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Former NTC Bainbridge, Port Deposit, MD	***Site Removal Actions***	***Date: 24-Nov-99***
Contract N62470-93-D-3032 D.O. # 137	***Project No. 919568***	***Title: memo~39***

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FROM: Larry Stearns
COPIES: Project File
SUBJECT: Transmittal of Project Close-Out Reports:
Volume 2: Aboveground and Underground Storage Tank Removal

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- U.S. EPA – Region III: 3 copies
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- Navy: 5 copies

Please forward any comments to Mr. Frank Zepka at the Navy.

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CONTRACTOR CLOSE-OUT REPORT
SITE CLEAN-UP AND REMOVAL ACTIONS
FORMER NAVAL TRAINING CENTER - BAINBRIDGE
PORT DEPOSIT, MARYLAND

VOLUME 2
ABOVEGROUND AND UNDERGROUND STORAGE TANK REMOVAL:
BUILDING 7 – TOME STEAM PLANT
BUILDING J-J - HOUSE
BUILDING 723 – PORTABLE TAR TANK
BUILDING 760 – AUTO HOBBY SHOP
BUILDING K – OFFICERS' HOUSING
BUILDING 693 – WATER TREATMENT PLANT
BUILDING 117 – ENLISTED MENS' BARRACKS
SUMMIT CIRCLE AREA – BUILDINGS 901 TO 930

Prepared for:

DEPARTMENT OF THE NAVY
Contract No. N62470-93-D-3032: D.O. 137
Engineering Field Activity - Chesapeake
Naval Facilities Engineering Command
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OHM Project 919568

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LIST OF ACRONYMS

Acronym	Title
AST	Aboveground Storage Tank
DRO	Diesel Range Organics
EPA	U.S. Environmental Protection Agency – Region III
GRO	Gasoline Range Organics
MDE	Maryland Department of the Environment
mg/kg	Milligram per kilogram [parts per million]
N/A	Not Applicable
ND	Non-detect
NTCB	Former Naval Training Center Bainbridge
OHM	OHM Remediation Services Corporation, a subsidiary of The IT Group
PCB	Polychlorinated Biphenyl
ppm	Parts per million
SW-846	U.S.EPA "Test Methods for Evaluating Solid Waste", 3rd ed., July 1994
TCLP	Toxicity Characteristic Leaching Procedure
TPH	Total Petroleum Hydrocarbons
UST	Underground Storage Tank
VOC	Volatile Organic Compound

1.0 INTRODUCTION

OHM Remediation Services Corp. [OHM] was contracted by the Navy to perform environmental remediation at the former Naval Training Center Bainbridge [NTCB] near Port Deposit, Maryland. This report documents a portion of the work performed on this project by OHM under federal contract N62470-93-D-3032, Delivery Order No. 137 issued 5 February 1997. Specifically, this report addresses the remediation (removal) of the aboveground storage tanks located at Buildings 7 (Tome Steam Plant), J-J (House) and 723 (Portable Tar Tank) and the underground storage tanks located at Building 760 (Auto Hobby Shop), Building K (Officers' Housing), Building 693 (Water Treatment Plant), Building 117 (Enlisted Mens' Barracks) and in the Summit Circle Civilian housing area (Buildings 901 to 930). Refer to drawing RD-01 for the corresponding building locations.

1.1 PROJECT BACKGROUND

Design and construction of NTCB began in 1942 initially building from the property of the former Tome Institute School. NTCB served as a boot camp for Navy recruits during World War II and the Korean War and was permanently closed in 1976. The facility encompasses approximately 1,250 acres and consists of roads, drill fields, and about 60 remaining buildings. Most buildings and structures within NTCB were demolished during the last 10 years. Since deactivation, NTCB has become extensively overgrown and has been little used in the past two decades.

The U.S. Department of the Navy currently owns NTCB, but transfer of ownership to the State of Maryland is in progress pending resolution of various environmental and other issues. State and local agencies are planning to develop NTCB, possibly for commercial and residential use. The remediation discussed in this report is part of a larger environmental remediation effort by the Navy at NTCB.

1.2 GENERAL SCOPE OF WORK

The general scope of work for the remediation involved removing the aboveground storage tanks in the areas of Buildings 7, J-J and 723 and the underground storage tanks in the areas of Buildings 760, K, 693, 117 and the Summit Circle Civilian housing area. This involved composite sampling of the tank contents, following receipt of the laboratory analysis of the waste oil, pumping the contents into a tank truck for transportation off-site for incineration, removing the tank from the building site (AST) or excavation site (UST), witnessed by a MDE certified observer, transporting the intact tank to the project storage area for cleaning and disposal by cutting the tank at both ends or horizontally, followed by pressure washing until clean. Tank sludges were drummed for disposal and the tank pieces were shipped off-site for disposal as scrap steel. As per the directions from the MDE Oil Control Program, the soil from the floor of each tank excavation was sampled for off-site laboratory confirmation analysis. All tank excavations were backfilled, seeded with grass and mulched with straw.

During the execution of this work, OHM used the following subcontractors for certified tank removal, waste disposal or analytical services.

- Non-hazardous waste oil treatment and disposal – International Petroleum Corporation of Delaware, 505 South Market Street, Wilmington, Delaware 19801 (302-421-9306).

- Hazardous waste oil treatment and disposal – Republic Environmental Services, 2869 Sandstone Drive, Hatfield, Pennsylvania 19440 (215-822-8996).

- Non-hazardous waste oil treatment and disposal – Mid-States Oil Refining LLC, 3520 Fairfield Road, Baltimore, Maryland 21226 (410-354-9500).

- Non-hazardous solid waste disposal – BFI Conestoga Landfill, Mineview Drive, P.O. Box 128, Morgantown, Pennsylvania 19543 (610-286-6844).

- Recycling scrap steel – Cambridge Iron & Metal Company, 901 S. Kresson Street, Baltimore Maryland 21224 (410-327-7870).

- Tank/vacuum truck service – Reifsneider Transportation Services, 233 Fellowship Road, P.O. Box 756, Eagle, Pennsylvania 19480 (610-458-9333).

- Laboratory analytical work - Gascoyne Laboratories, Inc., 2101 Van Deman Street, Baltimore, Maryland 21224 (410-633-1800).

- Laboratory analytical work – Accutest Laboratories, Inc., 4405 Vineland Road, Suite C-15, Orlando, Florida 32811 (407-425-6700).

- Laboratory analytical work – OHM Analytical Division, 16406 US Route 224 E, Findlay, Ohio, 45840 (419-423-3526).

- Laboratory analytical work – Q Biochem LLC, 1401 Municipal Road, Roanoke, Virginia 24012 (800-897-0297).

- Certified Tank Remover – Mr. Dale J. Carty, Engineering Technologies Association, Inc., 3458 Ellicott Center Drive, Suite 101, Ellicott City, Maryland 21043 (410-461-9920) Maryland Certification, MDIC – 96 – 0019.

1.3 PROJECT CLEANUP LEVELS

The project cleanup levels listed in Table 1 were established by the Navy with the concurrence of the EPA and MDE. Remediation continued until all of the confirmation analyses gave results that did not exceed the cleanup level(s) for the particular chemical(s) of concern at a specific location. Although laboratory analyses other than those listed in Table 1 may have been performed and may be reported in this document, the Table 1 values were the only cleanup levels specifically established for NTCB.

For the aboveground and underground storage area sites, the chemical of concern for cleanup level was:

- Total Petroleum Hydrocarbons

Table 1: Project Cleanup Levels Applied at Various NTCB Locations

Chemical of Concern	Cleanup Level	Units	Units	Intended Matrix
Total Petroleum Hydrocarbons	100	mg/kg	ppm	Soil
DDT	4.3	mg/kg	ppm	Soil
DDE	16.3	mg/kg	ppm	Soil
DDD	23.1	mg/kg	ppm	Soil
Alpha Chlordane	4.1	mg/kg	ppm	Soil
Gamma Chlordane	4.1	mg/kg	ppm	Soil
Heptachlor Epoxide	0.4	mg/kg	ppm	Soil
Antimony	27	mg/kg	ppm	Soil
Lead	400	mg/kg	ppm	Soil
Benzo (a) pyrene	2.0	mg/kg	ppm	Soil
Total PCB	10	mg/kg	ppm	Soil
Total PCB	10	mg/kg	ppm	Concrete
Total PCB	10	mg/kg	ppm	Non-porous Surfaces
Total PCB	50	mg/kg	ppm	Encapsulated Concrete

2.0 SUMMARY OF WORK PERFORMED

The following sections summarize the remediation work performed for the site cleanup action at the aboveground storage tank locations at Buildings 7 (Tome Steam Plant), J-J (House) and 723 (Portable Tar Tank) and the underground storage tank locations at Building 760 (Auto Hobby Shop), Building K (Officers' Housing), Building 693 (Water Treatment Plant), Building 117 (Enlisted Mens' Barracks) and in the Summit Circle Civilian housing area (Buildings 901 to 930). The locations of these aboveground and underground storage tank locations are shown on drawing RD-01.

2.1 LOCATION INVESTIGATION AND INITIAL REMOVALS

During the course of the early investigative and remediation effort (1997-1999), at the Former Naval Training Center Bainbridge, a series of three (3) aboveground storage tanks (AST) and four (4) underground storage tanks (UST) were discovered through inspection of the remedial activities or unexpectedly. The locations of these aboveground storage tanks were Buildings 7, J-J and 723 and underground storage tanks were Buildings 760, K, 693 and 117.

From mid July, 1999, through the beginning of August, 1999, a separate and new investigation was performed at 33 potential underground storage tank locations in the Summit Circle area, at the Brig, Commissary Store and the Fire Station Buildings. The investigation locations were based on 1943 and 1954 base drawings and various aerial photographs. All of the storage tanks found during the investigation had been installed from 1942 to 1943 and apparently had been out of service since circa 1958 to 1964. All of the storage tanks were formerly used to store heating oil at civilian residential housing units.

Each site was investigated either directly with an excavator or indirectly with a magnetometer. Underground storage tanks were uncovered at 24 locations in the Summit Circle Civilian housing area. Since four of the storage tanks caused interference with the ongoing construction work, they were immediately removed from the ground on July 14, 1999, as witnessed by Mr. Brown Roe of the MDE Oil Control Program. At this time, as part of the confirmation analysis, Mr. Roe requested one grab soil sample to be taken in the floor of each excavation following the removal of the tanks. The remaining 20 storage tanks were uncovered at the surface, measured for size and content and composite sampled for waste characterization analysis.

All of the 24 underground storage tanks, at the Summit Circle Civilian housing area, were single-wall, painted on the exterior and made of 1/8-in thick plain carbon steel with connecting piping of bare steel. The 525-gallon storage tanks measured 48-inches in diameter by 67-inches in length, the 940-gallon storage tank was 48-inches in diameter by 10-feet in length and the 3050-gallon storage tank was 96-inches in diameter by 16-feet 3-inches in length. No tanks were found at several Summit Circle Civilian housing area sites (C-903, C-904, C-907, C-922, C-924 and C-929) as well as the Brig (Building 627), Commissary Store (Building 686) and the Fire Station (Building 629). Information on underground storage tanks not located during investigations can be found in Table 3.

Analytical composites of the storage tank contents indicated non-hazardous wastes with high petroleum content. All of the storage tanks found during the investigation were located west of Barton Road, southeast of Fiske Road, north of Ridge Road, south of Valley Road plus around the exterior of Summit Circle.

The tanks were owned by the U.S. Department of the Navy – Atlantic Fleet, NAVFACENGCOM, Engineering Field Activity Chesapeake, with the point of contact as Mr. Frank Zepka, Remedial Project Manager, Building 212 – Code 18, 901 M Street S.E., Washington Naval Yard, Washington, D.C., 20374-5018 (202-685-3279).

Information on the aboveground and underground storage tanks located is given in Table 2.

Table 2: Aboveground and Underground Storage Tank Locations

Number	Type	Corresponding Building Number	Tank Size Gallon	Product Depth	Product Volume Gallon	Status
	AST	7	3000	Solidified	Approx. 2000	Removed
	AST	J-J	250	3/5 Full	150	Removed
	AST	723	240	Empty	0	Removed
	UST	760	1500	2/3 Full	1000	Uncovered/Removed
	UST	K	500	3/5 Full	300	Uncovered/Removed
	UST	693	550	Crushed	Minimal	Uncovered/Removed
	UST	117	3000	Full	3000	Uncovered/Removed
1	UST	C-901	940	Full	940	Uncovered/Removed
2	UST	C-902	3050	8" of 96"	254	Uncovered/Removed
3	UST	C-905	525	Full	525	Uncovered/Removed
4	UST	C-906	525	45" of 48"	492	Uncovered/Removed
5	UST	C-908	525	Full	525	Uncovered/Removed
6	UST	C-909	525	Full	525	Uncovered/Removed
7	UST	C-910	525	36" of 48"	394	Uncovered/Removed
8	UST	C-911	525	Full	525	Uncovered/Removed
9	UST	C-912	525	Full	525	Uncovered/Removed
10	UST	C-913	525	Full	525	Uncovered/Removed
11	UST	C-914	525	Full	525	Uncovered/Removed
12	UST	C-915	525	Full	525	Uncovered/Removed
13	UST	C-916	525	Full	525	Uncovered/Removed
14	UST	C-917	525	Full	525	Uncovered/Removed
15	UST	C-918	525	45" of 48"	492	Uncovered/Removed
16	UST	C-919	525	Full	525	Uncovered/Removed
17	UST	C-920	525	Full	525	Uncovered/Removed
18	UST	C-921	525	45" of 48"	492	Uncovered/Removed
19	UST	C-923	525	Full	525	Uncovered/Removed
20	UST	C-925	525	Full	525	Uncovered/Removed
21	UST	C-926	525	Full	525	Uncovered/Removed
22	UST	C-927	525	Full	525	Uncovered/Removed
23	UST	C-928	525	Full	525	Uncovered/Removed
24	UST	C-930	525	27"of 48"	295	Uncovered/Removed

In March, 1997, OHM performed a geophysical study at various locations at the Former Naval Training Center in Bainbridge, Maryland to determine if underground storage tanks still existed in areas where the military buildings/housing were previously removed. The study involved conducting a magnetometer survey over four separate areas within the site, using a Schonstedt 72CV Magnetic Gradiometer (72CV) and a GEM GSM 19 Gradiometer (GEM 19).

An additional geophysical investigation for underground storage tanks was conducted in August, 1999, in areas not previously investigated, at the Main Gate and at the former Camp Rogers site. For this limited investigation, the field personnel used an excavator and a small magnetometer. As a result of these investigations, no additional underground storage tanks were successfully located. The following table summarizes the results of all the investigative efforts made during the entire project, for which no underground storage tanks were located.

Table 3: Investigations Yielding "Non-Finds" for Underground Storage Tank Locations

Date	Location	Site Area	Investigative Results
3/7/97	Building 115	Camp Rogers	No Tank Found
3/7/97	Building 138	Camp Rogers	No Tank Found
3/7/97	Building 118	Camp Rogers	No Tank Found
3/7/97	Building 119	Camp Rogers	No Tank Found
3/7/97	Building 120	Camp Rogers	No Tank Found
3/6/97	Buildings 511-514	Camp Rogers	No Tanks Found
3/5/97	Buildings 516-521	Callaghan Circle	No Tanks Found
3/6/97	Buildings 522-525	Camp Rogers	No Tanks Found
7/29/99	C-903	Summit Circle	No Tank Found
7/29/99	C-904	Summit Circle	No Tank Found
7/29/99	C-907	Summit Circle	No Tank Found
7/29/99	C-922	Summit Circle	No Tank Found
7/29/99	C-924	Summit Circle	No Tank Found
7/29/99	C-929	Summit Circle	No Tank Found
7/29/99	Building 627	Brig	No Tank Found
7/29/99	Building 629	Fire Station	No Tank Found
7/29/99	Building 686	Commissary Store	No Tank Found
8/4/99	Quarters M	Main Gate	Heating Oil UST's previously removed by others
8/4/99	Quarters N	Main Gate	Heating Oil UST's previously removed by others
8/4/99	Building 32	Main Gate	No Tank Found
8/4/99	Building 33	Main Gate	No Tank Found
8/5/99	Building 526	Camp Rogers	No Tank Found
8/5/99	Building 529	Camp Rogers	No Tank Found

2.2 REMOVAL ACTION

The following summarizes the aboveground and underground storage tank removal actions performed during the site remediation. During this work, close communication was maintained with the Navy, EPA, and MDE representatives regarding the remediation progress and decisions about confirmation analyticals.

2.2.1 Aboveground Storage Tanks

2.2.1.1 Building 7 – Tome Steam Plant

This 3000-gallon steel AST was located behind Building 7 (Steam Plant) in the Tome Institute Area. The steel tank was found to be partially full of a black, solidified material which was later confirmed to be bituminous tar. Disposal samples were also collected; the off-site laboratory confirmed the tank contents as non-hazardous. The tank was lifted and transported to the project staging area using a hydraulic excavator for disposal. Upon arrival at the storage area, the tank was cut horizontally in half. Since the tar in the tank had solidified, the tank could be disposed in a sanitary landfill. The dissected tank was loaded into a rolloff box for off-site disposal.

2.2.1.2 Building J-J - House

This 250-gallon steel AST was recovered from the basement of Building J-J (House) in the Camp Semmes area. The steel tank contained approximately 150 gallons of heating fuel oil which was drained into three 55-gallon steel drums for off-site disposal. Upon the completion of the fuel oil transfer, the tank was removed from the basement of Building J-J and transported to the project staging area for processing. All associated fill, vent and discharge piping was also removed from the building. For disposal purposes, the tank was cut in half horizontally and pressure washed. Both tank halves were then placed with the scrap metal for recycling.

2.2.1.3 Building 723 – Portable Tar Tank

This 240-gallon steel, portable AST was located in a field just west of Building 723 in the Gate 16 area. The tank was mounted on a wheeled frame and appeared to have been used for hot tar in road repair work. The tank was empty and the steel shell severely corroded. The tank was placed in the scrap metal wastestream for recycling at Cambridge Iron & Metal Company, 901 S. Kresson Street, Baltimore, Maryland 21224 (410-327-7870).

2.2.2 Underground Storage Tanks

2.2.2.1 Building 760 – Auto Hobby Shop

This 1500-gallon steel UST was discovered by Mr. Brown Roe of MDE Oil Control Program, on March 18, 1997, during an inspection of other remediation activities. This tank was buried directly adjacent to the oil change service pits along the northwest face of the building. The oily contents were sampled on March 18, 1997, for disposal parameters; laboratory analytical confirmed the contents as hazardous. On April 9, 1997, approximately 1000 gallons of hazardous waste oil was removed from the tank and sent to Republic Environmental Services, 2869 Sandstone Drive, Hatfield, Pennsylvania 19440 (215-822-8996) for treatment and disposal. The tank was removed on April 10, 1997, as witnessed by Mr. Brown Roe of the MDE Oil Control Program, cleaned and prepared for recycling as scrap steel by Cambridge Iron & Metal Company, 901 S. Kresson Street, Baltimore, Maryland 21224 (410-327-7870).

There was no visible or observable indication that the UST had leaked. Only one confirmation sample of the floor of the excavation was required; it was sampled on April 10, 1997. The laboratory results indicated Total Petroleum Hydrocarbons, Diesel Range Organics (TPH-DRO) of 18 mg/kg (ppm). The soil removed during the excavation, which was also tested for TPH and other parameters, indicated TPH-DRO of 46 mg/kg. The excavation was backfilled on April 17, 1998, with the soil removed from the excavation plus some additional clean fill from on-base.

2.2.2.2 Building K – Officers' Housing

This 500-gallon steel UST was identified by the Navy and had been in continuous active use for heating oil at Building K until immediately prior to removal. On March 31, 1997, approximately 300 gallons of No. 2 heating oil was removed for off-site recycling by Mid-States Oil Refining LLC, 3520 Fairfield Road, Baltimore, Maryland 21226 (410-354-9500). The tank was removed on April 8, 1997, as witnessed by Mr. Brown Roe of the MDE Oil Control Program, for cleaning prior to being recycled as scrap steel by Cambridge Iron & Metal Company, 901 S. Kresson Street, Baltimore, Maryland 21224 (410-327-7870).

There was no visible or observable indication that the UST had leaked. A five-point composite soil sample was collected from the excavation floor and four walls for laboratory TPH analyses on April 8, 1997. The laboratory results indicated TPH-DRO of 3.7 mg/kg in the composite soil sample. The excavation was backfilled, graded and seeded on April 8, 1997.

2.2.2.3 Building 693 – Water Treatment Plant

This tank was discovered unexpectedly in January, 1998, during a larger Polychlorinated Biphenyl (PCB) remediation effort taking place inside the lower mechanical room of the former Water Treatment Plant Building 693. The UST was found outside the building during the removal of a floor drain pipe from the building. Although it remains unclear exactly how this UST was piped, it appears to have contained fuel oil possibly for the emergency pumps and generators. Due to the groundwater seepage conditions in this area, the excavation was constantly under water. Management of water was a priority due to PCB concerns and the close proximity of a wetlands. All water from the excavation was contained, collected and pumped through an activated carbon/organoclay treatment system as part of the overall remediation work being monitored by MDE Waste Management Administration and USEPA Region III. Mr. Brown Roe of the MDE Oil Control Program inspected the tank area on January 22, 1998.

This 550-gallon steel UST was removed on August 10, 1998, as witnessed by Mr. Brown Roe of the MDE Oil Control Program, under flooded conditions. The tank was inadvertently crushed during removal, and appeared to have contained petroleum at one time as a slight sheen was observed on the water in the excavation. The tank was subsequently cut open, cleaned and recycled as scrap steel by Cambridge Iron & Metal Company, 901 S. Kresson Street, Baltimore, Maryland 21224 (410-327-7870).

Initial soil sampling of the excavation floor and walls on August 12 and 13, 1998, indicated Total Petroleum Hydrocarbons, Gasoline Range Organics (TPH-GRO) and TPH-DRO ranging from 264 to 1870 mg/kg. The impacted soils were re-excavated. Resampling on September 2, 1998, indicated the floor and one wall needed further remediation, as TPH-DRO ranged from 663 to 4190 mg/kg. These areas were then further excavated. Resampling on October 6, 1998, indicated the remaining soils contained less than 14.6 mg/kg of TPH-GRO and TPH-DRO. About 161 tons of non-hazardous TPH impacted soil was disposed on December 9 and 10, 1998, at BFI Conestoga Landfill, Mineview Drive, P.O. Box 128, Morgantown, Pennsylvania 19543 (610-286-6844). The tank excavation area was backfilled and regraded on December 16, 1998.

2.2.2.4 Building 117 – Enlisted Mens' Barracks

This approximately 3000-gallon steel UST was discovered during a geophysical investigation in March, 1997. The contents were sampled for disposal parameters on December 8 and 10, 1997. The tank, found intact full of liquid, was believed to have provided heating oil to the former enlisted mens' barracks, Buildings 116 and 117. Mr. Brown Roe of the MDE Oil Control Program inspected the tank on January 6, 1998, prior to the removal of approximately 3000 gallons of liquid. The tank was inspected again on January 12, 1998, by Mr. Brown Roe; removal of the tank occurred on January 12, 1998, as witnessed by Mr. Brown Roe of the MDE Oil Control Program, cleaned and recycled as scrap steel by Cambridge Iron & Metal Company, 901 S. Kresson Street, Baltimore, Maryland 21224 (410-327-7870).

There was no visible or observable indication that the UST had leaked. Post excavation floor and wall soil samples taken on January 12, 1998, were generally less than the detection levels for TPH-GRO and TPH-DRO. Only TPH-DRO was detected at the east wall, at 24 mg/kg. The excavation was subsequently backfilled with clean soil from on-base.

2.2.2.5 Building C-901

The oily contents of this 940-gallon steel UST, located at the west end of Building 901, were composite sampled on July 21, 1999, for disposal parameters; laboratory analytical confirmed the contents as non-hazardous. On September 9, 1999, approximately 940 gallons of non-hazardous waste oil was removed from the tank and sent to International Petroleum Corporation of Delaware, 505 South Market Street, Wilmington, Delaware 19801 (302-421-9306) as part of a shipment of approximately 9654 gallons for treatment and disposal. The tank was removed on September 10, 1999, as witnessed by Dale J. Carty of Engineering Technology Associates, cleaned and prepared for recycling as scrap steel by Cambridge Iron & Metal Company, 901 S. Kresson Street, Baltimore, Maryland 21224 (410-327-7870).

There was no visible or observable indication that the UST had leaked. The confirmation analyticals for these tank extractions were changed from the previous tank extractions in July, 1999. As per the directions of Mr. Brown Roe of the MDE Oil Control Program, the floor of the excavation was sampled in two locations, instead of the former one location, on September 10, 1999. The laboratory results indicated TPH-GRO of < 10 ppm and TPH-DRO of 42 ppm. The excavation was backfilled, seeded with grass and mulched with straw.

2.2.2.6 Building C-902

On September 9, 1999, approximately 254 gallons of non-hazardous waste oil was removed from the 3050-gallon steel UST, located at the west end of Building 902, and sent to International Petroleum Corporation of Delaware, 505 South Market Street, Wilmington, Delaware 19801 (302-421-9306) as part of a shipment of approximately 9654 gallons for treatment and disposal. The tank was removed on September 10, 1999, as witnessed by Dale J. Carty of Engineering Technology Associates, cleaned and prepared for recycling as scrap steel by Cambridge Iron & Metal Company, 901 S. Kresson Street, Baltimore, Maryland 21224 (410-327-7870).

There was no visible or observable indication that the UST had leaked. As per the directions of Mr. Brown Roe of the MDE Oil Control Program, the floor of the excavation was sampled in two locations, on September 13, 1999. The laboratory results indicated TPH-GRO of < 10 ppm and TPH-DRO of < 10 ppm. The excavation was backfilled, seeded with grass and mulched with straw.

2.2.2.7 Building C-905

On September 9, 1999, approximately 525 gallons of non-hazardous waste oil was removed from the

525-gallon steel UST, located at the south end of Building 905, and sent to International Petroleum Corporation of Delaware, 505 South Market Street, Wilmington, Delaware 19801 (302-421-9306) as part of a shipment of approximately 9654 gallons for treatment and disposal. The tank was removed on September 10, 1999, as witnessed by Dale J. Carty of Engineering Technology Associates, cleaned and prepared for recycling as scrap steel by Cambridge Iron & Metal Company, 901 S. Kresson Street, Baltimore, Maryland 21224 (410-327-7870).

There was no visible or observable indication that the UST had leaked. As per the directions of Mr. Brown Roe of the MDE Oil Control Program, the floor of the excavation was sampled in two locations, on September 10, 1999. The laboratory results indicated TPH-GRO of < 10 ppm and TPH-DRO of < 10 ppm. The excavation was backfilled, seeded with grass and mulched with straw.

2.2.2.8 Building C-906

The oily contents of this 525-gallon steel UST, located at the south end of Building 906, were composite sampled on July 21, 1999, for disposal parameters; laboratory analytical confirmed the contents as non-hazardous. On September 9, 1999, approximately 492 gallons of non-hazardous waste oil was removed from the tank and sent to International Petroleum Corporation of Delaware, 505 South Market Street, Wilmington, Delaware 19801 (302-421-9306) as part of a shipment of approximately 9654 gallons for treatment and disposal. The tank was removed on September 10, 1999, as witnessed by Dale J. Carty of Engineering Technology Associates, cleaned and prepared for recycling as scrap steel by Cambridge Iron & Metal Company, 901 S. Kresson Street, Baltimore, Maryland 21224 (410-327-7870).

There was no visible or observable indication that the UST had leaked. As per the directions of Mr. Brown Roe of the MDE Oil Control Program, the floor of the excavation was sampled in two locations, on September 10, 1999. The laboratory results indicated TPH-GRO of < 10 ppm and TPH-DRO of 36 ppm. The excavation was backfilled, seeded with grass and mulched with straw.

2.2.2.9 Building C-908

On September 9, 1999, approximately 525 gallons of non-hazardous waste oil was removed from the 525-gallon steel UST, located at the west end of Building 908, and sent to International Petroleum Corporation of Delaware, 505 South Market Street, Wilmington, Delaware 19801 (302-421-9306) as part of a shipment of approximately 9654 gallons for treatment and disposal. The tank was removed on September 10, 1999, as witnessed by Dale J. Carty of Engineering Technology Associates, cleaned and prepared for recycling as scrap steel by Cambridge Iron & Metal Company, 901 S. Kresson Street, Baltimore, Maryland 21224 (410-327-7870).

There was no visible or observable indication that the UST had leaked. As per the directions of Mr. Brown Roe of the MDE Oil Control Program, the floor of the excavation was sampled in two locations, on September 10, 1999. The laboratory results indicated TPH-GRO of < 10 ppm and TPH-DRO of 310 and 120 ppm. The impacted floor of the excavation was re-excavated followed by resampling in the two failed locations on September 21, 1999. The laboratory results of the resampling indicated TPH-DRO of 28 and 19.6 ppm. The excavation was backfilled, seeded with grass and mulched with straw.

2.2.2.10 Building C-909

The oily contents of this 525-gallon steel UST, located at the south end of Building 909, were composite sampled on July 21, 1999, for disposal parameters; laboratory analytical confirmed the contents as non-hazardous. On September 9, 1999, approximately 525 gallons of non-hazardous waste oil was removed from the tank and sent to International Petroleum Corporation of Delaware, 505 South Market Street, Wilmington, Delaware 19801 (302-421-9306) as part of a shipment of approximately 9654 gallons for treatment and disposal.

The tank was removed on September 10, 1999, as witnessed by Dale J. Carty of Engineering Technology Associates, cleaned and prepared for recycling as scrap steel by Cambridge Iron & Metal Company, 901 S. Kresson Street, Baltimore, Maryland 21224 (410-327-7870).

There was no visible or observable indication that the UST had leaked. As per the directions of Mr. Brown Roe of the MDE Oil Control Program, the floor of the excavation was sampled in two locations, on September 10, 1999. The laboratory results indicated TPH-GRO of < 10 ppm and TPH-DRO of < 10 ppm. The excavation was backfilled, seeded with grass and mulched with straw.

2.2.2.11 Building C-910

The oily contents of this 525-gallon steel UST, located at the south end of Building 910, were composite sampled on July 21, 1999, for disposal parameters; laboratory analytical confirmed the contents as non-hazardous. On September 9, 1999, approximately 394 gallons of non-hazardous waste oil was removed from the tank and sent to International Petroleum Corporation of Delaware, 505 South Market Street, Wilmington, Delaware 19801 (302-421-9306) as part of a shipment of approximately 9654 gallons for treatment and disposal. The tank was removed on September 10, 1999, as witnessed by Dale J. Carty of Engineering Technology Associates, cleaned and prepared for recycling as scrap steel by Cambridge Iron & Metal Company, 901 S. Kresson Street, Baltimore, Maryland 21224 (410-327-7870).

There was no visible or observable indication that the UST had leaked. As per the directions of Mr. Brown Roe of the MDE Oil Control Program, the floor of the excavation was sampled in two locations, on September 10, 1999. The laboratory results indicated TPH-GRO of < 10 ppm and TPH-DRO of < 10 ppm. The excavation was backfilled, seeded with grass and mulched with straw.

2.2.2.12 Building C-911

The oily contents of this 525-gallon steel UST, located at the south end of Building 911, were composite sampled on July 21, 1999, for disposal parameters; laboratory analytical confirmed the contents as non-hazardous. On September 9, 1999, approximately 525gallons of non-hazardous waste oil was removed from the tank and sent to International Petroleum Corporation of Delaware, 505 South Market Street, Wilmington, Delaware 19801 (302-421-9306) as part of a shipment of approximately 9654 gallons for treatment and disposal. The tank was removed on September 10, 1999, as witnessed by Dale J. Carty of Engineering Technology Associates, cleaned and prepared for recycling as scrap steel by Cambridge Iron & Metal Company, 901 S. Kresson Street, Baltimore, Maryland 21224 (410-327-7870).

There was no visible or observable indication that the UST had leaked. As per the directions of Mr. Brown Roe of the MDE Oil Control Program, the floor of the excavation was sampled in two locations, on September 10, 1999. The laboratory results indicated TPH-GRO of < 10 ppm and TPH-DRO of < 19 ppm. The excavation was backfilled, seeded with grass and mulched with straw.

2.2.2.13 Building C-912

The oily contents of this 525-gallon steel UST, located at the south end of Building 912, were composite sampled on July 21, 1999, for disposal parameters; laboratory analytical confirmed the contents as non-hazardous. On September 9, 1999, approximately 525gallons of non-hazardous waste oil was removed from the tank and sent to International Petroleum Corporation of Delaware, 505 South Market Street, Wilmington, Delaware 19801 (302-421-9306) as part of a shipment of approximately 9654 gallons for treatment and disposal. The tank was removed on September 10, 1999, as witnessed by Dale J. Carty of Engineering Technology Associates, cleaned and prepared for recycling as scrap steel by Cambridge Iron & Metal Company, 901 S.

Kresson Street, Baltimore, Maryland 21224 (410-327-7870).

There was no visible or observable indication that the UST had leaked. As per the directions of Mr. Brown Roe of the MDE Oil Control Program, the floor of the excavation was sampled in two locations, on September 10, 1999. The laboratory results indicated TPH-GRO of < 10 ppm and TPH-DRO of 150 ppm. The impacted floor of the excavation was re-excavated followed by resampling in the one failed location on September 21, 1999. The laboratory results of the resampling indicated TPH-DRO of < 11 ppm. The excavation was backfilled, seeded with grass and mulched with straw.

2.2.2.14 Building C-913 (Tank 1)

The oily contents of this 525-gallon steel UST, located at the south end of Building 913, were composite sampled on June 28, 1999, for disposal parameters; laboratory analytical confirmed the contents as non-hazardous. On July 9, 1999, approximately 525gallons of non-hazardous waste oil was removed from the tank and sent to International Petroleum Corporation of Delaware, 505 South Market Street, Wilmington, Delaware 19801 (302-421-9306) for treatment and disposal. The tank removal, as witnessed by Mr. Brown Roe of the MDE Oil Control Program, was on July 14, 1999, because it interfered with the on-going site construction work. The tank was cleaned and prepared for recycling as scrap steel by Cambridge Iron & Metal Company, 901 S. Kresson Street, Baltimore, Maryland 21224 (410-327-7870).

There was no visible or observable indication that the UST had leaked. This tank was one of the first four located and at the time, only required one sample in the floor of the excavation on July 15, 1999. The laboratory results indicated TPH-GRO of < 10 ppm and TPH-DRO of 670 ppm. The impacted floor of the excavation was re-excavated followed by resampling in the one failed location on July 21, 1999. The laboratory results of the resampling indicated TPH-DRO of < 10 ppm. The excavation was backfilled, seeded with grass and mulched with straw.

2.2.2.15 Building C-914 (Tank 2)

The oily contents of this 525-gallon steel UST, located at the south end of Building 914, were composite sampled on June 28, 1999, for disposal parameters; laboratory analytical confirmed the contents as non-hazardous. On July 9, 1999, approximately 525gallons of non-hazardous waste oil was removed from the tank and sent to International Petroleum Corporation of Delaware, 505 South Market Street, Wilmington, Delaware 19801 (302-421-9306) for treatment and disposal. The tank removal, as witnessed by Mr. Brown Roe of the MDE Oil Control Program, was on July 14, 1999, because it interfered with the on-going site construction work. The tank was cleaned and prepared for recycling as scrap steel by Cambridge Iron & Metal Company, 901 S. Kresson Street, Baltimore, Maryland 21224 (410-327-7870).

There was no visible or observable indication that the UST had leaked. This tank was also one of the first four located and at the time, only required one sample in the floor of the excavation on July 15, 1999. The laboratory results indicated TPH-GRO of < 10 ppm and TPH-DRO of 74 ppm. The excavation was backfilled, seeded with grass and mulched with straw.

2.2.2.16 Building C-915 (Tank 3)

The oily contents of this 525-gallon steel UST, located at the south end of Building 915, were composite sampled on June 28, 1999, for disposal parameters; laboratory analytical confirmed the contents as non-hazardous. On July 9, 1999, approximately 525gallons of non-hazardous waste oil was removed from the tank and sent to International Petroleum Corporation of Delaware, 505 South Market Street, Wilmington, Delaware 19801 (302-421-9306) for treatment and disposal. The tank removal, as witnessed by Mr. Brown Roe of the

MDE Oil Control Program, was on July 14, 1999, because it interfered with the on-going site construction work. The tank was cleaned and prepared for recycling as scrap steel by Cambridge Iron & Metal Company, 901 S. Kresson Street, Baltimore, Maryland 21224 (410-327-7870).

There was no visible or observable indication that the UST had leaked. This tank was also one of the first four located and at the time, only required one sample in the floor of the excavation on July 15, 1999. The laboratory results indicated TPH-GRO of < 10 ppm and TPH-DRO of < 10 ppm. The excavation was backfilled, seeded with grass and mulched with straw.

2.2.2.17 Building C-916

The oily contents of this 525-gallon steel UST, located at the south end of Building 916, were composite sampled on July 21, 1999, for disposal parameters; laboratory analytical confirmed the contents as non-hazardous. On September 9, 1999, approximately 525 gallons of non-hazardous waste oil was removed from the tank and sent to International Petroleum Corporation of Delaware, 505 South Market Street, Wilmington, Delaware 19801 (302-421-9306) as part of a shipment of approximately 9654 gallons for treatment and disposal. The tank was removed on September 10, 1999, as witnessed by Dale J. Carty of Engineering Technology Associates, cleaned and prepared for recycling as scrap steel by Cambridge Iron & Metal Company, 901 S. Kresson Street, Baltimore, Maryland 21224 (410-327-7870).

There was no visible or observable indication that the UST had leaked. As per the directions of Mr. Brown Roe of the MDE Oil Control Program, the floor of the excavation was sampled in two locations, on September 9, 1999. The laboratory results indicated TPH-GRO of < 10 ppm and TPH-DRO of 25 and 62 ppm. The excavation was backfilled, seeded with grass and mulched with straw.

2.2.2.18 Building C-917

The oily contents of this 525-gallon steel UST, located at the south end of Building 917, were composite sampled on July 21, 1999, for disposal parameters; laboratory analytical confirmed the contents as non-hazardous. On September 9, 1999, approximately 525 gallons of non-hazardous waste oil was removed from the tank and sent to International Petroleum Corporation of Delaware, 505 South Market Street, Wilmington, Delaware 19801 (302-421-9306) as part of a shipment of approximately 9654 gallons for treatment and disposal. The tank was removed on September 10, 1999, as witnessed by Dale J. Carty of Engineering Technology Associates, cleaned and prepared for recycling as scrap steel by Cambridge Iron & Metal Company, 901 S. Kresson Street, Baltimore, Maryland 21224 (410-327-7870).

There was no visible or observable indication that the UST had leaked. As per the directions of Mr. Brown Roe of the MDE Oil Control Program, the floor of the excavation was sampled in two locations, on September 9, 1999. The laboratory results indicated TPH-GRO of < 10 ppm and TPH-DRO of 410 and 25 ppm. The impacted floor of the excavation was re-excavated followed by resampling in the one failed location on September 21, 1999. The laboratory results of the resampling indicated TPH-DRO of < 49.6 ppm. The excavation was backfilled, seeded with grass and mulched with straw.

2.2.2.19 Building C-918

The oily contents of this 525-gallon steel UST, located at the south end of Building 918, were composite sampled on July 21, 1999, for disposal parameters; laboratory analytical confirmed the contents as non-hazardous. On September 9, 1999, approximately 492 gallons of non-hazardous waste oil was removed from the tank and sent to International Petroleum Corporation of Delaware, 505 South Market Street, Wilmington, Delaware 19801 (302-421-9306) as part of a shipment of approximately 9654 gallons for treatment and disposal.

The tank was removed on September 10, 1999, as witnessed by Dale J. Carty of Engineering Technology Associates, cleaned and prepared for recycling as scrap steel by Cambridge Iron & Metal Company, 901 S. Kresson Street, Baltimore, Maryland 21224 (410-327-7870).

There was no visible or observable indication that the UST had leaked. As per the directions of Mr. Brown Roe of the MDE Oil Control Program, the floor of the excavation was sampled in two locations, on September 9, 1999. The laboratory results indicated TPH-GRO of < 10 ppm and TPH-DRO of 22 and 16 ppm. The excavation was backfilled, seeded with grass and mulched with straw.

2.2.2.20 Building C-919

The oily contents of this 525-gallon steel UST, located at the south end of Building 919, were composite sampled on July 21, 1999, for disposal parameters; laboratory analytical confirmed the contents as non-hazardous. On September 9, 1999, approximately 525 gallons of non-hazardous waste oil was removed from the tank and sent to International Petroleum Corporation of Delaware, 505 South Market Street, Wilmington, Delaware 19801 (302-421-9306) as part of a shipment of approximately 9654 gallons for treatment and disposal. The tank was removed on September 10, 1999, as witnessed by Dale J. Carty of Engineering Technology Associates, cleaned and prepared for recycling as scrap steel by Cambridge Iron & Metal Company, 901 S. Kresson Street, Baltimore, Maryland 21224 (410-327-7870).

There was no visible or observable indication that the UST had leaked. As per the directions of Mr. Brown Roe of the MDE Oil Control Program, the floor of the excavation was sampled in two locations, on September 9, 1999. The laboratory results indicated TPH-GRO of < 10 ppm and TPH-DRO of < 10 ppm. The excavation was backfilled, seeded with grass and mulched with straw.

2.2.2.21 Building C-920

The oily contents of this 525-gallon steel UST, located at the south end of Building 920, were composite sampled on July 21, 1999, for disposal parameters; laboratory analytical confirmed the contents as non-hazardous. On September 9, 1999, approximately 525 gallons of non-hazardous waste oil was removed from the tank and sent to International Petroleum Corporation of Delaware, 505 South Market Street, Wilmington, Delaware 19801 (302-421-9306) as part of a shipment of approximately 9654 gallons for treatment and disposal. The tank was removed on September 10, 1999, as witnessed by Dale J. Carty of Engineering Technology Associates, cleaned and prepared for recycling as scrap steel by Cambridge Iron & Metal Company, 901 S. Kresson Street, Baltimore, Maryland 21224 (410-327-7870).

There was no visible or observable indication that the UST had leaked. As per the directions of Mr. Brown Roe of the MDE Oil Control Program, the floor of the excavation was sampled in two locations, on September 9, 1999. The laboratory results indicated TPH-GRO of < 10 ppm and TPH-DRO of < 10 ppm. The excavation was backfilled, seeded with grass and mulched with straw.

2.2.2.22 Building C-921

On September 9, 1999, approximately 492 gallons of non-hazardous waste oil was removed from the 525-gallon steel UST, located at the north end of Building 921, and sent to International Petroleum Corporation of Delaware, 505 South Market Street, Wilmington, Delaware 19801 (302-421-9306) as part of a shipment of approximately 9654 gallons for treatment and disposal. The tank was removed on September 10, 1999, as witnessed by Dale J. Carty of Engineering Technology Associates, cleaned and prepared for recycling as scrap steel by Cambridge Iron & Metal Company, 901 S. Kresson Street, Baltimore, Maryland 21224 (410-327-7870).

There was no visible or observable indication that the UST had leaked. As per the directions of Mr. Brown Roe of the MDE Oil Control Program, the floor of the excavation was sampled in two locations, on September 10, 1999. The laboratory results indicated TPH-GRO of < 10 ppm and TPH-DRO of < 10 ppm. The excavation was backfilled, seeded with grass and mulched with straw.

2.2.2.23 Building C-923

On September 9, 1999, approximately 525 gallons of non-hazardous waste oil was removed from the 525-gallon steel UST, located at the south end of Building 923, and sent to International Petroleum Corporation of Delaware, 505 South Market Street, Wilmington, Delaware 19801 (302-421-9306) as part of a shipment of approximately 9654 gallons for treatment and disposal. The tank was removed on September 10, 1999, as witnessed by Dale J. Carty of Engineering Technology Associates, cleaned and prepared for recycling as scrap steel by Cambridge Iron & Metal Company, 901 S. Kresson Street, Baltimore, Maryland 21224 (410-327-7870).

There was no visible or observable indication that the UST had leaked. As per the directions of Mr. Brown Roe of the MDE Oil Control Program, the floor of the excavation was sampled in two locations, on September 10, 1999. The laboratory results indicated TPH-GRO of < 10 ppm and TPH-DRO of < 10 ppm. The excavation was backfilled, seeded with grass and mulched with straw.

2.2.2.24 Building C-925

On September 9, 1999, approximately 525 gallons of non-hazardous waste oil was removed from the 525-gallon steel UST, located at the west end of Building 925, and sent to International Petroleum Corporation of Delaware, 505 South Market Street, Wilmington, Delaware 19801 (302-421-9306) as part of a shipment of approximately 9654 gallons for treatment and disposal. The tank was removed on September 10, 1999, as witnessed by Dale J. Carty of Engineering Technology Associates, cleaned and prepared for recycling as scrap steel by Cambridge Iron & Metal Company, 901 S. Kresson Street, Baltimore, Maryland 21224 (410-327-7870).

There was no visible or observable indication that the UST had leaked. As per the directions of Mr. Brown Roe of the MDE Oil Control Program, the floor of the excavation was sampled in two locations, on September 10, 1999. The laboratory results indicated TPH-GRO of < 10 ppm and TPH-DRO of < 10 ppm. The excavation was backfilled, seeded with grass and mulched with straw.

2.2.2.25 Building C-926

On September 9, 1999, approximately 525 gallons of non-hazardous waste oil was removed from the 525-gallon steel UST, located at the west end of Building 926, and sent to International Petroleum Corporation of Delaware, 505 South Market Street, Wilmington, Delaware 19801 (302-421-9306) as part of a shipment of approximately 9654 gallons for treatment and disposal. The tank was removed on September 10, 1999, as witnessed by Dale J. Carty of Engineering Technology Associates, cleaned and prepared for recycling as scrap steel by Cambridge Iron & Metal Company, 901 S. Kresson Street, Baltimore, Maryland 21224 (410-327-7870).

There was no visible or observable indication that the UST had leaked. As per the directions of Mr. Brown Roe of the MDE Oil Control Program, the floor of the excavation was sampled in two locations, on September 10, 1999. The laboratory results indicated TPH-GRO of < 10 ppm and TPH-DRO of < 10 ppm. The excavation was backfilled, seeded with grass and mulched with straw.

2.2.2.26 Building C-927

On September 9, 1999, approximately 525 gallons of non-hazardous waste oil was removed from the

525-gallon steel UST, located at the east end of Building 927, and sent to International Petroleum Corporation of Delaware, 505 South Market Street, Wilmington, Delaware 19801 (302-421-9306) as part of a shipment of approximately 9654 gallons for treatment and disposal. The tank was removed on September 10, 1999, as witnessed by Dale J. Carty of Engineering Technology Associates, cleaned and prepared for recycling as scrap steel by Cambridge Iron & Metal Company, 901 S. Kresson Street, Baltimore, Maryland 21224 (410-327-7870).

There was no visible or observable indication that the UST had leaked. As per the directions of Mr. Brown Roe of the MDE Oil Control Program, the floor of the excavation was sampled in two locations, on September 10, 1999. The laboratory results indicated TPH-GRO of < 10 ppm and TPH-DRO of < 10 ppm. The excavation was backfilled, seeded with grass and mulched with straw.

2.2.2.27 Building C-928

On September 9, 1999, approximately 525 gallons of non-hazardous waste oil was removed from the 525-gallon steel UST, located at the west end of Building 928, and sent to International Petroleum Corporation of Delaware, 505 South Market Street, Wilmington, Delaware 19801 (302-421-9306) as part of a shipment of approximately 9654 gallons for treatment and disposal. The tank was removed on September 10, 1999, as witnessed by Dale J. Carty of Engineering Technology Associates, cleaned and prepared for recycling as scrap steel by Cambridge Iron & Metal Company, 901 S. Kresson Street, Baltimore, Maryland 21224 (410-327-7870).

There was no visible or observable indication that the UST had leaked. As per the directions of Mr. Brown Roe of the MDE Oil Control Program, the floor of the excavation was sampled in two locations, on September 10, 1999. The laboratory results indicated TPH-GRO of < 10 ppm and TPH-DRO of < 10 ppm. The excavation was backfilled, seeded with grass and mulched with straw.

