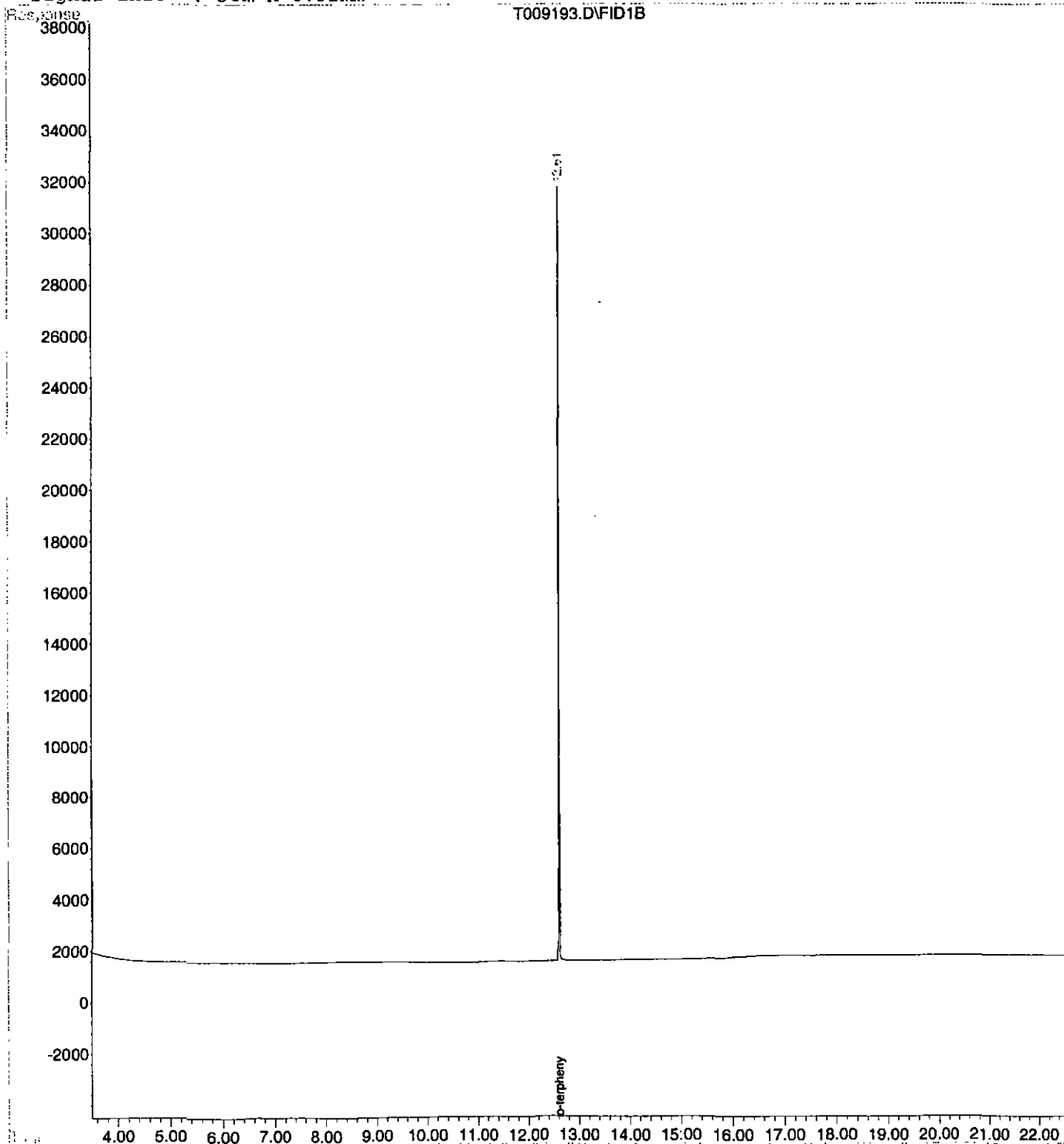
Quantitation Report

Data File : C:\HPCHEM\1\DATA\991201\T009193.D  
Acq On : 1 Dec 1999 5:40 pm  
Sample : 4970.01s  
Misc :  
IntFile : TPHCINT.E  
Quant Time: Dec 2 7:44 1999 Quant Results File: TPH66.RES