2.2.2.28 Building C-930 (Tank 4)

The oily contents of this 525-gallon steel UST were composite sampled on June 28, 1999, for disposal parameters; laboratory analytical confirmed the contents as non-hazardous. On July 9, 1999, approximately 295gallons of non-hazardous waste oil was removed from the tank and sent to International Petroleum Corporation of Delaware, 505 South Market Street, Wilmington, Delaware 19801 (302-421-9306) for treatment and disposal. The tank removal, as witnessed by Mr. Brown Roe of the MDE Oil Control Program, was on July 14, 1999, because it interfered with the on-going site construction work. The tank was cleaned and prepared for recycling as scrap steel by Cambridge Iron & Metal Company, 901 S. Kresson Street, Baltimore, Maryland 21224 (410-327-7870).

There was no visible or observable indication that the UST had leaked. This tank was the last of the first four located and at the time, only required one sample in the floor of the excavation on July 15, 1999. The laboratory results indicated TPH-GRO of < 10 ppm and TPH-DRO of < 10 ppm. The excavation was backfilled, seeded with grass and mulched with straw.

2.3 SITE RESTORATION

All tank excavations were backfilled with the soil removed from the excavations plus some additional clean fill from on-base, seeded with grass and mulched with straw.

3.0 CLEANUP CONFIRMATION

The following discussion summarizes the confirmation analyses that represent the aboveground storage tank (AST) locations, Buildings 7, J-J and 723 and the underground storage tank (UST) locations, Buildings 760, K, 693, 117 and in the Summit Circle Civilian housing area (Buildings 901-930) at the completion of remediation. The sample locations are shown on drawing RD-01.

3.1 CONFIRMATION APPROACH

This discussion is a synopsis of the approach to confirmation sampling and analyses that was presented in the OHM Work Plan Addendum, Modification No. 3 dated 1-Dec-97, Addendum No. 3 dated 22-Jun-99 and Addendum No. 4 dated 10-Sep-99.

3.1.1 AST Locations – Buildings 7, J-J and 723

No confirmation sampling was performed for the aboveground storage tank locations; one tank was drained of a minimal quantity of heating oil, one tank's contents had solidified and one tank was empty. Impact to the surrounding soil was non-existent or negligible.

3.1.2 UST Locations – Buildings 760, K, 693, 117 and Summit Circle Area

The contents of the underground storage tanks were composite sampled for waste disposal parameters, to determine the appropriate method of disposal. From the off-site laboratory analyticals, only the tank contents from the underground storage tank at Building 760 – Auto Hobby Shop were classified and disposed as hazardous waste oil; all other tank contents were classified and disposed as non-hazardous waste oil.

Following the removal of each underground storage tank, witnessed by a MDE certified observer, post excavation confirmation sampling was conducted at the floor of each tank excavation. Prior to August, 1999, one (1) grab soil sample was collected at the center in the floor of the excavation and sent to the off-site laboratory for analysis of Total Petroleum Hydrocarbons (TPH-GRO and TPH-DRO) by SW-846, Method 8015, Modified. For tanks extracted after August, 1999, two (2) grab soil samples were collected in the floor of the excavation and sent to the off-site laboratory for analysis of Total Petroleum Hydrocarbons (TPH-GRO and TPH-DRO) by SW-846, Method 8015, Modified.

Results were compared to the cleanup criteria for Total Petroleum Hydrocarbons (100 mg/kg) established in Table 1. Excavation continued until the cleanup criteria were achieved for each tank floor excavation. The following sample log lists the confirmation samples processed for each of the underground storage tank sites:

Table 4: Confirmation Sample Log

UST Location Building	Confirmation Sample	Laboratory Analytical TPH-GRO mg/kg	TPH-DRO mg/kg
K	048	Not Determined	3.7
760	049	Not Determined	18
	050	Not Determined	46
693	B693-901	34.1	435
	B693-902	264	1870
	B693-903	47.2	608
	B693-906	71.3	663
	B693-907	< 14.3	4190
	B693-908	< 14.2	32.1
	B693-909	< 12.4	< 12.4
	B693-910	< 14.6	< 14.6
117	B117-306	< 2.7	< 3.9
	B117-307	< 2.5	< 3.9
	B117-308	< 2.7	< 4.2
	B117-309	< 2.8	< 3.9
	B117-310	< 2.6	24
C-901	901-01	< 10	< 10
	901-02	< 10	42
C-902	902-01	< 10	< 10
	902-02	< 10	< 10
C-905	905-01	< 10	< 10
	905-02	< 10	< 10
C-906	906-01	< 10	< 10
	906-02	< 10	36
C-908	908-01	< 10	310
	908-02	< 10	120
	908-01A	Not Determined	28
	908-02A	Not Determined	19.6
C-909	909-01	< 10	< 10
	909-02	< 10	< 10
C-910	910-01	< 10	< 10
	910-02	< 10	< 10
C-911	911-01	< 10	19
	911-02	< 10	< 10
C-912	912-01	< 10	150
	912-02	< 10	< 10
	912-01A	Not Determined	< 11
C-913	Tank 1	< 10	670
	Tank 1A	< 10	< 10
C-914	Tank 2	< 10	74
C-915	Tank 3	< 10	< 10
C-916	916-01	< 10	25
	916-02	< 10	62
C-917	917-01	< 10	410
	917-02	< 10	25
	917-01A	Not Determined	49.6
C-918	918-01	< 10	22
	918-02	< 10	16
C-919	919-01	< 10	< 10
	919-02	< 10	< 10
C-920	920-01	< 10	< 10
	920-02	< 10	< 10

UST Location Building	Confirmation Sample	Laboratory Analytical TPH-GRO mg/kg	TPH-DRO mg/kg
C-921	921-01	< 10	< 10
	921-02	< 10	< 10
C-923	923-01	< 10	< 10
	923-02	< 10	< 10
C-925	925-01	< 10	< 10
	925-02	< 10	< 10
C-926	926-01	< 10	< 10
	926-02	< 10	< 10
C-927	927-01	< 10	< 10
	927-02	< 10	< 10
C-928	928-01	< 10	< 10
	928-02	< 10	< 10
C-930	Tank 4	< 10	< 10

In the above confirmation sample log, a "C" designation preceding a building number (C-901) indicates the former Summit Circle Civilian housing area. The first alpha-numeric (B693) or numeric set (901) indicates the building where the underground storage tank confirmation sample was taken. The second numeric set (01) refers to a chronological sample number for that building. If only one numeric set appears (049), it is a chronological sample number for the entire project. A letter designation "A" after the second numeric set or text indicates a resample following re-excavation at that sample point. Text was used at four UST building locations, Tank 1 at C-913, Tank 2 at C-914, Tank 3 at C-915 and Tank 4 at C-930.

Laboratory testing of confirmation soil samples used the following EPA SW-846 method:

Total Petroleum Hydrocarbons, (TPH-GRO and TPH-DRO) 8015, Modified

Laboratory testing of tank contents for waste disposal characterization used the following EPA SW-846 methods:

VOC	8260
Total PCB	8082
TPH-GRO	8015, Modified
TPH-DRO	8015, Modified
TCLP Metals	1311 for extract, 6010/7471

Prior to August, 1999, one grab soil sample was collected from 0 to 6-inches below the tank excavation floor in the center; after August, 1999, two grab soil samples were collected from 0 to 6-inches below the tank excavation floor. These grab soil samples were sent to the off-site laboratory for confirmation testing by Total Petroleum Hydrocarbons (TPH-GRO and TPH-DRO), SW-846, Method 8015, Modified.

If the laboratory result for either TPH-GRO or TPH-DRO or the combined total was greater than 100 ppm, the impacted floor of the tank excavation was re-excavated and the tank floor resampled. All laboratory analyticals included a Navy NFESC Level C quality control package.

3.2 LABORATORY ANALYTICAL RESULTS

Five (5) UST locations, Buildings 693, C-908, C-912, Tank 1 (C-913) and C-917, failed initial laboratory confirmation for TPH-GRO and/or TPH-DRO, requiring additional excavation of the impacted tank floor/wall followed by resampling and analysis before the cleanup criteria of 100 ppm Total Petroleum Hydrocarbons was achieved.

3.3 CLEANUP CONFIRMATION RESULTS

The off-site laboratory confirmed the cleanup criteria for Total Petroleum Hydrocarbons (TPH-GRO and TPH-DRO) in all of the samples as indicated in the following table:

Table 5: Cleanup Confirmation Results for Soil Left-in-Place

UST Building	Sample No. Left-in-Place	TPH-GRO ppm	TPH-DRO ppm
K	048	Not Determined	3.7
760	049	Not Determined	18
760	050	Not Determined	46
693	B693-908	< 14.2	32.1
693	B693-909	< 12.4	< 12.4
693	B693-910	< 14.6	< 14.6
117	B117-306	< 2.7	< 3.9
117	B117-307	< 2.5	< 3.9
117	B117-308	< 2.7	< 4.2
117	B117-309	< 2.8	< 3.9
117	B117-310	< 2.6	24
C-901	901-01	< 10	< 10
C-901	901-02	< 10	42
C-902	902-01	< 10	< 10
C-902	902-02	< 10	< 10
C-905	905-01	< 10	< 10
C-905	905-02	< 10	< 10
C-906	906-01	< 10	< 10
C-906	906-02	< 10	36
C-908	908-01A	< 10	28
C-908	908-02A	< 10	19.6
C-909	909-01	< 10	< 10
C-909	909-02	< 10	< 10
C-910	910-01	< 10	< 10
C-910	910-02	< 10	< 10
C-911	911-01	< 10	19
C-911	911-02	< 10	< 10
C-912	912-01A	< 10	< 11
C-912	912-02	< 10	< 10
C-913	Tank 1A	< 10	< 10
C-914	Tank 2	< 10	74
C-915	Tank 3	< 10	< 10

UST Building	Sample No. Left-in-Place	TPH-GRO ppm	TPH-DRO ppm
C-916	916-01	< 10	25
C-916	916-02	< 10	62
C-917	917-01A	< 10	49.6
C-917	917-02	< 10	25
C-918	918-01	< 10	22
C-918	918-02	< 10	16
C-919	919-01	< 10	< 10
C-919	919-02	< 10	< 10
C-920	920-01	< 10	< 10
C-920	920-02	< 10	< 10
C-921	921-01	< 10	< 10
C-921	921-02	< 10	< 10
C-923	923-01	< 10	< 10
C-923	923-02	< 10	< 10
C-925	925-01	< 10	< 10
C-925	925-02	< 10	< 10
C-926	926-01	< 10	< 10
C-926	926-02	< 10	< 10
C-927	927-01	< 10	< 10
C-927	927-02	< 10	< 10
C-928	928-01	< 10	< 10
C-928	928-02	< 10	< 10
C-930	Tank 4	< 10	< 10

APPENDIX A
PHOTOGRAPHS

Photo 1. Tank Removed from Bldg 693 - 11-Aug-99

Photo 2. Bldg. 693 Tank Pit Backfilled with Clean Gravel - 25-Aug-99

Photo 3. UST Located at Building K - 8-Apr-97

Photo 4. UST, Building K, Being Excavated - 8-Apr-97

Photo 5. UST Being Removed - 8-Apr-97

Photo 6. UST Pit Being Backfilled with Clean Fill - 8-Apr-97

Photo 7. UST Being Uncovered for Removal - 10-Apr-97

Photo 8. A Hole was Cut Into the UST for Hose Access - 10-Apr-97

Photo 9. Auto Hobby Shop UST Being Emptied Prior to Removal - 10-Apr-97

Photo 10. UST Pumping Continues - 10-Apr-97

Photo 11. Tank Being Removed - 10-Apr-97

Photo 12. Tank Being Loaded on Flat Bed to be Moved to the Cleaning Area. 10-Apr-97

Photo 13. Bldg. 760 UST Pit Back Filled and Graded. - 10-Apr-97

Photo 14. UST Tank Removed from Between Building 116 & 117. - 12-Jan-98

Photo 15. Tanks being staged for Cleaning -10-Apr-97

Photo 16. Tanks being cut up after Cleaning - Note Tar Tank from Bldg. 723 is seen on the Cleaning Pad. - 11-Apr-97

Photo 17. UST from Summit Circle Bldg. C909
Note: Access Ports were Stoppered -28-July-99

Photo 18. UST from Summit Circle Bldg. C910
27-Aug-98

Photo 19. UST at Summit Circle Bldg. C911 - 28-July-99

Photo 20. UST at Summit Circle Bldg. C912 - 28-July-99

Photo 21. UST at Summit Circle Bldg. C916 - 28-July-99
27-Aug-98

Photo 22. UST at Summit Circle Bldg. C917 - 28-July-99

Photo 23. UST at Summit Circle Bldg. C918 - 28-July-99

Photo 24. UST at Summit Circle Bldg. C919 - 28-July-99

Photo 25. UST at Summit Circle Bldg. C920 - 28-July-99

Photo 26. UST at Summit Circle Bldg. C901 - 9-Sept-99

Photo 27. UST at Summit Circle Bldg. C902 - 9-Sept-99

Photo 28. UST at Summit Circle Bldg C905 - 9-Sept-99

Photo 29. UST at Summit Circle Bldg. C906 - 9-Sept-99

Photo 30. UST at Summit Circle Bldg. C921 - 9-Sept-99

Photo 31. UST at Summit Circle Bldg. C923 - 9-Sept-99

Photo 32. UST at Summit Circle Bldg. C926 - 9-Sept-99

Photo 33. UST at Summit Circle Bldg. C927 - 9-Sept-99

Photo 34. UST at Summit Circle Bldg. C928 - 9-Sept-99

Photo 35. UST 902 Cut Opened and Cleaned - 28-Sept-99

Photo 36. UST 905 - Cut Opened and Cleaned - 28-Sept-99

Photo 37. UST 906 Cut Opened and Cleaned - 28-Sept-99

Photo 38. UST 907 Cut Opened and Cleaned - 28-Sept-99

Photo 39. UST 908 Cut Opened and Cleaned - 28-Sept-99

Photo 40. UST 909 Cut Opened and Cleaned - 28-Sept-99

Photo 41. UST 910 Cut Opened and Cleaned - 28-Sept-99

Photo 42. 911 Cut Opened and Cleaned - 28-Sept-99

Photo 43. UST 912 Cut Opened and Cleaned - 28-Sept-99

Photo 44. UST 913 Cut Opened and Cleaned - 28-Sept-99

Photo 45. UST 914 Cut Opened and Cleaned - 28-Sept-99

Photo 46. UST 915 Cut Opened and Cleaned - 28-Sept-99

Photo 47. UST 916 Cut Opened and Cleaned - 28-Sept-99

Photo 48. UST 917 Cut Opened and Cleaned - 28-Sept-99

Photo 49. UST 918 Cut Opened and Cleaned - 28-Sept-99

Photo 50. 919 Cut Opened and Cleaned - 28-Sept-99

Photo 51. UST 920 Cut Opened and Cleaned - 28-Sept-99

Photo 52. UST 921 Cut Opened and Cleaned - 28-Sept-99

Photo 53. UST 923 Cut Opened and Cleaned - 28-Sept-99

Photo 54. UST 925 Cut Opened and Cleaned - 28-Sept-99

Photo 55. UST 926 Cut Opened and Cleaned - 28-Sept-99

Photo 56. UST 927 Cut Opened and Cleaned - 28-Sept-99

Photo 57. UST 928 Cut Opened and Cleaned - 28-Sept-99

Photo 58. UST 930 Cut Opened and Cleaned - 28-Sept-99

APPENDIX C
RAW ANALYTICAL DATA

Q BioChem, L.L.C.
Analysis, Research & Technology Development
A USEPA Contract Laboratory

OHM Corporation
200 Horizon Center Blvd.
Trenton, NJ 08691
ATTN: Dr. Michael Lacy

Re: Laboratory Analysis
Q BioChem Client No. 10892
Port Deposit, MD

REPORT DATE/NUMBER: September 15, 1998 / 7

ANALYSIS FOR: Polychlorinated Biphenyls (PCBs), Gasoline and Diesel Range Organics

METHOD OF ANALYSIS: SW-846 Methods 8082, 8015B

SAMPLE ANALYSIS DATA

CLIENT ID: 376
MATRIX: Water
COLLECTION DATE: 09/02/98
OTHER ID: P.N. 19568
DESCRIPTION: BLDG 693, NTC BAINBRIDGE

LAB ID: 233398
COLLECTED BY: L. STEARNS
DATE RECEIVED: 09/03/98
TIME COLLECTED: 1015

POLYCHLORINATED BIPHENYLS:

PCB ——— **< 0.50 ug/l**
↳Analysis Date: 09/03/98 Time: 1253 by: AMP Run ID: 090398A2
↳Method: GC/ECD, SW-846 8082; Quantitation Limit=0.50 ug/l

SURROGATE RECOVERY RESULTS:

Surrogate: DCB	% Recovery: 68.5	QAO: 50-150%
Surrogate: TCMX	% Recovery: 35.8	QAO: 50-150%

TOTAL PETROLEUM HYDROCARBON RESULTS:

Diesel Range Organics ——— **< 0.40 mg/l**
↳Analysis Date: 09/04/98 Time: 17:36 by: KC Run ID: TPHGC090498
↳Method: GC/FID, SW-846 8015B; Quantitation Limit=0.40 mg/l

Gasoline Range Organics ——— **< 0.40 mg/l**
↳Analysis Date: 09/04/98 Time: 17:36 by: KC Run ID: TPHGC090498
↳Method: GC/FID, SW-846 8015B; Quantitation Limit=0.40 mg/l

REPORT CONTINUED ON NEXT PAGE

NER-Accts/Pay
RECEIVED
SEP 2 1 1998

1401 Municipal Road, Roanoke, VA 24012-1309 • 800-897-0297
540-265-7211 (voice) • 540-563-4866 (fax)

SAMPLE ANALYSIS DATA

SURROGATE RECOVERY RESULTS:
Surrogate: TCB % Recovery: 84.9 QAO: 50-150%

CLIENT ID: B693-906 **LAB ID: 233399**
MATRIX: Soil COLLECTED BY: L. STEARNS
COLLECTION DATE: 09/02/98 DATE RECEIVED: 09/03/98
OTHER ID: P.N. 19568 TIME COLLECTED: 1310
DESCRIPTION: FLOOR OF UGST EXC., NTC BAINBRIDGE

Diesel Range Organics — **663 mg/kg**
↳Analysis Date: 09/04/98 Time: 18:28 by: KC Run ID: TPHGC090498
↳Method: GC/FID, SW-846 8015B; Quantitation Limit=11.8 mg/kg
↳Comments: Reported on Dry Weight Basis of 85.0%

Gasoline Range Organics — **71.3 mg/kg**
↳Analysis Date: 09/04/98 Time: 18:28 by: KC Run ID: TPHGC090498
↳Method: GC/FID, SW-846 8015B; Quantitation Limit=11.8 mg/kg
↳Comments: Reported on Dry Weight Basis of 85.0%

SURROGATE RECOVERY RESULTS:
Surrogate: TCB % Recovery: 109.0 QAO: 50-150%

CLIENT ID: B693-907 **LAB ID: 233400**
MATRIX: Soil COLLECTED BY: L. STEARNS
COLLECTION DATE: 09/02/98 DATE RECEIVED: 09/03/98
OTHER ID: P.N. 19568 TIME COLLECTED: 1320
DESCRIPTION: R-WALL OF UGST EXC., NTC BAINBRIDGE

Diesel Range Organics — **4190 mg/kg**
↳Analysis Date: 09/08/98 Time: 18:05 by: KC Run ID: TPHGC090898
↳Method: GC/FID, SW-846 8015B; Quantitation Limit=71.3 mg/kg
↳Comments: Reported on Dry Weight Basis of 70.0%

Gasoline Range Organics — **< 14.3 mg/kg**
↳Analysis Date: 09/04/98 Time: 19:19 by: KC Run ID: TPHGC090498
↳Method: GC/FID, SW-846 8015B; Quantitation Limit=14.3 mg/kg
↳Comments: Reported on Dry Weight Basis of 70.0%

SURROGATE RECOVERY RESULTS:
Surrogate: TCB % Recovery: 95.1 QAO: 50-150%

CLIENT ID: B693-908 **LAB ID: 233401**
MATRIX: Soil COLLECTED BY: L. STEARNS
COLLECTION DATE: 09/02/98 DATE RECEIVED: 09/03/98
OTHER ID: P.N. 19568 TIME COLLECTED: 1330
DESCRIPTION: L-WALL OF UGST EXC., NTC BAINBRIDGE

Diesel Range Organics — **32.1 mg/kg**
↳Analysis Date: 09/04/98 Time: 20:10 by: KC Run ID: TPHGC090498
↳Method: GC/FID, SW-846 8015B; Quantitation Limit=14.2 mg/kg

REPORT CONTINUED ON NEXT PAGE

SAMPLE ANALYSIS DATA

CLIENT ID: B693-908 ▪ LAB ID: 233401 (continued)
↳Comments: Reported on Dry Weight Basis of 70.5%

Gasoline Range Organics ——— **< 14.2 mg/kg**
↳Analysis Date: 09/04/98 Time: 20:10 by: KC Run ID: TPHGC090498
↳Method: GC/FID, SW-846 8015B; Quantitation Limit=14.2 mg/kg
↳Comments: Reported on Dry Weight Basis of 70.5%

SURROGATE RECOVERY RESULTS:
Surrogate: TCB % Recovery: 90.2 QAO: 50-150%

CLIENT ID: B693-909 **LAB ID: 233402**
MATRIX: Soil COLLECTED BY: L. STEARNS
COLLECTION DATE: 09/02/98 DATE RECEIVED: 09/03/98
OTHER ID: P.N. 19568 TIME COLLECTED: 1340
DESCRIPTION: BACK WALL OF UGST EXC., NTC BAINBRIDGE

Diesel Range Organics ——— **< 12.4 mg/kg**
↳Analysis Date: 09/04/98 Time: 21:00 by: KC Run ID: TPHGC090498
↳Method: GC/FID, SW-846 8015B; Quantitation Limit=12.4 mg/kg
↳Comments: Reported on Dry Weight Basis of 80.6%

Gasoline Range Organics ——— **< 12.4 mg/kg**
↳Analysis Date: 09/04/98 Time: 21:00 by: KC Run ID: TPHGC090498
↳Method: GC/FID, SW-846 8015B; Quantitation Limit=12.4 mg/kg
↳Comments: Reported on Dry Weight Basis of 80.6%

SURROGATE RECOVERY RESULTS:
Surrogate: TCB % Recovery: 89.0 QAO: 50-150%

Quality Assurance performed on the above data is presented on the following page(s).

If we may be of further assistance, please contact us at any time.

Sincerely,
Q BioChem, L.L.C.

Cheryl M. Daniel, Quality Assurance Manager

QUALITY ASSURANCE SUMMARY

CALIBRATION VERIFICATION

ANALYTE	UNITS	TYPE	TRUE	FOUND	% REC	QAO	RUN ID
Aroclor 1016	ug/ml	CCV20H	2.00	2.00	99.8	85-115%	090398A2
Aroclor 1232	ug/ml	CCV21H	2.00	2.04	102.2	85-115%	090398A2
Aroclor 1242	ug/ml	CCV23G	2.00	1.90	94.9	85-115%	090398A2
Aroclor 1248	ug/ml	CCV24G	2.00	1.90	95.2	85-115%	090398A2
Diesel Range Organics	mg/l	CCV1	101	103	102.6	85-115%	TPHGC090498
Gasoline Range Organics	mg/l	CCV1	98.7	101	102.6	85-115%	TPHGC090498
Diesel Range Organics	mg/l	CCV2	101	96.7	96.3	85-115%	TPHGC090498
Gasoline Range Organics	mg/l	CCV2	98.7	111	112.6	85-115%	TPHGC090498
Diesel Range Organics	mg/l	CCV3	101	88.9	88.5	85-115%	TPHGC090498
Gasoline Range Organics	mg/l	CCV3	98.7	90.6	91.8	85-115%	TPHGC090498
Diesel Range Organics	mg/l	CCV4	101	91.3	90.9	85-115%	TPHGC090498
Gasoline Range Organics	mg/l	CCV4	98.9	112	113.0	85-115%	TPHGC090498
Diesel Range Organics	mg/kg	LCS	101	87.8	87.3	75-125%	TPHGC090498
Diesel Range Organics	mg/kg	LCS	101	97.9	97.4	75-125%	TPHGC090498
Gasoline Range Organics	mg/kg	LCS	98.7	75.1	76.1	75-125%	TPHGC090498
Gasoline Range Organics	mg/kg	LCS	98.9	95.8	96.9	75-125%	TPHGC090498
Diesel Range Organics	mg/l	CCV5	101	95.5	95.0	85-115%	TPHGC090898
Gasoline Range Organics	mg/l	CCV5	98.9	113	114.7	85-115%	TPHGC090898
Diesel Range Organics	mg/l	CCV6	101	99.4	98.9	85-115%	TPHGC090898
Gasoline Range Organics	mg/l	CCV6	98.9	113	114.2	85-115%	TPHGC090898
Diesel Range Organics	mg/l	CCV7	101	92.5	92.1	85-115%	TPHGC090898
Gasoline Range Organics	mg/l	CCV7	98.9	113	114.3	85-115%	TPHGC090898

QUALITY ASSURANCE SUMMARY
Continued

BLANKS

ANALYTE	UNITS	TYPE	FOUND	QAO	RUN ID
PCB, Total	ug/ml	CCB20H	<0.013	<0.013 ug/ml	090398A2
PCB, Total	ug/ml	CCB21H	<0.013	<0.013 ug/ml	090398A2
PCB, Total	ug/ml	CCB23G	<0.013	<0.013 ug/ml	090398A2
PCB, Total	ug/ml	CCB24G	<0.013	<0.013 ug/ml	090398A2
PCB, Total	ug Total	PBM	<0.013	< 1 ug Total	090398A2
PCB, Total	ug/l	PBW	<0.500	< 0.5 ug/l	090398A2
PCB, Total	ug/l	PBW	<3.00	< 3 ug/l	090398A2
Diesel Range Organics	mg/l	CCB2	<0.400	<0.4 mg/l	TPHGC090498
Diesel Range Organics	mg/l	CCB3	<0.400	<0.4 mg/l	TPHGC090498
Gasoline Range Organics	mg/l	CCB3	<0.400	<0.4 mg/l	TPHGC090498
Diesel Range Organics	mg/l	PB	<0.400	<0.4 mg/l	TPHGC090498
Gasoline Range Organics	mg/l	PB	<0.400	<0.4 mg/l	TPHGC090498
Gasoline Range Organics	mg/kg	PB	<10.00	<10 mg/l	TPHGC090498
Diesel Range Organics	mg/l	CCB6	<0.400	<0.4 mg/l	TPHGC090898
Gasoline Range Organics	mg/l	CCB6	<0.400	<0.4 mg/l	TPHGC090898
Diesel Range Organics	mg/l	CCB7	<0.400	<0.4 mg/l	TPHGC090898
Gasoline Range Organics	mg/l	CCB7	<0.400	<0.4 mg/l	TPHGC090898

DUPLICATES

LAB ID	ANALYTE	SAMPLE	DUP	UNITS	RPD	QAO	RUN ID
233402	Diesel Range Organics	271.9	265.4	mg/kg	6.45	<20RPD	TPHGC090498
233402	Gasoline Range Organics	248.8	243.6	mg/kg	2.11	<20RPD	TPHGC090498

QUALITY ASSURANCE SUMMARY
Continued

SPIKES

LAB ID	ANALYTE	TYPE	SAMPLE	SPK	ADDED	%REC	QAO	RUN ID
233402	Diesel Range Organics	MS	<12.4	271.9	248.8	109.3	75-125%	TPHGC090498
233402	Gasoline Range Organics	MS	<12.4	248.8	244.8	101.6	75-125%	TPHGC090498
233402	Diesel Range Organics	MSD	<12.4	265.4	248.8	106.7	75-125%	TPHGC090498
233402	Gasoline Range Organics	MSD	<12.4	243.6	244.8	99.5	75-125%	TPHGC090498

SURROGATES

LAB ID	ANALYTE	TRUE	FOUND	%REC	QAO	RUN ID
233398	DCB	0.100	0.069	68.5	50-150%	090398A2
233398	TCMX	0.100	0.036	35.8	50-150%	090398A2
CCB20H	DCB	0.100	0.118	118.0	50-150%	090398A2
CCB20H	TCMX	0.100	0.100	99.9	50-150%	090398A2
CCB21H	DCB	0.100	0.114	114.0	50-150%	090398A2
CCB21H	TCMX	0.100	0.112	112.0	50-150%	090398A2
CCB23G	DCB	0.100	0.099	99.0	50-150%	090398A2
CCB23G	TCMX	0.100	0.107	107.0	50-150%	090398A2
CCB24G	DCB	0.100	0.107	107.0	50-150%	090398A2
CCB24G	TCMX	0.100	0.114	114.0	50-150%	090398A2
CCV20H 1016 2.0	DCB	0.100	0.111	111.0	50-150%	090398A2
CCV20H 1016 2.0	TCMX	0.100	0.084	84.1	50-150%	090398A2
CCV21H 1232 2.0	DCB	0.100	0.127	127.0	50-150%	090398A2
CCV21H 1232 2.0	TCMX	0.100	0.084	84.3	50-150%	090398A2
CCV23G 1242 2.0	DCB	0.100	0.108	108.0	50-150%	090398A2
CCV23G 1242 2.0	TCMX	0.100	0.093	93.2	50-150%	090398A2
CCV24G 1248 2.0	DCB	0.100	0.108	108.0	50-150%	090398A2
CCV24G 1248 2.0	TCMX	0.100	0.096	95.6	50-150%	090398A2

QA Report Continued on Next Page

QUALITY ASSURANCE SUMMARY
Continued

SURROGATES

LAB ID	ANALYTE	TRUE	FOUND	%REC	QAO	RUN ID
PBM PCB 98-379	DCB	0.100	0.108	108.0	50-150%	090398A2
PBM PCB 98-379	TCMX	0.100	0.115	115.0	50-150%	090398A2
PBW PCB 98-378	DCB	0.050	0.046	91.4	50-150%	090398A2
PBW PCB 98-378	TCMX	0.050	0.041	81.0	50-150%	090398A2
PBW PCB 98-380	DCB	0.100	0.108	108.0	50-150%	090398A2
PBW PCB 98-380	TCMX	0.100	0.110	110.0	50-150%	090398A2
233398	TCB	20.0	17.0	84.9	50-150%	TPHGC090498
233399	TCB	10.0	10.9	109.0	50-150%	TPHGC090498
233400	TCB	10.0	9.51	95.1	50-150%	TPHGC090498
233401	TCB	10.0	9.02	90.2	50-150%	TPHGC090498
233402	TCB	10.0	8.90	89.0	50-150%	TPHGC090498
CCB2	TCB	10.0	9.39	93.9	50-150%	TPHGC090498
CCB3	TCB	10.0	9.73	97.3	50-150%	TPHGC090498
CCB4	TCB	10.0	8.47	84.7	50-150%	TPHGC090498
CCV1	TCB	50.0	42.4	84.9	50-150%	TPHGC090498
CCV2	TCB	50.0	49.1	98.2	50-150%	TPHGC090498
CCV3	TCB	50.0	39.8	79.6	50-150%	TPHGC090498
CCV4	TCB	50.0	47.9	95.8	50-150%	TPHGC090498
LCS	TCB	20.0	12.8	63.9	50-150%	TPHGC090498
LCS	TCB	20.0	16.1	80.3	50-150%	TPHGC090498
LCS	TCB	20.0	24.2	121.2	50-150%	TPHGC090498
PB	TCB	10.0	7.62	76.2	50-150%	TPHGC090498
PB	TCB	10.0	9.08	90.8	50-150%	TPHGC090498
CCB6	TCB	10.0	8.92	89.2	50-150%	TPHGC090898
CCB7	TCB	10.0	8.69	86.9	50-150%	TPHGC090898
CCV5	TCB	50.0	47.8	95.5	50-150%	TPHGC090898
CCV6	TCB	50.0	57.6	115.1	50-150%	TPHGC090898
CCV7	TCB	50.0	48.3	96.5	50-150%	TPHGC090898

QAO: Quality Assurance Objective; REC: Recovery; RPD: Relative Percent Difference; NC: Not calculatable.
DUP: Duplicate Analysis Result; SPK: Spiked Analysis Result; MS: Matrix SPK; MSD: Matrix SPK Duplicate.
For Duplicates <5X the Quantitation Limit (QL), ± DL shall apply for the QAO unless otherwise specified.

C . Remediation Services Corp.

(10895)

CHAIN-OF-CUSTODY RECORD

LAB COPY

Form 0019
Field Technical Services
Rev. 08/89

164361

O.H. MATERIALS CORP. • P.O. BOX 551 • FINDLAY, OH 45839-0551 • 419-423-3526

PROJECT NAME	PROJECT LOCATION
NTC BAINBRIDGE	Port Deposit MD

PROJ. NO.	PROJECT CONTACT	PROJECT TELEPHONE NO.
19568	Mike Lacy	609 588-6339

CLIENT'S REPRESENTATIVE	PROJECT MANAGER/SUPERVISOR
Frank Zepka	Larry Stearns

ANALYSIS DESIRED (INDICATE SEPARATE CONTAINERS)

ITEM NO.	SAMPLE NUMBER	DATE	TIME	COMP	GRAB	SAMPLE DESCRIPTION (INCLUDE MATRIX AND POINT OF SAMPLE)	NUMBER OF CONTAINERS	PCBs	TPH-DRO	TPH-GRO						REMARKS
1	376	9/2/98	10:15			From Bldg 693 (WATER) WATER FROM TREATMENT SYSTEM	3-1 Lt.	X	X							
2	B693-906	9/2/98	13:10			Soil From Bldg 693 FLOOR OF UGST EXCAVACTION	1-8oz		X	X						
3	B693-907	9/2/98	13:20			Soil From Bldg 693 R-WALL OF UGST EXCAVATION	1-8oz		X	X						
4	B693-908	9/2/98	13:30			Soil From Bldg 693 L-WALL OF UGST EXCAVATION	1-8oz		X	X						
5	B693-909	9/2/98	13:40			Soil From Bldg 693 BACK-WALL OF UGST EXCAVATION	1-8oz		X	X						
6																
7																
8																
9																
10																

* Called client [illegible] method (combined or separate TPH). Client does want combined 8015 (TPHGC) on all samples. SK

TRANSFER NUMBER	ITEM NUMBER	TRANSFERS RELINQUISHED BY	TRANSFERS ACCEPTED BY	DATE	TIME
1		John Clark	FED EX. 804823017028		
2			[signature]	9/3/98	0930
3					
4					

REMARKS 24 HR TURN AROUND
FAX RESULTS TO
MIKE LACY:
609 588-6339
STEVE CARRIER:
410 378-3232

Rec'd. in lab on ice at <4°C, tape intact. SK

SAMPLER'S SIGNATURE [signature]

233398-402

Q BioChem, L.L.C.
Analysis, Research & Technology Development
A USEPA Contract Laboratory

IEM-Accts/Pay
RECEIVED
SEP 04 1998

OHM Corporation
200 Horizon Center Blvd.
Trenton, NJ 08691
ATTN: Dr. Michael Lacy

Re: Laboratory Analysis
Q BioChem Client No. 10892
Port Deposit, MD

REPORT DATE/NUMBER: September 3, 1998 / 5

ANALYSIS FOR: Polychlorinated Biphenyls (PCBs), TCLP Metals, TCLP Volatiles and Semi-Volatiles, TCLP Herbicides, Pesticides, ICR, PF, TPH

METHOD OF ANALYSIS: SW-846 Methods 8082, 1311, 6010B, 7470A, 8260A, 8270A, 8081A, 8151A, 9045, 9095, 1010, 8015B

SAMPLE ANALYSIS DATA

CLIENT ID: B693-DS05 | **LAB ID: 232691**
MATRIX: Soil | COLLECTED BY: CLIENT
COLLECTION DATE: 08/13/98 | DATE RECEIVED: 08/14/98
OTHER ID: PORT DEPOSIT MD | TIME COLLECTED: 0930
DESCRIPTION: SLUDGE & RUST & PPE FROM 1,2,4,7,8,10,30 DRUMS

POLYCHLORINATED BIPHENYLS:
Aroclor 1254 ——— **58 mg/kg**
↳Analysis Date: 08/16/98 Time: 1754 by: AMP Run ID: 081698A3
↳Method: GC/ECD, SW-846 8082; Quantitation Limit=2.2 mg/kg
↳Comments: Reported on a dry weight basis of 46.3% solids.

SURROGATE RECOVERY RESULTS:

Surrogate: DCB	% Recovery: 99.1	QAO: 50-150%
Surrogate: TCMX	% Recovery: 107.0	QAO: 50-150%

CLIENT ID: B693-904 | **LAB ID: 232692**
MATRIX: Soil | COLLECTED BY: CLIENT
COLLECTION DATE: 08/13/98 | DATE RECEIVED: 08/14/98
OTHER ID: PORT DEPOSIT MD | TIME COLLECTED: 0800
DESCRIPTION: FROM FLOOR OF UST

PESTICIDE RESULTS:
Chlordane, TCLP ——— **< 0.015 mg/l**
↳Analysis Date: 08/21/98 Time: 16:46 by: WK Run ID: SPA082198
↳Method: GC/ECD, SW-846 8081A; Quantitation Limit=0.015 mg/l

REPORT CONTINUED ON NEXT PAGE

1401 Municipal Road, Roanoke, VA 24012-1309 • 800-897-0297
540-265-7211 (voice) • 540-265-4866 (fax)

SAMPLE ANALYSIS DATA

CLIENT ID: B693-904 ▪ LAB ID: 232692 (continued)
↳Comments: The Regulatory Limit for Chlordane, TCLP is 0.030 mg/l

Endrin, TCLP ——— **< 0.0100 mg/l**
↳Analysis Date: 08/21/98 Time: 16:46 by: WK Run ID: SPA082198
↳Method: GC/ECD, SW-846 8081A; Quantitation Limit=0.0100 mg/l
↳Comments: The Regulatory Limit for Endrin, TCLP is 0.02 mg/l

Heptachlor epoxide, TCLP ——— **< 0.0050 mg/l**
↳Analysis Date: 08/21/98 Time: 16:46 by: WK Run ID: SPA082198
↳Method: GC/ECD, SW-846 8081A; Quantitation Limit=0.0050 mg/l
↳Comments: The Reg. Limit for Heptachlor epoxide, TCLP is 0.008 mg/l

Heptachlor, TCLP ——— **< 0.0050 mg/l**
↳Analysis Date: 08/21/98 Time: 16:46 by: WK Run ID: SPA082198
↳Method: GC/ECD, SW-846 8081A; Quantitation Limit=0.0050 mg/l
↳Comments: The Regulatory Limit for Heptachlor, TCLP is 0.008 mg/l

Lindane, TCLP ——— **< 0.200 mg/l**
↳Analysis Date: 08/21/98 Time: 16:46 by: WK Run ID: SPA082198
↳Method: GC/ECD, SW-846 8081A; Quantitation Limit=0.200 mg/l
↳Comments: The Regulatory Limit for Lindane, TCLP is 0.4 mg/l

Methoxychlor, TCLP ——— **< 1.0 mg/l**
↳Analysis Date: 08/21/98 Time: 16:46 by: WK Run ID: SPA082198
↳Method: GC/ECD, SW-846 8081A; Quantitation Limit=1.0 mg/l
↳Comments: The Regulatory Limit for Methoxychlor, TCLP is 10.0 mg/l

Toxaphene, TCLP ——— **< 0.250 mg/l**
↳Analysis Date: 08/21/98 Time: 16:46 by: WK Run ID: SPA082198
↳Method: GC/ECD, SW-846 8081A; Quantitation Limit=0.250 mg/l
↳Comments: The Regulatory Limit for Toxaphene, TCLP is 0.50 mg/l

SURROGATE RECOVERY RESULTS:

Surrogate: Dibutylchlorendate	% Recovery: 33	QAO: 22-135%
Surrogate: Dichlorophenylacetic acid	% Recovery: 10	QAO: 11-135%
Surrogate: TCMX	% Recovery: 46	QAO: 22-135%

VOLATILE ORGANIC COMPOUNDS BY GC/MS:

1,1-Dichloroethene, TCLP ——— ***< 0.025 mg/l***
↳Analysis Date: 08/20/98 Time: 15:35 by: RRW Run ID: VOA082098
↳Method: GC/MS, SW-846 8260A; Quantitation Limit=0.025 mg/l

REPORT CONTINUED ON NEXT PAGE

SAMPLE ANALYSIS DATA

CLIENT ID: B693-904 ▪ LAB ID: 232692 (continued)

1,2-Dichloroethane, TCLP ——— **< 0.025 mg/l**
↳Analysis Date: 08/20/98 Time: 15:35 by: RRW Run ID: VOA082098
↳Method: GC/MS, SW-846 8260A; Quantitation Limit=0.025 mg/l

1,4-Dichlorobenzene, TCLP ——— **< 0.025 mg/l**
↳Analysis Date: 08/20/98 Time: 15:35 by: RRW Run ID: VOA082098
↳Method: GC/MS, SW-846 8260A; Quantitation Limit=0.025 mg/l

2-Butanone, TCLP ——— **< 0.050 mg/l**
↳Analysis Date: 08/20/98 Time: 15:35 by: RRW Run ID: VOA082098
↳Method: GC/MS, SW-846 8260A; Quantitation Limit=0.050 mg/l

Benzene, TCLP ——— **< 0.025 mg/l**
↳Analysis Date: 08/20/98 Time: 15:35 by: RRW Run ID: VOA082098
↳Method: GC/MS, SW-846 8260A; Quantitation Limit=0.025 mg/l

Carbon Tetrachloride, TCLP ——— **< 0.025 mg/l**
↳Analysis Date: 08/20/98 Time: 15:35 by: RRW Run ID: VOA082098
↳Method: GC/MS, SW-846 8260A; Quantitation Limit=0.025 mg/l

Chlorobenzene, TCLP ——— **< 0.025 mg/l**
↳Analysis Date: 08/20/98 Time: 15:35 by: RRW Run ID: VOA082098
↳Method: GC/MS, SW-846 8260A; Quantitation Limit=0.025 mg/l

Chloroform, TCLP ——— **< 0.025 mg/l**
↳Analysis Date: 08/20/98 Time: 15:35 by: RRW Run ID: VOA082098
↳Method: GC/MS, SW-846 8260A; Quantitation Limit=0.025 mg/l

Tetrachloroethene, TCLP ——— **< 0.025 mg/l**
↳Analysis Date: 08/20/98 Time: 15:35 by: RRW Run ID: VOA082098
↳Method: GC/MS, SW-846 8260A; Quantitation Limit=0.025 mg/l

Trichloroethene, TCLP ——— **< 0.025 mg/l**
↳Analysis Date: 08/20/98 Time: 15:35 by: RRW Run ID: VOA082098
↳Method: GC/MS, SW-846 8260A; Quantitation Limit=0.025 mg/l

Vinyl Chloride, TCLP ——— **< 0.025 mg/l**
↳Analysis Date: 08/20/98 Time: 15:35 by: RRW Run ID: VOA082098
↳Method: GC/MS, SW-846 8260A; Quantitation Limit=0.025 mg/l

SURROGATE RECOVERY RESULTS:

Surrogate: 1,2-Dichloroethane-d4	% Recovery: 97.5	QAO: 70-121%
Surrogate: Bromofluorobenzene	% Recovery: 91.6	QAO: 74-121%
Surrogate: Dibromofluoromethane	% Recovery: 101.1	QAO: 80-120%
Surrogate: Toluene-d8	% Recovery: 93.9	QAO: 81-117%

REPORT CONTINUED ON NEXT PAGE

SAMPLE ANALYSIS DATA

CLIENT ID: B693-904 ▪ LAB ID: 232692 (continued)

SEMI-VOLATILE RESULTS BY GC/MS:

1,4-Dichlorobenzene, TCLP ——— **< 0.040 mg/l**
↳Analysis Date: 08/20/98 Time: 21:43 by: RRW Run ID: BNA082098
↳Method: GC/MS, SW-846 8270A; Quantitation Limit=0.040 mg/l
↳Comments: Extracted 08/18/98; Low acid surrogates matrix related.

2,4,5-Trichlorophenol, TCLP ——— **< 0.040 mg/l**
↳Analysis Date: 08/20/98 Time: 21:43 by: RRW Run ID: BNA082098
↳Method: GC/MS, SW-846 8270A; Quantitation Limit=0.040 mg/l
↳Comments: Extracted 08/18/98; Low acid surrogates matrix related.

2,4,6-Trichlorophenol, TCLP ——— **< 0.040 mg/l**
↳Analysis Date: 08/20/98 Time: 21:43 by: RRW Run ID: BNA082098
↳Method: GC/MS, SW-846 8270A; Quantitation Limit=0.040 mg/l
↳Comments: Extracted 08/18/98; Low acid surrogates matrix related.

2,4-Dinitrotoluene, TCLP ——— **< 0.040 mg/l**
↳Analysis Date: 08/20/98 Time: 21:43 by: RRW Run ID: BNA082098
↳Method: GC/MS, SW-846 8270A; Quantitation Limit=0.040 mg/l
↳Comments: Extracted 08/18/98; Low acid surrogates matrix related.

2-Methylphenol, TCLP ——— **< 0.040 mg/l**
↳Analysis Date: 08/20/98 Time: 21:43 by: RRW Run ID: BNA082098
↳Method: GC/MS, SW-846 8270A; Quantitation Limit=0.040 mg/l
↳Comments: Extracted 08/18/98; Low acid surrogates matrix related.

3 & 4-Methylphenol, TCLP ——— **< 0.040 mg/l**
↳Analysis Date: 08/20/98 Time: 21:43 by: RRW Run ID: BNA082098
↳Method: GC/MS, SW-846 8270A; Quantitation Limit=0.040 mg/l
↳Comments: Extracted 08/18/98; Low acid surrogates matrix related.

Hexachlorobenzene, TCLP ——— **< 0.040 mg/l**
↳Analysis Date: 08/20/98 Time: 21:43 by: RRW Run ID: BNA082098
↳Method: GC/MS, SW-846 8270A; Quantitation Limit=0.040 mg/l
↳Comments: Extracted 08/18/98; Low acid surrogates matrix related.

Hexachlorobutadiene, TCLP ——— **< 0.040 mg/l**
↳Analysis Date: 08/20/98 Time: 21:43 by: RRW Run ID: BNA082098
↳Method: GC/MS, SW-846 8270A; Quantitation Limit=0.040 mg/l
↳Comments: Extracted 08/18/98; Low acid surrogates matrix related.

REPORT CONTINUED ON NEXT PAGE

SAMPLE ANALYSIS DATA

CLIENT ID: B693-904 ▪ LAB ID: 232692 (continued)

Hexachloroethane, TCLP ——— **< 0.040 mg/l**
↳Analysis Date: 08/20/98 Time: 21:43 by: RRW Run ID: BNA082098
↳Method: GC/MS, SW-846 8270A; Quantitation Limit=0.040 mg/l
↳Comments: Extracted 08/18/98; Low acid surrogates matrix related.

Nitrobenzene, TCLP ——— **< 0.040 mg/l**
↳Analysis Date: 08/20/98 Time: 21:43 by: RRW Run ID: BNA082098
↳Method: GC/MS, SW-846 8270A; Quantitation Limit=0.040 mg/l
↳Comments: Extracted 08/18/98; Low acid surrogates matrix related.

Pentachlorophenol, TCLP ——— **< 0.040 mg/l**
↳Analysis Date: 08/20/98 Time: 21:43 by: RRW Run ID: BNA082098
↳Method: GC/MS, SW-846 8270A; Quantitation Limit=0.040 mg/l
↳Comments: Extracted 08/18/98; Low acid surrogates matrix related.

Pyridine, TCLP ——— **< 0.040 mg/l**
↳Analysis Date: 08/20/98 Time: 21:43 by: RRW Run ID: BNA082098
↳Method: GC/MS, SW-846 8270A; Quantitation Limit=0.040 mg/l
↳Comments: Extracted 08/18/98; Low acid surrogates matrix related.

SURROGATE RECOVERY RESULTS:

Surrogate: 1,2-Dichlorobenzene-d4	% Recovery: 35.9	QAO: 20-130%
Surrogate: 2,4,6-Tribromophenol	% Recovery: 3.9	QAO: 19-122%
Surrogate: 2-Chlorophenol-d4	% Recovery: 7.9	QAO: 20-130%
Surrogate: 2-Fluorobiphenyl	% Recovery: 43.3	QAO: 30-115%
Surrogate: 2-Fluorophenol	% Recovery: 1.5	QAO: 25-121%
Surrogate: Nitrobenzene-d5	% Recovery: 54.7	QAO: 23-120%
Surrogate: Phenol-d5	% Recovery: 14.2	QAO: 24-113%
Surrogate: Terphenyl-d14	% Recovery: 76.3	QAO: 18-137%

METALS/ELEMENTS RESULTS:

Arsenic, TCLP ——— **< 0.005 mg/l**
↳Analysis Date: 08/19/98 Time: 15:49 by: KO Run ID: 081998TR
↳Method: ICP, SW-846 6010B; Quantitation Limit=0.005 mg/l
↳Comments: The Regulatory Level for Arsenic, TCLP is 5 mg/l

Barium, TCLP ——— **1.03 mg/l**
↳Analysis Date: 08/19/98 Time: 15:49 by: KO Run ID: 081998TR
↳Method: ICP, SW-846 6010B; Quantitation Limit=0.001 mg/l
↳Comments: The Regulatory Level for Barium, TCLP is 100 mg/l

REPORT CONTINUED ON NEXT PAGE

SAMPLE ANALYSIS DATA

CLIENT ID: B693-904 ▪ LAB ID: 232692 (continued)

Cadmium, TCLP — **0.009 mg/l**
↳Analysis Date: 08/19/98 Time: 15:49 by: KO Run ID: 081998TR
↳Method: ICP, SW-846 6010B; Quantitation Limit=0.001 mg/l
↳Comments: The Regulatory Level for Cadmium, TCLP is 1 mg/l

Chromium, TCLP — **0.009 mg/l**
↳Analysis Date: 08/19/98 Time: 15:49 by: KO Run ID: 081998TR
↳Method: ICP, SW-846 6010B; Quantitation Limit=0.005 mg/l
↳Comments: The Regulatory Level for Chromium, TCLP is 5 mg/l

Lead, TCLP — **0.048 mg/l**
↳Analysis Date: 08/19/98 Time: 15:49 by: KO Run ID: 081998TR
↳Method: ICP, SW-846 6010B; Quantitation Limit=0.005 mg/l
↳Comments: The Regulatory Level for Lead, TCLP is 5 mg/l

Mercury, TCLP — **< 0.002 mg/l**
↳Analysis Date: 08/20/98 Time: 16:24 by: LBH Run ID: 082098CV
↳Method: CVAAS, SW-846 7470A; Quantitation Limit=0.002 mg/l
↳Comments: The Regulatory Level for Mercury, TCLP is 0.2 mg/l

Selenium, TCLP — **< 0.005 mg/l**
↳Analysis Date: 08/19/98 Time: 15:49 by: KO Run ID: 081998TR
↳Method: ICP, SW-846 6010B; Quantitation Limit=0.005 mg/l
↳Comments: The Regulatory Level for Selenium, TCLP is 1 mg/l

Silver, TCLP — **< 0.002 mg/l**
↳Analysis Date: 08/19/98 Time: 15:49 by: KO Run ID: 081998TR
↳Method: ICP, SW-846 6010B; Quantitation Limit=0.002 mg/l
↳Comments: The Regulatory Level for Silver, TCLP is 5 mg/l

HERBICIDE RESULTS:

2,4-D, TCLP — **< 5.0 mg/l**
↳Analysis Date: 08/21/98 Time: 17:16 by: WK Run ID: SPA082198
↳Method: GC/ECD, SW-846 8151A; Quantitation Limit=5.0 mg/l
↳Comments: The Regulatory Limit for 2,4-D, TCLP is 5.0 mg/l

Silvex, TCLP — **< 0.50 mg/l**
↳Analysis Date: 08/21/98 Time: 17:16 by: WK Run ID: SPA082198
↳Method: GC/ECD, SW-846 8151A; Quantitation Limit=0.50 mg/l
↳Comments: The Regulatory Limit for Silvex, TCLP is 1.0 mg/l

SURROGATE RECOVERY RESULTS:

Surrogate: Dibutylchlorendate	% Recovery: 33	QAO: 22-135%
Surrogate: Dichlorophenylacetic acid	% Recovery: 10	QAO: 11-135%
Surrogate: TCMX	% Recovery: 46	QAO: 22-135%

REPORT CONTINUED ON NEXT PAGE

SAMPLE ANALYSIS DATA

CLIENT ID: B693-904 ▪ LAB ID: 232692 (continued)

ROUTINE LABORATORY RESULTS:

Corrosivity by pH ——— **7.35 pH units**
↳Analysis Date: 08/17/98 Time: 11:00 by: LAF Run ID: CRR081798
↳Method: Probe, SW-846 9045; Quantitation Limit=0.10 pH units
↳Comments: Measured in deionized water.

Ignitability ——— **> 202 Deg F**
↳Analysis Date: 08/17/98 Time: 11:00 by: LAF Run ID: IGN081798
↳Method: Closed Cup, SW 846 1010; Quantitation Limit=70 Deg F

Paint Filter Liquids Test ——— **0.5 ml**
↳Analysis Date: 08/17/98 Time: 12:15 by: LAF Run ID: PFT081798
↳Method: Filtration, SW 846 9095; Quantitation Limit=Not Applicable
↳Comments: Positive result; 0.5 ml of liquid passed the filter.

Reactivity ——— **Negative**
↳Analysis Date: 08/17/98 Time: 11:00 by: LAF Run ID: REA081798
↳Method: Presence/Absence, Spot Test; Quantitation Limit=Not Applicable
↳Comments: Negative for presence of cyanide and sulfide.

CLIENT ID: B693-376 | **LAB ID: 232693**
MATRIX: Water | COLLECTED BY: L. STEARNS
COLLECTION DATE: 08/12/98 | DATE RECEIVED: 08/14/98
OTHER ID: 19568 | TIME COLLECTED: 1325
DESCRIPTION: PORT DEPOSIT MD

POLYCHLORINATED BIPHENYLS:

Aroclor 1254 ——— **0.69 ug/l**
↳Analysis Date: 08/18/98 Time: 2048 by: AMP Run ID: 081898A3
↳Method: GC/ECD, SW-846 8082; Quantitation Limit=0.50 ug/l

SURROGATE RECOVERY RESULTS:

Surrogate: DCB	% Recovery: 101.0	QAO: 50-150%
Surrogate: TCMX	% Recovery: 125.0	QAO: 50-150%

TOTAL PETROLEUM HYDROCARBON RESULTS:

Diesel Range Organics ——— **< 0.40 mg/l**
↳Analysis Date: 08/20/98 Time: 06:45 by: AMP Run ID: TPHGC081998
↳Method: PURGE/FID, SW-846 8015B; Quantitation Limit=0.40 mg/l

REPORT CONTINUED ON NEXT PAGE

SAMPLE ANALYSIS DATA

CLIENT ID: B693-376 ▪ LAB ID: 232693 (continued)

Gasoline Range Organics ——— **< 0.40 mg/l**
↳Analysis Date: 08/20/98 Time: 06:45 by: AMP Run ID: TPHGC081998
↳Method: PURGE/FID, SW-846 8015B; Quantitation Limit=0.40 mg/l

CLIENT ID: B693-901 **LAB ID: 232694**
MATRIX: Soil COLLECTED BY: L. STEARNS
COLLECTION DATE: 08/12/98 DATE RECEIVED: 08/14/98
OTHER ID: 19568 TIME COLLECTED: 1332
DESCRIPTION: PORT DEPOSIT MD

POLYCHLORINATED BIPHENYLS:
PCB ——— **< 1.3 mg/kg**
↳Analysis Date: 08/18/98 Time: 2048 by: AMP Run ID: 081898A3
↳Method: GC/ECD, SW-846 8082; Quantitation Limit=1.3 mg/kg
↳Comments: Reported on dry weight basis of 79.9 %

SURROGATE RECOVERY RESULTS:

Surrogate: DCB	% Recovery: 105.0	QAO: 50-150%
Surrogate: TCMX	% Recovery: 114.0	QAO: 50-150%

TOTAL PETROLEUM HYDROCARBON RESULTS:
Diesel Range Organics ——— **435 mg/kg**
↳Analysis Date: 08/20/98 Time: 08:24 by: AMP Run ID: TPHGC081998
↳Method: PURGE/FID, SW-846 8015B; Quantitation Limit=11.7 mg/kg
↳Comments: Dry Weight Basis

Gasoline Range Organics ——— **34.1 mg/kg**
↳Analysis Date: 08/20/98 Time: 08:24 by: AMP Run ID: TPHGC081998
↳Method: PURGE/FID, SW-846 8015B; Quantitation Limit=11.7 mg/kg
↳Comments: Dry Weight Basis

CLIENT ID: B693-902 **LAB ID: 232695**
MATRIX: Soil COLLECTED BY: L. STEARNS
COLLECTION DATE: 08/12/98 DATE RECEIVED: 08/14/98
OTHER ID: 19568 TIME COLLECTED: 1345
DESCRIPTION: PORT DEPOSIT MD

POLYCHLORINATED BIPHENYLS:
PCB ——— **< 1.4 mg/kg**
↳Analysis Date: 08/18/98 Time: 2137 by: AMP Run ID: 081898A3
↳Method: GC/ECD, SW-846 8082; Quantitation Limit=1.4 mg/kg

REPORT CONTINUED ON NEXT PAGE

SAMPLE ANALYSIS DATA

CLIENT ID: B693-902 ▪ LAB ID: 232695 (continued)
↳Comments: Reported on dry weight basis of 71.1 %

SURROGATE RECOVERY RESULTS:

Surrogate: DCB	% Recovery: 111.0	QAO: 50-150%
Surrogate: TCMX	% Recovery: 122.0	QAO: 50-150%

TOTAL PETROLEUM HYDROCARBON RESULTS:

Diesel Range Organics ——— **1870 mg/kg**
↳Analysis Date: 08/27/98 Time: 22:23 by: AMP Run ID: TPHGC082798
↳Method: GC/FID, SW-846 8015B; Quantitation Limit=91 mg/kg
↳Comments: Dry Weight Basis

Gasoline Range Organics ——— **264 mg/kg**
↳Analysis Date: 08/20/98 Time: 08:24 by: AMP Run ID: TPHGC081998
↳Method: PURGE/FID, SW-846 8015B; Quantitation Limit=9.05 mg/kg
↳Comments: Dry Weight Basis

CLIENT ID: B693-903 | **LAB ID: 232696**
MATRIX: Soil | COLLECTED BY: L. STEARNS
COLLECTION DATE: 08/12/98 | DATE RECEIVED: 08/14/98
OTHER ID: 19568 | TIME COLLECTED: 1349
DESCRIPTION: PORT DEPOSIT MD

POLYCHLORINATED BIPHENYLS:

PCB ——— **< 1.3 mg/kg**
↳Analysis Date: 08/18/98 Time: 2226 by: AMP Run ID: 081898A3
↳Method: GC/ECD, SW-846 8082; Quantitation Limit=1.3 mg/kg
↳Comments: Reported on dry weight basis of 79.8 %

SURROGATE RECOVERY RESULTS:

Surrogate: DCB	% Recovery: 112.0	QAO: 50-150%
Surrogate: TCMX	% Recovery: 124.0	QAO: 50-150%

TOTAL PETROLEUM HYDROCARBON RESULTS:

Diesel Range Organics ——— **608 mg/kg**
↳Analysis Date: 08/20/98 Time: 09:13 by: AMP Run ID: TPHGC081998
↳Method: PURGE/FID, SW-846 8015B; Quantitation Limit=15.5 mg/kg
↳Comments: Dry Weight Basis

Gasoline Range Organics ——— **47.2 mg/kg**
↳Analysis Date: 08/20/98 Time: 09:13 by: AMP Run ID: TPHGC081998
↳Method: PURGE/FID, SW-846 8015B; Quantitation Limit=15.5 mg/kg

REPORT CONTINUED ON NEXT PAGE

SAMPLE ANALYSIS DATA

↳Comments: Dry Weight Basis

CLIENT ID: B693-905#
MATRIX: Water
COLLECTION DATE: 08/12/98
OTHER ID: 19568
DESCRIPTION: PORT DEPOSIT MD

LAB ID: 232697
COLLECTED BY: L. STEARNS
DATE RECEIVED: 08/14/98
TIME COLLECTED: 1336

POLYCHLORINATED BIPHENYLS:

Aroclor 1254 — **5.1 ug/l**
↳Analysis Date: 08/18/98 Time: 2137 by: AMP Run ID: 081898A3
↳Method: GC/ECD, SW-846 8082; Quantitation Limit=0.5 ug/l

SURROGATE RECOVERY RESULTS:

Surrogate: DCB	% Recovery: 41.1	QAO: 50-150%
Surrogate: TCMX	% Recovery: 86.2	QAO: 50-150%

TOTAL PETROLEUM HYDROCARBON RESULTS:

Diesel Range Organics — **1.50 mg/l**
↳Analysis Date: 08/20/98 Time: 10:02 by: AMP Run ID: TPHGC081998
↳Method: PURGE/FID, SW-846 8015B; Quantitation Limit=0.40 mg/l

Gasoline Range Organics — **< 0.40 mg/l**
↳Analysis Date: 08/20/98 Time: 10:02 by: AMP Run ID: TPHGC081998
↳Method: PURGE/FID, SW-846 8015B; Quantitation Limit=0.40 mg/l

CLIENT ID: B693-377
MATRIX: Water
COLLECTION DATE: 08/12/98
OTHER ID: 19568
DESCRIPTION: PORT DEPOSIT MD

LAB ID: 232698
COLLECTED BY: L. STEARNS
DATE RECEIVED: 08/14/98
TIME COLLECTED: 1358

POLYCHLORINATED BIPHENYLS:

Aroclor 1254 — **3.7 ug/l**
↳Analysis Date: 08/18/98 Time: 2226 by: AMP Run ID: 081898A3
↳Method: GC/ECD, SW-846 8082; Quantitation Limit=0.5 ug/l

SURROGATE RECOVERY RESULTS:

Surrogate: DCB	% Recovery: 77.2	QAO: 50-150%
Surrogate: TCMX	% Recovery: 110.0	QAO: 50-150%

CLIENT ID: B693-378
MATRIX: Water
COLLECTION DATE: 08/12/98
OTHER ID: 19568
DESCRIPTION: PORT DEPOSIT MD

LAB ID: 232699
COLLECTED BY: L. STEARNS
DATE RECEIVED: 08/14/98
TIME COLLECTED: 1407

REPORT CONTINUED ON NEXT PAGE

SAMPLE ANALYSIS DATA

CLIENT ID: B693-378 ▪ LAB ID: 232699 (continued)

Aroclor 1254 — **24000 ug/l**
↳Analysis Date: 08/26/98 Time: 0102 by: AMP Run ID: 082498A3
↳Method: GC/ECD, SW-846 8082; Quantitation Limit=0.5 ug/l
↳Comments: Surrogates diluted out.

CLIENT ID: B693-399 | **LAB ID: 232700**
MATRIX: Water | COLLECTED BY: L. STEARNS
COLLECTION DATE: 08/12/98 | DATE RECEIVED: 08/14/98
OTHER ID: 19568 | TIME COLLECTED: 1555
DESCRIPTION: PORT DEPOSIT MD

Aroclor 1254 — **74000 ug/l**
↳Analysis Date: 08/26/98 Time: 0151 by: AMP Run ID: 082498A3
↳Method: GC/ECD, SW-846 8082; Quantitation Limit=0.5 ug/l
↳Comments: Surrogates diluted out.

CLIENT ID: B693-DS04 | **LAB ID: 232701**
MATRIX: Soil | COLLECTED BY: L. STEARNS
COLLECTION DATE. 08/12/98 | DATE RECEIVED: 08/14/98
OTHER ID: 19568 | TIME COLLECTED: 1530
DESCRIPTION: PORT DEPOSIT MD

PESTICIDE RESULTS:

Chlordane, TCLP — **< 0.015 mg/l**
↳Analysis Date: 08/21/98 Time: 16:46 by: WK Run ID: SPA082198
↳Method: GC/ECD, SW-846 8081A; Quantitation Limit=0.015 mg/l
↳Comments: The Regulatory Limit for Chlordane, TCLP is 0.030 mg/l

Endrin, TCLP — **< 0.0100 mg/l**
↳Analysis Date: 08/21/98 Time: 16:46 by: WK Run ID: SPA082198
↳Method: GC/ECD, SW-846 8081A; Quantitation Limit=0.0100 mg/l
↳Comments: The Regulatory Limit for Endrin, TCLP is 0.02 mg/l

Heptachlor epoxide, TCLP — **< 0.0050 mg/l**
↳Analysis Date: 08/21/98 Time: 16:46 by: WK Run ID: SPA082198
↳Method: GC/ECD, SW-846 8081A; Quantitation Limit=0.0050 mg/l
↳Comments: The Reg. Limit for Heptachlor epoxide, TCLP is 0.008 mg/l

Heptachlor, TCLP — **< 0.0050 mg/l**
↳Analysis Date: 08/21/98 Time: 16:46 by: WK Run ID: SPA082198
↳Method: GC/ECD, SW-846 8081A; Quantitation Limit=0.0050 mg/l
↳Comments: The Regulatory Limit for Heptachlor, TCLP is 0.008 mg/l

REPORT CONTINUED ON NEXT PAGE

SAMPLE ANALYSIS DATA

CLIENT ID: B693-DS04 ▪ LAB ID: 232701 (continued)

Lindane, TCLP ——— **< 0.200 mg/l**
↳Analysis Date: 08/21/98 Time: 16:46 by: WK Run ID: SPA082198
↳Method: GC/ECD, SW-846 8081A; Quantitation Limit=0.200 mg/l
↳Comments: The Regulatory Limit for Lindane, TCLP is 0.4 mg/l

Methoxychlor, TCLP ——— **< 1.0 mg/l**
↳Analysis Date: 08/21/98 Time: 16:46 by: WK Run ID: SPA082198
↳Method: GC/ECD, SW-846 8081A; Quantitation Limit=1.0 mg/l
↳Comments: The Regulatory Limit for Methoxychlor, TCLP is 10.0 mg/l

Toxaphene, TCLP ——— **< 0.250 mg/l**
↳Analysis Date: 08/21/98 Time: 16:46 by: WK Run ID: SPA082198
↳Method: GC/ECD, SW-846 8081A; Quantitation Limit=0.250 mg/l
↳Comments: The Regulatory Limit for Toxaphene, TCLP is 0.50 mg/l

SURROGATE RECOVERY RESULTS:

Surrogate: Dibutylchlorendate	% Recovery: 27	QAO: 22-135%
Surrogate: Dichlorophenylacetic acid	% Recovery: 12	QAO: 11-135%
Surrogate: TCMX	% Recovery: 46	QAO: 22-135%

VOLATILE ORGANIC COMPOUNDS BY GC/MS:

1,1-Dichloroethene, TCLP ——— **< 0.025 mg/l**
↳Analysis Date: 08/20/98 Time: 16:22 by: RRW Run ID: VOA082098
↳Method: GC/MS, SW-846 8260A; Quantitation Limit=0.025 mg/l

1,2-Dichloroethane, TCLP ——— **< 0.025 mg/l**
↳Analysis Date: 08/20/98 Time: 16:22 by: RRW Run ID: VOA082098
↳Method: GC/MS, SW-846 8260A; Quantitation Limit=0.025 mg/l

1,4-Dichlorobenzene, TCLP ——— **< 0.025 mg/l**
↳Analysis Date: 08/20/98 Time: 16:22 by: RRW Run ID: VOA082098
↳Method: GC/MS, SW-846 8260A; Quantitation Limit=0.025 mg/l

2-Butanone, TCLP ——— **< 0.050 mg/l**
↳Analysis Date: 08/20/98 Time: 16:22 by: RRW Run ID: VOA082098
↳Method: GC/MS, SW-846 8260A; Quantitation Limit=0.050 mg/l

Benzene, TCLP ——— **< 0.025 mg/l**
↳Analysis Date: 08/20/98 Time: 16:22 by: RRW Run ID: VOA082098
↳Method: GC/MS, SW-846 8260A; Quantitation Limit=0.025 mg/l

REPORT CONTINUED ON NEXT PAGE

SAMPLE ANALYSIS DATA

CLIENT ID: B693-DS04 ▪ LAB ID: 232701 (continued)

Carbon Tetrachloride, TCLP ——— **< 0.025 mg/l**
↳Analysis Date: 08/20/98 Time: 16:22 by: RRW Run ID: VOA082098
↳Method: GC/MS, SW-846 8260A; Quantitation Limit=0.025 mg/l

Chlorobenzene, TCLP ——— **< 0.025 mg/l**
↳Analysis Date: 08/20/98 Time: 16:22 by: RRW Run ID: VOA082098
↳Method: GC/MS, SW-846 8260A; Quantitation Limit=0.025 mg/l

Chloroform, TCLP ——— **< 0.025 mg/l**
↳Analysis Date: 08/20/98 Time: 16:22 by: RRW Run ID: VOA082098
↳Method: GC/MS, SW-846 8260A; Quantitation Limit=0.025 mg/l

Tetrachloroethene, TCLP ——— **< 0.025 mg/l**
↳Analysis Date: 08/20/98 Time: 16:22 by: RRW Run ID: VOA082098
↳Method: GC/MS, SW-846 8260A; Quantitation Limit=0.025 mg/l

Trichloroethene, TCLP ——— **< 0.025 mg/l**
↳Analysis Date: 08/20/98 Time: 16:22 by: RRW Run ID: VOA082098
↳Method: GC/MS, SW-846 8260A; Quantitation Limit=0.025 mg/l

Vinyl Chloride, TCLP ——— **< 0.025 mg/l**
↳Analysis Date: 08/20/98 Time: 16:22 by: RRW Run ID: VOA082098
↳Method: GC/MS, SW-846 8260A; Quantitation Limit=0.025 mg/l

SURROGATE RECOVERY RESULTS:

Surrogate: 1,2-Dichloroethane-d4	% Recovery: 99.6	QAO: 70-121%
Surrogate: Bromofluorobenzene	% Recovery: 95.0	QAO: 74-121%
Surrogate: Dibromofluoromethane	% Recovery: 103.2	QAO: 80-120%
Surrogate: Toluene-d8	% Recovery: 97.3	QAO: 81-117%

SEMI-VOLATILE RESULTS BY GC/MS:

1,4-Dichlorobenzene, TCLP ——— **< 0.040 mg/l**
↳Analysis Date: 08/20/98 Time: 22:26 by: RRW Run ID: BNA082098
↳Method: GC/MS, SW-846 8270A; Quantitation Limit=0.040 mg/l
↳Comments: Extracted 08/18/98; Low acid surrogates matrix related.

2,4,5-Trichlorophenol, TCLP ——— **< 0.040 mg/l**
↳Analysis Date: 08/20/98 Time: 22:26 by: RRW Run ID: BNA082098
↳Method: GC/MS, SW-846 8270A; Quantitation Limit=0.040 mg/l

REPORT CONTINUED ON NEXT PAGE

SAMPLE ANALYSIS DATA

CLIENT ID: B693-DS04 ▪ LAB ID: 232701 (continued)
↳Comments: Extracted 08/18/98; Low acid surrogates matrix related.

2,4,6-Trichlorophenol, TCLP ——— **< 0.040 mg/l**
↳Analysis Date: 08/20/98 Time: 22:26 by: RRW Run ID: BNA082098
↳Method: GC/MS, SW-846 8270A; Quantitation Limit=0.040 mg/l
↳Comments: Extracted 08/18/98; Low acid surrogates matrix related.

2,4-Dinitrotoluene, TCLP ——— **< 0.040 mg/l**
↳Analysis Date: 08/20/98 Time: 22:26 by: RRW Run ID: BNA082098
↳Method: GC/MS, SW-846 8270A; Quantitation Limit=0.040 mg/l
↳Comments: Extracted 08/18/98; Low acid surrogates matrix related.

2-Methylphenol, TCLP ——— **< 0.040 mg/l**
↳Analysis Date: 08/20/98 Time: 22:26 by: RRW Run ID: BNA082098
↳Method: GC/MS, SW-846 8270A; Quantitation Limit=0.040 mg/l
↳Comments: Extracted 08/18/98; Low acid surrogates matrix related.

3 & 4-Methylphenol, TCLP ——— **< 0.040 mg/l**
↳Analysis Date: 08/20/98 Time: 22:26 by: RRW Run ID: BNA082098
↳Method: GC/MS, SW-846 8270A; Quantitation Limit=0.040 mg/l
↳Comments: Extracted 08/18/98; Low acid surrogates matrix related.

Hexachlorobenzene, TCLP ——— **< 0.040 mg/l**
↳Analysis Date: 08/20/98 Time: 22:26 by: RRW Run ID: BNA082098
↳Method: GC/MS, SW-846 8270A; Quantitation Limit=0.040 mg/l
↳Comments: Extracted 08/18/98; Low acid surrogates matrix related.

Hexachlorobutadiene, TCLP ——— **< 0.040 mg/l**
↳Analysis Date: 08/20/98 Time: 22:26 by: RRW Run ID: BNA082098
↳Method: GC/MS, SW-846 8270A; Quantitation Limit=0.040 mg/l
↳Comments: Extracted 08/18/98; Low acid surrogates matrix related.

Hexachloroethane, TCLP ——— **< 0.040 mg/l**
↳Analysis Date: 08/20/98 Time: 22:26 by: RRW Run ID: BNA082098
↳Method: GC/MS, SW-846 8270A; Quantitation Limit=0.040 mg/l
↳Comments: Extracted 08/18/98; Low acid surrogates matrix related.

Nitrobenzene, TCLP ——— **< 0.040 mg/l**
↳Analysis Date: 08/20/98 Time: 22:26 by: RRW Run ID: BNA082098
↳Method: GC/MS, SW-846 8270A; Quantitation Limit=0.040 mg/l
↳Comments: Extracted 08/18/98; Low acid surrogates matrix related.

REPORT CONTINUED ON NEXT PAGE

SAMPLE ANALYSIS DATA

CLIENT ID: B693-DS04 ▪ LAB ID: 232701 (continued)

Pentachlorophenol, TCLP ——— **< 0.040 mg/l**
↳Analysis Date: 08/20/98 Time: 22:26 by: RRW Run ID: BNA082098
↳Method: GC/MS, SW-846 8270A; Quantitation Limit=0.040 mg/l
↳Comments: Extracted 08/18/98; Low acid surrogates matrix related.

Pyridine, TCLP ——— **< 0.040 mg/l**
↳Analysis Date: 08/20/98 Time: 22:26 by: RRW Run ID: BNA082098
↳Method: GC/MS, SW-846 8270A; Quantitation Limit=0.040 mg/l
↳Comments: Extracted 08/18/98; Low acid surrogates matrix related.

SURROGATE RECOVERY RESULTS:

Surrogate: 1,2-Dichlorobenzene-d4	% Recovery: 39.1	QAO: 20-130%
Surrogate: 2,4,6-Tribromophenol	% Recovery: 4.8	QAO: 19-122%
Surrogate: 2-Chlorophenol-d4	% Recovery: 11.7	QAO: 20-130%
Surrogate: 2-Fluorobiphenyl	% Recovery: 46.5	QAO: 30-115%
Surrogate: 2-Fluorophenol	% Recovery: 1.6	QAO: 25-121%
Surrogate: Nitrobenzene-d5	% Recovery: 59.2	QAO: 23-120%
Surrogate: Phenol-d5	% Recovery: 20.6	QAO. 24-113%
Surrogate: Terphenyl-d14	% Recovery: 76.1	QAO: 18-137%

METALS/ELEMENTS RESULTS:

Arsenic, TCLP ——— **< 0.005 mg/l**
↳Analysis Date: 08/19/98 Time: 16:14 by: KO Run ID: 081998TR
↳Method: ICP, SW-846 6010B; Quantitation Limit=0.005 mg/l
↳Comments: The Regulatory Level for Arsenic, TCLP is 5 mg/l

Barium, TCLP ——— **1.47 mg/l**
↳Analysis Date: 08/19/98 Time: 16:14 by: KO Run ID: 081998TR
↳Method: ICP, SW-846 6010B; Quantitation Limit=0.001 mg/l
↳Comments: The Regulatory Level for Barium, TCLP is 100 mg/l

Cadmium, TCLP ——— **0.052 mg/l**
↳Analysis Date: 08/19/98 Time: 16:14 by: KO Run ID: 081998TR
↳Method: ICP, SW-846 6010B; Quantitation Limit=0.001 mg/l
↳Comments: The Regulatory Level for Cadmium, TCLP is 1 mg/l

Chromium, TCLP ——— **< 0.005 mg/l**
↳Analysis Date: 08/19/98 Time: 16:14 by: KO Run ID: 081998TR
↳Method: ICP, SW-846 6010B; Quantitation Limit=0.005 mg/l
↳Comments: The Regulatory Level for Chromium, TCLP is 5 mg/l

REPORT CONTINUED ON NEXT PAGE

SAMPLE ANALYSIS DATA

CLIENT ID: B693-DS04 ▪ LAB ID: 232701 (continued)

Lead, TCLP — **1.40 mg/l**
↳Analysis Date: 08/19/98 Time: 16:14 by: KO Run ID: 081998TR
↳Method: ICP, SW-846 6010B; Quantitation Limit=0.005 mg/l
↳Comments: The Regulatory Level for Lead, TCLP is 5 mg/l

Mercury, TCLP — **< 0.002 mg/l**
↳Analysis Date: 08/20/98 Time: 16:29 by: LBH Run ID: 082098CV
↳Method: CVAAS, SW-846 7470A; Quantitation Limit=0.002 mg/l
↳Comments: The Regulatory Level for Mercury, TCLP is 0.2 mg/l

Selenium, TCLP — **0.007 mg/l**
↳Analysis Date: 08/19/98 Time: 16:14 by: KO Run ID: 081998TR
↳Method: ICP, SW-846 6010B; Quantitation Limit=0.005 mg/l
↳Comments: The Regulatory Level for Selenium, TCLP is 1 mg/l

Silver, TCLP — **< 0.002 mg/l**
↳Analysis Date: 08/19/98 Time: 16:14 by: KO Run ID: 081998TR
↳Method: ICP, SW 846 6010B; Quantitation Limit=0.002 mg/l
↳Comments: The Regulatory Level for Silver, TCLP is 5 mg/l

HERBICIDE RESULTS:

2,4-D, TCLP — **< 5.0 mg/l**
↳Analysis Date: 08/21/98 Time: 17:16 by: WK Run ID: SPA082198
↳Method: GC/ECD, SW-846 8151A; Quantitation Limit=5.0 mg/l
↳Comments: The Regulatory Limit for 2,4-D, TCLP is 5.0 mg/l

Silvex, TCLP — **< 0.50 mg/l**
↳Analysis Date: 08/21/98 Time: 17:16 by: WK Run ID: SPA082198
↳Method: GC/ECD, SW-846 8151A; Quantitation Limit=0.50 mg/l
↳Comments: The Regulatory Limit for Silvex, TCLP is 1.0 mg/l

SURROGATE RECOVERY RESULTS:

Surrogate: Dibutylchlorendate	% Recovery: 27	QAO: 22-135%
Surrogate: Dichlorophenylacetic acid	% Recovery: 12	QAO: 11-135%
Surrogate: TCMX	% Recovery: 46	QAO: 22-135%

POLYCHLORINATED BIPHENYLS:

Aroclor 1254 — **5.7 mg/kg**
↳Analysis Date: 08/20/98 Time: 1223 by: AMP Run ID: 081998A3
↳Method: GC/ECD, SW-846 8082; Quantitation Limit=1.7 mg/kg

REPORT CONTINUED ON NEXT PAGE

SAMPLE ANALYSIS DATA

CLIENT ID: B693-DS04 ▪ LAB ID: 232701 (continued)
↳Comments: Dry weight basis of 58.4 %

SURROGATE RECOVERY RESULTS:

Surrogate: DCB	% Recovery: 104.0	QAO: 50-150%
Surrogate: TCMX	% Recovery: 111.0	QAO: 50-150%

ROUTINE LABORATORY RESULTS:

Corrosivity by pH — **10.04 pH units**
↳Analysis Date: 08/17/98 Time: 12:30 by: LAF Run ID: CRR081798
↳Method: Probe, SW-846 9045; Quantitation Limit=0.10 pH units
↳Comments: Measured in CaCl2.

Ignitability — **122 Deg F**
↳Analysis Date: 08/17/98 Time: 11:00 by: LAF Run ID: IGN081798
↳Method: Closed Cup, SW 846 1010; Quantitation Limit=70 Deg F

Paint Filter Liquids Test — **Negative**
↳Analysis Date: 08/17/98 Time: 12:15 by: LAF Run ID: PFT081798
↳Method: Filtration, SW 846 9095; Quantitation Limit=Not Applicable
↳Comments: Negative result; no liquids passed the filter.

Reactivity — **Negative**
↳Analysis Date: 08/17/98 Time: 11:00 by: LAF Run ID: REA081798
↳Method: Presence/Absence, Spot Test; Quantitation Limit=Not Applicable
↳Comments: Negative for presence of cyanide and sulfide.

CLIENT ID: B691-804
MATRIX: Soil
COLLECTION DATE: 08/12/98
OTHER ID: 19568
DESCRIPTION: PORT DEPOSIT MD

LAB ID: 232702
COLLECTED BY: L. STEARNS
DATE RECEIVED: 08/14/98
TIME COLLECTED: 1603

POLYCHLORINATED BIPHENYLS:

Aroclor 1254 — **299 mg/kg**
↳Analysis Date: 08/19/98 Time: 0004 by: AMP Run ID: 081898A3
↳Method: GC/ECD, SW-846 8082; Quantitation Limit=1.8 mg/kg
↳Comments: Reported on a dry weight basis of 56.9% solids.

SURROGATE RECOVERY RESULTS:

Surrogate: DCB	% Recovery: 59.4	QAO: 50-150%
Surrogate: TCMX	% Recovery: 84.6	QAO: 50-150%

CLIENT ID: B691-805
MATRIX: Soil
COLLECTION DATE: 08/12/98
OTHER ID: 19568
DESCRIPTION: PORT DEPOSIT MD

LAB ID: 232703
COLLECTED BY: L. STEARNS
DATE RECEIVED: 08/14/98
TIME COLLECTED: 1606

REPORT CONTINUED ON NEXT PAGE

SAMPLE ANALYSIS DATA

CLIENT ID: B691-805 ▪ LAB ID: 232703 (continued)

PCB ——— **< 1.3 mg/kg**
↳Analysis Date: 08/19/98 Time: 0052 by: AMP Run ID: 081898A3
↳Method: GC/ECD, SW-846 8082; Quantitation Limit=1.3 mg/kg
↳Comments: Reported on a dry weight basis of 74.6% solids.

SURROGATE RECOVERY RESULTS:

Surrogate: DCB	% Recovery: 108.0	QAO: 50-150%
Surrogate: TCMX	% Recovery: 118.0	QAO: 50-150%

CLIENT ID: B691-806 **LAB ID: 232704**
MATRIX: Soil COLLECTED BY: L. STEARNS
COLLECTION DATE: 08/12/98 DATE RECEIVED: 08/14/98
OTHER ID: 19568 TIME COLLECTED: 1609
DESCRIPTION: PORT DEPOSIT MD

Aroclor 1254 ——— **< 1.3 mg/kg**
↳Analysis Date: 08/19/98 Time: 0141 by: AMP Run ID: 081898A3
↳Method: GC/ECD, SW-846 8082; Quantitation Limit=1.3 mg/kg
↳Comments: Reported on a dry weight basis of 75.7% solids.

SURROGATE RECOVERY RESULTS:

Surrogate: DCB	% Recovery: 110.0	QAO: 50-150%
Surrogate: TCMX	% Recovery: 120.0	QAO: 50-150%

Quality Assurance performed on the above data is presented on the following page(s).

If we may be of further assistance, please contact us at any time.

Sincerely,
Q BioChem, L.L.C.

Cheryl M. Daniel, Quality Assurance Manager

QUALITY ASSURANCE SUMMARY

CALIBRATION VERIFICATION

ANALYTE	UNITS	TYPE	TRUE	FOUND	% REC	QAO	RUN ID
Aroclor 1016	ug/ml	CCV1F	2.00	2.11	105.6	85-115%	081698A3
Aroclor 1242	ug/ml	CCV5E	2.00	2.02	101.2	85-115%	081698A3
Aroclor 1248	ug/ml	CCV6E	2.00	2.07	103.7	85-115%	081698A3
Aroclor 1260	ug/ml	CCV6F	2.00	2.12	106.2	85-115%	081698A3
Aroclor 1254	ug/ml	CCV10F	2.00	2.19	109.4	85-115%	081898A3
Aroclor 1260	ug/ml	CCV1F	2.00	2.13	106.4	85-115%	081898A3
Aroclor 1260	ug/ml	CCV9E	2.00	2.28	114.0	85-115%	081898A3
Aroclor 1248	ug/ml	CCV9F	2.00	2.04	102.1	85-115%	081898A3
Aroclor 1016	ug/ml	CCV11F	2.00	2.29	114.6	85-115%	081998A3
Aroclor 1232	ug/ml	CCV12F	2.00	2.22	111.1	85-115%	081998A3
Aroclor 1242	ug/ml	CCV13F	2.00	1.78	89.2	85-115%	081998A3
Aroclor 1016	ug/ml	CCV14E	2.00	2.13	106.7	85-115%	082498A3
Aroclor 1242	ug/ml	CCV14F	2.00	2.28	113.8	85-115%	082498A3
Aroclor 1232	ug/ml	CCV15E	2.00	1.78	88.9	85-115%	082498A3
Aroclor 1248	ug/ml	CCV15F	2.00	2.28	114.1	85-115%	082498A3
Aroclor 1254	ug/ml	CCV16E	2.00	1.76	88.1	85-115%	082498A3
Aroclor 1260	ug/ml	CCV16F	2.00	2.28	113.8	85-115%	082498A3
1,4-Dichlorobenzene	ug/l	CCV02	50.0	48.6	97.2	75-125%	BNA082098
2,4,5-Trichlorophenol	ug/l	CCV02	50.0	51.2	102.4	75-125%	BNA082098
2,4,6-Trichlorophenol	ug/l	CCV02	50.0	49.9	99.8	75-125%	BNA082098
2,4-Dinitrotoluene	ug/l	CCV02	50.0	53.0	106.0	75-125%	BNA082098
2-Methylphenol	ug/l	CCV02	50.0	47.7	95.4	75-125%	BNA082098
3 & 4-Methylphenol	ug/l	CCV02	50.0	48.0	96.0	75-125%	BNA082098
Hexachlorobenzene	ug/l	CCV02	50.0	49.5	99.0	75-125%	BNA082098
Hexachlorobutadiene	ug/l	CCV02	50.0	48.6	97.2	10-200%	BNA082098
Hexachloroethane	ug/l	CCV02	50.0	50.6	101.2	75-125%	BNA082098
Nitrobenzene	ug/l	CCV02	50.0	51.9	103.8	75-125%	BNA082098
Pentachlorophenol	ug/l	CCV02	50.0	44.3	88.6	75-125%	BNA082098
Pyridine	ug/l	CCV02	50.0	41.1	82.2	10-200%	BNA082098

QA Report Continued on Next Page

QUALITY ASSURANCE SUMMARY
Continued

CALIBRATION VERIFICATION

ANALYTE	UNITS	TYPE	TRUE	FOUND	% REC	QAO	RUN ID
1,4-Dichlorobenzene	mg/l	LCS108	0.050	0.020	40.0	36-97%	BNA082098
2,4,5-Trichlorophenol	mg/l	LCS108	0.050	0.027	54.0	25-110%	BNA082098
2,4,6-Trichlorophenol	mg/l	LCS108	0.050	0.025	50.0	25-110%	BNA082098
2,4-Dinitrotoluene	mg/l	LCS108	0.050	0.024	48.0	24-96%	BNA082098
2-Methylphenol	mg/l	LCS108	0.050	0.027	54.0	25-110%	BNA082098
3 & 4-Methylphenol	mg/l	LCS108	0.050	0.057	114.0	25-110%	BNA082098
Hexachlorobenzene	mg/l	LCS108	0.050	0.024	48.0	25-110%	BNA082098
Hexachlorobutadiene	mg/l	LCS108	0.050	0.015	30.0	10-200%	BNA082098
Hexachloroethane	mg/l	LCS108	0.050	0.018	36.0	25-110%	BNA082098
Nitrobenzene	mg/l	LCS108	0.050	0.030	60.0	25-110%	BNA082098
Pentachlorophenol	mg/l	LCS108	0.075	0.028	37.3	9-103%	BNA082098
Diesel Range Organics	mg/l	CCV1	84.7	94.2	111.2	85-115%	TPHGC081998
Gasoline Range Organics	mg/l	CCV1	77.2	75.5	97.8	85-115%	TPHGC081998
Diesel Range Organics	mg/l	CCV2	84.7	72.0	85.0	85-115%	TPHGC081998
Gasoline Range Organics	mg/l	CCV2	77.2	77.1	99.8	85-115%	TPHGC081998
Diesel Range Organics	mg/l	ICV1	100	85.5	85.5	85-115%	TPHGC081998
Gasoline Range Organics	mg/l	ICV1	100	91.2	91.2	85-115%	TPHGC081998
Gasoline Range Organics	mg/kg	LCSS64	167	146	87.8	75-125%	TPHGC081998
Diesel Range Organics	mg/l	LCSW63	1.77	1.87	106.1	75-125%	TPHGC081998
Diesel Range Organics	mg/kg	LCSW64	177	139	78.6	75-125%	TPHGC081998
Diesel Range Organics	mg/l	CCV1	84.7	82.9	97.9	85-115%	TPHGC082798
Gasoline Range Organics	mg/l	CCV1	77.2	77.2	99.9	85-115%	TPHGC082798
Gasoline Range Organics	mg/l	CCV2	77.2	75.4	97.6	85-115%	TPHGC082798
Diesel Range Organics	mg/l	ICV1	100	107	106.7	85-115%	TPHGC082798
Gasoline Range Organics	mg/l	ICV1	100	94.9	94.9	85-115%	TPHGC082798
Diesel Range Organics	mg/l	LCSW67	1.77	1.67	94.7	75-125%	TPHGC082798
Gasoline Range Organics	mg/l	LCSW67	1.67	0.633	37.9	40-120%	TPHGC082798
1,1-Dichloroethene	ug/l	CCV14	50.0	46.4	92.8	75-125%	VOA082098
1,2-Dichloroethane	ug/l	CCV14	50.0	51.2	102.4	75-125%	VOA082098
1,4-Dichlorobenzene	ug/l	CCV14	50.0	48.8	97.6	75-125%	VOA082098
2-Butanone	ug/l	CCV14	50.0	52.2	104.4	50-150%	VOA082098

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QUALITY ASSURANCE SUMMARY
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CALIBRATION VERIFICATION

ANALYTE	UNITS	TYPE	TRUE	FOUND	% REC	QAO	RUN ID
Benzene	ug/l	CCV14	50.0	49.7	99.4	75-125%	VOA082098
Carbon Tetrachloride	ug/l	CCV14	50.0	52.7	105.4	75-125%	VOA082098
Chlorobenzene	ug/l	CCV14	50.0	50.8	101.6	75-125%	VOA082098
Chloroform	ug/l	CCV14	50.0	50.4	100.8	75-125%	VOA082098
Tetrachloroethene	ug/l	CCV14	50.0	53.5	107.0	75-125%	VOA082098
Trichloroethene	ug/l	CCV14	50.0	48.6	97.2	75-125%	VOA082098
Vinyl Chloride	ug/l	CCV14	50.0	51.6	103.2	75-125%	VOA082098
1,1-Dichloroethene	mg/l	LCS14	0.050	0.049	98.0	61-145%	VOA082098
1,2-Dichloroethane	mg/l	LCS14	0.050	0.048	96.0	60-140%	VOA082098
1,4-Dichlorobenzene	mg/l	LCS14	0.050	0.042	84.0	75-125%	VOA082098
2-Butanone	mg/l	LCS14	0.050	0.044	88.0	50-150%	VOA082098
Benzene	mg/l	LCS14	0.050	0.050	100.0	76-127%	VOA082098
Carbon Tetrachloride	mg/l	LCS14	0.050	0.049	98.0	75-125%	VOA082098
Chlorobenzene	mg/l	LCS14	0.050	0.046	92.0	75-130%	VOA082098
Chloroform	mg/l	LCS14	0.050	0.048	96.0	75-125%	VOA082098
Tetrachloroethene	mg/l	LCS14	0.050	0.047	94.0	75-125%	VOA082098
Trichloroethene	mg/l	LCS14	0.050	0.045	90.0	71-120%	VOA082098
Vinyl Chloride	mg/l	LCS14	0.050	0.047	94.0	60-140%	VOA082098
Arsenic	ug/l	CCV1	500	479	95.8	90-110%	081998TR
Barium	ug/l	CCV1	500	486	97.1	90-110%	081998TR
Cadmium	ug/l	CCV1	500	487	97.4	90-110%	081998TR
Chromium	ug/l	CCV1	500	486	97.1	90-110%	081998TR
Lead	ug/l	CCV1	500	485	97.0	90-110%	081998TR
Selenium	ug/l	CCV1	500	483	96.5	90-110%	081998TR
Silver	ug/l	CCV1	500	491	98.2	90-110%	081998TR
Arsenic	ug/l	CCV2	500	501	100.1	90-110%	081998TR
Barium	ug/l	CCV2	500	504	100.7	90-110%	081998TR
Cadmium	ug/l	CCV2	500	509	101.8	90-110%	081998TR
Chromium	ug/l	CCV2	500	501	100.2	90-110%	081998TR
Lead	ug/l	CCV2	500	505	101.0	90-110%	081998TR
Selenium	ug/l	CCV2	500	500	100.0	90-110%	081998TR

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QUALITY ASSURANCE SUMMARY
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CALIBRATION VERIFICATION

ANALYTE	UNITS	TYPE	TRUE	FOUND	% REC	QAO	RUN ID
Silver	ug/l	CCV2	500	503	100.7	90-110%	081998TR
Arsenic	ug/l	CCV3	500	488	97.7	90-110%	081998TR
Barium	ug/l	CCV3	500	498	99.6	90-110%	081998TR
Cadmium	ug/l	CCV3	500	507	101.5	90-110%	081998TR
Chromium	ug/l	CCV3	500	492	98.3	90-110%	081998TR
Lead	ug/l	CCV3	500	501	100.1	90-110%	081998TR
Selenium	ug/l	CCV3	500	493	98.5	90-110%	081998TR
Silver	ug/l	CCV3	500	492	98.4	90-110%	081998TR
Arsenic	ug/l	ICSABF	1000	984	98.4	80-120%	081998TR
Barium	ug/l	ICSABF	500	485	97.0	80-120%	081998TR
Cadmium	ug/l	ICSABF	1000	898	89.8	80-120%	081998TR
Chromium	ug/l	ICSABF	500	442	88.5	80-120%	081998TR
Lead	ug/l	ICSABF	1000	961	96.1	80-120%	081998TR
Selenium	ug/l	ICSABF	1000	970	97.0	80-120%	081998TR
Silver	ug/l	ICSABF	1000	1031	103.1	80-120%	081998TR
Arsenic	ug/l	ICSABI	1000	981	98.1	80-120%	081998TR
Barium	ug/l	ICSABI	500	489	97.8	80-120%	081998TR
Cadmium	ug/l	ICSABI	1000	883	88.3	80-120%	081998TR
Chromium	ug/l	ICSABI	500	446	89.1	80-120%	081998TR
Lead	ug/l	ICSABI	1000	954	95.4	80-120%	081998TR
Selenium	ug/l	ICSABI	1000	972	97.2	80-120%	081998TR
Silver	ug/l	ICSABI	1000	1051	105.1	80-120%	081998TR
Arsenic	ug/l	ICV1	1000	954	95.4	90-110%	081998TR
Barium	ug/l	ICV1	500	483	96.5	90-110%	081998TR
Cadmium	ug/l	ICV1	500	480	96.1	90-110%	081998TR
Chromium	ug/l	ICV1	500	493	98.6	90-110%	081998TR
Lead	ug/l	ICV1	1000	1000	100.0	90-110%	081998TR
Selenium	ug/l	ICV1	2000	1964	98.2	90-110%	081998TR
Silver	ug/l	ICV1	500	496	99.1	90-110%	081998TR
Arsenic	ug/l	LCSW	1000	905	90.5	80-120%	081998TR
Barium	ug/l	LCSW	500	458	91.7	80-120%	081998TR

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QUALITY ASSURANCE SUMMARY
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CALIBRATION VERIFICATION