VOLUME: 5  
Operator: Bhaskar  
Inst : GC/MS Ins  
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\TPH66.M (Chemstation Integrator)  
Title : TPHC Calibration 06/05/97 21 peaks  
Last Update : Wed Nov 17 14:48:28 1999  
Response via : Multiple Level Calibration  
DataAcq Meth : TPH66.M

Volume Inj. : 1 ul  
Signal Phase : HP-5  
Signal Info : 30m x 0.32mm



Data File : C:\HPCHEM\1\LA\991201\T009194.D  
Acq On : 1 Dec 1999 6:14 pm  
Sample : 4970.02s  
Misc :  
IntFile : TPHCINT.E  
Quant Time: Dec 2 7:44 1999 Quant Results File: TPH66.RES

Operator: Bhaskar  
Inst : GC/MS Ins  
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\TPH66.M (Chemstation Integrator)  
Title : TPHC Calibration 06/05/97 21 peaks  
Last Update : Wed Nov 17 14:48:28 1999  
Response via : Initial Calibration  
DataAcq Meth : TPH66.M

Volume Inj. : 1 ul  
Signal Phase : HP-5  
Signal Info : 30m x 0.32mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
21) sC o-terphenyl	12.61	271261	8.452 mg/L
Spiked Amount 10.000	Range 8 - 13	Recovery =	84.52%#
Target Compounds			