ANALYTE	UNITS	TYPE	TRUE	FOUND	% REC	QAO	RUN ID
Cadmium	ug/l	LCSW	500	453	90.7	80-120%	081998TR
Chromium	ug/l	LCSW	500	463	92.6	80-120%	081998TR
Lead	ug/l	LCSW	1000	936	93.6	80-120%	081998TR
Selenium	ug/l	LCSW	2000	1812	90.6	80-120%	081998TR
Silver	ug/l	LCSW	1000	1031	103.1	80-120%	081998TR
Mercury	ug/l	CCV1	5.00	5.03	100.6	80-120%	082098CV
Mercury	ug/l	CCV2	5.00	5.08	101.6	80-120%	082098CV
Mercury	ug/l	CCV3	5.00	5.32	106.4	80-120%	082098CV
Mercury	ug/l	CCV4	5.00	5.28	105.6	80-120%	082098CV
Mercury	ug/l	CCV5	5.00	5.47	109.4	80-120%	082098CV
Mercury	ug/l	ICV1	4.90	5.02	102.4	80-120%	082098CV
Mercury	mg/kg	LCSS	12.7	12.2	95.7	80-120%	082098CV
Mercury	ug/l	LCSW	4.90	5.28	107.8	80-120%	082098CV

BLANKS

ANALYTE	UNITS	TYPE	FOUND	QAO	RUN ID
PCB, Total	ug/ml	CCB1F	<0.013	<0.013 ug/ml	081698A3
PCB, Total	ug/ml	CCB5E	<0.013	<0.013 ug/ml	081698A3
PCB, Total	ug/ml	CCB6E	<0.013	<0.013 ug/ml	081698A3
PCB, Total	ug/ml	CCB6F	<0.013	<0.013 ug/ml	081698A3
PCB, Total	mg/kg	PBO	<0.013	< 1 mg/kg	081698A3
PCB, Total	ug/ml	CCB10F	<0.010	<0.01 ug/ml	081898A3
PCB, Total	ug/ml	CCB1F	<0.010	<0.01 ug/ml	081898A3

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QUALITY ASSURANCE SUMMARY
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BLANKS

ANALYTE	UNITS	TYPE	FOUND	QAO	RUN ID
PCB, Total	ug/ml	CCB8E	<0.010	<0.01 ug/ml	081898A3
PCB, Total	ug/ml	CCB9F	<0.010	<0.01 ug/ml	081898A3
PCB, Total	ug/ml	CCB11F	<0.010	<0.01 ug/ml	081998A3
PCB, Total	ug/ml	CCB12F	<0.010	<0.01 ug/ml	081998A3
PCB, Total	ug/ml	CCB13F	<0.010	<0.01 ug/ml	081998A3
PCB, Total	mg/kg	PBS	<1.00	< 1 mg/kg	081998A3
PCB, Total	mg/kg	PBS	<1.00	< 1 mg/kg	081998A3
PCB, Total	ug/ml	CCB14E	<0.013	<0.013 ug/ml	082498A3
PCB, Total	ug/ml	CCB14F	<0.013	<0.013 ug/ml	082498A3
PCB, Total	ug/ml	CCB15E	<0.013	<0.013 ug/ml	082498A3
PCB, Total	ug/ml	CCB15F	<0.013	<0.013 ug/ml	082498A3
PCB, Total	ug/ml	CCB16E	<0.013	<0.013 ug/ml	082498A3
PCB, Total	ug/ml	CCB16F	<0.013	<0.013 ug/ml	082498A3
1,4-Dichlorobenzene	mg/l	SBL108	<0.040	<0.040 mg/l	BNA082098
2,4,5-Trichlorophenol	mg/l	SBL108	<0.040	<0.040 mg/l	BNA082098
2,4,6-Trichlorophenol	mg/l	SBL108	<0.040	<0.040 mg/l	BNA082098
2,4-Dinitrotoluene	mg/l	SBL108	<0.040	<0.040 mg/l	BNA082098
2-Methylphenol	mg/l	SBL108	<0.040	<0.040 mg/l	BNA082098
3 & 4-Methylphenol	mg/l	SBL108	<0.040	<0.040 mg/l	BNA082098
Hexachlorobenzene	mg/l	SBL108	<0.040	<0.040 mg/l	BNA082098
Hexachlorobutadiene	mg/l	SBL108	<0.040	<0.040 mg/l	BNA082098
Hexachloroethane	mg/l	SBL108	<0.040	<0.040 mg/l	BNA082098
Nitrobenzene	mg/l	SBL108	<0.040	<0.040 mg/l	BNA082098
Pentachlorophenol	mg/l	SBL108	<0.040	<0.040 mg/l	BNA082098
Pyridine	mg/l	SBL108	<0.040	<0.040 mg/l	BNA082098
2,4-D	mg/l	PB	<5.00	<5.0 mg/l	SPA082198
2,4-D	mg/l	PB	<5.00	<5.0 mg/l	SPA082198
Chlordane	mg/l	PB	<0.015	<0.015 mg/l	SPA082198

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QUALITY ASSURANCE SUMMARY
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BLANKS

ANALYTE	UNITS	TYPE	FOUND	QAO	RUN ID
Chlordane	mg/l	PB	<0.015	<0.015 mg/l	SPA082198
Endrin	mg/l	PB	<0.010	<0.0100 mg/l	SPA082198
Endrin	mg/l	PB	<0.010	<0.0100 mg/l	SPA082198
Heptachlor	mg/l	PB	<0.005	<0.0050 mg/l	SPA082198
Heptachlor	mg/l	PB	<0.005	<0.0050 mg/l	SPA082198
Heptachlor epoxide	mg/l	PB	<0.005	<0.0050 mg/l	SPA082198
Heptachlor epoxide	mg/l	PB	<0.005	<0.0050 mg/l	SPA082198
Lindane	mg/l	PB	<0.200	<0.200 mg/l	SPA082198
Lindane	mg/l	PB	<0.200	<0.200 mg/l	SPA082198
Methoxychlor	mg/l	PB	<1.00	<1.0 mg/l	SPA082198
Methoxychlor	mg/l	PB	<1.00	<1.0 mg/l	SPA082198
Silvex	mg/l	PB	<0.500	<0.50 mg/l	SPA082198
Silvex	mg/l	PB	<0.500	<0.50 mg/l	SPA082198
Toxaphene	mg/l	PB	<0.250	<0.250 mg/l	SPA082198
Toxaphene	mg/l	PB	<0.250	<0.250 mg/l	SPA082198
Gasoline Range Organics	mg/l	CCB1	<0.400	<0.40 mg/l	TPHGC081998
Diesel Range Organics	mg/l	CCB2	<0.400	<0.40 mg/l	TPHGC081998
Gasoline Range Organics	mg/l	CCB2	<0.400	<0.40 mg/l	TPHGC081998
Diesel Range Organics	mg/l	ICB1	<0.400	<0.40 mg/l	TPHGC081998
Gasoline Range Organics	mg/l	ICB1	<0.400	<0.40 mg/l	TPHGC081998
Diesel Range Organics	mg/kg	PBS62	<10.3	<10.3 mg/kg	TPHGC081998
Gasoline Range Organics	mg/kg	PBS62	<10.3	<10.3 mg/kg	TPHGC081998
Diesel Range Organics	mg/kg	PBS64	<9.75	<9.75 mg/kg	TPHGC081998
Gasoline Range Organics	mg/kg	PBS64	<9.75	<9.75 mg/kg	TPHGC081998
Diesel Range Organics	mg/l	PBW63	<0.400	<0.40 mg/l	TPHGC081998
Gasoline Range Organics	mg/l	PBW63	<0.400	<0.40 mg/l	TPHGC081998
Diesel Range Organics	mg/l	CCB1	<0.400	< 0.4 mg/l	TPHGC082798
Gasoline Range Organics	mg/l	CCB1	<0.400	< 0.4 mg/l	TPHGC082798

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QUALITY ASSURANCE SUMMARY
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BLANKS

ANALYTE	UNITS	TYPE	FOUND	QAO	RUN ID
Gasoline Range Organics	mg/l	CCB2	<0.400	< 0.4 mg/l	TPHGC082798
Gasoline Range Organics	mg/kg	PBS65	<9.69	< 9.7 mg/kg	TPHGC082798
Gasoline Range Organics	mg/kg	PBS66	<9.78	< 9.8 mg/kg	TPHGC082798
Gasoline Range Organics	mg/l	PBW61	<0.400	< 0.4 mg/l	TPHGC082798
Diesel Range Organics	mg/l	PBW67	<0.400	< 0.4 mg/l	TPHGC082798
Gasoline Range Organics	mg/l	PBW67	<0.400	< 0.4 mg/l	TPHGC082798
1,1-Dichloroethene	ug/l	CCB14	<5.00	<5.0 ug/l	VOA082098
1,2-Dichloroethane	ug/l	CCB14	<5.00	<5.0 ug/l	VOA082098
1,4-Dichlorobenzene	ug/l	CCB14	<5.00	<5.0 ug/l	VOA082098
2-Butanone	ug/l	CCB14	<10.0	<10.0 ug/l	VOA082098
Benzene	ug/l	CCB14	<5.00	<5.0 ug/l	VOA082098
Carbon Tetrachloride	ug/l	CCB14	<5.00	<5.0 ug/l	VOA082098
Chlorobenzene	ug/l	CCB14	<5.00	<5.0 ug/l	VOA082098
Chloroform	ug/l	CCB14	<5.00	<5.0 ug/l	VOA082098
Tetrachloroethene	ug/l	CCB14	<5.00	<5.0 ug/l	VOA082098
Trichloroethene	ug/l	CCB14	<5.00	<5.0 ug/l	VOA082098
Vinyl Chloride	ug/l	CCB14	<5.00	<5.0 ug/l	VOA082098
1,1-Dichloroethene	mg/l	PBWT14	<0.025	<0.025 mg/l	VOA082098
1,2-Dichloroethane	mg/l	PBWT14	<0.025	<0.025 mg/l	VOA082098
1,4-Dichlorobenzene	mg/l	PBWT14	<0.025	<0.025 mg/l	VOA082098
2-Butanone	mg/l	PBWT14	<0.050	<0.050 mg/l	VOA082098
Benzene	mg/l	PBWT14	<0.025	<0.025 mg/l	VOA082098
Carbon Tetrachloride	mg/l	PBWT14	<0.025	<0.025 mg/l	VOA082098
Chlorobenzene	mg/l	PBWT14	<0.025	<0.025 mg/l	VOA082098
Chloroform	mg/l	PBWT14	<0.025	<0.025 mg/l	VOA082098
Tetrachloroethene	mg/l	PBWT14	<0.025	<0.025 mg/l	VOA082098
Trichloroethene	mg/l	PBWT14	<0.025	<0.025 mg/l	VOA082098
Vinyl Chloride	mg/l	PBWT14	<0.025	<0.025 mg/l	VOA082098

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QUALITY ASSURANCE SUMMARY
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BLANKS

ANALYTE	UNITS	TYPE	FOUND	QAO	RUN ID
Arsenic	ug/l	CCB1	<5.00	<5.00 ug/l	081998TR
Barium	ug/l	CCB1	<1.00	<1.00 ug/l	081998TR
Cadmium	ug/l	CCB1	<1.00	<1.00 ug/l	081998TR
Chromium	ug/l	CCB1	<5.00	<5.00 ug/l	081998TR
Lead	ug/l	CCB1	<5.00	<5.00 ug/l	081998TR
Selenium	ug/l	CCB1	<5.00	<5.00 ug/l	081998TR
Silver	ug/l	CCB1	<2.00	<2.00 ug/l	081998TR
Arsenic	ug/l	CCB2	<5.00	<5.00 ug/l	081998TR
Barium	ug/l	CCB2	<1.00	<1.00 ug/l	081998TR
Cadmium	ug/l	CCB2	<1.00	<1.00 ug/l	081998TR
Chromium	ug/l	CCB2	<5.00	<5.00 ug/l	081998TR
Lead	ug/l	CCB2	<5.00	<5.00 ug/l	081998TR
Selenium	ug/l	CCB2	<5.00	<5.00 ug/l	081998TR
Silver	ug/l	CCB2	<2.00	<2.00 ug/l	081998TR
Arsenic	ug/l	CCB3	<5.00	<5.00 ug/l	081998TR
Barium	ug/l	CCB3	<1.00	<1.00 ug/l	081998TR
Cadmium	ug/l	CCB3	<1.00	<1.00 ug/l	081998TR
Chromium	ug/l	CCB3	<5.00	<5.00 ug/l	081998TR
Lead	ug/l	CCB3	<5.00	<5.00 ug/l	081998TR
Selenium	ug/l	CCB3	<5.00	<5.00 ug/l	081998TR
Silver	ug/l	CCB3	<2.00	<2.00 ug/l	081998TR
Arsenic	ug/l	ICB1	<5.00	<5.00 ug/l	081998TR
Barium	ug/l	ICB1	<1.00	<1.00 ug/l	081998TR
Cadmium	ug/l	ICB1	<1.00	<1.00 ug/l	081998TR
Chromium	ug/l	ICB1	<5.00	<5.00 ug/l	081998TR
Lead	ug/l	ICB1	<5.00	<5.00 ug/l	081998TR
Selenium	ug/l	ICB1	<5.00	<5.00 ug/l	081998TR
Silver	ug/l	ICB1	<2.00	<2.00 ug/l	081998TR

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QUALITY ASSURANCE SUMMARY
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BLANKS

ANALYTE	UNITS	TYPE	FOUND	QAO	RUN ID
Arsenic	ug/l	PBW	<5.00	<5 ug/l	081998TR
Barium	ug/l	PBW	<1.00	<1 ug/l	081998TR
Cadmium	ug/l	PBW	<1.00	<1 ug/l	081998TR
Chromium	ug/l	PBW	<5.00	<5 ug/l	081998TR
Lead	ug/l	PBW	<5.00	<5 ug/l	081998TR
Selenium	ug/l	PBW	<5.00	<5 ug/l	081998TR
Silver	ug/l	PBW	<2.00	<2 ug/l	081998TR
Mercury	ug/l	CCB1	<0.200	<0.2 ug/l	082098CV
Mercury	ug/l	CCB2	<0.200	<0.2 ug/l	082098CV
Mercury	ug/l	CCB3	<0.200	<0.2 ug/l	082098CV
Mercury	ug/l	CCB4	<0.200	<0.2 ug/l	082098CV
Mercury	ug/l	CCB5	<0.200	<0.2 ug/l	082098CV
Mercury	ug/l	ICB1	<0.200	<0.2 ug/l	082098CV
Mercury	mg/kg	PBS	<0.100	<0.1 mg/kg	082098CV
Mercury	ug/l	PBW	0.250	<0.2 ug/l	082098CV

DUPLICATES

LAB ID	ANALYTE	SAMPLE	DUP	UNITS	RPD	QAO	RUN ID
232692	Arsenic	87.1	89.0	% Rec	2.2	≤20 RPD	081998TR
232692	Barium	88.0	90.6	% Rec	2.9	≤20 RPD	081998TR
232692	Cadmium	106.8	110.4	% Rec	3.3	≤20 RPD	081998TR
232692	Chromium	95.2	97.6	% Rec	2.5	≤20 RPD	081998TR
232692	Lead	103.3	106.1	% Rec	2.7	≤20 RPD	081998TR

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QUALITY ASSURANCE SUMMARY
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DUPLICATES

LAB ID	ANALYTE	SAMPLE	DUP	UNITS	RPD	QAO	RUN ID
232692	Mercury	114.0	118.0	% Rec	3.4	≤20 RPD	082098CV
232868	Mercury	<0.100	<0.100	mg/kg	0.0	≤20 RPD	082098CV
232672	Mercury	<0.200	0.214	ug/l	NC	≤20 RPD	082098CV
232692	Selenium	102.0	104.5	% Rec	2.4	≤20 RPD	081998TR
232692	Silver	96.7	98.1	% Rec	1.5	≤20 RPD	081998TR

SPIKES

LAB ID	ANALYTE	TYPE	SAMPLE	SPK	ADDED	%REC	QAO	RUN ID
232692	Arsenic	MS	<5.00	696.8	800.0	87.1	75-125%	081998TR
232692	Barium	MS	1031	3670	3000	88.0	75-125%	081998TR
232692	Cadmium	MS	8.76	115.6	100.0	106.8	75-125%	081998TR
232692	Chromium	MS	9.07	389.9	400.0	95.2	75-125%	081998TR
232692	Lead	MS	47.9	1081	1000	103.3	75-125%	081998TR
232692	Selenium	MS	<5.00	815.9	800.0	102.0	75-125%	081998TR
232692	Silver	MS	<2.00	48.4	50.0	96.7	75-125%	081998TR
232692	Arsenic	MSD	<5.00	712.0	800.0	89.0	75-125%	081998TR
232692	Barium	MSD	1031	3750	3000	90.6	75-125%	081998TR
232692	Cadmium	MSD	8.76	119.1	100.0	110.4	75-125%	081998TR
232692	Chromium	MSD	9.07	399.3	400.0	97.6	75-125%	081998TR
232692	Lead	MSD	47.9	1109	1000	106.1	75-125%	081998TR
232692	Selenium	MSD	<5.00	836.3	800.0	104.5	75-125%	081998TR
232692	Silver	MSD	<2.00	49.1	50.0	98.1	75-125%	081998TR
232672	Mercury	MS	<0.200	0.865	1.00	86.5	75-125%	082098CV
232692	Mercury	MS	<2.00	11.4	10.0	114.0	75-125%	082098CV
232692	Mercury	MSD	<2.00	11.8	10.0	118.0	75-125%	082098CV

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QUALITY ASSURANCE SUMMARY
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SPIKES

LAB ID	ANALYTE	TYPE	SAMPLE	SPK	ADDED	%REC	QAO	RUN ID
232868	Mercury	MS	<0.100	0.620	0.520	119.2	75-125%	082098CV

SURROGATES

LAB ID	ANALYTE	TRUE	FOUND	%REC	QAO	RUN ID
232691	DCB	0.100	0.099	99.1	50-150%	081698A3
232691	TCMX	0.100	0.107	107.0	50-150%	081698A3
CCB1F	DCB	0.100	0.094	93.6	50-150%	081698A3
CCB1F	TCMX	0.100	0.110	110.0	50-150%	081698A3
CCB5E	DCB	0.100	0.105	105.0	50-150%	081698A3
CCB5E	TCMX	0.100	0.111	111.0	50-150%	081698A3
CCB6E	DCB	0.100	0.114	114.0	50-150%	081698A3
CCB6E	TCMX	0.100	0.131	131.0	50-150%	081698A3
CCB6F	DCB	0.100	0.103	103.0	50-150%	081698A3
CCB6F	TCMX	0.100	0.116	116.0	50-150%	081698A3
CCV1F 1016 2.0	DCB	0.100	0.098	97.8	50-150%	081698A3
CCV1F 1016 2.0	TCMX	0.100	0.096	96.2	50-150%	081698A3
CCV5E 1242 2.0	DCB	0.100	0.138	138.0	50-150%	081698A3
CCV5E 1242 2.0	TCMX	0.100	0.090	90.2	50-150%	081698A3
CCV6E 1248 2.0	DCB	0.100	0.120	120.0	50-150%	081698A3
CCV6E 1248 2.0	TCMX	0.100	0.105	105.0	50-150%	081698A3
CCV6F 1260 2.0	DCB	0.100	0.131	131.0	50-150%	081698A3
CCV6F 1260 2.0	TCMX	0.100	0.101	101.0	50-150%	081698A3
PBO PCB 98-343	DCB	0.100	0.090	90.4	50-150%	081698A3
PBO PCB 98-343	TCMX	0.100	0.088	88.2	50-150%	081698A3
PBW PCB 98-312	DCB	0.100	0.142	142.0	50-150%	081698A3

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QUALITY ASSURANCE SUMMARY
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SURROGATES

LAB ID	ANALYTE	TRUE	FOUND	%REC	QAO	RUN ID
PBW PCB 98-312	TCMX	0.100	0.123	123.0	50-150%	081698A3
232691	DCB	0.100	0.110	110.0	50-150%	081898A3
232691	TCMX	0.100	0.112	112.0	50-150%	081898A3
232693	DCB	0.100	0.101	101.0	50-150%	081898A3
232693	TCMX	0.100	0.125	125.0	50-150%	081898A3
232694	DCB	0.100	0.105	105.0	50-150%	081898A3
232694	TCMX	0.100	0.114	114.0	50-150%	081898A3
232695	DCB	0.100	0.111	111.0	50-150%	081898A3
232695	TCMX	0.100	0.122	122.0	50-150%	081898A3
232696	DCB	0.100	0.112	112.0	50-150%	081898A3
232696	TCMX	0.100	0.124	124.0	50-150%	081898A3
232697	DCB	0.100	0.041	41.1	50-150%	081898A3
232697	TCMX	0.100	0.086	86.2	50-150%	081898A3
232698	DCB	0.100	0.077	77.2	50-150%	081898A3
232698	TCMX	0.100	0.110	110.0	50-150%	081898A3
232699	DCB	0.100	0.112	112.0	50-150%	081898A3
232699	TCMX	0.100	0.059	59.3	50-150%	081898A3
232700	DCB	0.100	0.149	149.0	50-150%	081898A3
232700	TCMX	0.100	0.087	87.0	50-150%	081898A3
232702	DCB	0.100	0.059	59.4	50-150%	081898A3
232702	TCMX	0.100	0.085	84.6	50-150%	081898A3
232703	DCB	0.100	0.108	108.0	50-150%	081898A3
232703	TCMX	0.100	0.118	118.0	50-150%	081898A3
232704	DCB	0.100	0.110	110.0	50-150%	081898A3
232704	TCMX	0.100	0.120	120.0	50-150%	081898A3
BLK	DCB	0.100	0.112	112.0	50-150%	081898A3
BLK	TCMX	0.100	0.124	124.0	50-150%	081898A3
CCB10F	DCB	0.100	0.107	107.0	50-150%	081898A3
CCB10F	TCMX	0.100	0.105	105.0	50-150%	081898A3

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QUALITY ASSURANCE SUMMARY
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SURROGATES

LAB ID	ANALYTE	TRUE	FOUND	%REC	QAO	RUN ID
CCB1F	DCB	0.100	0.112	112.0	50-150%	081898A3
CCB1F	TCMX	0.100	0.121	121.0	50-150%	081898A3
CCB8E	DCB	0.100	0.127	127.0	50-150%	081898A3
CCB8E	TCMX	0.100	0.137	137.0	50-150%	081898A3
CCB9F	DCB	0.100	0.116	116.0	50-150%	081898A3
CCB9F	TCMX	0.100	0.120	120.0	50-150%	081898A3
CCV10F 1254 2.0	DCB	0.100	0.118	118.0	50-150%	081898A3
CCV10F 1254 2.0	TCMX	0.100	0.131	131.0	50-150%	081898A3
CCV1F 1260 2.0	DCB	0.100	0.102	102.0	50-150%	081898A3
CCV1F 1260 2.0	TCMX	0.100	0.097	96.8	50-150%	081898A3
CCV9E 1260 2.0	DCB	0.100	0.105	105.0	50-150%	081898A3
CCV9E 1260 2.0	TCMX	0.100	0.094	94.3	50-150%	081898A3
CCV9F 1248 2.0	DCB	0.100	0.105	105.0	50-150%	081898A3
CCV9F 1248 2.0	TCMX	0.100	0.102	102.0	50-150%	081898A3
232701	DCB	0.100	0.104	104.0	50-150%	081998A3
232701	TCMX	0.100	0.111	111.0	50-150%	081998A3
CCB11F	DCB	0.100	0.115	115.0	50-150%	081998A3
CCB11F	TCMX	0.100	0.130	130.0	50-150%	081998A3
CCB12F	DCB	0.100	0.122	122.0	50-150%	081998A3
CCB12F	TCMX	0.100	0.131	131.0	50-150%	081998A3
CCB13F	DCB	0.100	0.111	111.0	50-150%	081998A3
CCB13F	TCMX	0.100	0.105	105.0	50-150%	081998A3
CCV11F 1016 2.0	DCB	0.100	0.111	111.0	50-150%	081998A3
CCV11F 1016 2.0	TCMX	0.100	0.105	105.0	50-150%	081998A3
CCV12F 1232 2.0	DCB	0.100	0.116	116.0	50-150%	081998A3
CCV12F 1232 2.0	TCMX	0.100	0.118	118.0	50-150%	081998A3
CCV13F 1242 2.0	DCB	0.100	0.105	105.0	50-150%	081998A3
CCV13F 1242 2.0	TCMX	0.100	0.112	112.0	50-150%	081998A3
PBS PCB 98-338	DCB	0.100	0.107	107.0	50-150%	081998A3

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QUALITY ASSURANCE SUMMARY
Continued

SURROGATES

LAB ID	ANALYTE	TRUE	FOUND	%REC	QAO	RUN ID
PBS PCB 98-338	TCMX	0.100	0.120	120.0	50-150%	081998A3
PBS PCB 98-341	DCB	0.100	0.120	120.0	50-150%	081998A3
PBS PCB 98-341	TCMX	0.100	0.124	124.0	50-150%	081998A3
CCB14E	DCB	0.100	0.082	81.8	50-150%	082498A3
CCB14E	TCMX	0.100	0.109	109.0	50-150%	082498A3
CCB14F	DCB	0.100	0.125	125.0	50-150%	082498A3
CCB14F	TCMX	0.100	0.139	139.0	50-150%	082498A3
CCB15E	DCB	0.100	0.098	98.0	50-150%	082498A3
CCB15E	TCMX	0.100	0.115	115.0	50-150%	082498A3
CCB15F	DCB	0.100	0.123	123.0	50-150%	082498A3
CCB15F	TCMX	0.100	0.137	137.0	50-150%	082498A3
CCB16E	DCB	0.100	0.090	89.8	50-150%	082498A3
CCB16E	TCMX	0.100	0.113	113.0	50-150%	082498A3
CCB16F	DCB	0.100	0.124	124.0	50-150%	082498A3
CCB16F	TCMX	0.100	0.137	137.0	50-150%	082498A3
CCV14E 1016 2.0	DCB	0.100	0.099	98.9	50-150%	082498A3
CCV14E 1016 2.0	TCMX	0.100	0.100	99.8	50-150%	082498A3
CCV14F 1242 2.0	DCB	0.100	0.138	138.0	50-150%	082498A3
CCV14F 1242 2.0	TCMX	0.100	0.128	128.0	50-150%	082498A3
CCV15E 1232 2.0	DCB	0.100	0.110	110.0	50-150%	082498A3
CCV15E 1232 2.0	TCMX	0.100	0.091	91.1	50-150%	082498A3
CCV15F 1248 2.0	DCB	0.100	0.130	130.0	50-150%	082498A3
CCV15F 1248 2.0	TCMX	0.100	0.121	121.0	50-150%	082498A3
CCV16E 1254 2.0	DCB	0.100	0.088	88.3	50-150%	082498A3
CCV16E 1254 2.0	TCMX	0.100	0.087	86.7	50-150%	082498A3
CCV16F 1260 2.0	DCB	0.100	0.153	153.0	50-150%	082498A3
CCV16F 1260 2.0	TCMX	0.100	0.122	122.0	50-150%	082498A3
232692	1,2-Dichlorobenzene-d4	50.0	18.0	35.9	20-130%	BNA082098
232692	2,4,6-Tribromophenol B693-904	75.0	<2.91	3.9	19-122%	BNA082098

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QUALITY ASSURANCE SUMMARY
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SURROGATES

LAB ID	ANALYTE	TRUE	FOUND	%REC	QAO	RUN ID
232692	2-Chlorophenol-d4	75.0	<5.94	7.9	20-130%	BNA082098
232692	2-Fluorobiphenyl	50.0	21.6	43.3	30-115%	BNA082098
232692	2-Fluorophenol B693-904	75.0	<1.10	1.5	25-121%	BNA082098
232692	Nitrobenzene-d5	50.0	27.4	54.7	23-120%	BNA082098
232692	Phenol-d5	75.0	10.7	14.2	24-113%	BNA082098
232692	Terphenyl-d14	50.0	38.2	76.3	18-137%	BNA082098
232701	1,2-Dichlorobenzene-d4	50.0	19.6	39.1	20-130%	BNA082098
232701	2,4,6-Tribromophenol	75.0	<3.62	4.8	19-122%	BNA082098
232701	2-Chlorophenol-d4	75.0	<8.76	11.7	20-130%	BNA082098
232701	2-Fluorobiphenyl B693-DS04	50.0	23.3	46.5	30-115%	BNA082098
232701	2-Fluorophenol	75.0	<1.17	1.6	25-121%	BNA082098
232701	Nitrobenzene-d5	50.0	29.6	59.2	23-120%	BNA082098
232701	Phenol-d5	75.0	15.4	20.6	24-113%	BNA082098
232701	Terphenyl-d14	50.0	38.0	76.1	18-137%	BNA082098
CCV02	1,2-Dichlorobenzene-d4	50.0	49.5	99.0	16-110%	BNA082098
CCV02	2,4,6-Tribromophenol	75.0	50.1	66.9	10-123%	BNA082098
CCV02	2-Chlorophenol-d4	75.0	49.5	66.0	33-110%	BNA082098
CCV02	2-Fluorobiphenyl	50.0	48.8	97.7	43-116%	BNA082098
CCV02	2-Fluorophenol	75.0	51.0	68.0	21-100%	BNA082098
CCV02	Nitrobenzene-d5	50.0	51.5	103.0	35-114%	BNA082098
CCV02	Phenol-d5	75.0	48.4	64.5	10-94%	BNA082098
CCV02	Terphenyl-d14	50.0	49.9	99.8	33-141%	BNA082098
LCS108	1,2-Dichlorobenzene-d4	50.0	18.7	37.3	20-130%	BNA082098
LCS108	2,4,6-Tribromophenol	75.0	47.7	63.6	19-122%	BNA082098
LCS108	2-Chlorophenol-d4	75.0	40.3	53.7	20-130%	BNA082098
LCS108	2-Fluorobiphenyl	50.0	23.2	46.3	30-115%	BNA082098
LCS108	2-Fluorophenol	75.0	38.6	51.5	25-121%	BNA082098
LCS108	Nitrobenzene-d5	50.0	26.9	53.7	23-120%	BNA082098
LCS108	Phenol-d5	75.0	34.7	46.3	24-113%	BNA082098

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QUALITY ASSURANCE SUMMARY
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SURROGATES

LAB ID	ANALYTE	TRUE	FOUND	%REC	QAO	RUN ID
LCS108	Terphenyl-d14	50.0	40.5	81.0	18-137%	BNA082098
SBL108	1,2-Dichlorobenzene-d4	50.0	21.0	42.0	20-130%	BNA082098
SBL108	2,4,6-Tribromophenol	75.0	52.2	69.7	19-122%	BNA082098
SBL108	2-Chlorophenol-d4	75.0	48.3	64.4	20-130%	BNA082098
SBL108	2-Fluorobiphenyl	50.0	26.6	53.2	30-115%	BNA082098
SBL108	2-Fluorophenol	75.0	44.3	59.1	25-121%	BNA082098
SBL108	Nitrobenzene-d5	50.0	31.4	62.8	23-120%	BNA082098
SBL108	Phenol-d5	75.0	40.9	54.5	24-113%	BNA082098
SBL108	Terphenyl-d14	50.0	45.4	90.8	18-137%	BNA082098
232692	Dibutylchlorendate	0.000	0.000	33	22-135%	SPA082198
232692	Dichlorophenylacetic acid B693-904	0.000	0.000	10	11-135%	SPA082198
232692	TCMX	0.000	0.000	46	22-135%	SPA082198
232701	Dibutylchlorendate	0.000	0.000	27	22-135%	SPA082198
232701	Dichlorophenylacetic acid	0.000	0.000	12	11-135%	SPA082198
232701	TCMX	0.000	0.000	46	22-135%	SPA082198
232693	TCB	20.0	20.5	102.6	50-150%	TPHGC081998
232694	TCB	10.0	7.89	78.9	50-150%	TPHGC081998
232695	TCB B693-902	10.0	16.1	160.7	50-150%	TPHGC081998
232696	TCB B693-903	10.0	4.91	49.1	50-150%	TPHGC081998
232697	TCB	20.0	19.6	98.1	50-150%	TPHGC081998
CCB1	TCB	10.0	8.05	80.5	50-150%	TPHGC081998
CCB2	TCB	10.0	7.77	77.7	50-150%	TPHGC081998
CCV1	TCB	50.0	48.1	96.3	50-150%	TPHGC081998
CCV2	TCB	50.0	44.4	88.7	50-150%	TPHGC081998
ICV1	TCB	50.0	50.4	100.8	50-150%	TPHGC081998
LCSS64	TCB	10.0	13.7	137.0	50-150%	TPHGC081998
LCSW61	TCB	20.0	22.1	110.3	50-150%	TPHGC081998
LCSW63	TCB	20.0	34.1	170.6	50-150%	TPHGC081998
PBS62	TCB	10.0	8.05	80.5	50-150%	TPHGC081998

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QUALITY ASSURANCE SUMMARY
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SURROGATES

LAB ID	ANALYTE	TRUE	FOUND	%REC	QAO	RUN ID
PBS64	TCB	10.0	8.26	82.6	50-150%	TPHGC081998
PBW63	TCB	20.0	14.3	71.7	50-150%	TPHGC081998
CCB1	TCB	10.0	8.72	87.2	50-150%	TPHGC082798
CCB2	TCB	10.0	8.89	88.9	50-150%	TPHGC082798
CCV1	TCB	50.0	48.5	97.0	50-150%	TPHGC082798
CCV2	TCB	50.0	46.6	93.2	50-150%	TPHGC082798
ICV1	TCB	50.0	52.0	104.0	50-150%	TPHGC082798
LCSW67	TCB	50.0	30.1	60.2	50-150%	TPHGC082798
PBS65	TCB	10.0	8.96	89.6	50-150%	TPHGC082798
PBS66	TCB	10.0	8.88	88.8	50-150%	TPHGC082798
PBW61	TCB	20.0	23.6	118.0	50-150%	TPHGC082798
PBW67	TCB	20.0	21.1	105.7	50-150%	TPHGC082798
232692	1,2-Dichloroethane-d4	50.0	48.7	97.5	70-121%	VOA082098
232692	Bromofluorobenzene	50.0	45.8	91.6	74-121%	VOA082098
232692	Dibromofluoromethane	50.0	50.5	101.1	80-120%	VOA082098
232692	Toluene-d8	50.0	46.9	93.9	81-117%	VOA082098
232701	1,2-Dichloroethane-d4	50.0	49.8	99.6	70-121%	VOA082098
232701	Bromofluorobenzene	50.0	47.5	95.0	74-121%	VOA082098
232701	Dibromofluoromethane	50.0	51.6	103.2	80-120%	VOA082098
232701	Toluene-d8	50.0	48.7	97.3	81-117%	VOA082098
CCB14	1,2-Dichloroethane-d4	50.0	47.8	95.6	76-114%	VOA082098
CCB14	Bromofluorobenzene	50.0	45.9	91.9	86-115%	VOA082098
CCB14	Dibromofluoromethane	50.0	48.1	96.1	86-118%	VOA082098
CCB14	Toluene-d8	50.0	46.7	93.4	88-110%	VOA082098
CCV14	1,2-Dichloroethane-d4	50.0	51.9	103.8	76-114%	VOA082098
CCV14	Bromofluorobenzene	50.0	53.1	106.2	86-115%	VOA082098
CCV14	Dibromofluoromethane	50.0	49.7	99.4	86-118%	VOA082098
CCV14	Toluene-d8	50.0	51.5	103.0	88-110%	VOA082098
LCS14	1,2-Dichloroethane-d4	50.0	49.5	98.9	70-121%	VOA082098

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QUALITY ASSURANCE SUMMARY
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SURROGATES

LAB ID	ANALYTE	TRUE	FOUND	%REC	QAO	RUN ID
LCS14	Bromofluorobenzene	50.0	45.8	91.5	74-121%	VOA082098
LCS14	Dibromofluoromethane	50.0	49.2	98.4	80-120%	VOA082098
LCS14	Toluene-d8	50.0	46.0	92.0	81-117%	VOA082098
PBWT14	1,2-Dichloroethane-d4	50.0	49.1	98.2	70-121%	VOA082098
PBWT14	Bromofluorobenzene	50.0	47.4	94.9	74-121%	VOA082098
PBWT14	Dibromofluoromethane	50.0	50.1	100.2	80-120%	VOA082098
PBWT14	Toluene-d8	50.0	48.2	96.5	81-117%	VOA082098

QAO: Quality Assurance Objective; REC: Recovery; RPD: Relative Percent Difference; NC: Not calculatable.
DUP: Duplicate Analysis Result; SPK: Spiked Analysis Result; MS: Matrix SPK; MSD: Matrix SPK Duplicate.
For Duplicates <5X the Quantitation Limit (QL), ± DL shall apply for the QAO unless otherwise specified.

OHM Remediation Services Corp.

CHAIN-OF-CUSTODY RECORD

LAB COPY
Form 0019
Field Technical Services
Rev. 08/89

202992

10892

O.H. MATERIALS CORP. • P.O. BOX 551 • FINDLAY, OH 45839-0551 • 419-423-3526

PROJECT NAME: Bainbridge NTC
PROJECT LOCATION: Port Deposit MD
PROJ. NO.: 19568
PROJECT CONTACT: Mike Lacy
PROJECT TELEPHONE NO.: 609 588 6339
CLIENT'S REPRESENTATIVE: Frank Zepka
PROJECT MANAGER/SUPERVISOR: Larry Stearns

ANALYSIS DESIRED (INDICATE SEPARATE CONTAINERS): PCBS 8082; TPH GRO/DRO 8015; Full TCLP; RCRA Char. [ICR, PFT]

ITEM NO.	SAMPLE NUMBER	DATE (98)	TIME	COMP	GRAB	SAMPLE DESCRIPTION (INCLUDE MATRIX AND POINT OF SAMPLE)	NUMBER OF CONTAINERS	PCBS 8082	TPH GRO/DRO 8015	Full TCLP	RCRA Char. [ICR, PFT]				REMARKS
1	water B693-376	8/12	1325		X	water in pit outside Bldg 693	(M) ~~2~~ 2	X	X						24 hr TAT
2	soil B693-901		1332		X	Grey silt below UST	2	X	X						
3	soil B693-902		1345		X	Soil below UST Right side	2	X	X						
4	soil B693-903		1349		X	Soil below UST Left side	2	X	X						
5	water B693-~~905~~ 905		1336		X	water outside pit	2	X	X						# is B693-905
6	water B693-377 (M)		1358		X	Frac tank water	1	X							1 wk TAT
7	water B693-378		1407	X		rinsate water	1	X							Drums 11, 13, 15, 18, 19, 21, 22, 25, 29, 30
8	* B693-379 B693-399		1555	X		rinsate water	1	X							Drums 12, 14, 16, 17, 20, 23, 26, 27, 28
9	soil B693-DS04		1530	X		Drum solids	3	X		X	X				Drums 3, 5, 6, 9
10															1 wk TAT

TRANSFER NUMBER	ITEM NUMBER	TRANSFERS RELINQUISHED BY	TRANSFERS ACCEPTED BY	DATE	TIME
1	1-9	M J Lacy	Fed Ex 807006182409	8/13/98	1600
2		Fed-X	Susan Lippard	8/14/98	0950
3					
4					

REMARKS: Fax results to Mike Lacy 609 588 ~~6339~~ 6403

* Rec'd. no bottle # B693-399
Did receive bottle # B693-379 water

M J Lacy
SAMPLER'S SIGNATURE

232693-704

OHM Remediation Services Corp.

CHAIN-OF-CUSTODY RECORD

LAB COPY
Form 0018
Field Technical Services
Rev. 08/88

202993

O.H. MATERIALS CORP. • P.O. BOX 551 • FINDLAY, OH 45839-0551 • 419-423-3526

PROJECT NAME: Bainbridge NTC	PROJECT LOCATION: Port Deposit MD
PROJ. NO.: 19564	PROJECT CONTACT: Mike Lacy
PROJECT TELEPHONE NO.: 609 588 6339	
CLIENT'S REPRESENTATIVE: Frank Zepka	PROJECT MANAGER/SUPERVISOR: Larry Stearns

ITEM NO.	SAMPLE NUMBER	98 DATE	TIME	COMP	GRAB	SAMPLE DESCRIPTION (INCLUDE MATRIX AND POINT OF SAMPLE)	NUMBER OF CONTAINERS	PCBs 8082							REMARKS
1	Soil B691-804	8/12	1603		X	collected along building	1	X							24 hr TAT
2	Soil B691-805	↓	1606		X	1/2 way up hill	1	X							↓
3	Soil B691-806	↓	1609		X	3/4 way up hill	1	X							↓
4															
5															
6															
7															
8															
9															
10															

TRANSFER NUMBER	ITEM NUMBER	TRANSFERS RELINQUISHED BY	TRANSFERS ACCEPTED BY	DATE	TIME
1	1-3	M J Lacy	Fed Ex 9070061 82409	8/13/98	1600
2		Fed-X	[illegible]	8/14/98	0940
3					
4					

REMARKS: Fax results to Mike Lacy 609 588 6403

SAMPLER'S SIGNATURE: M J Lacy

OHM Corporation

10892

CHAIN-OF-CUSTODY RECORD

Form 0019
Field Technical Services
Rev. 08/89

№ 113565

O.H. MATERIALS CORP. • P.O. BOX 551 • FINDLAY, OH 45839-0551 • 419-423-3526

PROJECT NAME	PROJECT LOCATION
BainBridge - Do #137	Port Deposit MD

PROJ. NO.	PROJECT CONTACT	PROJECT TELEPHONE NO.
919568	MIKE LACY	609 588-6339

CLIENT'S REPRESENTATIVE	PROJECT MANAGER/SUPERVISOR
FRANK ZepKA	LARRY STEARNS

ANALYSIS DESIRED (INDICATE SEPARATE CONTAINERS)

ITEM NO.	SAMPLE NUMBER	DATE	TIME	COMP	GRAB	SAMPLE DESCRIPTION (INCLUDE MATRIX AND POINT OF SAMPLE)	NUMBER OF CONTAINERS	PCB's	Full TCLP	RCRA CHARA. [ICR, PFT]						REMARKS
1	B693-DS05	8/13/98	0930	X		Sludge + Rust + PPE TAKE FROM Drums SLUDS	1 8oz	X	X	X	*					Drum # 1-2-4-7-8-10-30 See Drum Log.
2	B693 904	8/13/98	0800		X	WET SOILS TAKEN FROM floor of UST	2-8oz 3 1-4oz		X	X						
3																
4																
5																
6																
7																
8																
9																
10																

(XX) * Per Mike Lacy B693-DS05 needs RCRA char. also 8-14-98 EKH will send more sample.

TRANSFER NUMBER	ITEM NUMBER	TRANSFERS RELINQUISHED BY	TRANSFERS ACCEPTED BY	DATE	TIME
1		Steve Carriere	FED EX	8/13/98	1100 Am
2		Fed-X	Susan Heppard	8/14/98	0950
3					
4					

REMARKS

1-WK TAT ON B693-904
1-WK TAT ON B693-DS05
FAX RESULTS TO MIKE LACY
FAX # 609-588-6403
232691-692
(XX) per Mike Lacy 8/14 Full TCLP & RCRA con

SAMPLER'S SIGNATURE

LAB COPY

OHM Remediation Services Corp.
A Subsidiary of OHM Corporation

ANALYTICAL DIVISION

Laboratory Analysis

Report(s) #622432

Client: OHM Remediation Services Corp.
Eastern Region (Pittsburgh PA)

Attn: Larry Stearns

Project: Naval Training Center, Port Deposit, MD

Sample(s) Received: April 11, 1997 **Data Due:** April 15, 1997

Order Received: April 11, 1997 **Data Reported:** April 15, 1997

This report is "PROPRIETARY AND CONFIDENTIAL" and delivered to, and intended for the exclusive use of the above named client only. OHM Remediation Services Corp., Analytical Division, assumes no responsibility or liability for the reliance hereon or use hereof by anyone other than the above named client.

Reviewed and Approved by: Joseph A. Hnatow *Date:* May 5, 1997
Joseph A. Hnatow, Laboratory Manager

16406 U.S. Route 224 East ▪ P.O. Box 551 ▪ Findlay, OH 45839-0551 ▪ 419-423-3526

Narrative for SDG # 048

Laboratory: OHM Remediation Services Corp.
Analytical Division

Project #: 19568N

Project Location: Naval Training Center, Port Deposit, MD

Samples in this Sample Delivery Group (SDG):

048 049 051 052 053 054 055

The sample temperature upon receipt by the laboratory was 8°C, that is outside the temperature acceptability range of 2°C to 6°C. Notification of this was communicated to Steve Wurzburger, Mike Lacy and Larry Stearns via the Order Confirmation, faxed on April 14, 1997. No response was received, therefore, the laboratory proceeded with the analytical as requested.

The information listed on the "SDG No." line for FORM's I, II, III and IV represents the lab analytical batch number in place of 048.

CLP Forms and/or analytical requirements do not apply to all Level C type deliverable requirements. Every effort was made to conform to the CLP format and all applicable CLP/Level C forms have been included.

PCBs by GC

Multiple analytical runs were combined and reported on one CLP FORM I PEST data sheet. The chromatograms were arranged with all of the primary analysis presented first followed by the confirmation analytical runs.

Zero of 36 surrogates were outside QC limits, 28 were diluted due to high levels of target analytes. This was confirmed by replicate analysis.

Matrix spike/matrix spike duplicate results are not available due to dilution below detectable levels as a result of high levels of target analytes present in the unspiked sample. Batch acceptance was based on method spike recoveries which were within QC limits.

Zero of 1 method spike recoveries were outside QC limits.

All method blank criteria were met for this SDG.

All initial and continuing calibration criteria were met.

All holding times were met for this SDG.

Total Extractable Hydrocarbons (DRO) by GC

Zero of 12 surrogate recoveries were outside QC limits.

Zero of 2 matrix spike recoveries and zero of 1 matrix RPD's were outside QC limits.

Zero of 1 method spike recoveries were outside QC limits.

All method blank criteria were met for this SDG.

Initial and continuing calibration criteria were met.

All sample holding times were met for this SDG.