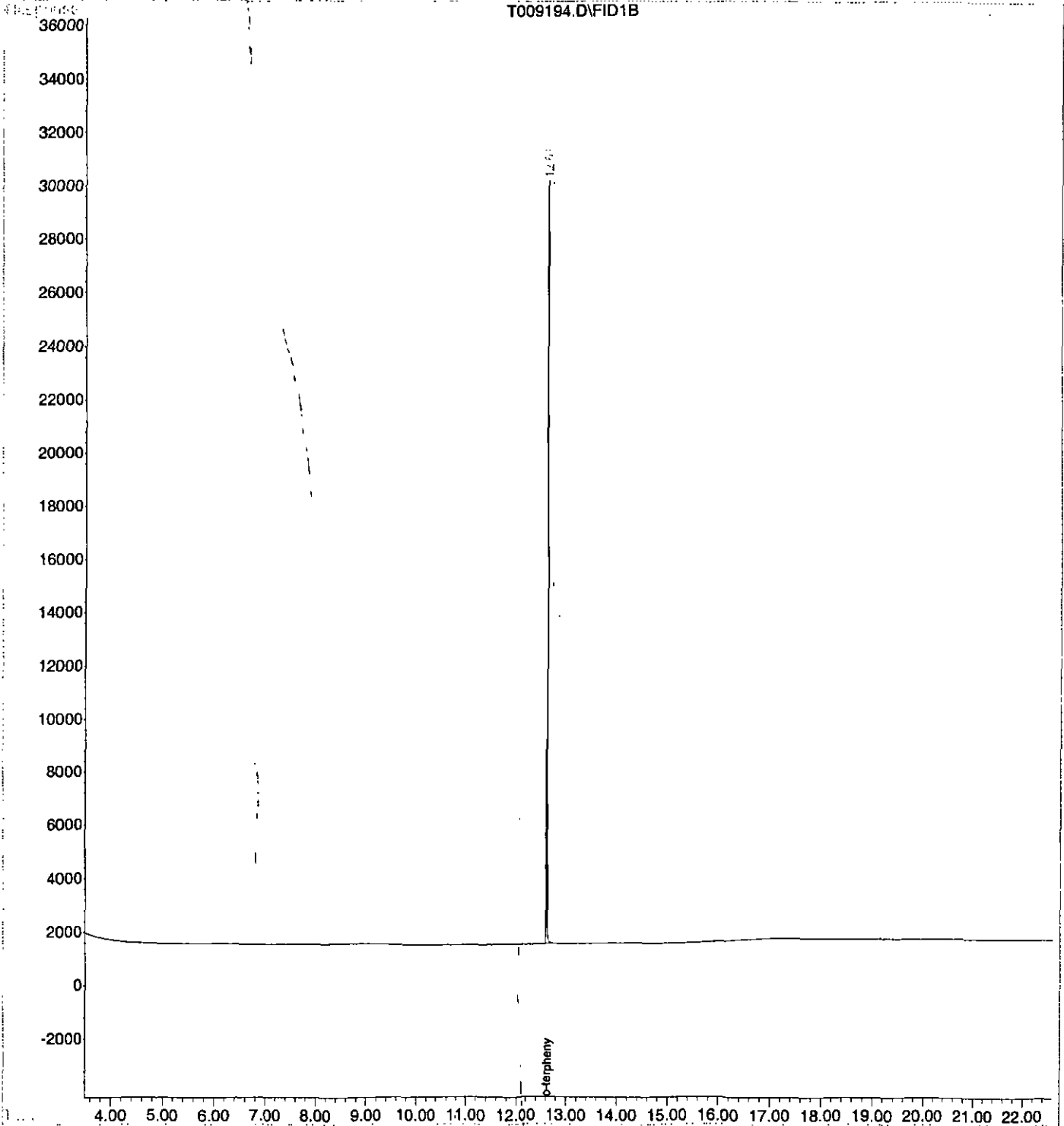
Quantitation Report

Data File : C:\HPCHEM\1\DATA\991201\T009194.D  
Acq On : 1 Dec 1999 6:14 pm  
Sample : 4970.02s  
Misc :  
IntFile : TPHCINT.E  
Quant Time: Dec 2 7:44 1999 Quant Results File: TPH66.RES

Operator: Bhaskar  
Inst : GC/MS Ins  
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\TPH66.M (Chemstation Integrator)  
Title : TPHC Calibration 06/05/97 21 peaks  
Last Update : Wed Nov 17 14:48:28 1999  
Response via : Multiple Level Calibration  
DataAcq Meth : TPH66.M

Volume Inj. : 1 ul  
Signal Phase : HP5  
Signal Info : 30m x 0.32mm



Data File : C:\HPCHEM\1\DATA\991201\T009195.D  
Acq On : 1 Dec 1999 6:48 pm  
Sample : 4970.03s  
Misc :  
IntFile : TPHCINT.E  
Quant Time: Dec 2 7:44 1999 Quant Results File: TPH66.RES

Operator: Bhaskar  
Inst : GC/MS Ins  
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\TPH66.M (Chemstation Integrator)  
Title : TPHC Calibration 06/05/97 21 peaks  
Last Update : Wed Nov 17 14:48:28 1999  
Response via : Initial Calibration  
DataAcq Meth : TPH66.M

Volume Inj. : 1 ul  
Signal Phase : HP-5  
Signal Info : 30m x 0.32mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
21) sC o-terphenyl	12.61	274512	8.554 mg/L
Spiked Amount 10.000	Range 8 - 13	Recovery =	85.54%#
Target Compounds			

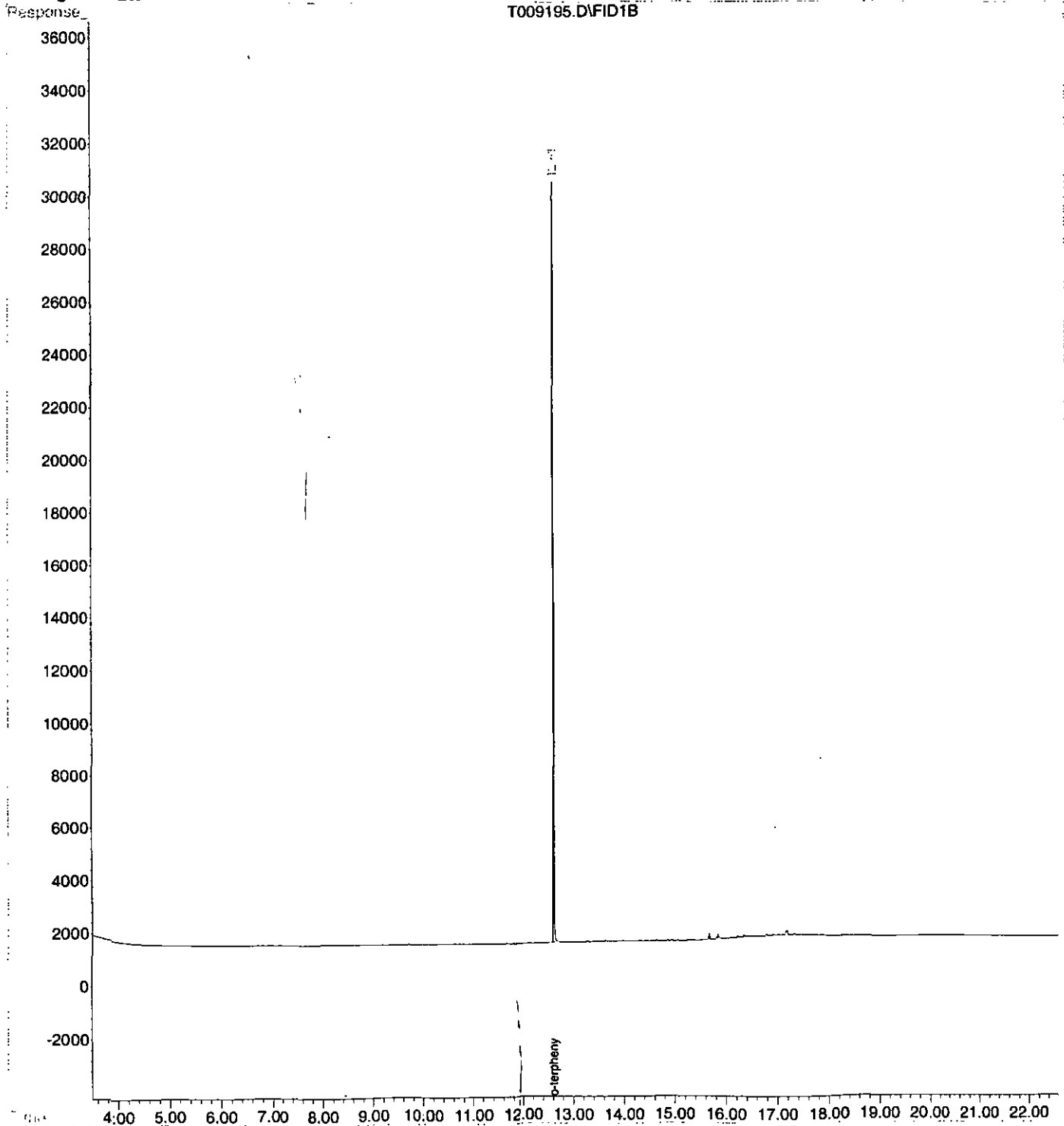
Quantitation Report

Data File : C:\HPCHEM\1\DATA\991201\T009195.D  
Acq On : 1 Dec 1999 6:48 pm  
Sample : 4970.03s  
Misc :  
IntFile : TPHCINT.E  
Quant Time: Dec 2 7:44 1999 Quant Results File: TPH66.RES