Signature: Joseph A. Hnatow Name: Joseph A. Hnatow
Date: May 5, 1997 Title: Laboratory Manager

SUMMARY OF ANALYTICAL METHODOLOGY

Joblink # 622432

REFERENCE		TITLE
8080	SW-846	Organochlorine Pesticides and/or PCBs
8100/DRO	SW-846	Method 8100 Modified for Diesel Range Organics by GC/FID

Total Extractable Hydrocarbons (DRO) by GC

2B (GC)
SOIL SEMIVOLATILE SURROGATE RECOVERY

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: _____ Case No.: 19568N SAS No.: _____ SDG No.: Q2F70539

Level: (low/med) ____

	EPA SAMPLE NO.	SMC1 (FBP)#	SMC2 (TPL)#			TOT OUT
01	048	117	94			0
02	048MSD	97	89			0
03	048MS1	99	90			0
04	049	120	97			0
05	FBLK01	95	80			0
06	FSPK01	95	94			0

	QC LIMITS
SMC1 (FBP) = 2-Fluorobiphenyl	(43-123)
SMC2 (TPL) = o-Terphenyl	(61-110)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring compound diluted out

3C (GC)
SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: _____ Case No.: 19568N SAS No.: _____ SDG No.: Q2F70539

Matrix Spike - EPA Sample No.: 048 Level: (low/med) ____

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
DRO(C10 - C21)	38000	0	33900	89	34-110

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
DRO(C10 - C21)	37300	28200	76	16	30	34-110

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 1 outside limits
Spike Recovery: 0 out of 2 outside limits

COMMENTS: _____

3C (GC)
SOIL SEMIVOLATILE BLANK SPIKE RECOVERY

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: _____ Case No.: 19568N SAS No.: _____ SDG No.: Q2F70539

Matrix Spike - EPA Sample No.: FSPK01

COMPOUND	SPIKE ADDED (ug/Kg)	BLANK CONCENTRATION (ug/Kg)	BS CONCENTRATION (ug/Kg)	BS % REC #	QC LIMITS REC.
DRO(C10 - C21)	33700	0	26700	79	52-110

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 1 outside limits

COMMENTS: _____

4B (GC)
SEMIVOLATILE METHOD BLANK SUMMARY

0074 EPA SAMPLE NO.

FBLK01

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: _____ Case No.: 19568N SAS No.: _____ SDG No.: Q2F70539

Lab File ID: SR6170 Lab Sample ID: Q2F70539F

Instrument ID: GCS Date Extracted: 04/11/97

Matrix: (soil/water) SOIL Date Analyzed: 04/14/97

Level: (low/med) _____ Time Analyzed: 13:18

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	048	JQ9100F	SR6174	04/14/97
02	048MSD	JQ9100FR	SR6173	04/14/97
03	048MS1	JQ9100FS	SR6172	04/14/97
04	049	JQ9101F	SR6175	04/14/97
05	FSPK01	Q2F70539FS	SR6171	04/14/97

COMMENTS:

1B (GC)
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

0075 EPA SAMPLE NO.

048

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: _____ Case No.: 19568N SAS No.: _____ SDG No.: Q2F70539

Matrix: (soil/water) SOIL Lab Sample ID: JQ9100F

Sample wt/vol: 30.5 (g/mL) G Lab File ID: SR6174

Level: (low/med) _____ Date Received: 04/11/97

% Moisture: 12 decanted: (Y/N) ___ Date Extracted: 04/11/97

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 04/14/97

Injection Volume: _____ (uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
	DRO(C10 - C21)	3700	U

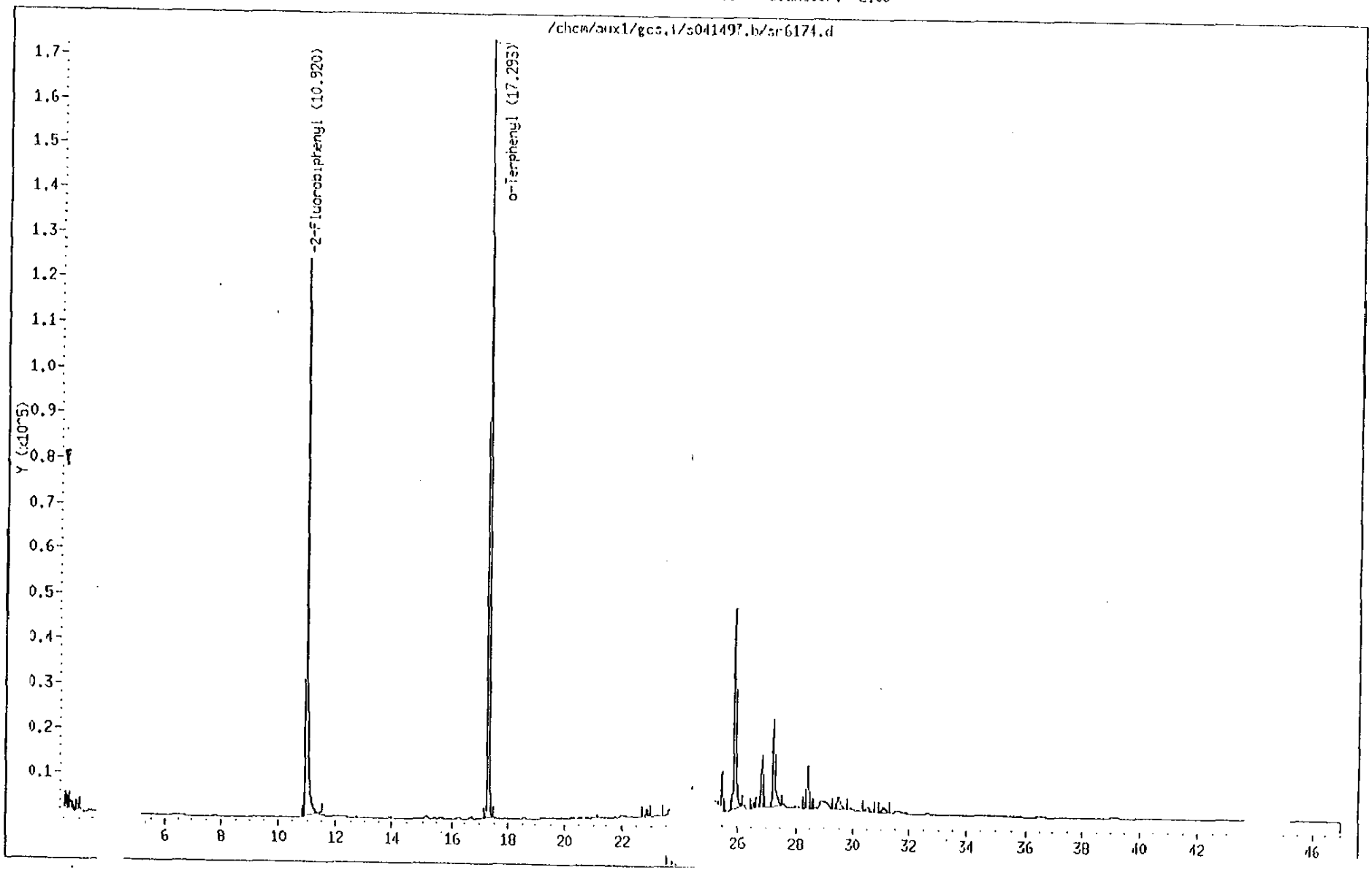
0076

Data File: /chem/aux1/gcs.1/s041497.b/sr6174.d
Date : 14-APR-97 16:50
Client ID:
Sample Info: 19568n-048

Column phase: db-5

Instrument: gcs.1

Operator: s.swan
Column diameter: 2.00



Data File: /chem/aux1/gcs.i/s041497.b/sr6174.d
Report Date: 15-Apr-1997 09:40

OHM Analytical Division

Data file : /chem/aux1/gcs.i/s041497.b/sr6174.d
Lab Smp Id:
Inj Date : 14-APR-97 16:50
Operator : s.swan Inst ID: gcs.i
Smp Info : 19568n-048
Misc Info : jq9100f,q2f70539,g1,2,1
Comment :
Method : /chem/aux1/gcs.i/s041497.b/032097_gcs_teh.m
Meth Date : 15-Apr-1997 09:29 Quant Type: ESTD
Cal Date : 20-MAR-97 19:23 Cal File: sr6059.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.10

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/ml)
1 DRO(C10 - C21)	Compound Not Detected.					
	Compound Not Detected.					
	Compound Not Detected.					
4 GRO3	Compound Not Detected.					
5 Total Heavy(C21 - C40)	Compound Not Detected.					
6 2-Fluorobiphenyl	10.920	10.920	0.000	2578960	125.987	125.987(M)
7 o-Terphenyl	17.293	17.290	0.003	3177675	101.005	101.005(M)

QC Flag Legend

M - Compound response manually integrated.

1B (GC)
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

0078 EPA SAMPLE NO.

049

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: _____ Case No.: 19568N SAS No.: _____ SDG No.: Q2F70539

Matrix: (soil/water) SOIL Lab Sample ID: JQ9101F

Sample wt/vol: 30.9 (g/mL) G Lab File ID: SR6175

Level: (low/med) _____ Date Received: 04/11/97

% Moisture: 17 decanted: (Y/N) ___ Date Extracted: 04/11/97

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 04/14/97

Injection Volume: _____ (uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
	DRO(C10 - C21)	18000	

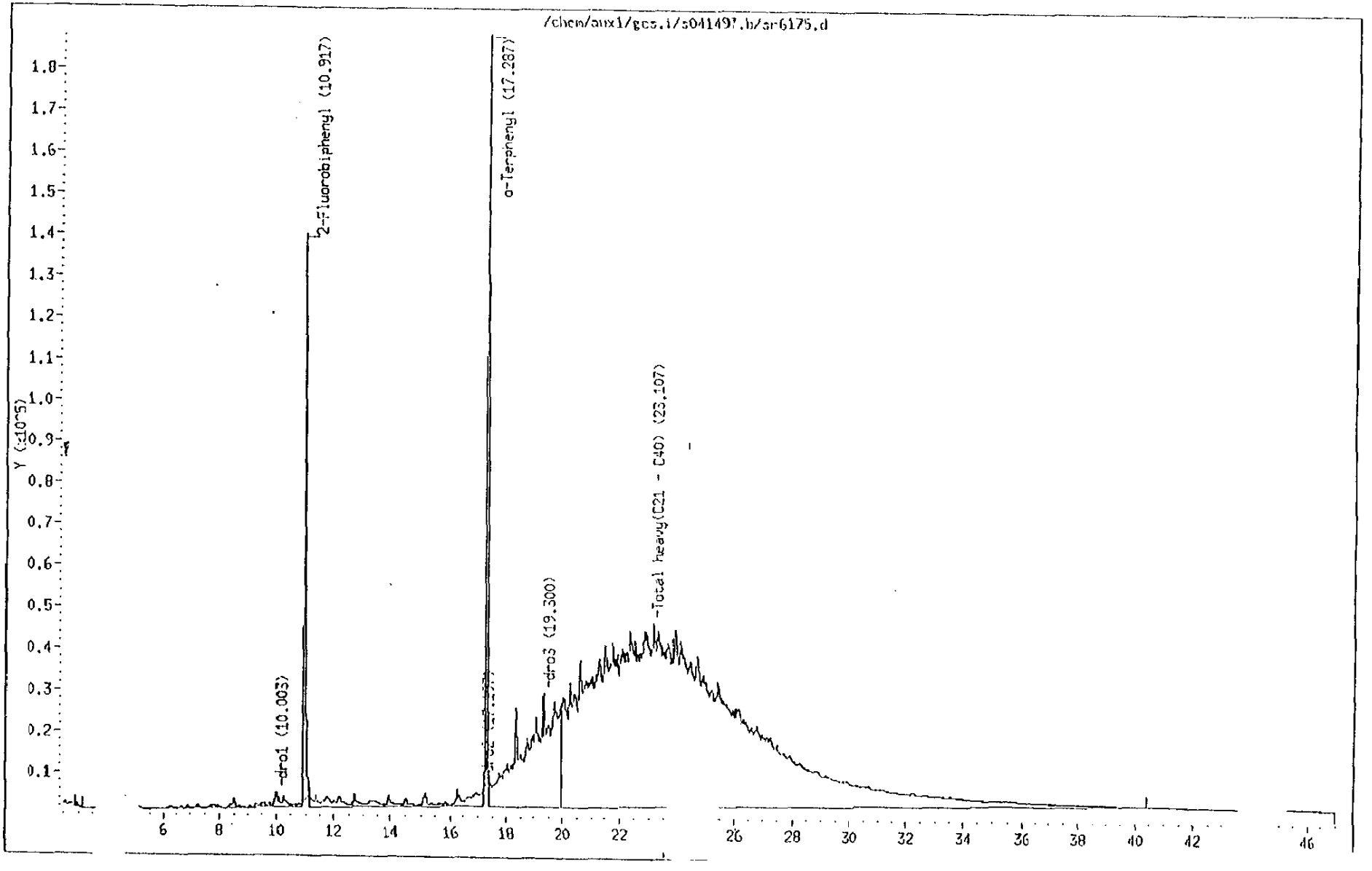
0079

Data File: /chem/aux1/gcs.1/s041497.b/sr6175.d
Date : 14-APR-97 17:44
Client ID:
Sample Info: 19568n-049

Column phase: db-5

Instrument: gcs.1

Operator: s.swan
Column diameter: 2.00



Data File: /chem/aux1/gcs.i/s041497.b/sr6175.d
Report Date: 15-Apr-1997 09:41

OHM Analytical Division

Data file : /chem/aux1/gcs.i/s041497.b/sr6175.d
Lab Smp Id:
Inj Date : 14-APR-97 17:44
Operator : s.swan Inst ID: gcs.i
Smp Info : 19568n-049
Misc Info : jq9101f,q2f70539,g1,2,1
Comment :
Method : /chem/aux1/gcs.i/s041497.b/032097_gcs_teh.m
Meth Date : 15-Apr-1997 09:29 Quant Type: ESTD
Cal Date : 20-MAR-97 19:23 Cal File: sr6059.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.10

						CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)
Compounds		RT	EXP RT	DLT RT	RESPONSE		
M	1 DRO(C10 - C21)				13721140	470.869	470.869
	1	10.003	9.957	0.046	480529	64.036	64.036(M)
	2	17.197	11.353	5.844	2412906	164.816	164.816(M)
	4 GRO3	19.300	18.323	0.977	10327704	1547.478	1547.478(M)
	5 Total Heavy(C21 - C40)	23.107	24.667	-1.560	79258774	4935.457	4935.457(M)
S	6 2-Fluorobiphenyl	10.917	10.920	-0.003	2642634	129.100	129.100(M)
S	7 o-Terphenyl	17.287	17.290	-0.003	3301181	104.932	104.932(M)

QC Flag Legend

M - Compound response manually integrated.

6B
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: Case No.: 19568N SAS No.: SDG No.: Q2F70539

Instrument ID: gcs Calibration Date(s): 03/20/97 03/20/97

Calibration Times: 1546 1923

LAB FILE ID: RRF100= sr6055.d RRF200= sr6056.d
RRF500= sr6057.d 1000 = sr6058.d 2000 = sr6059.d

COMPOUND	RRF100	RRF200	RRF500	1000	2000	$\overline{RRF}$	% RSD
DRO(C10 - C21)	27529	29780	29326	27680	31376	29140	5.472
dro1	6710	7648	7594	7038	8528	7504	9.245
dro2	13879	14767	14571	14221	15744	14636	4.825
dro3	6940	7358	7161	6421	7103	6997	5.068
Total heavy(C21 - C40)	19680	17639	16357	13497	12350	15905	18.83
2-Fluorobiphenyl *	14691	20055	24518	20318	22783	20470	18.16*
o-Terphenyl	30630	30587	33618	30889	31567	31458	4.036

unds with required minimum RRF and maximum %RSD values.
other compounds must meet a minimum RRF of 0.010.

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

0082

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: Case No.: 19568N SAS No.: SDG No.: Q2F70539

Instrument ID: gcs Calibration Date: 04/14/97 Time: 1208

Lab File ID: sr6169 Init. Calib. Date(s): 03/20/97 03/20/97

Init. Calib. Times: 1546 1923

COMPOUND	$\overline{RRF}$	RRF0	MIN RRF	%D	MAX %D
DRO(C10 - C21)	29140.	24818.	0.010	14.8	15.0
dro1	7504.0	++++	0.010	++++	15.0
dro2	14640.	++++	0.010	++++	15.0
dro3	6997.0	++++	0.010	++++	15.0
Total heavy(C21 - C40)	15900.	15342.	0.010	3.5	15.0
2-Fluorobiphenyl	20470.	20647.	0.010	0.9	15.0
o-Terphenyl	31460.	28706.	0.010	8.8	15.0

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

0083

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

ode: Case No.: 19568N SAS No.: SDG No.: Q2F70539

Instrument ID: gcs Calibration Date: 04/14/97 Time: 2215

Lab File ID: sr6180 Init. Calib. Date(s): 03/20/97 03/20/97

Init. Calib. Times: 1546 1923

COMPOUND	$\overline{RRF}$	RRF0	MIN RRF	%D	MAX %D
DRO(C10 - C21)	29140.	25934.	0.010	11.0	15.0
dro1	7504.0	++++	0.010	++++	15.0
dro2	14640.	++++	0.010	++++	15.0
dro3	6997.0	++++	0.010	++++	15.0
Total heavy(C21 - C40)	15900.	15136.	0.010	4.8	15.0
2-Fluorobiphenyl	20470.	20550.	0.010	0.4	15.0
o-Terphenyl	31460.	29355.	0.010	6.7	15.0

1B (GC)
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

0084 EPA SAMPLE NO.

FBLK01

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: _____ Case No.: 19568N SAS No.: _____ SDG No.: Q2F70539

Matrix: (soil/water) SOIL Lab Sample ID: Q2F70539F

Sample wt/vol: 30.0 (g/mL) G Lab File ID: SR6170

Level: (low/med) _____ Date Received: _____

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/11/97

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 04/14/97

Injection Volume: _____ (uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
	DRO(C10 - C21)	3300	U

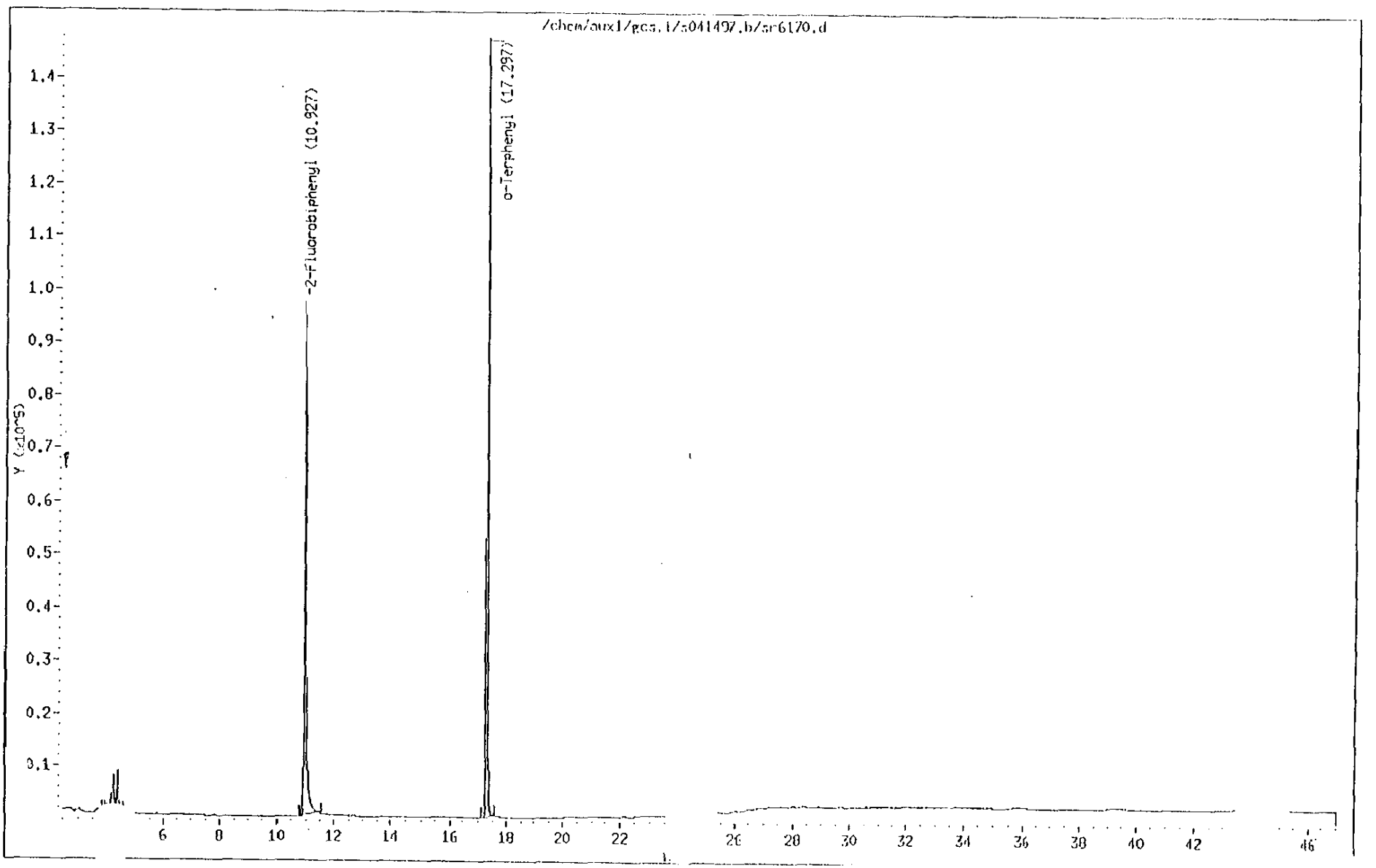
0085

Data File: /chem/aux1/gcs.i/s041497.b/sr6170.d
Date : 14-APR-97 13:18
Client ID:
Sample Info: method blank

Column phase: db-5

Instrument: gcs.i

Operator: s.swan
Column diameter: 2.00



Data File: /chem/aux1/gcs.i/s041497.b/sr6170.d
Report Date: 15-Apr-1997 09:34

OHM Analytical Division

Data file : /chem/aux1/gcs.i/s041497.b/sr6170.d
Lab Smp Id:
Inj Date : 14-APR-97 13:18
Operator : s.swan Inst ID: gcs.i
Smp Info : method blank
Misc Info : q2f70539f,q2f70539,g1,2,1
Comment :
Method : /chem/aux1/gcs.i/s041497.b/032097_gcs_teh.m
Meth Date : 15-Apr-1997 09:29 Quant Type: ESTD
Cal Date : 20-MAR-97 19:23 Cal File: sr6059.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.10

						CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)
Compounds		RT	EXP RT	DLT RT	RESPONSE		
M	1 DRO(C10 - C21)	Compound Not Detected					
	1	Compound Not Detected.					
	2	Compound Not Detected.					
	4 dro3	Compound Not Detected.					
	5 Total heavy(C21 - C40)	Compound Not Detected.					
S	6 2-Fluorobiphenyl	10.927	10.920	0.007	2109585	103.057	103.057(M)
S	7 o-Terphenyl	17.297	17.290	0.007	2702315	85.895	85.895(M)

QC Flag Legend

M - Compound response manually integrated.

1B (GC)
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

0087 EPA SAMPLE NO.

048MS

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: _____ Case No.: 19568N SAS No.: _____ SDG No.: Q2F70539

Matrix: (soil/water) SOIL Lab Sample ID: JQ9100FS

Sample wt/vol: 30.1 (g/mL) G Lab File ID: SR6172

Level: (low/med) _____ Date Received: 04/11/97

% Moisture: 12 decanted: (Y/N) ___ Date Extracted: 04/11/97

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 04/14/97

Injection Volume: _____ (uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
	DRO(C10 - C21)	34000	

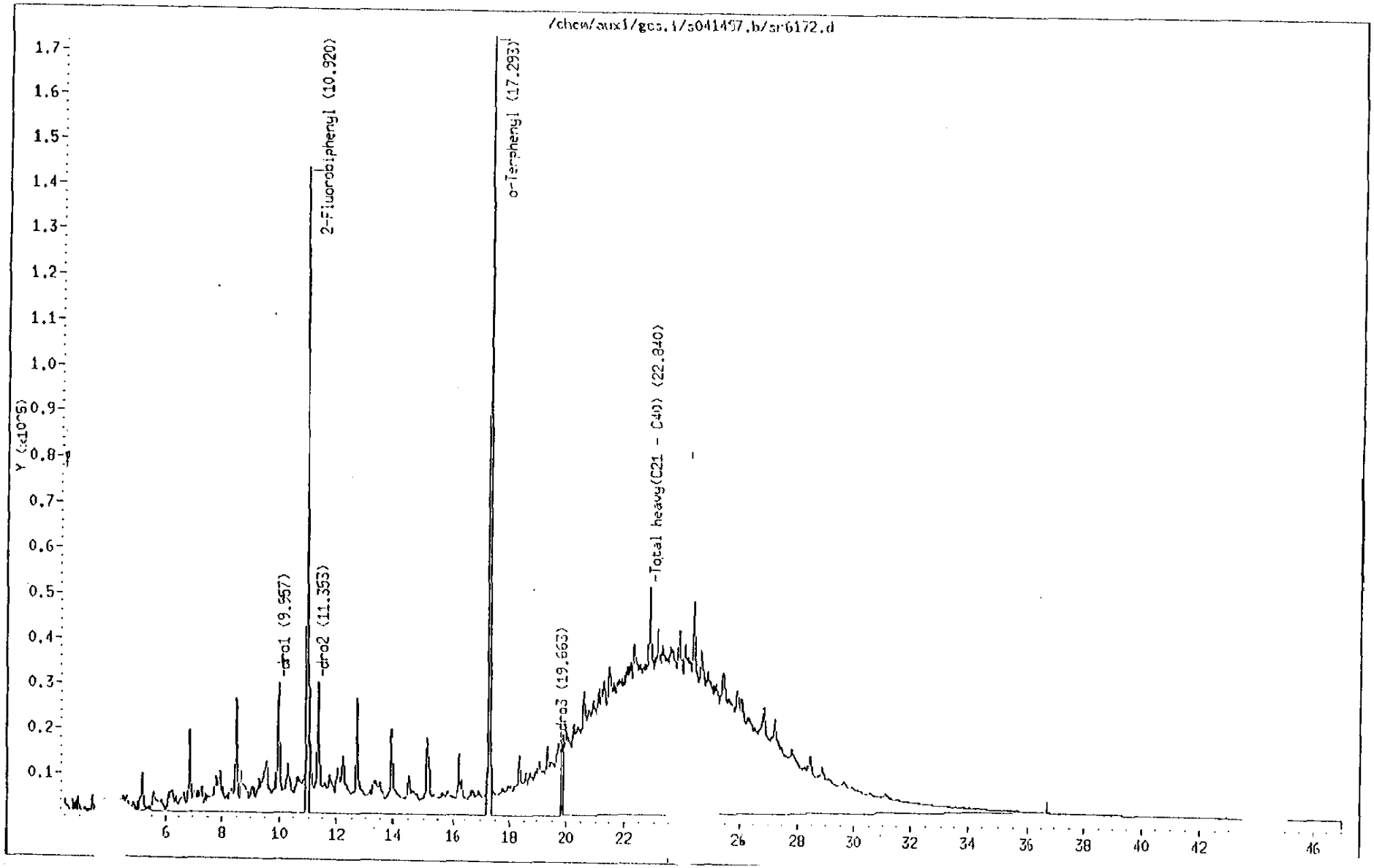
0088

Data File: /chem/aux1/gcs.1/s041497.b/sr6172.d
Date : 14-APR-97 15:01
Client ID:
Sample Info: 19568n-048 mtx spk

Column phase: db-5

Instrument: gcs.1

Operator: s.swan
Column diameter: 2.00



Data File: /chem/aux1/gcs.i/s041497.b/sr6172.d
Report Date: 15-Apr-1997 09:39

OHM Analytical Division

Data file : /chem/aux1/gcs.i/s041497.b/sr6172.d
Lab Smp Id:
Inj Date : 14-APR-97 15:01
Operator : s.swan Inst ID: gcs.i
Smp Info : 19568n-048 mtx spk
Misc Info : jq9100fs,q2f70539,g1,2,1
Comment :
Method : /chem/aux1/gcs.i/s041497.b/032097_gcs_teh.m
Meth Date : 15-Apr-1997 09:29 Quant Type: ESTD
Cal Date : 20-MAR-97 19:23 Cal File: sr6059.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.10

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)
1 DRO(C10 - C21)				25233270	900.249	900.249
	9.957	9.957	0.000	9175434	1222.745	1222.745(M)
	11.353	11.353	0.000	10907915	745.076	745.076(M)
4 GRO	19.663	18.323	1.340	6149870	878.929	878.929(M)
5 Total Heavy(C21 - C40)	22.840	24.667	-1.827	72408820	4554.013	4554.013(M)
6 2-Fluorobiphenyl	10.920	10.920	0.000	2182667	105.627	105.627(M)
7 o-Terphenyl	17.293	17.290	0.003	3045360	96.801	96.801(M)

C Flag Legend

- Compound response manually integrated.

1B (GC)
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

0090 EPA SAMPLE NO.

048MSD

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: _____ Case No.: 19568N SAS No.: _____ SDG No.: Q2F70539

Matrix: (soil/water) SOIL Lab Sample ID: JQ9100FR

Sample wt/vol: 30.7 (g/mL) G Lab File ID: SR6173

Level: (low/med) _____ Date Received: 04/11/97

% Moisture: 12 decanted: (Y/N) ___ Date Extracted: 04/11/97

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 04/14/97

Injection Volume: _____ (uL) Dilution Factor: 1.0

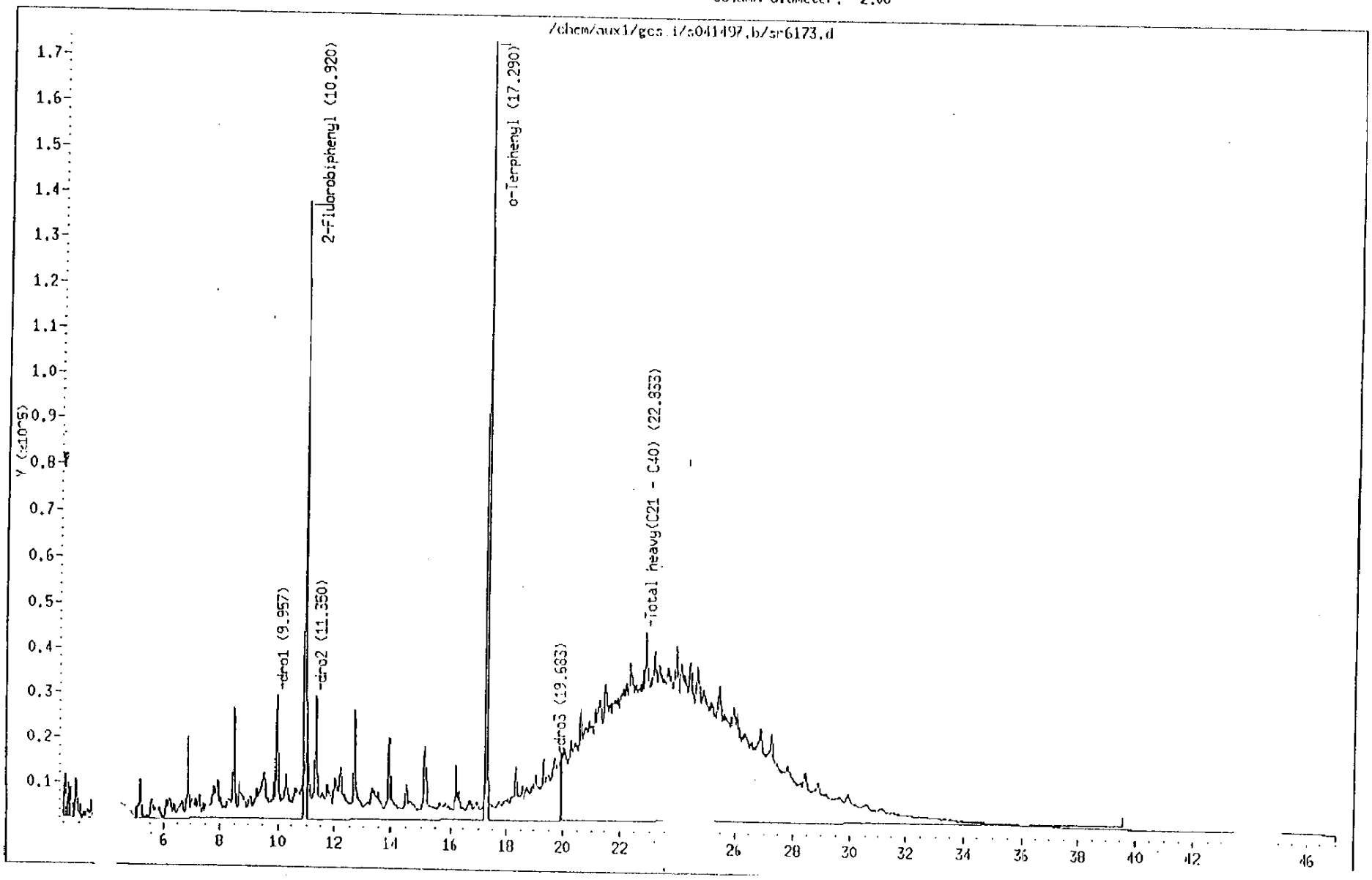
GPC Cleanup: (Y/N) N pH: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
	DRO(C10 - C21)	28000	

Data File: /chem/aux1/gcs.i/s041497.b/sr6173.d
Date : 14-APR-97 15:55
Client ID:
Sample Info: 19568n-048 mtx dup

Instrument: gcs.i

Operator: s.swan
Column phase: db-5
Column diameter: 2.00



Data File: /chem/aux1/gcs.i/s041497.b/sr6173.d
Report Date: 15-Apr-1997 09:38

OHM Analytical Division

Data file : /chem/aux1/gcs.i/s041497.b/sr6173.d
Lab Smp Id:
Inj Date : 14-APR-97 15:55
Operator : s.swan Inst ID: gcs.i
Smp Info : 19568n-048 mtx dup
Misc Info : jq9100fr,q2f70539,g1,2,1
Comment :
Method : /chem/aux1/gcs.i/s041497.b/032097_gcs_teh.m
Meth Date : 15-Apr-1997 09:29 Quant Type: ESTD
Cal Date : 20-MAR-97 19:23 Cal File: sr6059.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.10

						CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)
Compounds		RT	EXP RT	DLT RT	RESPONSE		
M	1 DRO(C10 - C21)				22258031	764.174	764.174
	1	9.957	9.957	0.000	8069617	1075.375	1075.375(M)
	2	11.350	11.353	-0.003	9059984	518.851	518.851(M)
	4 dro3	19.683	18.323	1.360	5138430	734.376	734.376(M)
	8 Total Heavy(C21 - C40)	22.833	24.667	-1.834	64241358	4040.358	4040.358(M)
S	5 2-Fluorobiphenyl	10.920	10.920	0.000	2149570	105.015	105.015(M)
S	7 o-Terphenyl	17.290	17.290	0.000	3025610	96.173	96.173(M)

QC Flag Legend

M - Compound response manually integrated.

1B (GC)
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

009 EPA SAMPLE NO.

FSPK01

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Code: _____ Case No.: 19568N SAS No.: _____ SDG No.: Q2F70539

Matrix: (soil/water) SOIL Lab Sample ID: Q2F70539FS

Sample wt/vol: 30.0 (g/mL) G Lab File ID: SR6171

Level: (low/med) _____ Date Received: _____

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 04/11/97

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 04/14/97

Injection Volume: _____ (uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
	DRO(C10 - C21)	27000	

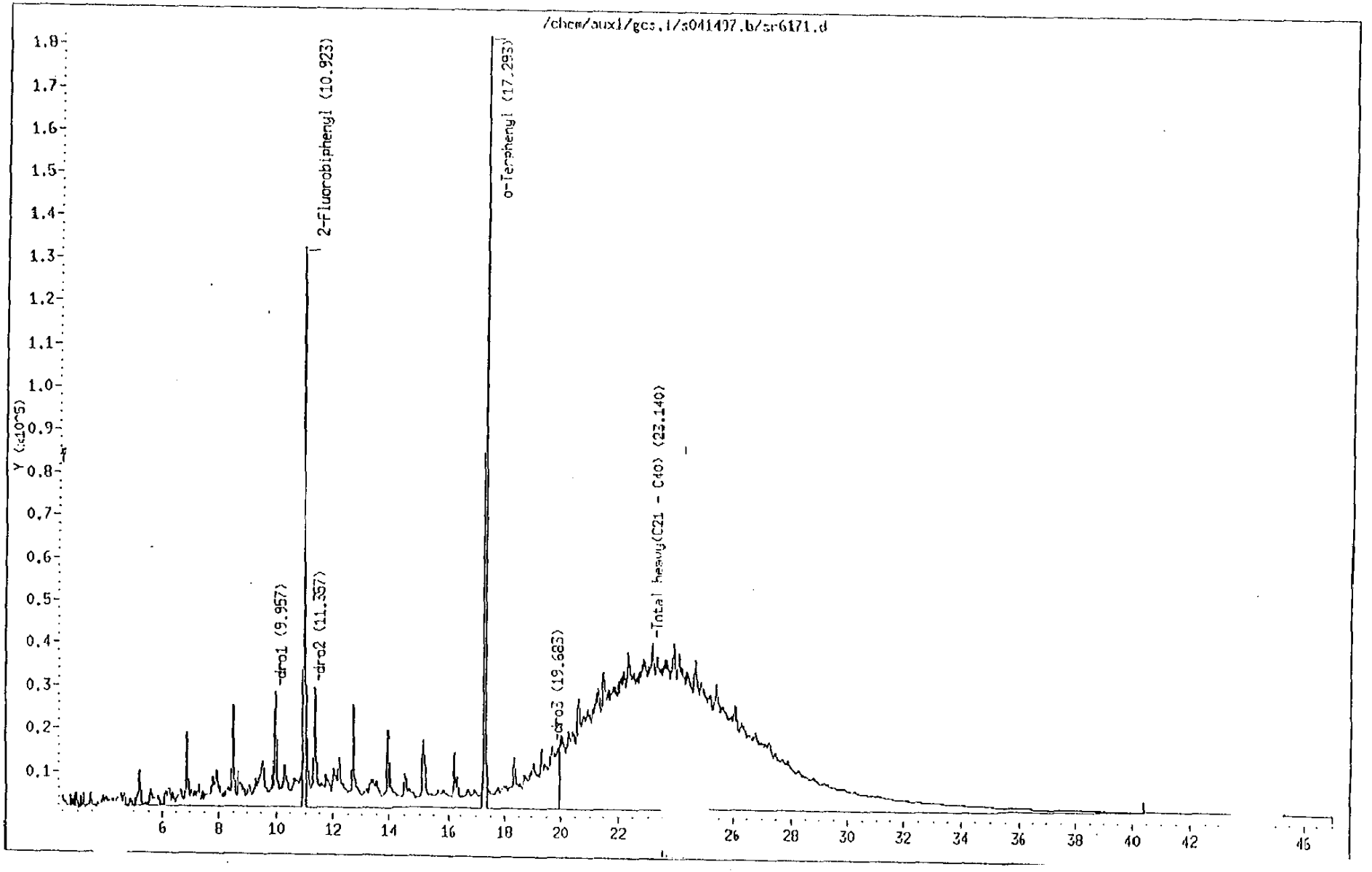
0094

Data File: /chem/auxl/gcs.1/s041497.b/sr6171.d
Date : 14-APR-97 14:07
Client ID:
Sample Info: method spike

Column phase: db-5

Instrument: gcs.1

Operator: s.swan
Column diameter: 2.00



Data File: /chem/aux1/gcs.i/s041497.b/sr6171.d
Report Date: 15-Apr-1997 09:35

OHM Analytical Division

Data file : /chem/aux1/gcs.i/s041497.b/sr6171.d
Lab Smp Id:
Inj Date : 14-APR-97 14:07
Operator : s.swan Inst ID: gcs.i
Smp Info : method spike
Misc Info : q2f70539fs,q2f70539,g1,2,1
Comment :
Method : /chem/aux1/gcs.i/s041497.b/032097_gcs_teh.m
Meth Date : 15-Apr-1997 09:29 Quant Type: ESTD
Cal Date : 20-MAR-97 19:23 Cal File: sr6059.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.10

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)
M	1 DRO(C10 - C21)				23313197	800.041	800.041
	1	9.957	9.957	0.000	8073385	1075.877	1075.877(M)
	2	11.357	11.353	0.004	9513840	649.852	649.852(M)
	4 ero3	19.683	18.323	1.360	5725971	818.346	818.346(M)
	5 Total heavy(C21 - C40)	23.140	24.667	-1.527	68495268	4307.878	4307.878(M)
S	6 2-Fluorobiphenyl	10.923	10.920	0.003	2091030	102.153	102.153(M)
S	7 o-Terphenyl	17.293	17.290	0.003	3204983	101.874	101.874(M)

QC Flag Legend

M - Compound response manually integrated.

Sample Receipt Documentation

C emediation
S s Corp.

CHAIN-OF-CUSTODY RECORD

LAB COPY
Form 0019
Field Technical Services
Rev. 08/89

203127

O.H. MATERIALS CORP. • P.O. BOX 551 • FINDLAY, OH 45339-0551 • 419-423-3526

PROJECT NAME: Naval Training Center
PROJECT LOCATION: Port Deposit, MD
PROJ. NO.: 19568
PROJECT CONTACT: Stephan Wurzburger
PROJECT TELEPHONE NO.: 609-588-6356
CLIENT'S REPRESENTATIVE: Frank Zepka
PROJECT MANAGER/SUPERVISOR: Fred Poulin

ANALYSIS DESIRED (INDICATE SEPARATE CONTAINERS): TPH - DRO's; Total Solids, pH, Flash, React, CN & S-2; Full TCLP + Cu & Zn; TCL VOA's, Semis, Pests, PCBs & Herbs; Total CN, Paint Filter, TOX; PCB's

ITEM NO.	SAMPLE NUMBER	DATE	TIME	COMP	GRAB	SAMPLE DESCRIPTION (INCLUDE MATRIX AND POINT OF SAMPLE)	NUMBER OF CONTAINERS	TPH - DRO's	Total Solids, pH, Flash, React, CN & S-2	Full TCLP + Cu & Zn	TCL VOA's, Semis, Pests, PCBs & Herbs	Total CN, Paint Filter, TOX	PCB's			REMARKS
1	049	4/10/97	0905	X		5pt Composite Post-Ex Soil from Excavation at UST near Bldg 760	1-8oz	X								48 hr. - Turn
2	050	4/10/97	0930	X		Composite of Soil Stockpile from UST Excavation Near Bldg 760	1-32oz	X	X	X	X	X				5-day Turn
3	048	4/8/97	1015	X		5pt Composite Post-Ex Soil from Excavation of Diesel Tank Bldg K	1-8oz	X								48 hr - Turn
4	051	4/10/97	1150	X		Composite from around Concrete Pad	1-8oz						X			48 hr. - Turn
5	052	4/10/97	1155	X		Composite from around Concrete Pad.	1-8oz						X			48 hr - Turn
6	053	4/10/97	1200	X		Composite from around Concrete Pad	1-8oz						X			48 hr - Turn
7	054	4/10/97	1215		X	Grab Sample from visually contaminated area	1-8oz						X			48 hr - Turn
8	055	4/10/97	1225	X		Composite from Stockpiled soil (From Hillside Bldg 629)	1-8oz						X			48 hr - Turn.
9																
10																

TRANSFER NUMBER	ITEM NUMBER	TRANSFERS RELINQUISHED BY	TRANSFERS ACCEPTED BY	DATE	TIME
1	1→8	S. Wurzburger	Fed-Ex	4/10/97	1400
2	1-8	Fedex 4577797002	Donita Jensen 6481	4-11-97	1100
3					
4					

REMARKS
No weekend work.
48 hrs is 2-working days.
Fax results to S. Wurzburger @ 410-378-5609
temp 8°C pg/IR

SAMPLER'S SIGNATURE: S. Wurzburger

0097

"SAMPLE RECEIPT FORM"

Project: 19568

Tote ____ Box ____ Bucket ✓ COC #: 203127

Cooler #: _____ COC #: _____

Cooler #: _____ COC #: _____

Cooler #: _____ COC #: _____

Use other side of this form to note further details concerning check-in problems and to specify and describe any action(s) regarding the resolution(s) of problem(s).

1) Have designated person initial here to acknowledge receipt of sample(s): DJ (date) 4/11/97

2) Were sample custody seals on outside of cooler? If Yes, how many & where? ____ yes ✓ no

[____] front [____] back [____] right side [____] left side ___ of ___ intact

seal date: _____ name: _____

3) Were custody papers sealed in a plastic bag & taped inside to the lid? ____ yes ✓ no

4) Were custody papers filled out properly (ink, signed, etc.)? ✓ yes ____ no

5) Samples came via: [____] A/B [✓] FED EXP [____] UPS [____] H/D [____] other

Attach & enter air bill or invoice number here: 4597797002

6) Describe packing: [____] sorbent [____] bubble pk [____] paper [____] cardboard [____] rags
[____] vermiculite [____] foam [____] peanuts [____] tyvek [____] other: _____

7) Temperature = 8 (Acceptance Range = 2 to 6°C) Blk ___ Smp ✓ Cooler ___ ____ yes ✓ no
WITH ICE

8) Were all bottles sealed in separate plastic bags? ✓ yes ____ no

9) Did all bottles arrive unbroken & in good condition? ✓ yes ____ no

10) Were Custody Seals on sample jar lids? If YES, were they intact upon arrival?
Seal Date: _____ Name: _____ ____ yes ✓ no

11) Labels complete? NO LABELS ____ yes ____ no

12) Labels agree with custody papers? If NO, list on other side. ✓ yes ____ no

[____] Matrix on COC and Jar don't agree

13) Correct containers? ✓ yes ____ no

14) Were preservatives used when required? ✓ yes ____ no

15) Was a sufficient amount of sample sent for tests indicated? ✓ yes ____ no

16) Bubbles in VOA vials? If YES, list samples on other side. ✓ N/A ____ yes ____ no

pH Range:

[____] Metals 0 to 2 [____] Sulfide > 9 [____] COD < 2

[____] Oil & Grease 0 to 2 [____] Hardness < 2 [____] TOC < 2

[____] Cyanide > 12 [____] Phenols < 2 [____] _____

[____] Health Warnings Listed

FedEx USA Airbill Tracking Number 4597797002

Recipient's Copy

1 From

Date 4/10/97 [redacted]

Sender's Name [illegible] Phone (410) 378-5121

Dept. Floor/Suite/Room

Company [illegible] Training Center

Address [illegible] Rd.

City [illegible] State MD Zip 21904

2 Your Internal Billing Reference Information JOB 19568

3 To

Recipient's Name Glenn [illegible] Phone (800) 537-9540

Dept. Floor/Suite/Room

Company OHM Analytical Services Corp.

Address 16406 U.S. Route 224 East

(To "HOLD" at FedEx location, print FedEx address here)

City Findlay State OH Zip 45839

For HOLD at FedEx location check here

Hold Weekday (Not available for all FedEx First Overnight) Hold Saturday (Not available for all FedEx Standard Overnight)

For Saturday Delivery check here

(Fee Charge. Not available for all locations) (Not available for FedEx First Overnight or FedEx Standard Overnight)

4 5 9 7 7 9 7 0 0 2

4a Express Package Service *Packages under 150 lbs.*

Delivery commitment may be later in some areas

- [x] FedEx Priority Overnight (Next business morning)
- [ ] FedEx Standard Overnight (Next business afternoon)
- [ ] FedEx 2Day* (Second business day)
- [ ] NEW FedEx First Overnight (Next business morning delivery to select locations)

*FedEx Letter Rate not available. Minimum charge. One pound FedEx 2Day rate.

4b Express Freight Service *Packages over 150 lbs.*

Delivery commitment may be later in some areas

- [ ] FedEx Overnight Freight (Next business-day service for any distance)
- [ ] FedEx 2Day Freight (Second business-day service for any distance)
- [ ] FedEx Express Saver Freight (Up to 3 business-day service based upon distance)

(Call for delivery schedule. See back for detailed descriptions of freight products.)

5 Packaging

- [ ] FedEx Letter
- [ ] FedEx Pak
- [ ] FedEx Box
- [ ] FedEx Tube
- [x] Other Pkg.

Declared value limit $500

6 Special Handling

Does this shipment contain dangerous goods? [ ] Yes (As per attached Shipper's Declaration) [ ] Yes (Shipper's Declaration not required)

- [ ] Dry Ice (Dry Ice, 9, UN 1845 III) (Dangerous Goods Shipper's Declaration not required)
- CA [ ] Cargo Aircraft Only

7 Payment

Bill to: [ ] Sender (Account no. in section 1 will be billed) [x] Recipient (Enter FedEx account no. or Credit Card no. below) [ ] Third Party [ ] Credit Card [ ] Cash/Check

[redacted]

Total Packages	Total Weight	Total Declared Value*	Total Charges
1	15	$ .00	$

*When declaring a value higher than $100 per shipment, you pay an additional charge. See SERVICE CONDITIONS, DECLARED VALUE AND LIMIT OF LIABILITY section for further information.

Credit Card Auth.

8 Release Signature

Your signature authorizes Federal Express to deliver this shipment without obtaining a signature and agrees to indemnify and hold harmless Federal Express from any resulting claims.

272

Questions?
Call 1-800-Go-FedEx
(1-800-463-3339)

OHM Remediation Services Corp.
A Subsidiary of OHM Corporation

ANALYTICAL DIVISION

Laboratory Analysis

Report(s) #623569

Client: OHM Remediation Services Corp.
Eastern Region (Pittsbugh, PA)

VOLUME I of I

Attn: Larry Stearns

Bldg 117
Sample B117-306 Soil sample from tank exc bottom
Sample B117-307 Soil sample from left wall facing trailer
Sample B117-308 Soil sample from back wall facing trailer
Sample B117-309 Soil sample from right wall facing trailer
Sample B117-310 Soil sample from front wall facing trailer

Project: 19568 - Bainbridge, Port Deposit, MD

Date Samples Received: January 13, 1998 **Date Order Received:** January 20, 1998

Certification No.: **Maryland MDDHMH 210**

This report is "PROPRIETARY AND CONFIDENTIAL" and delivered to, and intended for the exclusive use of the above named client only. OHM Remediation Services Corp., Analytical Division, assumes no responsibility or liability for the reliance hereon or use hereof by anyone other than the above named client.