Operator: Bhaskar  
Inst : GC/MS Ins  
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\TPH66.M (Chemstation Integrator)  
Title : TPHC Calibration 06/05/97 21 peaks  
Last Update : Wed Nov 17 14:48:28 1999  
Response via : Multiple Level Calibration  
DataAcq Meth : TPH66.M

Volume Inj. : 1 ul  
Signal Phase : HP-5  
Signal Info : 30m x 0.32mm





Data File : C:\HPCHEM\1\DATA\991201\T009196.D  
 Acq On : 1 Dec 1999 7:22 pm  
 Sample : 4970.04s  
 Misc :  
 IntFile : TPHCINT.E  
 Quant Time: Dec 2 7:44 1999 Quant Results File: TPH66.RES

Operator: Bhaskar  
 Inst : GC/MS Ins  
 Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\TPH66.M (Chemstation Integrator)  
 Title : TPHC Calibration 06/05/97 21 peaks  
 Last Update : Wed Nov 17 14:48:28 1999  
 Response via : Initial Calibration  
 DataAcq Meth : TPH66.M

Volume Inj. : 1 ul  
 Signal Phase : HP-5  
 Signal Info : 30m x 0.32mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
21) sC o-terphenyl	12.61	290515	9.052 mg/L
Spiked Amount 10.000	Range 8 - 13	Recovery =	90.52%#