Reviewed and Approved by: Joseph A. Hnatow
Joseph A. Hnatow, Laboratory Manager ***Date:*** *January 20, 1998*

16406 U.S. Route 224 East ▪ P.O. Box 551 ▪ Findlay, OH 45839-0551 ▪ 419-423-3526

PROJECT NARRATIVE

REPORT # 623569

LABORATORY: OHM Analytical Division

PROJECT: 19568

PROJECT LOCATION: Bainbridge, Port Deposit, Maryland

The sample temperature upon receipt by the laboratory was 3°C which is within the temperature acceptability range of 2 - 4°C.

The information listed on the "SDG No." line for Form's I, II, III and IV represents the laboratory's analytical batch number.

Total Petroleum Hydrocarbons - Gasoline Range (TPH-GRO) BY GC (QC Batch Q2W6411)

Zero of nine surrogate recoveries were outside QC limits.

Zero of two matrix spike recoveries and zero of one matrix spike RPD were outside the QC limits.

Zero of one method spike recovery was outside the QC limits.

All method blank criteria were met for this report.

Initial and continuing calibration criteria were met.

All holdtimes were met for this sample set.

Total Petroleum Hydrocarbons - Diesel Range (TPH-DRO) BY GC (QC Batch Q2F80026)

Zero of 18 surrogate recoveries were outside QC limits.

Zero of two matrix spike recoveries and zero of one matrix spike RPD were outside the QC limits.

Zero of one method spike recovery was outside the QC limits.

All method blank criteria were met for this report.

Initial and continuing calibration criteria were met.

All holdtimes were met for this sample set.

OH. Remediation Services Corp.

CHAIN-OF-CUSTODY RECORD

LAB COPY
Form 0019
Field Technical Services
Rev. 08/89

203231

O.H. MATERIALS CORP. • P.O. BOX 551 • FINDLAY, OH 45839-0551 • 419-423-3526

PROJECT NAME: BAINBRIDGE NTC
PROJECT LOCATION: PORT DEPOSIT, MD
PROJ. NO.: 19566
PROJECT CONTACT: DEBRA BURKETT
PROJECT TELEPHONE NO.: 410 378 3223
CLIENT'S REPRESENTATIVE: FRANK ZEPKA
PROJECT MANAGER/SUPERVISOR: LARRY STEARNS / CHAZ CRENSHAW

ITEM NO.	SAMPLE NUMBER	DATE	TIME	COMP	GRAB	SAMPLE DESCRIPTION (INCLUDE MATRIX AND POINT OF SAMPLE)	NUMBER OF CONTAINERS	ANALYSIS DESIRED (INDICATE SEPARATE CONTAINERS): TPH (DRO, GRO)								REMARKS
1	B117-306	1/12/98	1130		X	BROWN SOIL BLDG 117 TANK BOTTOM	1x4oz	X								
2	B117-307	1/12/98	1132		X	BROWN SOIL BLDG 117 TANK LEFT WALL FACING TRAILER	1x4oz	X								
3	B117-308	1/12/98	1136		X	BROWN SOIL BLDG 117 TANK BACK WALL FACING TRAILER	1x4oz	X								
4	B117-309	1/12/98	1141		X	BROWN SOIL BLDG 117 TANK RIGHT WALL FACING TRAILER	1x4oz	X								
5	B117-310	1/12/98	1150		X	BROWN SOIL BLDG 117 TANK FRONT WALL FACING TRAILER	1x4oz	X								
6																
7																
8																
9																
10																3°C

TRANSFER NUMBER	ITEM NUMBER	TRANSFERS RELINQUISHED BY	TRANSFERS ACCEPTED BY	DATE	TIME
1	1-5	DBURKETT	TO ASC FEDEX 801490170170	1/12/98	1700
2	1-5	Fed Exp	W J Kanner	1/13/98	1030
3					
4					

REMARKS
7 DAY TAT
Please fax results to
410 378 3232
Please mail hard copy to
LARRY STEARNS
OHM CORP
1000 RIDGE PLAZA SUITE 600
PITTSBURGH PA 15230

SAMPLER'S SIGNATURE: D. Burkett

0002

SAMPLE INFORMATION SUMMARY

Sample Id	Lab Id	Sample Date	Matrix	Method	QC Batch #	Prep Date	Analysis Date	Hold Met	Dry Wgt	Run #	Analyst
B117-306	JR9118	01/12/98	Solid	8015/DRO	Q2F80026	01/14/98	01/18/98	Yes	Yes	FF7360	Kelly J.
			Solid	8015/GRO	Q2W5411	01/13/98	01/13/98	Yes	Yes	JF2017	Kelly J.
			Solid	D2216			01/14/98	N/A	N/A		Powell J.
B117-307	JR9119	01/12/98	Solid	8015/DRO	Q2F80026	01/14/98	01/18/98	Yes	Yes	FF7361	Kelly J.
			Solid	8015/GRO	Q2W5411	01/13/98	01/13/98	Yes	Yes	JF2020	Kelly J.
			Solid	D2216			01/14/98	N/A	N/A		Powell J.
B117-308	JR9120	01/12/98	Solid	8015/DRO	Q2F80026	01/14/98	01/18/98	Yes	Yes	FF7362	Kelly J.
			Solid	8015/GRO	Q2W5411	01/13/98	01/13/98	Yes	Yes	JF2021	Kelly J.
			Solid	D2216			01/14/98	N/A	N/A		Powell J.
B117-309	JR9121	01/12/98	Solid	8015/DRO	Q2F80026	01/14/98	01/18/98	Yes	Yes	FF7363	Kelly J.
			Solid	8015/GRO	Q2W5411	01/13/98	01/13/98	Yes	Yes	JF2022	Kelly J.
			Solid	D2216			01/14/98	N/A	N/A		Powell J.
B117-310	JR9122	01/12/98	Solid	8015/DRO	Q2F80026	01/14/98	01/18/98	Yes	Yes	FF7364	Kelly J.
			Solid	8015/GRO	Q2W5411	01/13/98	01/13/98	Yes	Yes	JF2023	Kelly J.
			Solid	D2216			01/14/98	N/A	N/A		Powell J.

V

DATA SUMMARY REPORT

DATE: 01/20/98

Company: OHM-PENNSYLVANIA DIVISION

PAGE: 1

Sample Point ID:	B117-306	B117-307	B117-308	B117-309	B117-310			
Lab Sample Number:	JR9118	JR9119	JR9120	JR9121	JR9122			
Sample Date:	01/12/98	01/12/98	01/12/98	01/12/98	01/12/98			
Facility Code:	019568N	019568N	019568N	019568N	019568N			
:V10 Wet Chemistry								
:olids, Total %	84.1	83.1	78.8	83.4	86.0			
:S17 GC TPHC								
)RO(C10 - C21) ug/kg	3900 U	3900 U	4200 U	3900 U	24000			
:RO(C2 - C10) ug/kg	2700 U	2500 U	2700 U	2800 U	2600 U			

0004

SUMMARY OF ANALYTICAL METHODOLOGY

Joblink # 623569

REFERENCE		TITLE
8015/DRO	SW-846	TPH/DRO by 8015B - Nonhalogenated Organics Using GC/FID.
8015/GRO	SW-846	TPH/GRO by 8015B - Nonhalogenated Organics Using GC/FID.

2B (GC)
SOIL VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

ab Code: _____ Case No.: 19568N SAS No.: _____ SDG No.: Q2W6411

Level: (low/med) _____

	EPA SAMPLE NO.	SMC1 (DCA) #	SMC2 (TOL) #	SMC3 (TFT) #	SMC4 (DCB) #	TOT OUT
01	B117-306			93		0
02	B117-306MSD			93		0
03	B117-306MS			94		0
04	B117-307			79		0
05	B117-308			92		0
06	B117-309			93		0
07	B117-310			83		0
08	WBLK01			88		0
09	WSPK01			91		0

QC LIMITS

SMC1 (DCA) = 1,2-Dichloroethane-D4
SMC2 (TOL) = Toluene-D8
SMC3 (TFT) = a,a,a-Trifluorotoluene (55-122)
SMC4 (DCB) = 1,4-Dichlorobutane

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring compound diluted out

3B (GC)
SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

0007

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

ab Code: _____ Case No.: 19568N SAS No.: _____ SDG No.: Q2W6411

Matrix Spike - EPA Sample No.: B117-306 Level: (low/med) ____

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
GRO(C2 - C10)	11300	0	10700	95	67-115

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
GRO(C2 - C10)	11400	11200	98	3	14	67-115

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 1 outside limits
Spike Recovery: 0 out of 2 outside limits

COMMENTS: _____

3B (GC)
SOIL VOLATILE BLANK SPIKE RECOVERY

0008

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

ab Code: _____ Case No.: 19568N SAS No.: _____ SDG No.: Q2W6411

Matrix Spike - EPA Sample No.: WSPK01

COMPOUND	SPIKE ADDED (ug/Kg)	BLANK CONCENTRATION (ug/Kg)	BS CONCENTRATION (ug/Kg)	BS % REC #	QC LIMITS REC.
GRO(C2 - C10)	9350	0	8400	90	80-118

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 1 outside limits

COMMENTS: _____

4A (GC)
VOLATILE METHOD BLANK SUMMARY

0009

EPA SAMPLE NO.

WBLK01

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: _____ Case No.: 19568N SAS No.: _____ SDG No.: Q2W6411

Lab File ID: JF2015 Lab Sample ID: Q2W6411W

Date Analyzed: 01/13/98 Time Analyzed: 15:17

GC Column: _____ ID: _____ (mm) Heated Purge: (Y/N) ___

Instrument ID: CJ

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	B117-306	JR9118W	JF2017	16:27
02	B117-306MSD	JR9118WR	JF2019	17:37
03	B117-306MS	JR9118WS	JF2018	17:02
04	B117-307	JR9119W	JF2020	18:12
05	B117-308	JR9120W	JF2021	18:47
06	B117-309	JR9121W	JF2022	19:22
07	B117-310	JR9122W	JF2023	19:57
08	WSPK01	Q2W6411WS	JF2016	15:52

COMMENTS:

1A (GC)
VOLATILE ORGANICS ANALYSIS DATA SHEET 0010

EPA SAMPLE NO.

B117-306

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

ab Code: _____ Case No.: 19568N SAS No.: _____ SDG No.: Q2W6411

Matrix: (soil/water) SOIL Lab Sample ID: JR9118W

Sample wt/vol: 1.06 (g/mL) G Lab File ID: JF2017

Level: (low/med) LOW Date Received: 01/13/98

% Moisture: not dec. 16 Date Analyzed: 01/13/98

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: _____ (uL)

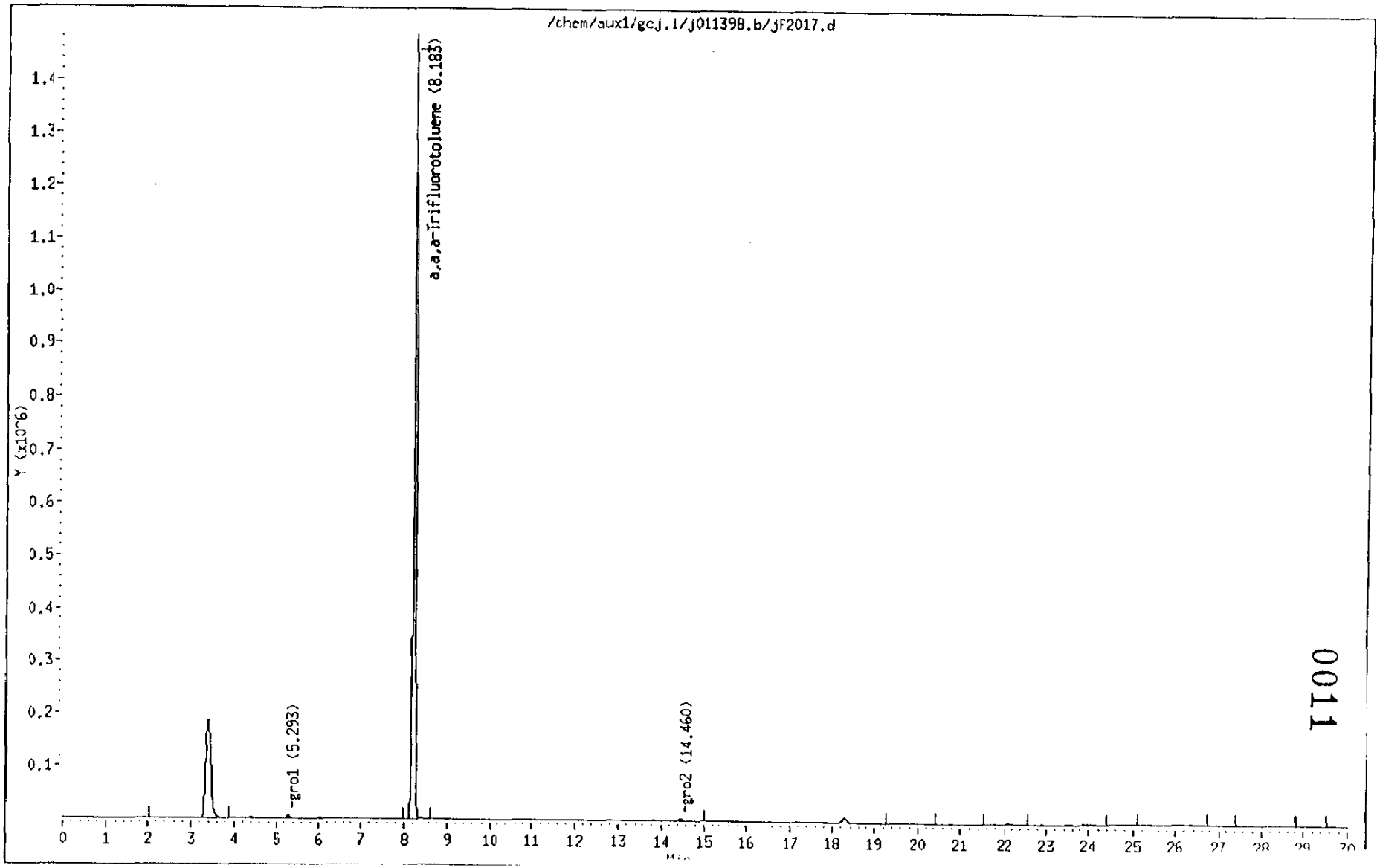
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
	GRO(C2 - C10)	2700	U

Data File: /chem/aux1/gcj.i/j011398.b/jf2017.d
Date : 13-JAN-98 16:27
Client ID:
Sample Info: 19568n b117-306 1.06g

Column phase: DB-624 75m x 0.53mm

Instrument: gcj.i

Operator: jdk
Column diameter: 0.53



0011

Data File: /chem/aux1/gcj.i/j011398.b/jf2017.d
Report Date: 14-Jan-1998 08:02

OHM Analytical Division

Data file : /chem/aux1/gcj.i/j011398.b/jf2017.d
Lab Smp Id:
Inj Date : 13-JAN-98 16:27
Operator : jdk Inst ID: gcj.i
Smp Info : 19568n b117-306 1.06g
Misc Info : jr9118w,q2w6411,g2,1,1,
Comment :
Method : /chem/aux1/gcj.i/j011398.b/j111797_gas.m
Meth Date : 14-Jan-1998 07:19 Quant Type: ESTD
Cal Date : 17-NOV-97 22:11 Cal File: jf1850.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.10

JD 1/14/98

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
M 1 GRO(C2 - C10)	Compound Not Detected.					
gro1	5.293	4.833	0.460	429763	19.695	19.695(M)
3 gro2	14.460	9.690	4.770	1030778	46.389	46.389(M)
$ 4 a,a,a Trifluorotoluene	8.183	8.197	-0.014	30274905	746.606	746.606(M)

QC Flag Legend

M - Compound response manually integrated.

1A (GC)
VOLATILE ORGANICS ANALYSIS DATA SHEET

0013

EPA SAMPLE NO.

B117-307

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: _____ Case No.: 19568N SAS No.: _____ SDG No.: Q2W6411

Matrix: (soil/water) SOIL Lab Sample ID: JR9119W

Sample wt/vol: 1.16 (g/mL) G Lab File ID: JF2020

Level: (low/med) LOW Date Received: 01/13/98

% Moisture: not dec. 17 Date Analyzed: 01/13/98

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: _____ (uL)

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

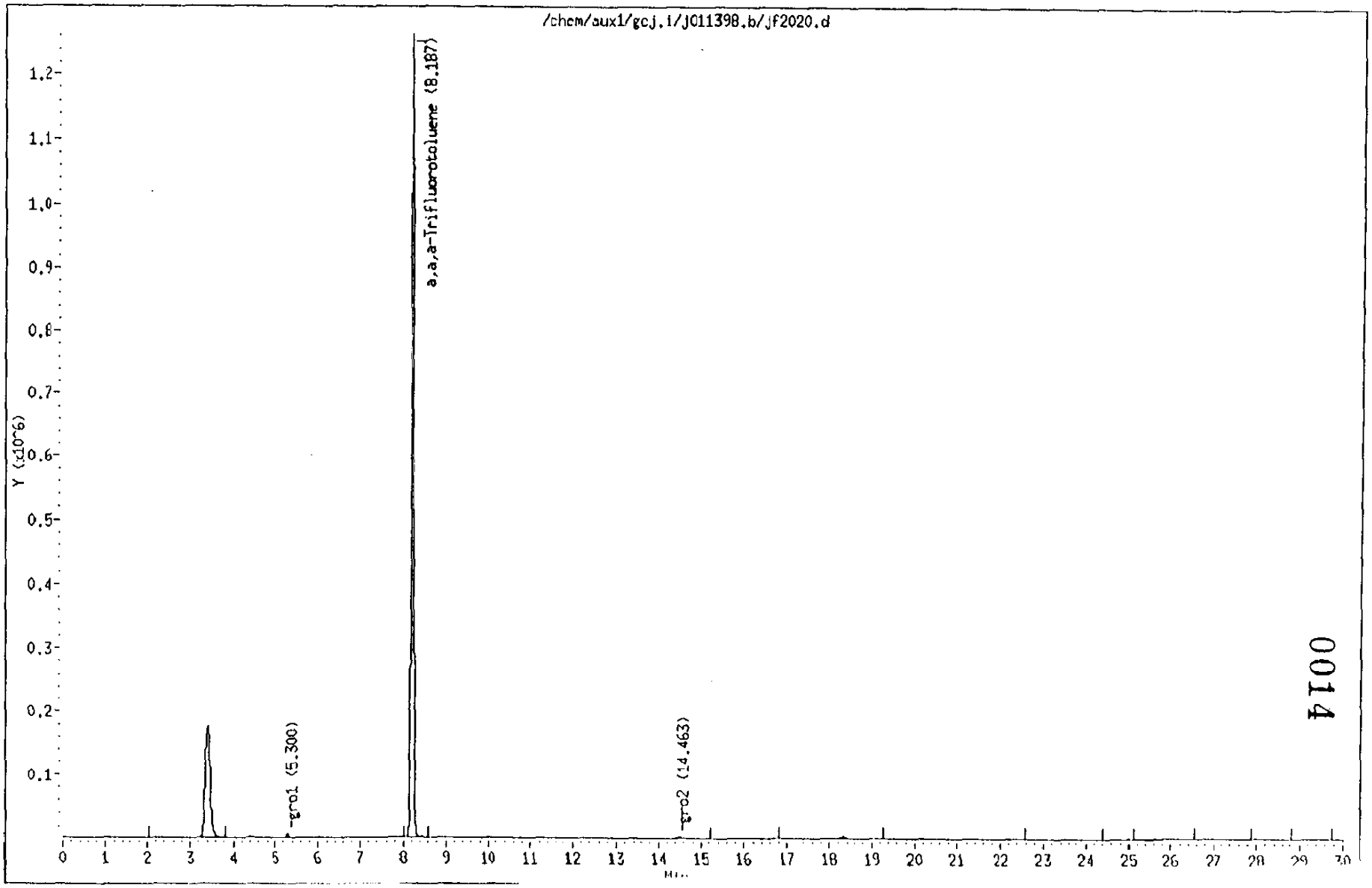
CAS NO.	COMPOUND		Q
	CRO(C2 - C10)	2500	U

Data File: /chem/aux1/gcj.i/J011398.b/jf2020.d
Date : 13-JAN-98 18:12
Client ID:
Sample Info: 19568n b117-307 1.16g

Column phase: DB-624 75m x 0.53mm

Instrument: gcj.i

Operator: jdk
Column diameter: 0.53



0014

OHM Analytical Division

Data file : /chem/aux1/gcj.i/j011398.b/jf2020.d
Lab Smp Id:
Inj Date : 13-JAN-98 18:12
Operator : jdk Inst ID: gcj.i
Smp Info : 19568n b117-307 1.16g
Misc Info : jr9119w,q2w6411,g2,1,1,
Comment :
Method : /chem/aux1/gcj.i/j011398.b/j111797_gas.m
Meth Date : 14-Jan-1998 07:19 Quant Type: ESTD
Cal Date : 17-NOV-97 22:11 Cal File: jf1850.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.10

JP 1/14/98

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
M 1 GRO(C2 - C10)	Compound Not Detected.					
2 gro1	5.300	4.833	0.467	378100	17.327	17.327(M)
3 gro2	14.463	9.690	4.773	855017	38.479	38.479(M)
S 4 a,a,a-Trifluorotoluene	8.187	8.197	-0.010	25643234	632.385	632.385(M)

QC Flag Legend

M - Compound response manually integrated.

1A (GC)
VOLATILE ORGANICS ANALYSIS DATA SHEET

0016

EPA SAMPLE NO.

B117-308

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

ab Code: _____ Case No.: 19568N SAS No.: _____ SDG No.: Q2W6411

Matrix: (soil/water) SOIL Lab Sample ID: JR9120W

Sample wt/vol: 1.12 (g/mL) G Lab File ID: JF2021

Level: (low/med) LOW Date Received: 01/13/98

% Moisture: not dec. 21 Date Analyzed: 01/13/98

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: _____ (uL)

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

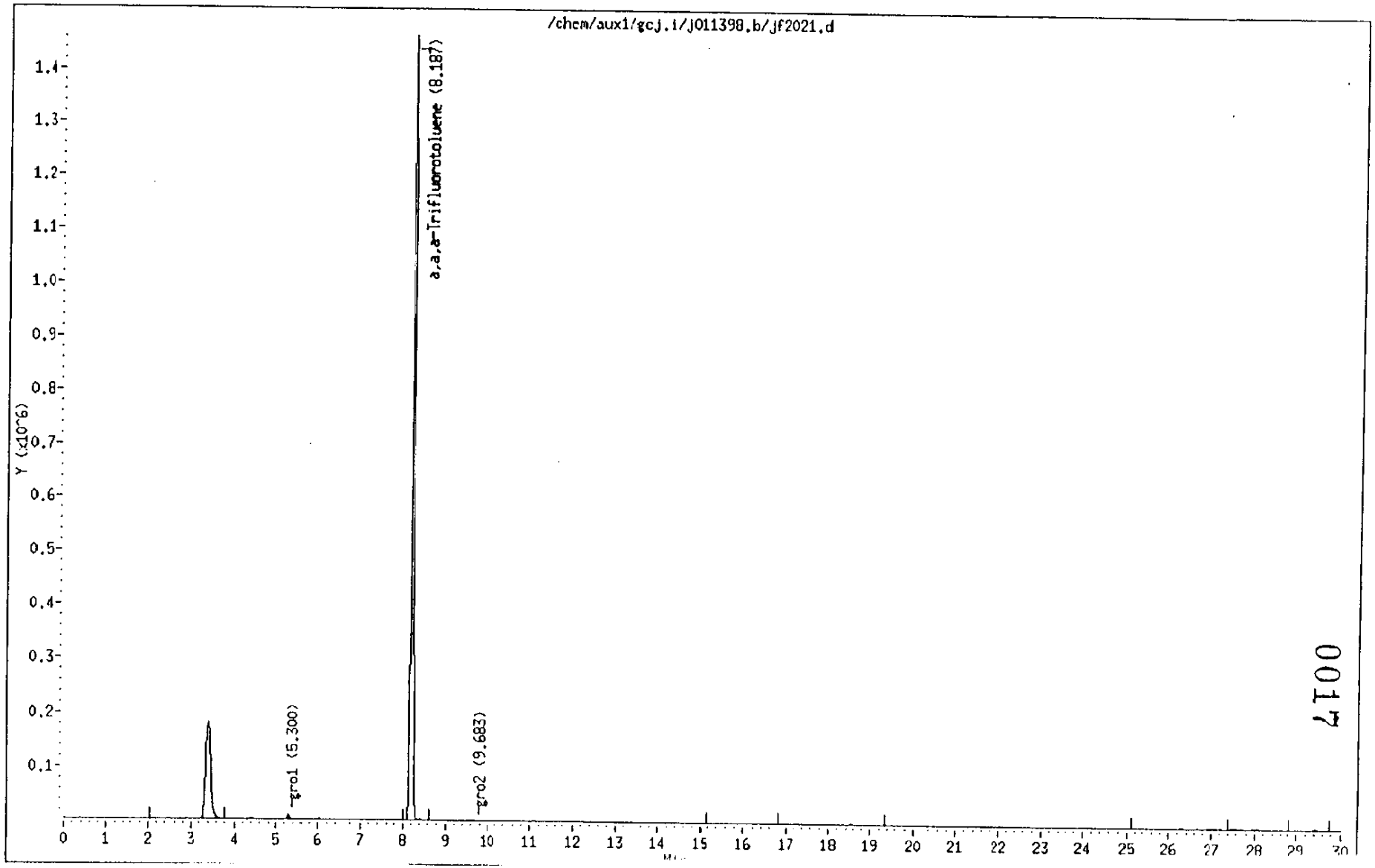
CAS NO.	COMPOUND		Q
	GRO(C2 - C10)	2700	U

Data File: /chem/aux1/gcj.i/j011398.b/jf2021.d
Date : 13-JAN-98 18:47
Client ID:
Sample Info: 19568n b117-308 1.12g

Column phase: DB-624 75m x 0.53mm

Instrument: gcj.i

Operator: jdk
Column diameter: 0.53



00117

Data File: /chem/aux1/gcj.i/j011398.b/jf2021.d
Report Date: 14-Jan-1998 08:04

OHM Analytical Division

Data file : /chem/aux1/gcj.i/j011398.b/jf2021.d
Lab Smp Id:
Inj Date : 13-JAN-98 18:47
Operator : jdk Inst ID: gcj.i
Smp Info : 19568n b117-308 1.12g
Misc Info : jr9120w,q2w6411,g2,1,1,
Comment :
Method : /chem/aux1/gcj.i/j011398.b/j111797_gas.m
Meth Date : 14-Jan-1998 07:19 Quant Type: ESTD
Cal Date : 17-NOV-97 22:11 Cal File: jf1850.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.10

9cf
1/14/98

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
M	1 GRO(C2 - C10)	Compound Not Detected.					
	2 gro1	5.300	4.833	0.467	409727	18.777	18.777(M)
	3 gro2	9.683	9.690	-0.007	781256	35.159	35.159(M)
S	4 a,a,a-Trifluorotoluene	9.187	9.197	-0.010	29833921	735.731	735.731(M)

QC Flag Legend

M - Compound response manually integrated.

1A (GC)
VOLATILE ORGANICS ANALYSIS DATA SHEET 0019

EPA SAMPLE NO.

B117-309

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: _____ Case No.: 19568N SAS No.: _____ SDG No.: Q2W6411

Matrix: (soil/water) SOIL Lab Sample ID: JR9121W

Sample wt/vol: 1.02 (g/mL) G Lab File ID: JF2022

Level: (low/med) LOW Date Received: 01/13/98

% Moisture: not dec. 17 Date Analyzed: 01/13/98

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: _____ (uL)

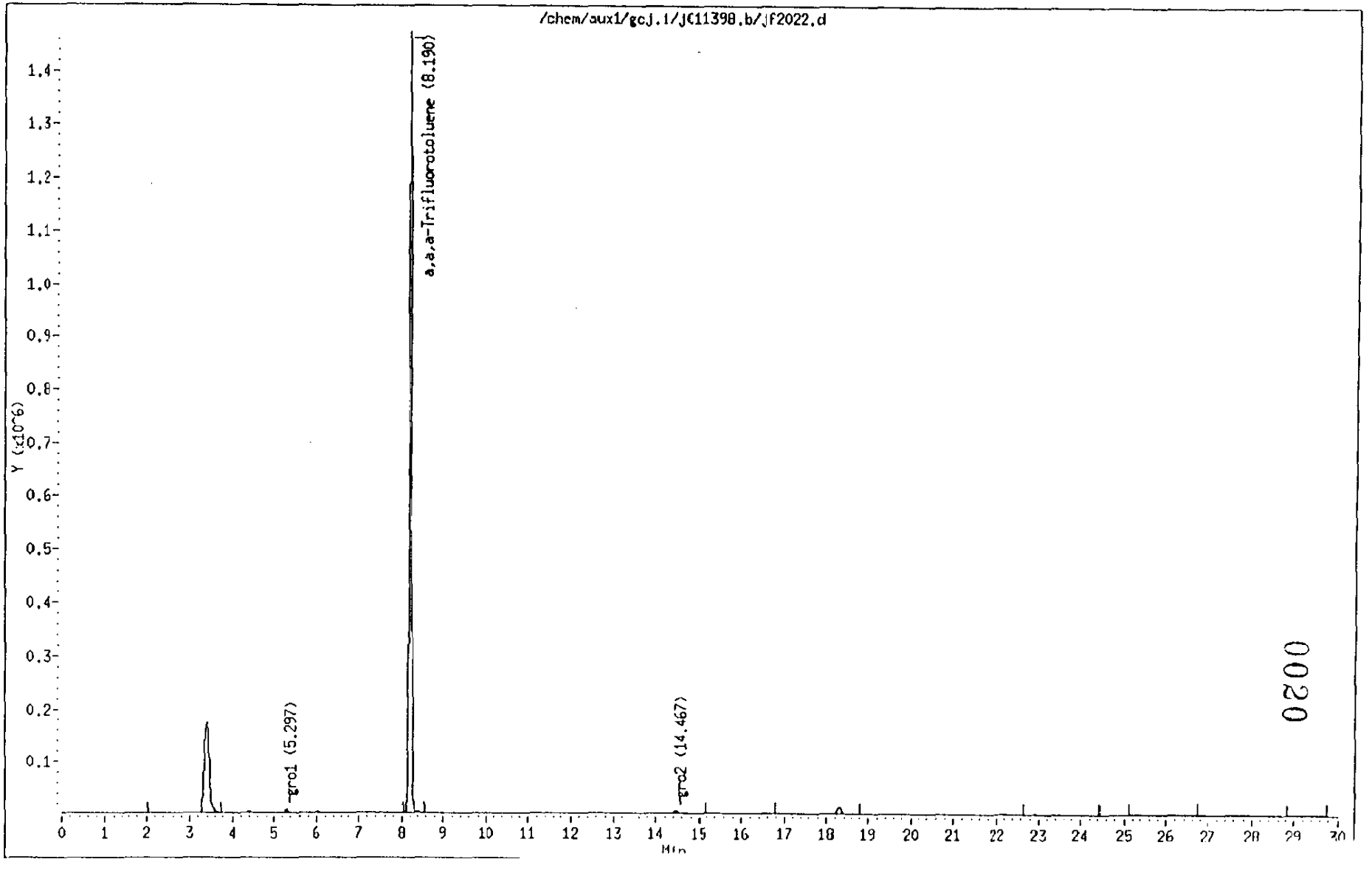
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
	GRO(C2 - C10)	2800	U

Data File: /chem/aux1/gcj.i/j011398.b/jf2022.d
Date : 13-JAN-98 19:22
Client ID:
Sample Info: 19568n b117-309 1.02g

Column phase: DB-624 75m x 0.53mm

Instrument: gcj.i

Operator: jdk
Column diameter: 0.53



0020

OHM Analytical Division

Data file : /chem/aux1/gcj.i/j011398.b/jf2022.d
Lab Smp Id:
Inj Date : 13-JAN-98 19:22
Operator : jdk Inst ID: gcj.i
Smp Info : 19568n b117-309 1.02g
Misc Info : jr9121w,q2w6411,g2,1,1,
Comment :
Method : /chem/aux1/gcj.i/j011398.b/j111797_gas.m
Meth Date : 14-Jan-1998 07:19 Quant Type: ESTD
Cal Date : 17-NOV-97 22:11 Cal File: jf1850.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.10

9W
1/14/98

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
M 1 GRO(C2 - C10)	Compound Not Detected.					
2 gro1	5.297	4.833	0.464	403841	18.507	18.507(M)
3 gro2	14.467	9.690	4.777	885302	39.842	39.842(M)
S 4 a,a,a-Trifluorotoluene	8.190	8.197	-0.007	30106861	742.462	742.462(M)

QC Flag Legend

M - Compound response manually integrated.

1A (GC)
VOLATILE ORGANICS ANALYSIS DATA SHEET 0022

EPA SAMPLE NO.

B117-310

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: _____ Case No.: 19568N SAS No.: _____ SDG No.: Q2W6411

Matrix: (soil/water) SOIL Lab Sample ID: JR9122W

Sample wt/vol: 1.06 (g/mL) G Lab File ID: JF2023

Level: (low/med) LOW Date Received: 01/13/98

% Moisture: not dec. 14 Date Analyzed: 01/13/98

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

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: _____ (uL)

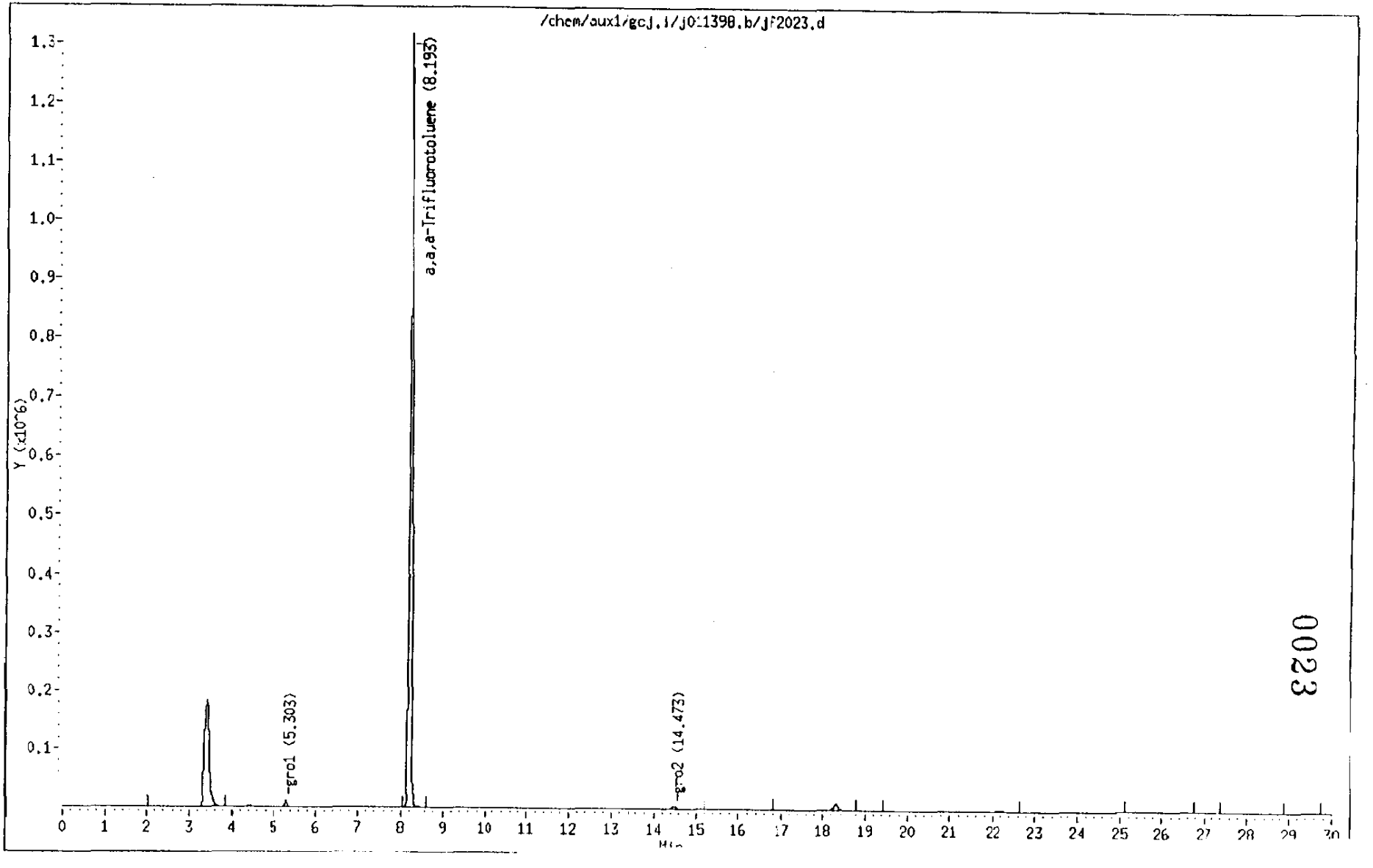
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
	GRO(C2 - C10)	2600	U

Data File: /chem/aux1/gcj.i/j011398.b/jf2023.d
Date : 13-JAN-98 19:57
Client ID:
Sample Info: 19568n b117-310 1.06g

Column phase: DB-624 75m x 0.53mm

Instrument: gcj.i

Operator: jdk
Column diameter: 0.53



0023

OHM Analytical Division

Data file : /chem/aux1/gcj.i/j011398.b/jf2023.d
Lab Smp Id:
Inj Date : 13-JAN-98 19:57
Operator : jdk Inst ID: gcj.i
Smp Info : 19568n b117-310 1.06g
Misc Info : jr9122w,q2w6411,g2,1,1,
Comment :
Method : /chem/aux1/gcj.i/j011398.b/j111797_gas.m
Meth Date : 14-Jan-1998 07:19 Quant Type: ESTD
Cal Date : 17-NOV-97 22:11 Cal File: jf1850.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.10

AD 1/14/98

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
M	1 GRO(C2 - C10)	Compound Not Detected.					
	2 gro1	5.303	4.833	0.470	426627	19.551	19.551(M)
	3 gro2	14.473	9.690	4.783	846607	38.101	38.101(M)
S	4 a,a,a-Trifluorotoluene	8.193	8.197	-0.004	26826247	661.559	661.559(M)

QC Flag Legend

M - Compound response manually integrated.

6A
VOLATILE ORGANICS INITIAL CALIBRATION DATA

0025

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

ab Code: _____ Case No.: 19568N SAS No.: _____ SDG No.: Q2W6411

Instrument ID: cj Calibration Date(s): 11/17/97 11/17/97

Heated Purge: (Y/N) N Calibration Times: 1951 2211

GC Column: DB-624 ID: 0.53 (mm)

LAB FILE ID: RRF250= jf1846.d RRF400= jf1847.d
1000 = jf1848.d 2000 = jf1849.d 3000 = jf1850.d

COMPOUND	RRF250	RRF400	1000	2000	3000	$\overline{RRF}$	% RSD
GRO(C2 - C10)	43758	44477	42708	46191	43069	44040	3.133
gro1	21151	21770	21548	23183	21450	21821	3.637
gro2	22606	22707	21160	23008	21618	22220	3.552
a,a,a-Trifluorotoluene	37005	40972	38869	43127	42797	40550	6.437

ompounds with required minimum RRF and maximum %RSD values.
all other compounds must meet a minimum RRF of 0.010.

7A
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

ab Code: _____ Case No.: 19568N SAS No.: _____ SDG No.: Q2W6411

Instrument ID: cj Calibration Date: 01/13/98 Time: 1231

Lab File ID: jf2014 Init. Calib. Date(s): 11/17/97 11/17/97

Heated Purge: (Y/N) N Init. Calib. Times: 1951 2211

GC Column: DB 624 ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RF2060	MIN RRF	%D	MAX %D
GRO(C2 - C10)	44040.	44901.	0.010	2.0	15.0
gro1	21820.	21736.	0.010	0.4	15.0
gro2	22220.	21857.	0.010	1.6	15.0
a,a,a-Trifluorotoluene	40550.	42256.	0.010	4.2	15.0

7A
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: _____ Case No.: 19568N SAS No.: _____ SDG No.: Q2W6411

Instrument ID: cj Calibration Date: 01/13/98 Time: 2107

Lab File ID: jf2025 Init. Calib. Date(s): 11/17/97 11/17/97

Heated Purge: (Y/N) N Init. Calib. Times: 1951 2211

GC Column: DB624 ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RF2060	MIN RRF	%D	MAX %D
GRO(C2 - C10)	44040.	43525.	0.010	1.2	15.0
gro1	21820.	20825.	0.010	4.6	15.0
gro2	22220.	21431.	0.010	3.5	15.0
a,a,a-Trifluorotoluene	40550.	40179.	0.010	0.9	15.0

1A (GC)
VOLATILE ORGANICS ANALYSIS DATA SHEET 0028

EPA SAMPLE NO.

WBLK01

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: _____ Case No.: 19568N SAS No.: _____ SDG No.: Q2W6411

Matrix: (soil/water) SOIL Lab Sample ID: Q2W6411W

Sample wt/vol: 1.09 (g/mL) G Lab File ID: JF2015

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

% Moisture: not dec. _____ Date Analyzed: 01/13/98

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: _____ (uL)

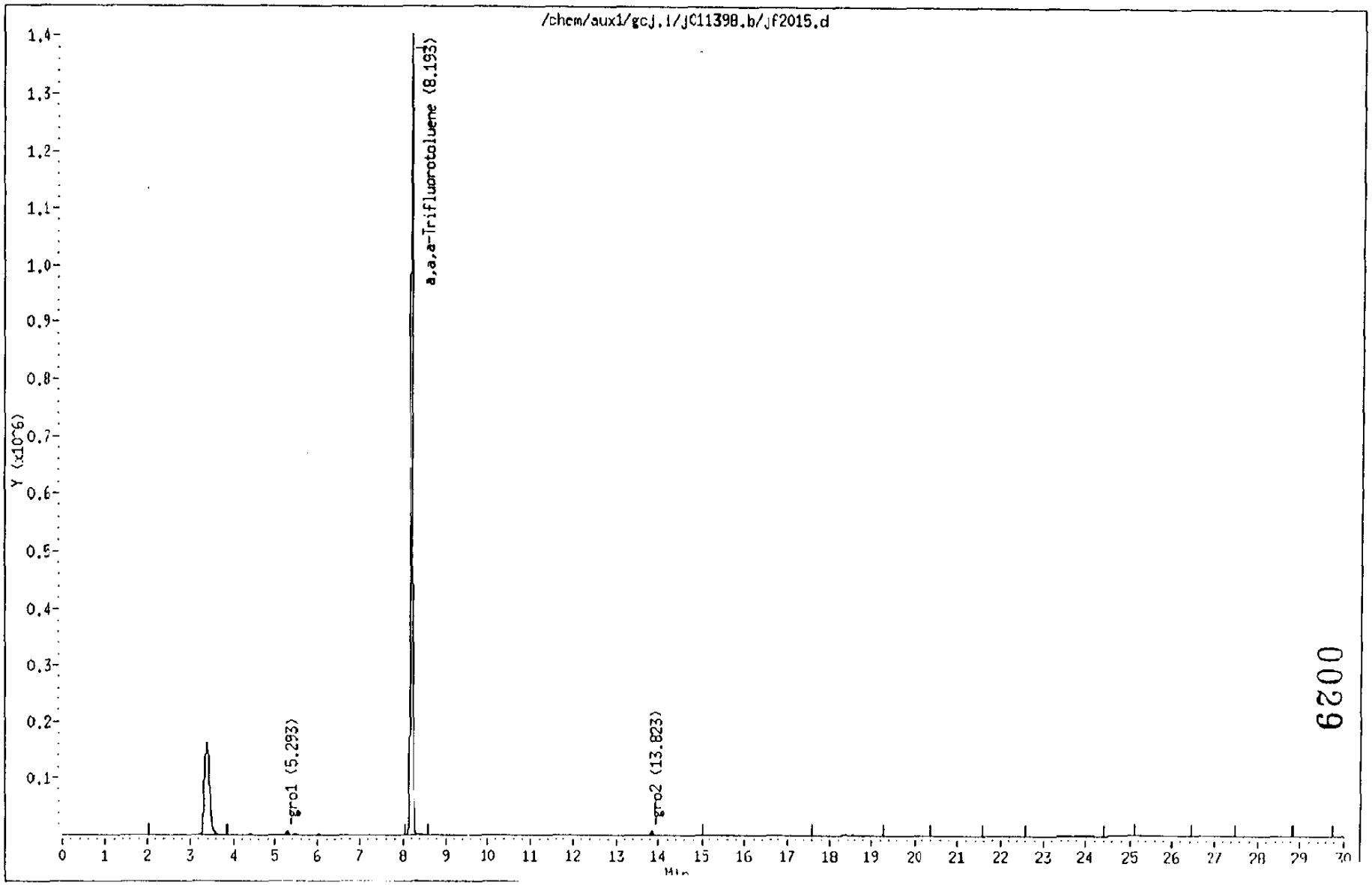
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
	GRO(C2 - C10)	2200	U

Data File: /chem/aux1/gcj.1/j011398.b/jf2015.d
Date : 13-JAN-98 15:17
Client ID:
Sample Info: met blk q2w6411 1.09g Ottawa sand

Column phase: DB-624 75m x 0.53mm

Instrument: gcj.1

Operator: jdk
Column diameter: 0.53



0029

OHM Analytical Division

jd 1/14/98

Data file : /chem/aux1/gcj.i/j011398.b/jf2015.d
Lab Smp Id:
Inj Date : 13-JAN-98 15:17
Operator : jdk Inst ID: gcj.i
Smp Info : met blk q2w6411 1.09g Ottawa sand
Misc Info : q2w6411w,q2w6411,g2,1,1,
Comment :
Method : /chem/aux1/gcj.i/j011398.b/j111797_gas.m
Meth Date : 14-Jan-1998 07:19 Quant Type: ESTD
Cal Date : 17-NOV-97 22:11 Cal File: jf1850.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.10

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
M	1 GRO(C2 - C10)	Compound Not Detected.					
	2 gro1	5.293	4.833	0.460	522211	23.932	23.932(M)
	3 gro2	13.823	9.690	4.133	1047316	47.133	47.133(M)
S	4 a,a,a-Trifluorotoluene	8.193	8.197	0.004	28606358	705.508	705.508(M)

QC Flag Legend

M - Compound response manually integrated.