Target Compounds

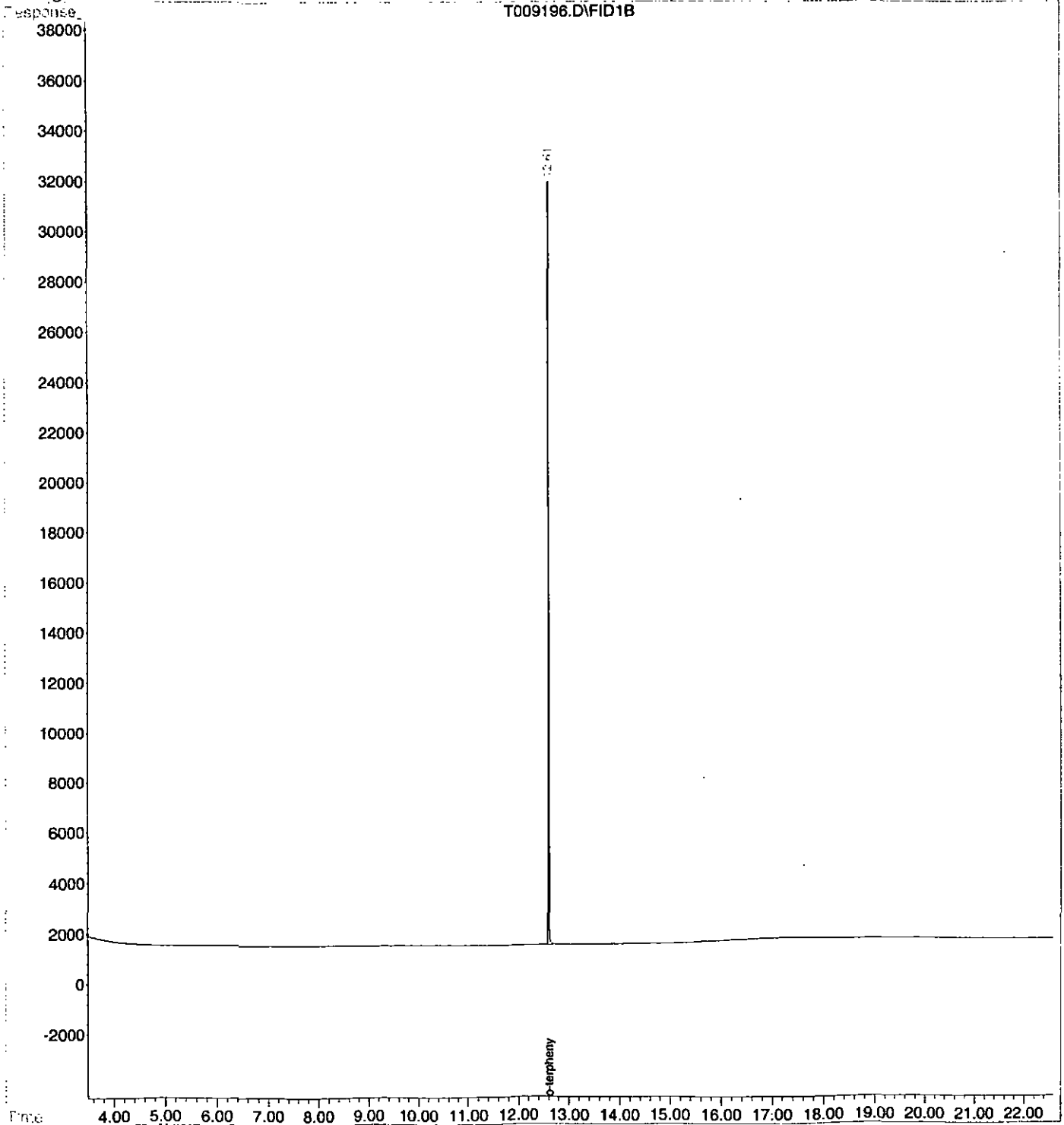
Quantitation Report

Data File : C:\HPCHEM\1\LEDA\991201\T009196.D  
Acq On : 1 Dec 1999 7:22 pm  
Sample : 4970.04s  
Misc :  
IntFile : TPHCINT.E  
Quant Time: Dec 2 7:44 1999 Quant Results File: TPH66.RES

8  
Operator: Bhaskar  
Inst : GC/MS Ins  
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\TPH66.M (Chemstation Integrator)  
Title : TPHC Calibration 06/05/97 21 peaks  
Last Update : Wed Nov 17 14:48:28 1999  
Response via : Multiple Level Calibration  
DataAcq Meth : TPH66.M

Volume Inj. : 1 ul  
Signal Phase : HP-5  
Signal Info : 30m x 0.32mm



Data File : C:\HPCHEM\1\... \991201\T009197.D  
 Acq On : 1 Dec 1999 7:56 pm  
 Sample : 4970.05s  
 Misc :  
 IntFile : TPHCINT.E  
 Quant Time: Dec 2 7:44 1999 Quant Results File: TPH66.RES

Operator: Bhaskar  
 Inst : GC/MS Ins  
 Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\TPH66.M (Chemstation Integrator)  
 Title : TPHC Calibration 06/05/97 21 peaks  
 Last Update : Wed Nov 17 14:48:28 1999  
 Response via : Initial Calibration  
 DataAcq Meth : TPH66.M  
 Volume Inj. : 1 ul  
 Signal Phase : HP-5  
 Signal Info : 30m x 0.32mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
21) sC o-terphenyl	12.61	273048	8.508 mg/L
Spiked Amount	10.000	Range 8 - 13	Recovery = 85.08%#
Target Compounds			