1A (GC)
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0031 B117-306MS

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: _____ Case No.: 19568N SAS No.: _____ SDG No.: Q2W6411

Matrix: (soil/water) SOIL Lab Sample ID: JR9118WS

Sample wt/vol: 1.05 (g/mL) G Lab File ID: JF2018

Level: (low/med) LOW Date Received: 01/13/98

% Moisture: not dec. 16 Date Analyzed: 01/13/98

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: _____ (uL)

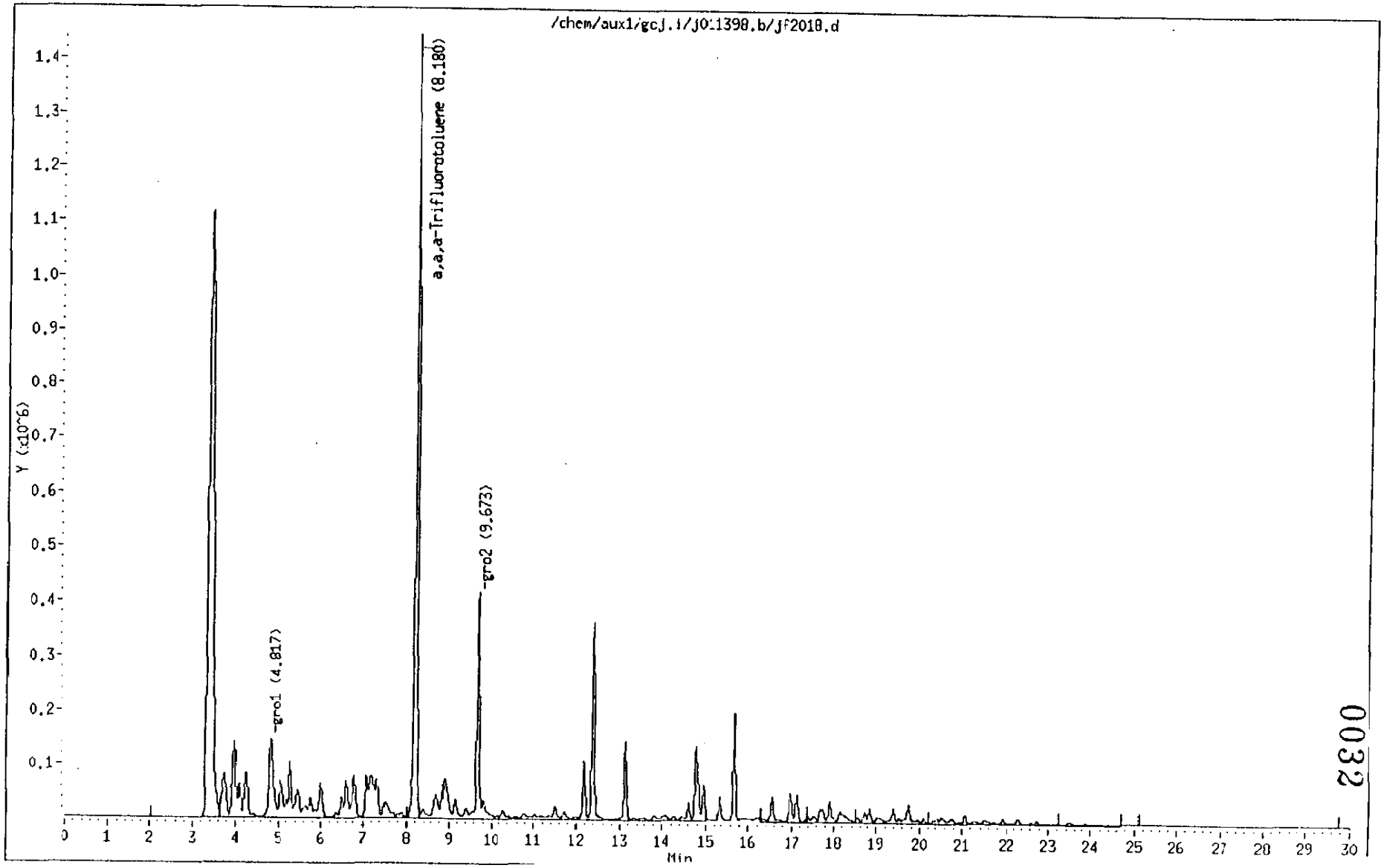
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
	GRO(C2 - C10)	11000	

Data File: /chem/aux1/gcj.1/j011398.b/jf2018.d
Date : 13-JAN-98 17:02
Client ID:
Sample Info: 19568n b117-306 ms q2w6411 1.05g

Column phase: DB-624 75m x 0.53mm

Instrument: gcj.1

Operator: jdk
Column diameter: 0.53



0032

OHM Analytical Division

Data file : /chem/aux1/gcj.i/j011398.b/jf2018.d
Lab Smp Id:
Inj Date : 13-JAN-98 17:02
Operator : jdk Inst ID: gcj.i
Smp Info : 19568n b117-306 ms q2w6411 1.05g
Misc Info : jr9118ws,q2w6411,g2,1,1,
Comment :
Method : /chem/aux1/gcj.i/j011398.b/j111797_gas.m
Meth Date : 14-Jan-1998 07:19 Quant Type: ESTD
Cal Date : 17-NOV-97 22:11 Cal File: jf1850.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.10

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
M 1 GRO(C2 - C10)				83594438	1898.148	1898.148
gro1	4.817	4.833	-0.016	41506481	1902.167	1902.167(M)
3 gro2	9.673	9.690	-0.017	42087957	1894.142	1894.142(M)
S 4 a,a,a-Trifluorotoluene	8.180	8.197	-0.017	30449212	750.905	750.905(M)

QC Flag Legend

M - Compound response manually integrated.

1A (GC)
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0034 B117-306MSD

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

ab Code: _____ Case No.: 19568N SAS No.: _____ SDG No.: Q2W6411

Matrix: (soil/water) SOIL Lab Sample ID: JR9118WR

Sample wt/vol: 1.04 (g/mL) G Lab File ID: JF2019

Level: (low/med) LOW Date Received: 01/13/98

% Moisture: not dec. 16 Date Analyzed: 01/13/98

GC Column: RB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: _____ (uL)

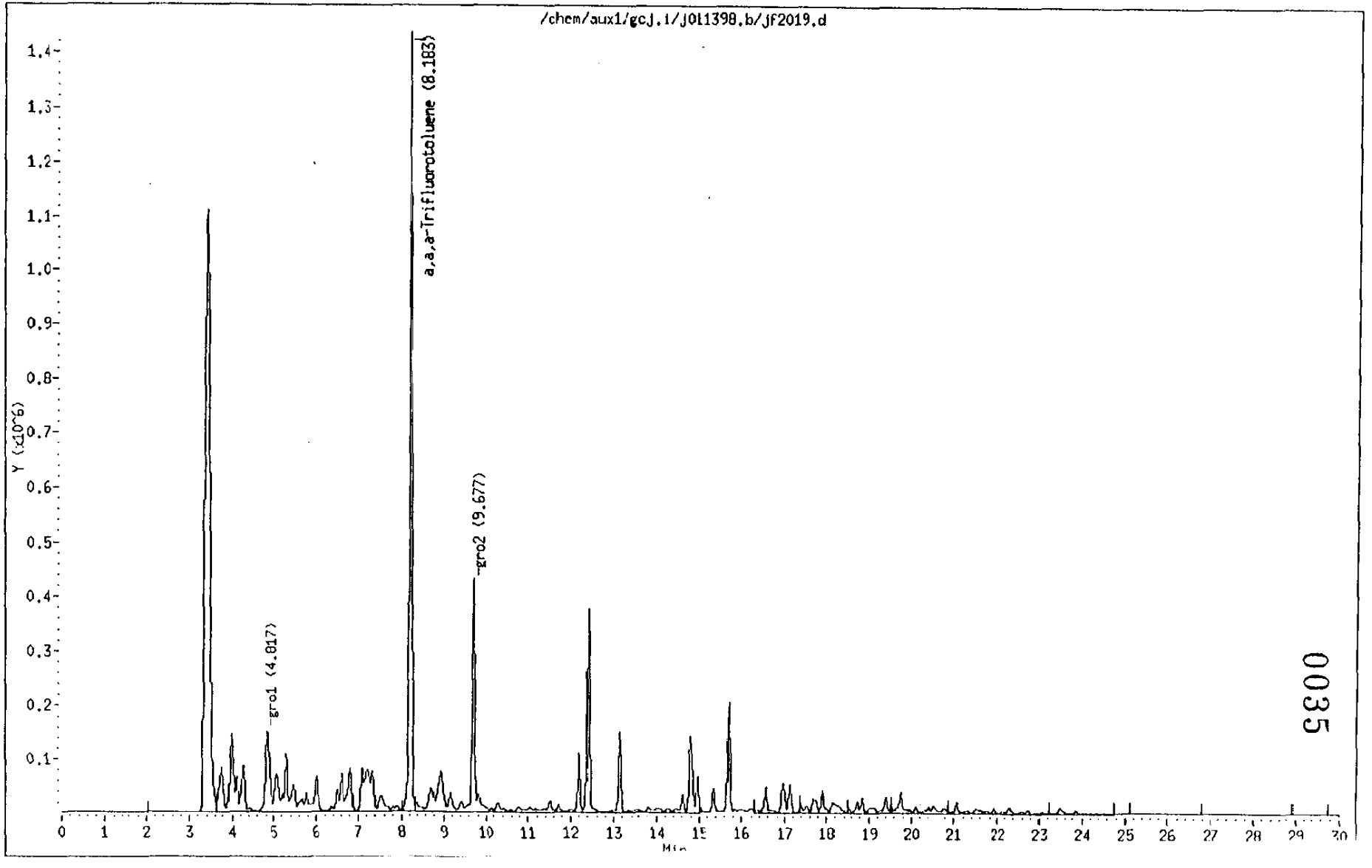
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
	GRO(C2 - C10)	11000	

Data File: /chem/aux1/gcj.i/j011398.b/jf2019.d
Date : 13-JAN-98 17:37
Client ID:
Sample Info: 19568n b117-306 msd q2w6411 1.04g

Column phase: DB-624 75m x 0.53mm

Instrument: gcj.i

Operator: jdk
Column diameter: 0.53



0035

Data File: /chem/aux1/gcj.i/j011398.b/jf2019.d
Report Date: 14-Jan-1998 08:03

OHM Analytical Division

Data file : /chem/aux1/gcj.i/j011398.b/jf2019.d
Lab Smp Id:
Inj Date : 13-JAN-98 17:37
Operator : jdk Inst ID: gcj.i
Smp Info : 19568n b117-306 msd q2w6411 1.04g
Misc Info : jr9118wr,q2w6411,g2,1,1,
Comment :
Method : /chem/aux1/gcj.i/j011398.b/j111797_gas.m
Meth Date : 14-Jan-1998 07:19 Quant Type: ESTD
Cal Date : 17-NOV-97 22:11 Cal File: jf1850.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.10

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
M	1 GRO(C2 - C10)				85913988	1950.817	1950.817
	gro1	4.817	4.833	-0.016	42885624	1965.371	1965.371(M)
	3 gro2	9.677	9.690	-0.013	43028364	1936.465	1936.465(M)
S	4 a,a,a-Trifluorotoluene	8.183	8.197	-0.014	30276211	746.639	746.639(M)

QC Flag Legend

M - Compound response manually integrated.

1A (GC)
VOLATILE ORGANICS ANALYSIS DATA SHEET

0037

EPA SAMPLE NO.

WSPK01

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: _____ Case No.: 19568N SAS No.: _____ SDG No.: Q2W6411

Matrix: (soil/water) SOIL Lab Sample ID: Q2W6411WS

Sample wt/vol: 1.07 (g/mL) G Lab File ID: JF2016

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

% Moisture: not dec. _____ Date Analyzed: 01/13/98

GC Column: PB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: _____ (uL)

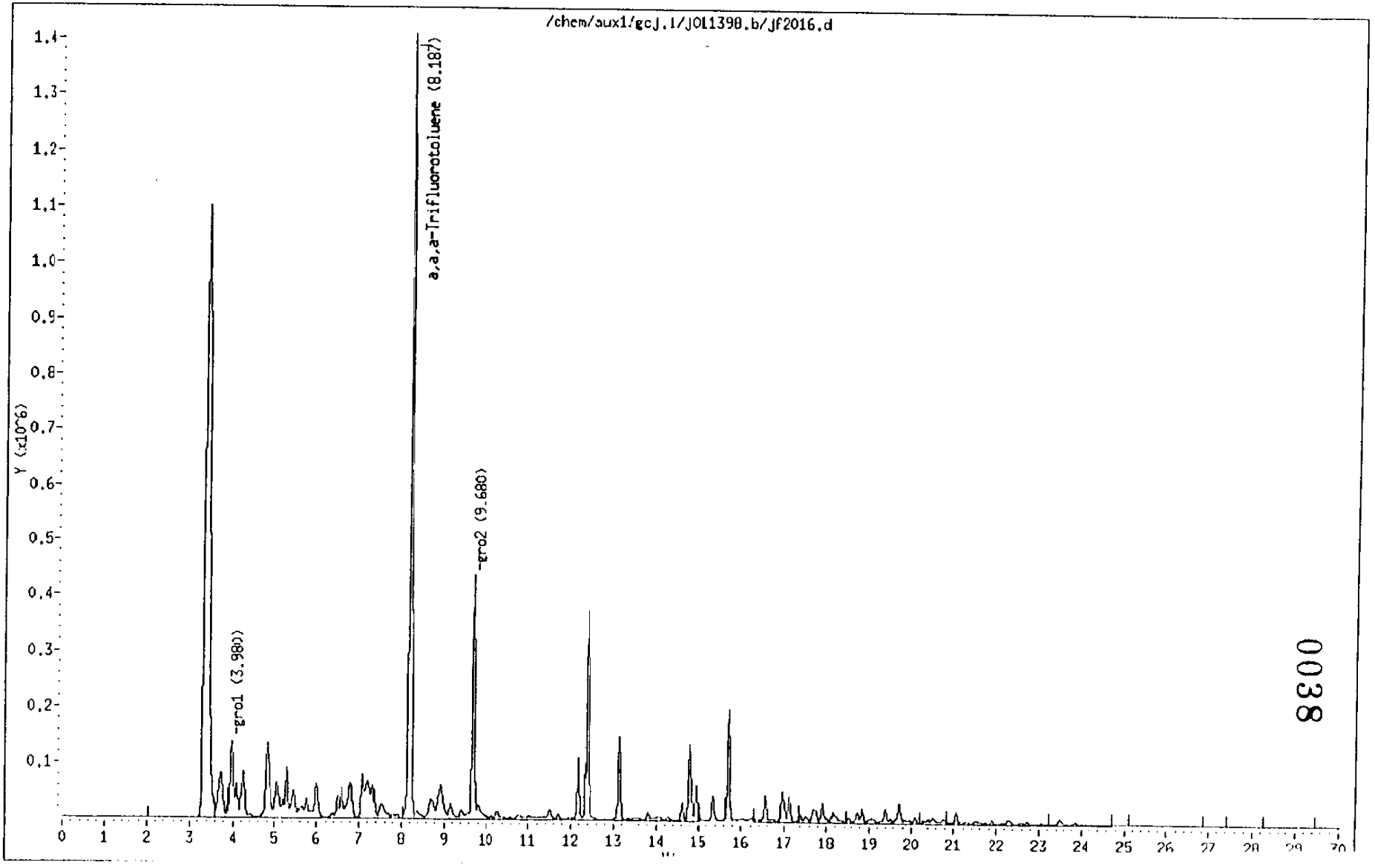
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
	GRO(C2 - C10)	8400	

Data File: /chem/aux1/gcj.1/J011398.b/jf2016.d
Date : 13-JAN-98 15:52
Client ID:
Sample Info: met spk q2w6411 1.07g Ottawa sand

Column phase: DB-624 75m x 0.53mm

Instrument: gcj.1

Operator: jdk
Column diameter: 0.53



0038

OHM Analytical Division

gcl 1/14/98

Data file : /chem/aux1/gcj.i/j011398.b/jf2016.d
Lab Smp Id:
Inj Date : 13-JAN-98 15:52
Operator : jdk Inst ID: gcj.i
Smp Info : met spk q2w6411 1.07g Ottawa sand
Misc Info : q2w6411ws,q2w6411,g2,1,1,
Comment :
Method : /chem/aux1/gcj.i/j011398.b/j111797_gas.m
Meth Date : 14-Jan-1998 07:19 Quant Type: ESTD
Cal Date : 17-NOV-97 22:11 Cal File: jf1850.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.10

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
M	1 GRO(C2 - C10)				79179101	1797.890	1797.890
	2 gro1	3.980	4.833	-0.853	39087343	1791.303	1791.303(M)
	3 gro2	9.680	9.690	-0.010	40091758	1804.305	1804.305(M)
S	4 a,a,a-Trifluorotoluene	8.187	8.197	0.010	29539141	728.462	728.462(M)

QC Flag Legend

M - Compound response manually integrated.

2B (GC)
SOIL SEMIVOLATILE SURROGATE RECOVERY

0040

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

ab Code: _____ Case No.: 19568N SAS No.: _____ SDG No.: Q2F80026

Level: (low/med) ____

	EPA SAMPLE NO.	SMC1 (FBP) #	SMC2 (TPL) #			TOT OUT
01	B117-306	72	81			0
02	B117-306MSD	66	63			0
03	B117-306MS	71	71			0
04	B117-307	51	65			0
05	B117-308	59	70			0
06	B117-309	61	76			0
07	B117-310	78	73			0
08	FBLK01	62	72			0
09	FSPK01	65	73			0

		QC LIMITS
SMC1 (FBP)	= 2-Fluorobiphenyl	(43-123)
SMC2 (TPL)	= o-Terphenyl	(61-110)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring compound diluted out

3C (GC)
SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

0041

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: _____ Case No.: 19568N SAS No.: _____ SDG No.: Q2F80026

Matrix Spike - EPA Sample No.: B117-306 Level: (low/med) ____

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
DRO(C10 - C21)	39100	0	28500	73	34-110

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
DRO(C10 - C21)	39200	27700	70	3	30	34-110

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 1 outside limits
Spike Recovery: 0 out of 2 outside limits

COMMENTS: _____

3C (GC)
SOIL SEMIVOLATILE BLANK SPIKE RECOVERY

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: _____ Case No.: 19568N SAS No.: _____ SDG No.: Q2F80026

Matrix Spike - EPA Sample No.: FSPK01

COMPOUND	SPIKE ADDED (ug/Kg)	BLANK CONCENTRATION (ug/Kg)	BS CONCENTRATION (ug/Kg)	BS % REC #	QC LIMITS REC.
DRO(C10 - C21)	33300	0	22900	69	52-110

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 1 outside limits

COMMENTS: _____

4B (GC)
SEMIVOLATILE METHOD BLANK SUMMARY

0043

EPA SAMPLE NO.

FBLK01

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: _____ Case No.: 19568N SAS No.: _____ SDG No.: Q2F80026

Lab File ID: FF7356 Lab Sample ID: Q2F80026F

Instrument ID: CF Date Extracted: 01/14/98

Matrix: (soil/water) SOIL Date Analyzed: 01/17/98

Level: (low/med) _____ Time Analyzed: 21:32

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	B117-306	JR9118F	FF7360	01/18/98
02	B117-306MSD	JR9118FR	FF7359	01/18/98
03	B117-306MS	JR9118FS	FF7358	01/17/98
04	B117-307	JR9119F	FF7361	01/18/98
05	B117-308	JR9120F	FF7362	01/18/98
06	B117-309	JR9121F	FF7363	01/18/98
07	B117-310	JR9122F	FF7364	01/18/98
08	FSPK01	Q2F80026FS	FF7357	01/17/98

COMMENTS:

1B (GC)
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

0044

EPA SAMPLE NO.

B117-306

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

ab Code: _____ Case No.: 19568N SAS No.: _____ SDG No.: Q2F80026

Matrix: (soil/water) SOIL Lab Sample ID: JR9118F

Sample wt/vol: 30.4 (g/mL) G Lab File ID: FF7360

Level: (low/med) _____ Date Received: 01/13/98

% Moisture: 16 decanted: (Y/N) ___ Date Extracted: 01/14/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/18/98

Injection Volume: 1000 (uL) Dilution Factor: 1.0

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

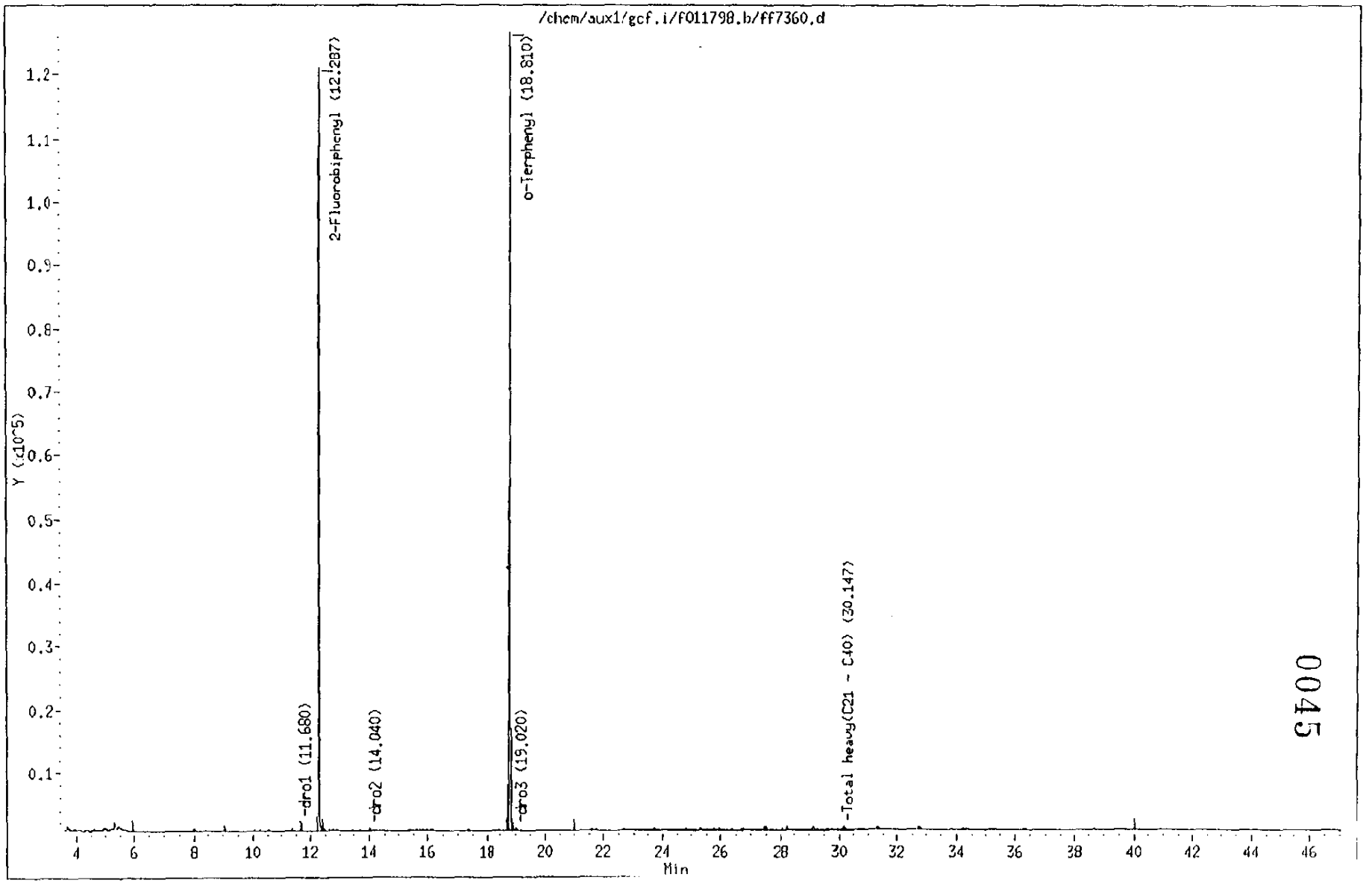
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
	DRO(C10 - C21)	3900	U

Data File: /chem/aux1/gcf.i/f011798.b/ff7360.d
Date : 18-JAN-98 01:09
Client ID:
Sample Info: 19568n b117-306

Column phase: db-5 30m .25um film

Instrument: gcf.i

Operator: klb
Column diameter: 0.32



0045

Data File: /chem/aux1/gcf.i/f011798.b/ff7360.d
Report Date: 19-Jan-1998 09:34

OHM Analytical Division

Data file : /chem/aux1/gcf.i/f011798.b/ff7360.d
Lab Smp Id:
Inj Date : 18-JAN-98 01:09
Operator : klb Inst ID: gcf.i
Smp Info : 19568n b117-306
Misc Info : jr9118f,q2f80026,g1,1,1,
Comment :
Method : /chem/aux1/gcf.i/f011798.b/011798_gcf_teh.m
Meth Date : 19-Jan-1998 09:24 Quant Type: ESTD
Cal Date : 17-JAN-98 18:49 Cal File: ff7353.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.10

JM 1/19/98

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)
"	1 DRO(C10 - C21)	Compound Not Detected.					
	2 dro1	11.630	11.277	0.403	83543	17.473	17.473(M)
	3 dro2	14.040	12.703	1.337	88211	7.776	7.776(M)
	4 dro3	19.020	19.787	-0.767	17429	2.989	2.989(M)
	5 Total heavy(C21 - C40)	30.147	22.973	7.174	782011	62.761	62.761(M)
$	6 2-Fluorobiphenyl	12.287	12.297	-0.010	1209840	73.412	73.412(M)
$	7 o-Terphenyl	18.810	18.817	-0.007	1459866	81.329	81.329(M)

QC Flag Legend

M - Compound response manually integrated.

1B (GC)
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

0047

EPA SAMPLE NO.

B117-307

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: _____ Case No.: 19568N SAS No.: _____ SDG No.: Q2F80026

Matrix: (soil/water) SOIL Lab Sample ID: JR9119F

Sample wt/vol: 30.6 (g/mL) G Lab File ID: FF7361

Level: (low/med) _____ Date Received: 01/13/98

% Moisture: 17 decanted: (Y/N) ___ Date Extracted: 01/14/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/18/98

Injection Volume: 1000 (uL) Dilution Factor: 1.0

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

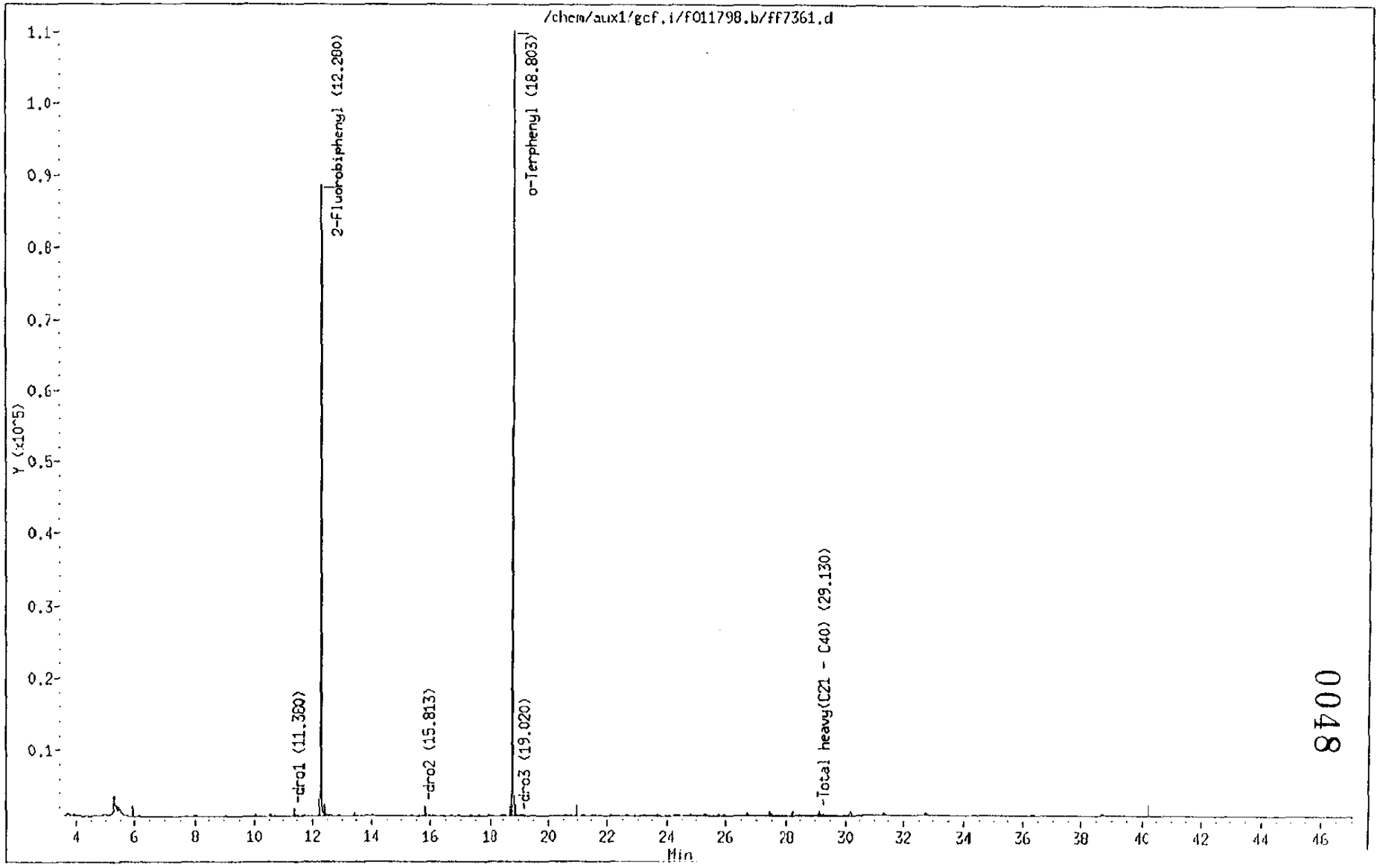
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
	DRO(C10 - C21)	3900	U

Data File: /chem/aux1/gcf.i/f011798.b/ff7361.d
Date : 18-JAN-98 02:04
Client ID:
Sample Info: 19568n b117-307

Column phase: db-5 30m .25um film

Instrument: gcf.i

Operator: klb
Column diameter: 0.32



0048

Data File: /chem/aux1/gcf.i/f011798.b/ff7361.d
Report Date: 19-Jan-1998 09:36

OHM Analytical Division

Data file : /chem/aux1/gcf.i/f011798.b/ff7361.d
Lab Smp Id:
Inj Date : 18-JAN-98 02:04
Operator : klb Inst ID: gcf.i
Smp Info : 19568n b117-307
Misc Info : jr9119f,q2f80026,gl,1,1,
Comment :
Method : /chem/aux1/gcf.i/f011798.b/011798_gcf_teh.m
Meth Date : 19-Jan-1998 09:24 Quant Type: ESTD
Cal Date : 17-JAN-98 18:49 Cal File: ff7353.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.10

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)
M	1 DRO(C10 - C21)	Compound Not Detected.					
	2 dro1	11.330	11.277	0.103	80484	15.833	15.833(M)
	3 dro2	15.813	12.703	3.110	109634	9.665	9.665(M)
	4 dro3	19.636	19.787	9.767	22817	3.914	3.914(M)
	5 Total heavy(C21 - C40)	29.130	22.973	6.157	594672	47.726	47.726(M)
S	6 2-Fluorobiphenyl	12.230	12.297	-0.017	863173	52.377	52.377(M)
S	7 o-Terphenyl	18.803	18.817	-0.014	1170285	55.196	55.196(M)

QC Flag Legend

M - Compound response manually integrated.

1B (GC)
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0050

B117-308

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: _____ Case No.: 19568N SAS No.: _____ SDG No.: Q2F80026

Matrix: (soil/water) SOIL Lab Sample ID: JR9120F

Sample wt/vol: 30.1 (g/mL) G Lab File ID: FF7362

Level: (low/med) _____ Date Received: 01/13/98

% Moisture: 21 decanted: (Y/N) ___ Date Extracted: 01/14/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/18/98

Injection Volume: 1000 (uL) Dilution Factor: 1.0

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

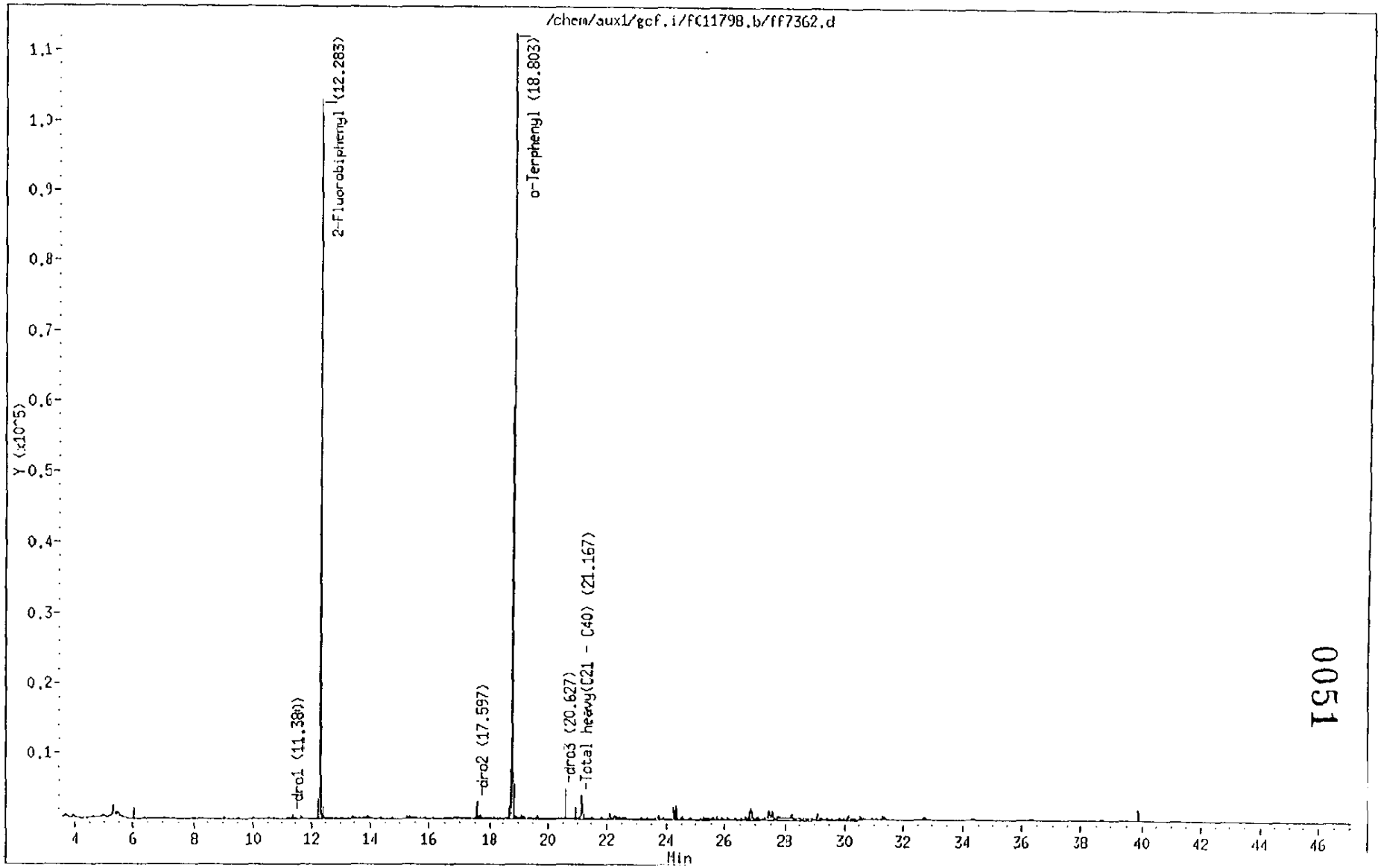
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
	DRO(C10 - C21)	4200	U

Data File: /chem/aux1/gcf.i/f011798.b/ff7362.d
Date : 18-JAN-98 02:58
Client ID:
Sample Info: 19568n b117-308

Column phase: db-5 30m .25um film

Instrument: gcf.i

Operator: klb
Column diameter: 0.32



0051

OHM Analytical Division

Data file : /chem/aux1/gcf.i/f011798.b/ff7362.d
Lab Smp Id:
Inj Date : 18-JAN-98 02:58
Operator : klb Inst ID: gcf.i
Smp Info : 19568n b117-308
Misc Info : jr9120f,q2f80026,g1,1,1,
Comment :
Method : /chem/aux1/gcf.i/f011798.b/011798_gcf_teh.m
Meth Date : 19-Jan-1998 09:24 Quant Type: ESTD
Cal Date : 17-JAN-98 18:49 Cal File: ff7353.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.10

JLR
1/19/98

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)
M	1 DRO(C10 - C21)	Compound Not Detected.					
	2 dro1	11.380	11.277	0.103	67022	14.018	14.018(M)
	3 dro2	17.597	12.703	4.894	152871	13.477	13.477(M)
	4 dro3	30.627	19.787	0.840	117859	20.183	20.183(M)
	5 Total heavy(C21 - C40)	21.167	22.973	-1.806	1028658	82.555	82.555(M)
S	6 2-Fluorobiphenyl	12.283	12.297	-0.014	998453	60.585	60.585(M)
S	7 o-Terphenyl	18.803	18.817	-0.014	1269582	70.723	70.723(M)

QC Flag Legend

M - Compound response manually integrated.

1B (GC)
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0053

B117-309

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: _____ Case No.: 19568N SAS No.: _____ SDG No.: Q2F80026

Matrix: (soil/water) SOIL Lab Sample ID: JR9121F

Sample wt/vol: 30.5 (g/mL) G Lab File ID: FF7363

Level: (low/med) _____ Date Received: 01/13/98

% Moisture: 17 decanted: (Y/N) ___ Date Extracted: 01/14/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/18/98

Injection Volume: 1000 (uL) Dilution Factor: 1.0

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

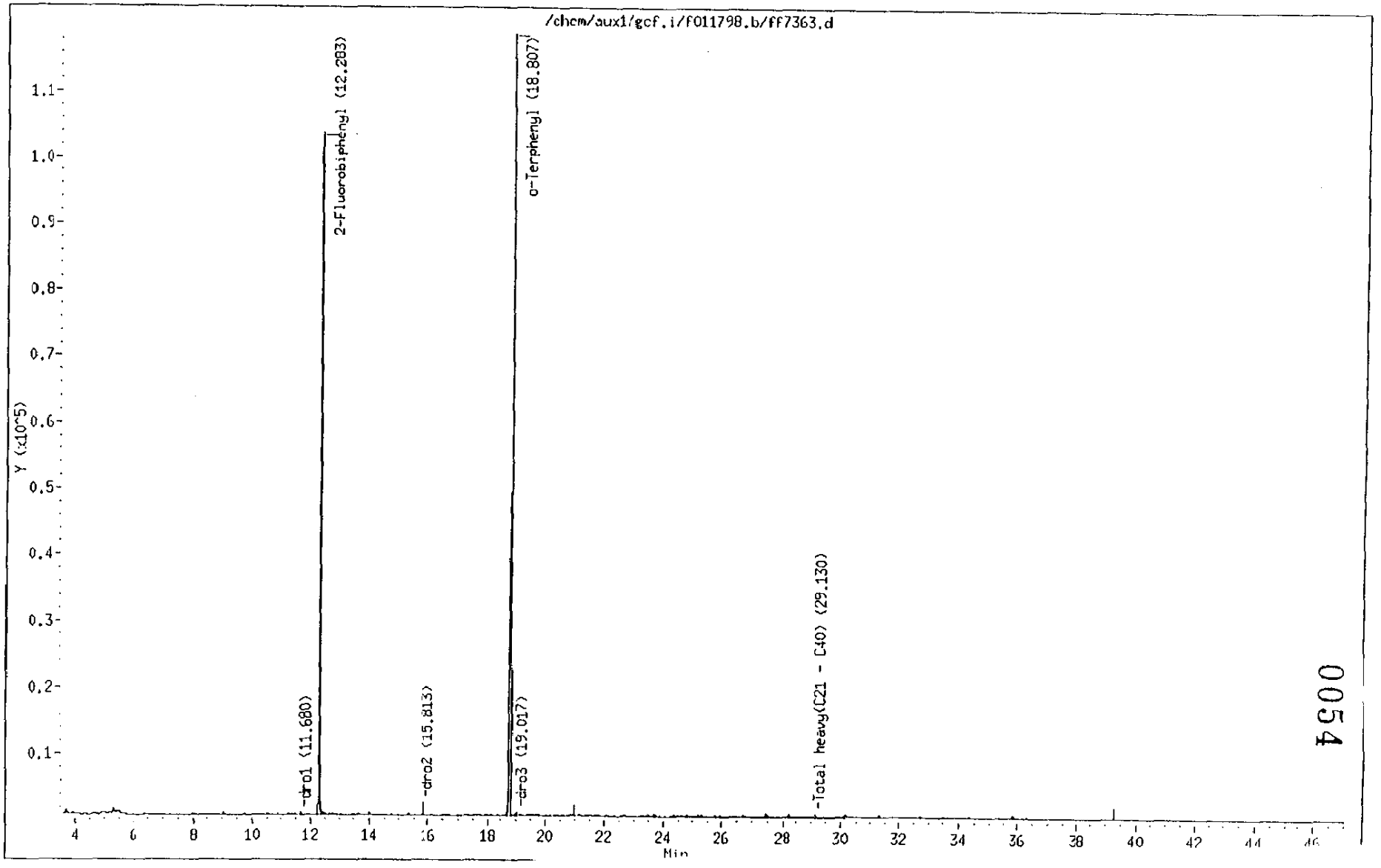
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
	DRO(C10 - C21)	3900	U

Data File: /chem/aux1/gcf.i/f011798.b/ff7363.d
Date : 18-JAN-98 03:53
Client ID:
Sample Info: 19568n b117-309

Column phase: db-5 30m .25um film

Instrument: gcf.i

Operator: klb
Column diameter: 0.32



0054

OHM Analytical Division

Data file : /chem/aux1/gcf.i/f011798.b/ff7363.d
Lab Smp Id:
Inj Date : 18-JAN-98 03:53
Operator : klb Inst ID: gcf.i
Smp Info : 19568n b117-309
Misc Info : jr9121f,q2f80026,g1,1,1,
Comment :
Method : /chem/aux1/gcf.i/f011798.b/011798_gcf_teh.m
Meth Date : 19-Jan-1998 09:24 Quant Type: ESTD
Cal Date : 17-JAN-98 18:49 Cal File: ff7353.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.10

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)
* 1 DRO(C10 - C21)	Compound Not Detected.					
2 dro1	11.680	11.277	0.403	60429	12.639	12.639(M)
3 dro2	15.813	12.703	3.110	128683	11.344	11.344(M)
4 dro3	19.017	19.787	-0.770	37353	6.409	6.409(M)
5 Total heavy(C21 - C40)	29.130	22.973	6.157	392734	31.519	31.519(M)
$ 6 2-fluorobiphenyl	12.283	12.297	-0.014	1027437	52.344	52.344(M)
$ 7 o-Terphenyl	18.807	18.817	-0.010	1386576	77.246	77.246(M)

QC Flag Legend

M - Compound response manually integrated.

1B (GC)
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

0056

EPA SAMPLE NO.

B117-310

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: _____ Case No.: 19568N SAS No.: _____ SDG No.: Q2F80026

Matrix: (soil/water) SOIL Lab Sample ID: JR9122F

Sample wt/vol: 30.2 (g/mL) G Lab File ID: FF7364

Level: (low/med) _____ Date Received: 01/13/98

% Moisture: 14 decanted: (Y/N) ___ Date Extracted: 01/14/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/18/98

Injection Volume: 1000 (uL) Dilution Factor: 1.0

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

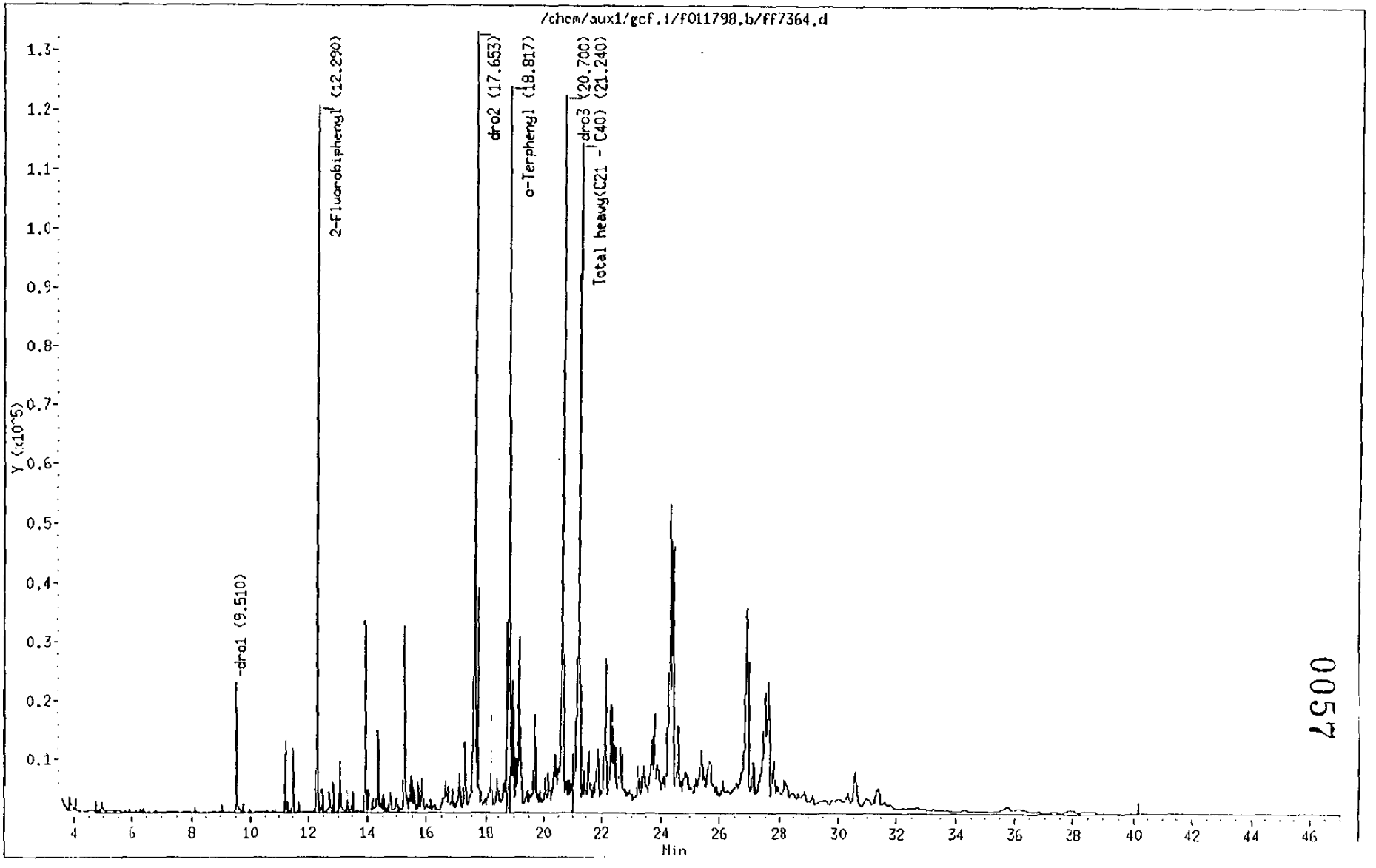
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
	DRO(C10 - C21)	24000	

Data File: /chem/aux1/gcf.i/f011798.b/ff7364.d
Date : 18-JAN-98 04:47
Client ID:
Sample Info: 19568n b117-310

Column phase: db-5 30m .25um film

Instrument: gcf.i

Operator: klb
Column diameter: 0.32



0057

OHM Analytical Division

JW
1/19/98

Data file : /chem/aux1/gcf.i/f011798.b/ff7364.d
Lab Smp Id:
Inj Date : 18-JAN-98 04:47
Operator : klb Inst ID: gcf.i
Smp Info : 19568n b117-310
Misc Info : jr9122f,q2f80026,g1,1,1,
Comment :
Method : /chem/aux1/gcf.i/f011798.b/011798_gcf_teh.m
Meth Date : 19-Jan-1998 09:24 Quant Type: ESTD
Cal Date : 17-JAN-98 18:49 Cal File: ff7353.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.10

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)
M	1 DRO(C10 - C21)				13854056	631.164	631.164
	2 dro1	9.510	11.277	-1.767	1028553	215.128	215.128(M)
	3 dro2	17.653	12.703	4.950	7004360	617.506	617.506(M)
	4 dro3	20.700	19.787	0.913	5821153	998.536	998.586(M)
	5 Total heavy(C21 - C40)	21.240	22.973	-1.733	21354698	1714.662	1714.662(M)
$	6 2-Fluorobiphenyl	12.290	12.297	-0.007	1316340	79.875	79.875(M)
$	7 o-Terphenyl	18.817	18.817	0.000	1323804	73.749	73.749(M)

QC Flag Legend

M - Compound response manually integrated.