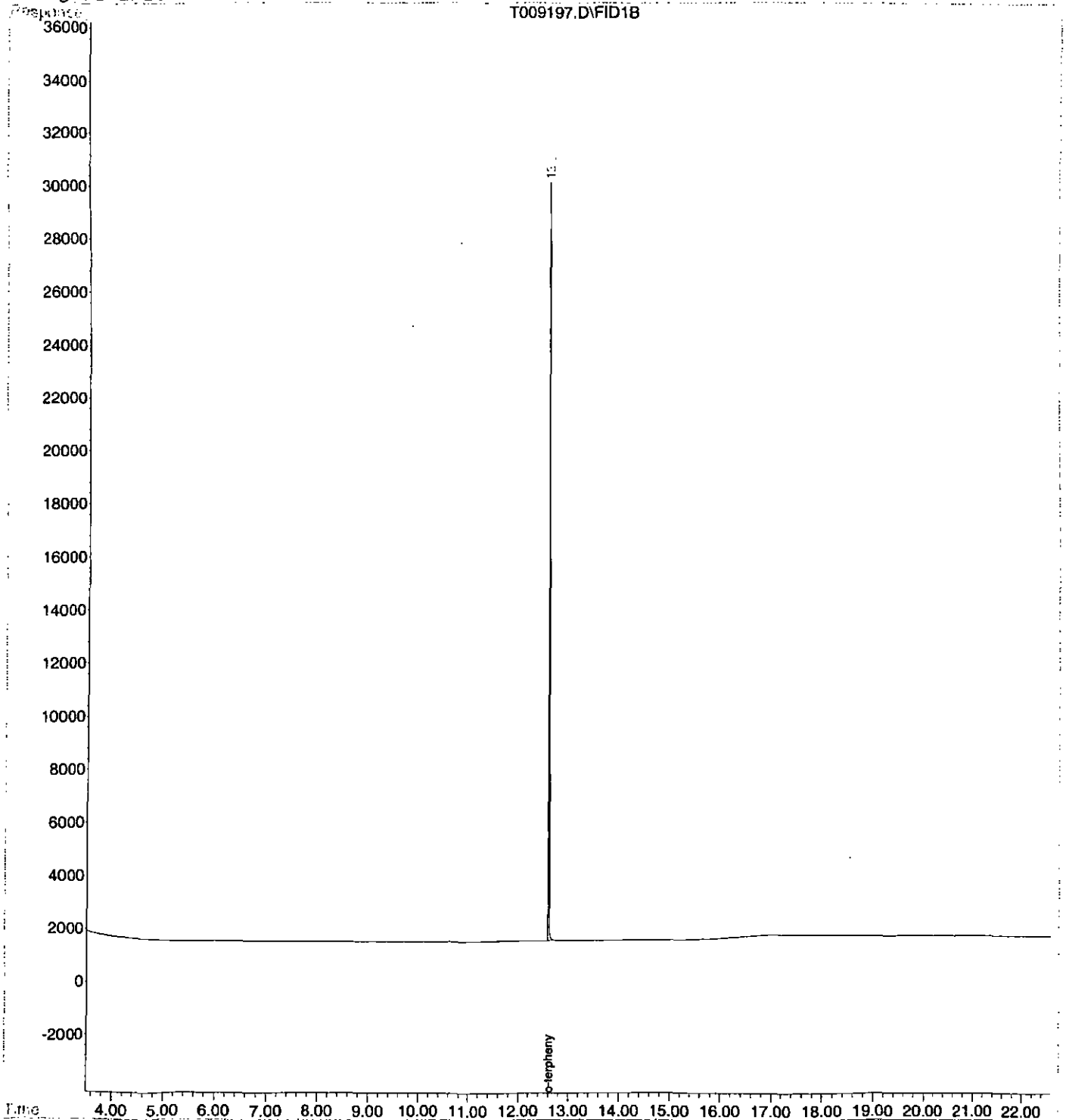
Quantitation Report

Data File : C:\HPCHEM\1\A\991201\T009197.D  
Acq On : 1 Dec 1999 7:56 pm  
Sample : 4970.05s  
Misc :  
IntFile : TPHCINT.E  
Quant Time: Dec 2 7:44 1999 Quant Results File: TPH66.RES

L: 9  
Operator: Bhaskar  
Inst : GC/MS Ins  
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\TPH66.M (Chemstation Integrator)  
Title : TPHC Calibration 06/05/97 21 peaks  
Last Update : Wed Nov 17 14:48:28 1999  
Response via : Multiple Level Calibration  
DataAcq Meth : TPH66.M

Volume Inj. : 1 ul  
Signal Phase : HP-5  
Signal Info : 30m x 0.32mm



# 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 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 01/03/00



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**