6B
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: _____ Case No.: 19568N SAS No.: _____ SDG No.: Q2F80026

Instrument ID: cf Calibration Date(s): 01/17/98 01/17/98

Calibration Times: 1512 1849

LAB FILE ID: RRF100= ff7349.d RRF200= ff7350.d
RRF500= ff7351.d 1000 = ff7352.d 2000 = ff7353.d

COMPOUND	RRF100	RRF200	RRF500	1000	2000	$\overline{RRF}$	% RSD
DRO(C10 - C21)	24442	19504	18406	23588	23830	21950	12.67
dro1	5421	4359	4034	5048	5044	4781	11.86
dro2	12488	9862	9519	12204	12642	11343	13.41
dro3	6533	5279	4853	6337	6145	5829	12.45
Total heavy(C21 - C40)	14923	11689	11414	12324	11952	12460	11.37
2-Fluorobiphenyl *	17708	14330	14079	17914	18345	16480	12.66*
o-Terphenyl	22603	17805	15413	18851	15091	17950	16.96

Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

0060

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: _____ Case No.: 19568N SAS No.: _____ SDG No.: Q2F80026

Instrument ID: cf Calibration Date: 01/18/98 Time: 0636

Lab File ID: ff7366 Init. Calib. Date(s): 01/17/98 01/17/98

Init. Calib. Times: 1512 1849

COMPOUND	$\overline{RRF}$	RRF500	MIN RRF	%D	MAX %D
DRO(C10 - C21)	21950.	23903.	0.010	8.9	15.0
dro1	4781.1	5159.6	0.010	7.9	15.0
dro2	11342.	12278.	0.010	8.2	15.0
dro3	5829.3	6465.2	0.010	10.9	15.0
Total heavy(C21 - C40)	12460.	13093.	0.010	5.1	15.0
2-Fluorobiphenyl	16480.	18037.	0.010	9.5	15.0
o-Terphenyl	17950.	19596.	0.010	9.2	15.0

1B (GC)
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0061

FBLK01

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: _____ Case No.: 19568N SAS No.: _____ SDG No.: Q2F80026

Matrix: (soil/water) SOIL Lab Sample ID: Q2F80026F

Sample wt/vol: 30.0 (g/mL) G Lab File ID: FF7356

Level: (low/med) _____ Date Received: _____

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 01/14/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/17/98

Injection Volume: 1000 (uL) Dilution Factor: 1.0

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

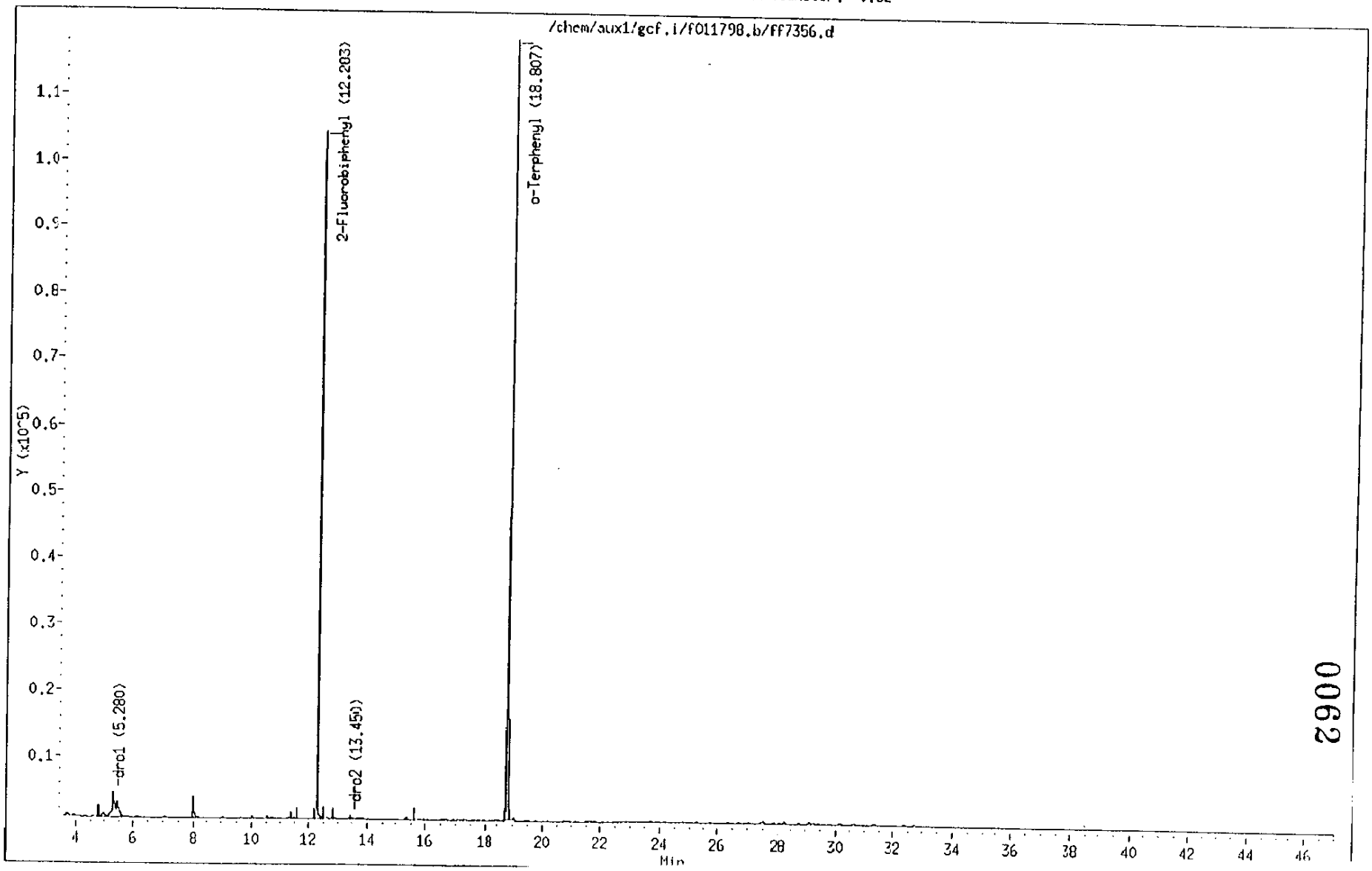
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
	DRO(C10 - C21)	3300	U

Data File: /chem/aux1/gcf.i/f011798.b/ff7356.d
Date : 17-JAN-98 21:32
Client ID:
Sample Info: met blk q2f80026

Column phase: db-5 30m .25um film

Instrument: gcf.:

Operator: klb
Column diameter: 0.32



0062

Data File: /chem/aux1/gcf.i/f011798.b/ff7356.d
Report Date: 19-Jan-1998 09:26

OHM Analytical Division

Data file : /chem/aux1/gcf.i/f011798.b/ff7356.d
Lab Smp Id:
Inj Date : 17-JAN-98 21:32
Operator : klb Inst ID: gcf.i
Smp Info : met blk q2f80026
Misc Info : q2f80026f,q2f80026,gl,1,1,
Comment :
Method : /chem/aux1/gcf.i/f011798.b/011798_gcf_teh.m
Meth Date : 19-Jan-1998 09:24 Quant Type: ESTD
Cal Date : 17-JAN-98 18:49 Cal File: ff7353.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.10

KL 1/19/98

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)
M	1 DRO(C10 - C21)	Compound Not Detected.					
	2 dro1	5.280	11.277	-5.997	274528	57.419	57.419(M)
	3 dro2	13.450	12.703	0.747	9268	0.817	0.817(M)
	4 dro3	Compound Not Detected.					
	5 Total heavy(C21 - C40)	Compound Not Detected.					
S	6 2-Fluorobiphenyl	12.283	12.297	-0.014	1037094	62.930	62.930(M)
S	7 o-Terphenyl	18.807	18.817	-0.010	1313873	73.195	73.195(M)

QC Flag Legend

M - Compound response manually integrated.

1B (GC)
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET 0064

EPA SAMPLE NO.

B117-306MS

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: _____ Case No.: 19568N SAS No.: _____ SDG No.: Q2F80026

Matrix: (soil/water) SOIL Lab Sample ID: JR9118FS

Sample wt/vol: 30.4 (g/mL) G Lab File ID: FF7358

Level: (low/med) _____ Date Received: 01/13/98

% Moisture: 16 decanted: (Y/N) ___ Date Extracted: 01/14/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/17/98

Injection Volume: 1000 (uL) Dilution Factor: 1.0

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

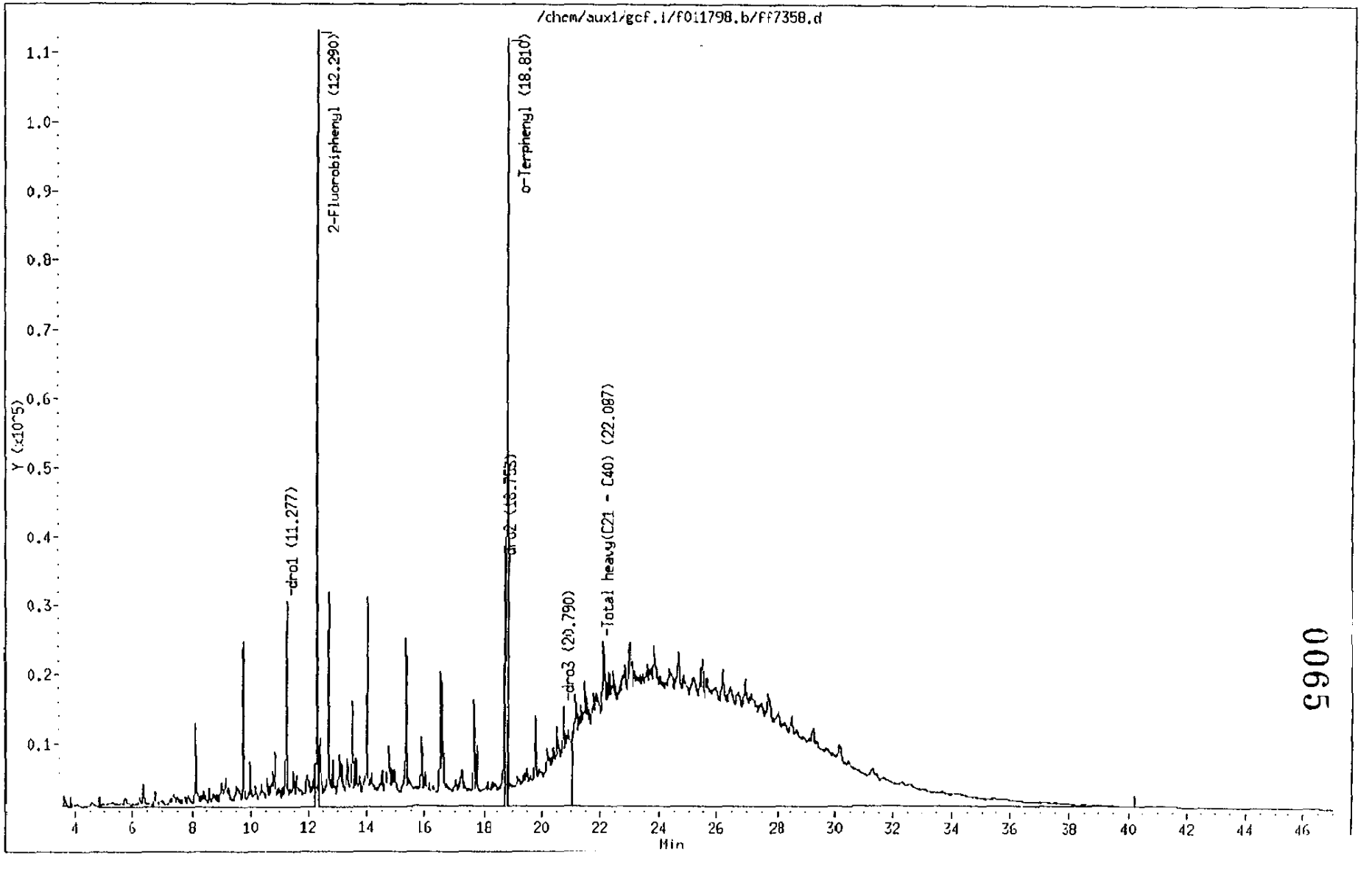
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
	DRO(C10 - C21)	29000	

Data File: /chem/aux1/gcf.1/f011798.b/ff7358.d
Date : 17-JAN-98 23:21
Client ID:
Sample Info: 19568n b117-306 ms q2f80026

Column phase: db-5 30m .25um film

Instrument: gcf.1

Operator: klb
Column diameter: 0.32



0065

Data File: /chem/aux1/gcf.i/f011798.b/ff7358.d
Report Date: 19-Jan-1998 09:30

OHM Analytical Division

Data file : /chem/aux1/gcf.i/f011798.b/ff7358.d
Lab Smp Id:
Inj Date : 17-JAN-98 23:21
Operator : klb Inst ID: gcf.i
Smp Info : 19568n b117-306 ms q2f80026
Misc Info : jr9118fs,q2f80026,gl,1,1,
Comment :
Method : /chem/aux1/gcf.i/f011798.b/011798_gcf_teh.m
Meth Date : 19-Jan-1998 09:24 Quant Type: ESTD
Cal Date : 17-JAN-98 18:49 Cal File: ff7353.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.10

JH
1/19/98

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)
M	1 DRO(C10 - C21)				16020658	729.870	729.870
	2 dro1	11.277	11.277	0.000	4168752	871.921	871.921(M)
	3 dro2	18.753	12.703	6.050	7952601	701.103	701.103(M)
	4 dro3	20.790	19.787	1.003	3899305	668.904	668.904(M)
	5 Total heavy(C21 - C40)	22.087	22.973	-0.886	46278943	3714.200	3714.200(M)
$	6 2-Fluorobiphenyl	12.290	12.297	-0.007	1193859	72.442	72.442(M)
$	7 o-Terphenyl	18.810	18.817	-0.007	1294982	72.143	72.143(M)

QC Flag Legend

M - Compound response manually integrated.

1B (GC)
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

0067

EPA SAMPLE NO.

B117-306MSD

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: _____ Case No.: 19568N SAS No.: _____ SDG No.: Q2F80026

Matrix: (soil/water) SOIL Lab Sample ID: JR9118FR

Sample wt/vol: 30.3 (g/mL) G Lab File ID: FF7359

Level: (low/med) _____ Date Received: 01/13/98

% Moisture: 16 decanted: (Y/N) ___ Date Extracted: 01/14/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/18/98

Injection Volume: 1000 (uL) Dilution Factor: 1.0

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

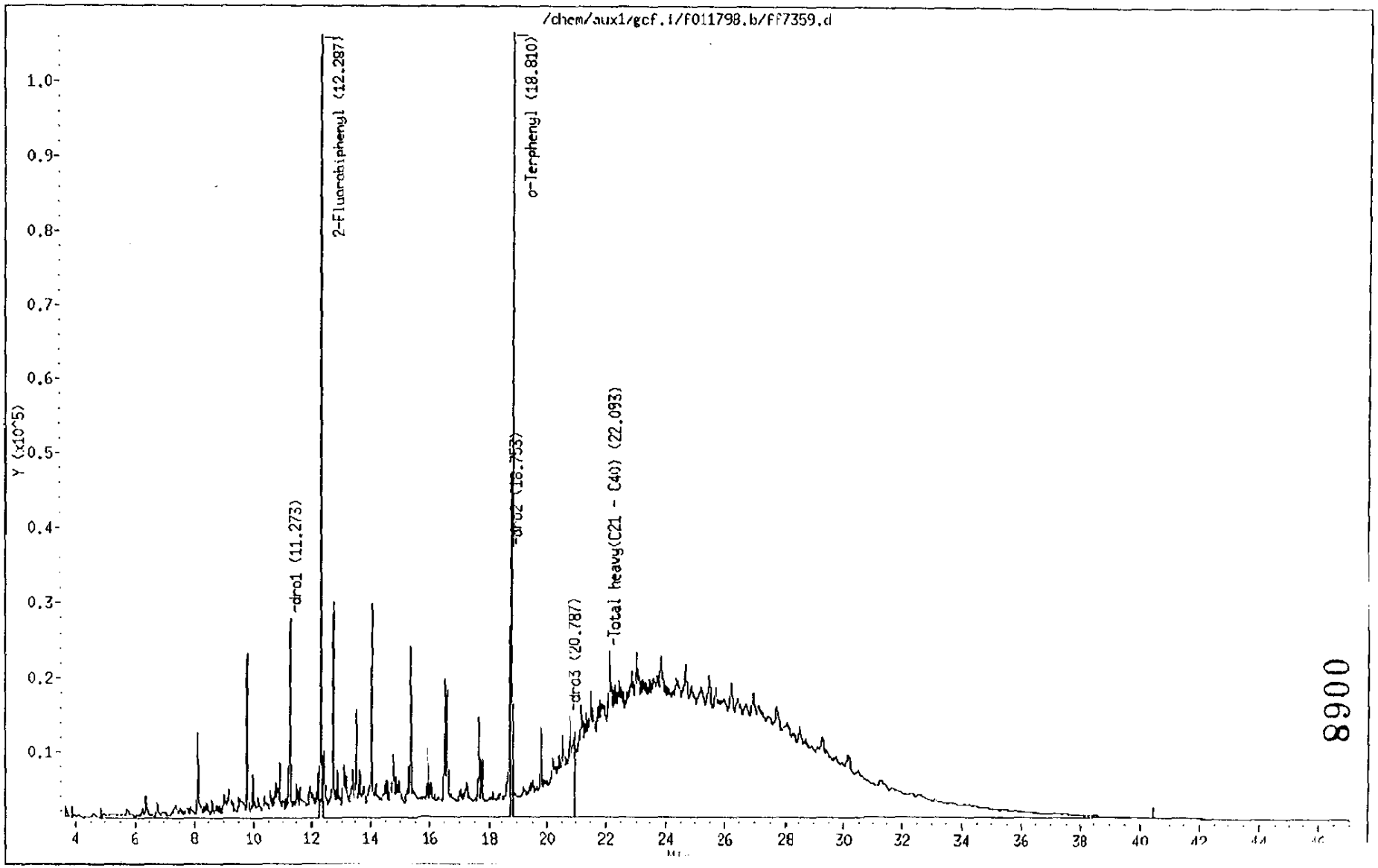
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
	DRO(C10 - C21)	28000	

Data File: /chem/aux1/gcf.i/f011798.b/ff7359.d
Date : 18-JAN-98 00:15
Client ID:
Sample Info: 1956Bn b117-306 msd q2f80026

Column phase: db-5 30m .25um film

Instrument: gcf.i

Operator: klb
Column diameter: 0.32



0068

OHM Analytical Division

gl
1/19/98

Data file : /chem/aux1/gcf.i/f011798.b/ff7359.d
Lab Smp Id:
Inj Date : 18-JAN-98 00:15
Operator : klb Inst ID: gcf.i
Smp Info : 19568n b117-306 msd q2f80026
Misc Info : jr9118fr,q2f80026,g1,1,1,
Comment :
Method : /chem/aux1/gcf.i/f011798.b/011798_gcf_teh.m
Meth Date : 19-Jan-1998 09:24 Quant Type: ESTD
Cal Date : 17-JAN-98 18:49 Cal File: ff7353.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.10

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/ml)
M	1 DRO(C10 - C21)				15469763	704.772	704.772
	2 dro1	11.273	11.277	-0.004	3909618	817.722	817.722(M)
	3 dro2	18.753	12.703	6.050	7916815	697.948	697.948(M)
	4 dro3	20.787	19.787	1.000	3643329	624.992	624.992(M)
	5 Total heavy(C21 - C40)	22.093	22.973	-0.880	44795532	3595.227	3595.227(M)
S	6 2-Fluorobiphenyl	12.287	12.297	-0.010	1109334	67.314	67.314(M)
S	7 o-Terphenyl	18.810	18.817	-0.007	1149885	64.060	64.060(M)

QC Flag Legend

M - Compound response manually integrated.

1B (GC)
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

0070

EPA SAMPLE NO.

FSPK01

Lab Name: OHM ANALYTICAL DIVISION Contract: NFESC

Lab Code: _____ Case No.: 19568N SAS No.: _____ SDG No.: Q2F80026

Matrix: (soil/water) SOIL Lab Sample ID: Q2F80026FS

Sample wt/vol: 30.0 (g/mL) G Lab File ID: FF7357

Level: (low/med) _____ Date Received: _____

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 01/14/98

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/17/98

Injection Volume: 1000 (uL) Dilution Factor: 1.0

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

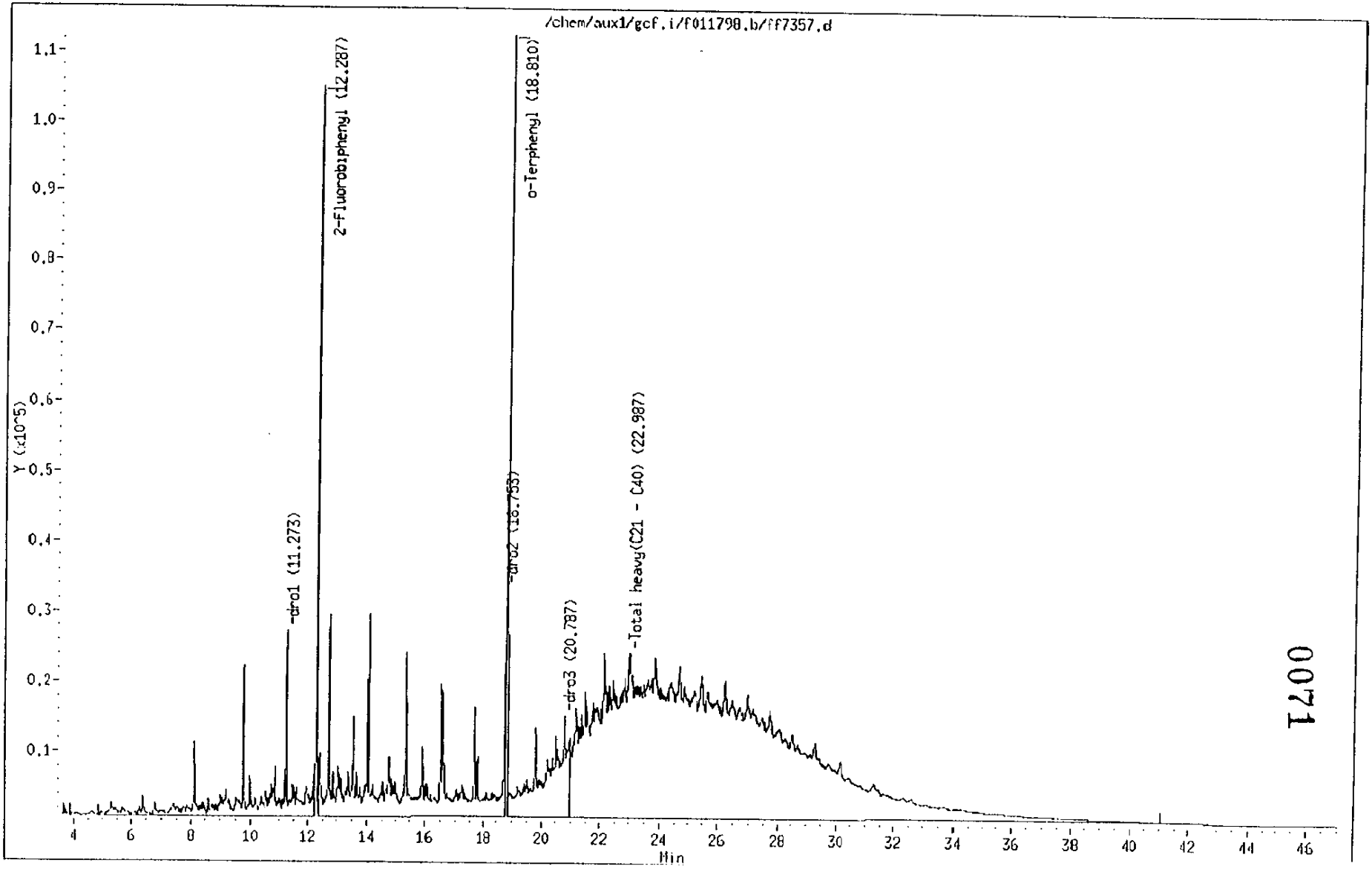
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
	DRO(C10 - C21)	23000	

Data File: /chem/aux1/gcf.i/f011798.b/ff7357.d
Date : 17-JAN-98 22:27
Client ID:
Sample Info: met spk q2f80026

Column phase: db-5 30m .25um film

Instrument: gcf.i

Operator: klb
Column diameter: 0.32



0071

OHM Analytical Division

Data file : /chem/aux1/gcf.i/f011798.b/ff7357.d
Lab Smp Id:
Inj Date : 17-JAN-98 22:27
Operator : klb Inst ID: gcf.i
Smp Info : met spk q2f80026
Misc Info : q2f80026fs,q2f80026,g1,1,1,
Comment :
Method : /chem/aux1/gcf.i/f011798.b/011798_gcf_teh.m
Meth Date : 19-Jan-1998 09:24 Quant Type: ESTD
Cal Date : 17-JAN-98 18:49 Cal File: ff7353.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.10

94
1/19/98

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/ml)
M 1 DRO(C10 - C21)				15103546	688.088	688.088
2 dro1	11.273	11.277	-0.004	3800580	794.915	794.915(M)
3 dro2	18.753	12.703	6.050	7635497	673.147	673.147(M)
4 dro3	20.737	19.787	1.000	3667468	629.133	629.133(M)
5 Total heavy(C21 - C40)	22.987	22.973	0.014	45480215	3650.097	3650.097(M)
S 6 2-Fluorobiphenyl	12.287	12.297	-0.010	1085207	65.849	65.849(M)
S 7 o-Terphenyl	18.810	18.817	-0.007	1323085	73.709	73.709(M)

QC Flag Legend

M - Compound response manually integrated.

ACCUTEST

10/05/99

Technical Report for

IT Corporation

Bainbridge

Accutest Job Number: F4924

Report to:

IT Corporation
2790 Mosside Blvd.
Monroeville, PA 15146

ATTN: Larry Stearns

Total number of pages in report: 54

Harry Behzadi, Ph.D.
Laboratory Director

Results relate only to the items tested.
This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

ACCUTEST

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ACCUTEST

Sample Summary

IT Corporation

Bainbridge

Job No: F4924

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
F4924-1	09/21/99	08:45 DT	09/22/99	SO	Soil	917-01A
F4924-2	09/21/99	08:15 DT	09/22/99	SO	Soil	908 01A
F4924-3	09/21/99	08:20 DT	09/22/99	SO	Soil	908-02A
F4924-4	09/21/99	08:30 DT	09/22/99	SO	Soil	912-01A

ACCUTEST

Report of Analysis

Client Sample ID:	917-01A		
Lab Sample ID:	F4924 1	**Date Sampled:**	09/21/99
Matrix:	SO - Soil	**Date Received:**	09/22/99
Method:	SW846 8015 M	**Percent Solids:**	85.2
Project:	Bainbridge		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP05285.D	1	09/23/99	ME	09/23/99	OP994	GOP253
Run #2							

CAS No.	Compound	Result	RDL	Units	Q
	TPH (C10-C28)	49.6	9.8	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	95%		40-140%

ND = Not detected
RDL = Reported Detection Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

ACCUTEST

Report of Analysis

Client Sample ID:	908-01A		
Lab Sample ID:	F4924-2	**Date Sampled:**	09/21/99
Matrix:	SO - Soil	**Date Received:**	09/22/99
Method:	SW846 8015 M	**Percent Solids:**	84.0
Project:	Bainbridge		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP05286.D	1	09/23/99	ME	09/23/99	OP994	GOP253
Run #2							

CAS No.	Compound	Result	RDL	Units	Q
	TPH (C10-C28)	28.0	9.9	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	93%		40-140%

ND = Not detected
RDL = Reported Detection Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

ACCUTEST

Report of Analysis

Client Sample ID:	908-02A		
Lab Sample ID:	F4924-3	**Date Sampled:**	09/21/99
Matrix:	SO - Soil	**Date Received:**	09/22/99
Method:	SW846 8015 M	**Percent Solids:**	87.5
Project:	Bainbridge		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP05287.D	1	09/23/99	ME	09/23/99	OP994	GOP253
Run #2							

CAS No.	Compound	Result	RDL	Units	Q
	TPH (C10-C28)	19.6	9.5	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	97%		40-140%

ND = Not detected
RDL = Reported Detection Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

ACCUTEST

Report of Analysis

Client Sample ID:	912-01A		
Lab Sample ID:	F4924-4	**Date Sampled:**	09/21/99
Matrix:	SO - Soil	**Date Received:**	09/22/99
Method:	SW846 8015 M	**Percent Solids:**	78.0
Project:	Bainbridge		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP05290.D	1	09/23/99	ME	09/23/99	OP994	GOP253
Run #2							

CAS No.	Compound	Result	RDL	Units	Q
	TPH (C10-C28)	ND	11	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	94%		40-140%

ND = Not detected
RDL = Reported Detection Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

INTERNATIONAL TECHNOLOGY CORPORATION

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD*

Reference Document No. 559854
Page 1 of 1

Project Name/No. 1 Bainbridge 798939
Sample Team Members 2 Treater / Klinger
Profit Center No. 3 ——
Project Manager 4 L. Stearns
Purchase Order No. 6 798939-007
Required Report Date 11 3 days

Samples Shipment Date 7 9/21/99
Lab Destination 8 Accutest Lab 407-425-6700
Lab Contact 9 Susan Gaudios 410-378-3450
Project Contact/Phone 12 Dick Treater
Carrier/Waybill No. 13 Fedex 791793272873

Bill to: 5 IT Corp
2790 Mosside Blvd
Monroeville, PA 15146

Report to: 10 Fax to Larry Stearns 412-380-0699
IT Corp
2790 Mosside Blvd
Monroeville, PA 15146

ONE CONTAINER PER LINE

Sample Number 14	Sample Description/Type 15	Date/Time Collected 16	Container Type 17	Sample Volume 18	Pre-servative 19	Requested Testing Program 20	Condition on Receipt 21	Disposal Record No. 22
917-01A	Grab Bldg 917 Tank Floor & exc	9/21/99 0845	1-4oz	4oz	4°C	TPH DRO 8015 Modified	E4924-1	
908-01A	Grab Bldg 908 Tank Floor & exc	9/21/99 0815	|	|	|	|	-2	
908-02A	Grab Bldg 908 Tank Floor & exc	9/21/99 0820	|	|	|	|	-3	MS/MSD
912-01A	Grab Bldg 912 Tank Floor & exc	9/21/99 0830	|	|	|	|	-4	

Special Instructions: 23 Fax results to Larry Stearns @ 412-380-0699

Possible Hazard Identification: 24 Petroleum Hydrocarbons
Non-hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☒

Sample Disposal: 25
Return to Client ☐ Disposal by Lab ☒ Archive (mos.)

Turnaround Time Required: 26
Normal ☐ Rush ☒ 3 days

QC Level: 27
I. ☐ II. ☐ III. ☒ Project Specific (specify): Navy NFESC Level C

1. Relinquished by 28 (Signature/Affiliation) Dick Treater / Dick Treater / IT	Date: 9/21/99 Time: 1730	1. Received by 28 (Signature/Affiliation) Abby Wilson	Date: 9-22-99 Time: 1115
2. Relinquished by (Signature/Affiliation)	Date: Time:	2. Received by (Signature/Affiliation)	Date: Time:
3. Relinquished by (Signature/Affiliation)	Date: Time:	3. Received by (Signature/Affiliation)	Date: Time:

Comments: 29 Dick Treater and Frank Zepka Cooler N/C
Fax results to 410-378-3232 and 02-433-7018

MCA 3/15

Accutest Laboratories Southeast
Case Narrative

Job (SDG) No.: F4924

Samples: 1-4

Analysis Performed: 8015 M

1) Sample Receipt Conformance / Non-Conformance Summary

Custody Seals on Coolers?	Yes (✓)	No ( )
Custody Seals in Tact?	Yes (✓)	No ( )
Chain of Custody Sealed in Plastic?	Yes (✓)	No ( )
Chain of Custody Filled out Properly?	Yes (✓)	No ( )
Enough ice and Packing material?	Yes (✓)	No ( )
All Bottles Sealed?	Yes (✓)	No ( )
Any Bottles Broken?	Yes ( )	No (✓)
Labels in good condition?	Yes (✓)	No ( )
Labels agree with chain of custody?	Yes (✓)	No ( )
Correct Containers Used?	Yes (✓)	No ( )
Preserved Properly?	Yes (✓)	No ( )
Sufficient Sample?	Yes (✓)	No ( )

Comments: _____

ORGANICS RUN NARRATIVE

Instrument (11) 4/2 FID2 Date 4/24/97

Initial Calibration or Initial Continuing Calibration Check met method criteria except as noted:

Continuing Calibration Check(s) met method criteria except as noted:

Acceptable Initial and Continuing Calibration Checks bracketed all samples with detected target analytes.

Method blank met method criteria except as noted:

QC Samples met method criteria except as noted:

Note any unusual run occurrences below:

N/A

000009

SAMPLE RESULT SUMMARY

Report of Analysis

Client Sample ID:	917-01A		
Lab Sample ID:	F4924-1	**Date Sampled:**	09/21/99
Matrix:	SO - Soil	**Date Received:**	09/22/99
Method:	SW846 8015 M	**Percent Solids:**	85.2
Project:	Bainbridge		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP05285.D	1	09/23/99	ME	09/23/99	OP994	GOP253
Run #2							

CAS No.	Compound	Result	RDL	Units	Q
	TPH (C10-C28)	49.6	9.8	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	95%		40-140%

ND = Not detected
RDL = Reported Detection Limit
E = Indicates value exceeds calibration range

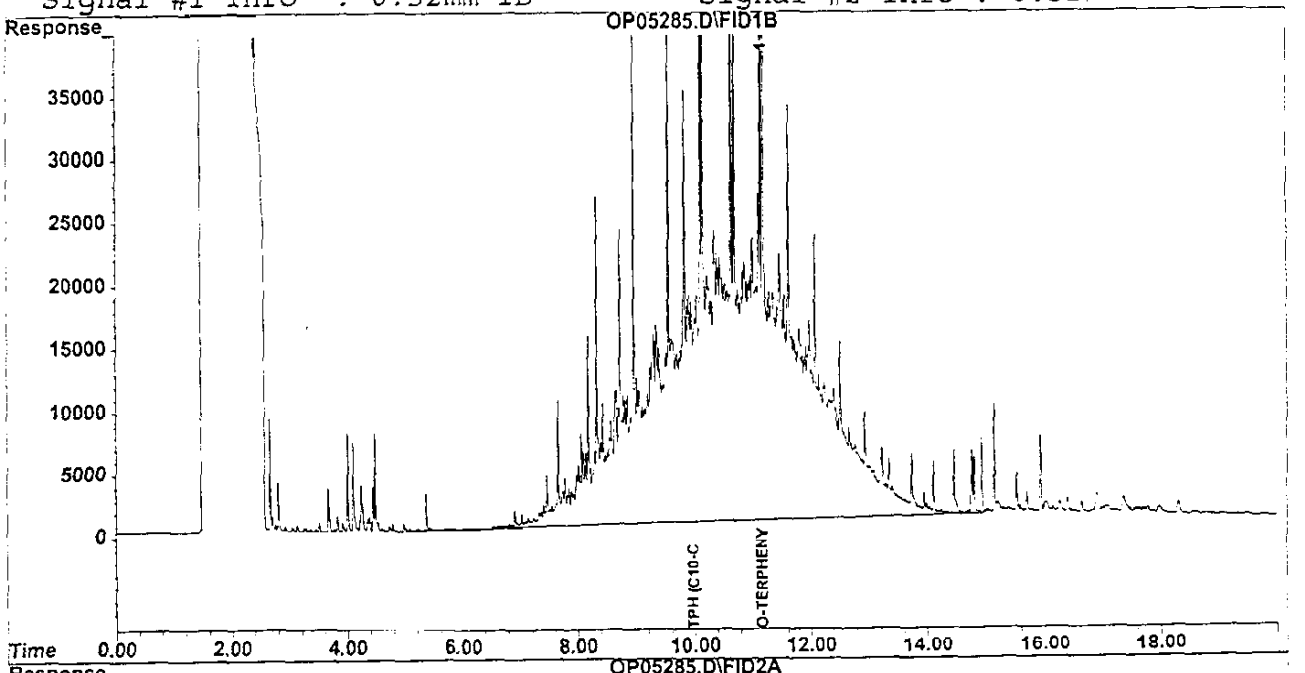
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

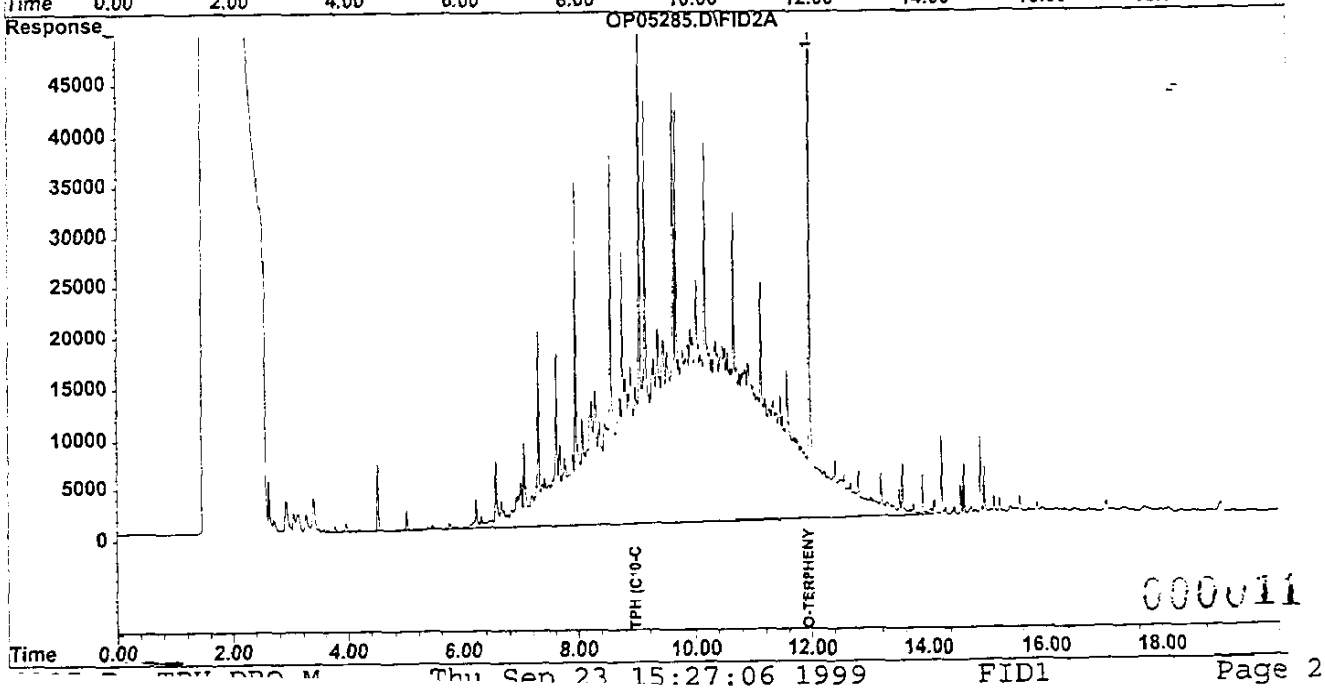
Quantitation Report

Signal #1 : C:\HPCHEM\2\DATA\0923DRO\OP05285.D\FID1B.CH Vial: 10
Signal #2 : C:\HPCHEM\2\DATA\0923DRO\OP05285.D\FID2A.CH
Acq On : 23 Sep 1999 3:05 pm Operator: marke
Sample : f4924-1 Inst : FID 2
Misc : op994,gop253,soil,,,1, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 23 15:26 1999 Quant Results File: TPH_DRO.RES

Quant Method : C:\HPCHEM\2\METHODS\TPH_DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Thu Sep 23 10:15:02 1999
Response via : Multiple Level Calibration
DataAcq Meth : TPH_DRO.M

Volume Inj. : 2uL
Signal #1 Phase : DB-5 Signal #2 Phase: DB-17
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID





000011

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\2\DATA\0923DRO\OP05285.D\FID1B.CH Vial: 10
Signal #2 : C:\HPCHEM\2\DATA\0923DRO\OP05285.D\FID2A.CH
Acq On : 23 Sep 1999 3:05 pm Operator: marke
Sample : f4924-1 Inst : FID 2
Misc : op994,gop253,soil,,,1, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 23 15:26 1999 Quant Results File: TPH_DRO.RES

Quant Method : C:\HPCHEM\2\METHODS\TPH_DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Thu Sep 23 10:15:02 1999
Response via : Initial Calibration
DataAcq Meth : TPH_DRO.M

Volume Inj. : 2uL
Signal #1 Phase : DB-5 Signal #2 Phase: DB-17
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	PPM	PPM
System Monitoring Compounds						
1) S O-TERPHENYL	11.19	11.98	1687720	1712604	47.599m	49.153m
Spiked Amount 50.000 Range 40 - 140 Recovery =					95.20%	98.31%
Target Compounds						
2) H TPH (C10-C28)	10.00	9.00	42706034	39888089	1269.255	1289.296

30.0g

TPH-42

000012

1/2 Window (#)-Amounts differ by > 25% (m)=manual int.

Report of Analysis

Client Sample ID:	908-01A		
Lab Sample ID:	F4924 2	**Date Sampled:**	09/21/99
Matrix:	SO - Soil	**Date Received:**	09/22/99
Method:	SW846 8015 M	**Percent Solids:**	84.0
Project:	Bainbridge		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP05286.D	1	09/23/99	ME	09/23/99	OP994	GOP253
Run #2							

CAS No.	Compound	Result	RDL	Units	Q
	TPH (C10-C28)	28.0	9.9	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	93%		40-140%

ND = Not detected
RDL = Reported Detection Limit
E = Indicates value exceeds calibration range

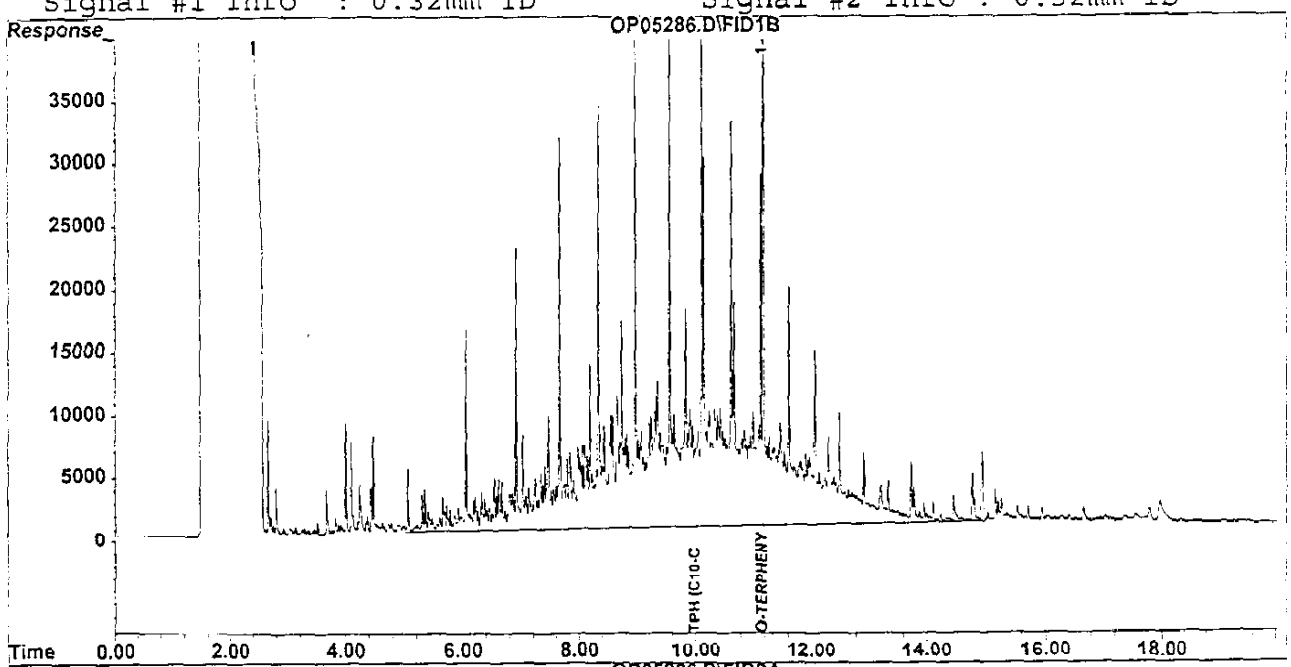
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

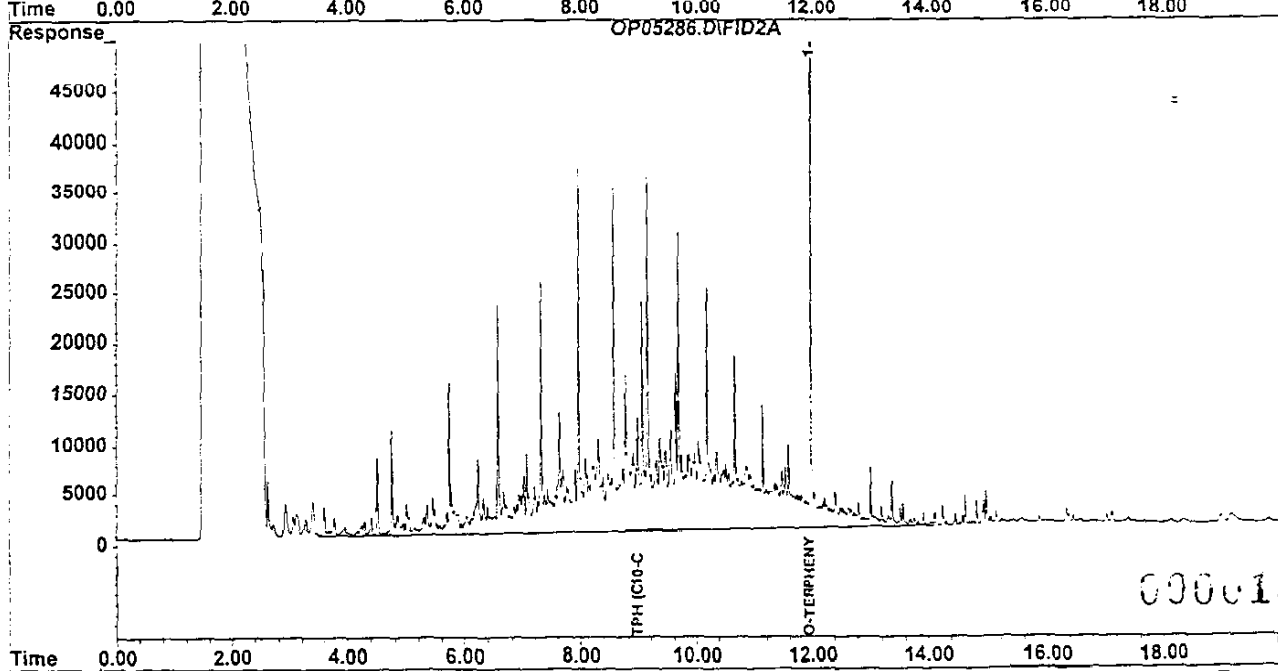
Quantitation Report

Signal #1 : C:\HPCHEM\2\DATA\0923DRO\OP05286.D\FID1B.CH Vial: 11
Signal #2 : C:\HPCHEM\2\DATA\0923DRO\OP05286.D\FID2A.CH
Acq On : 23 Sep 1999 3:32 pm Operator: marke
Sample : f4924-2 Inst : FID 2
Misc : op994,gop253,soil,,,1, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 23 15:53 1999 Quant Results File: TPH_DRO.RES

Quant Method : C:\HPCHEM\2\METHODS\TPH_DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Thu Sep 23 10:15:02 1999
Response via : Multiple Level Calibration
DataAcq Meth : TPH_DRO.M

Volume Inj. : 2uL
Signal #1 Phase : DB-5 Signal #2 Phase: DB-17
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID





000014

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\2\DATA\0923DRO\OP05286.D\FID1B.CH Vial: 11
Signal #2 : C:\HPCHEM\2\DATA\0923DRO\OP05286.D\FID2A.CH
Acq On : 23 Sep 1999 3:32 pm Operator: marke
Sample : f4924-2 Inst : FID 2
Misc : op994,gop253,soil,,,1, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 23 15:53 1999 Quant Results File: TPH_DRO.RES

Quant Method : C:\HPCHEM\2\METHODS\TPH_DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Thu Sep 23 10:15:02 1999
Response via : Initial Calibration
DataAcq Meth : TPH_DRO.M

Volume Inj. : 2uL
Signal #1 Phase : DB-5 Signal #2 Phase: DB-17
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	PPM	PPM
System Monitoring Compounds						
1) S O-TERPHENYL	11.19	11.98	1642135	1673177	46.314m	48.021
Spiked Amount 50.000 Range 40 - 140 Recovery =					92.63%	96.04%
Target Compounds						
2) H TPH (C10-C28)	10.00	9.00	23786303	21706012	706.947	701.600
					30.0g	

DRO-24

000015

(#) RT Delta 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Report of Analysis

Client Sample ID:	908-02A		
Lab Sample ID:	F4924-3	**Date Sampled:**	09/21/99
Matrix:	SO - Soil	**Date Received:**	09/22/99
Method:	SW846 8015 M	**Percent Solids:**	87.5
Project:	Bainbridge		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP05287.D	1	09/23/99	ME	09/23/99	OP994	GOP253
Run #2							

CAS No.	Compound	Result	RDL	Units	Q
	TPH (C10-C28)	19.6	9.5	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	97%		40-140%

ND = Not detected
RDL = Reported Detection Limit
E = Indicates value exceeds calibration range

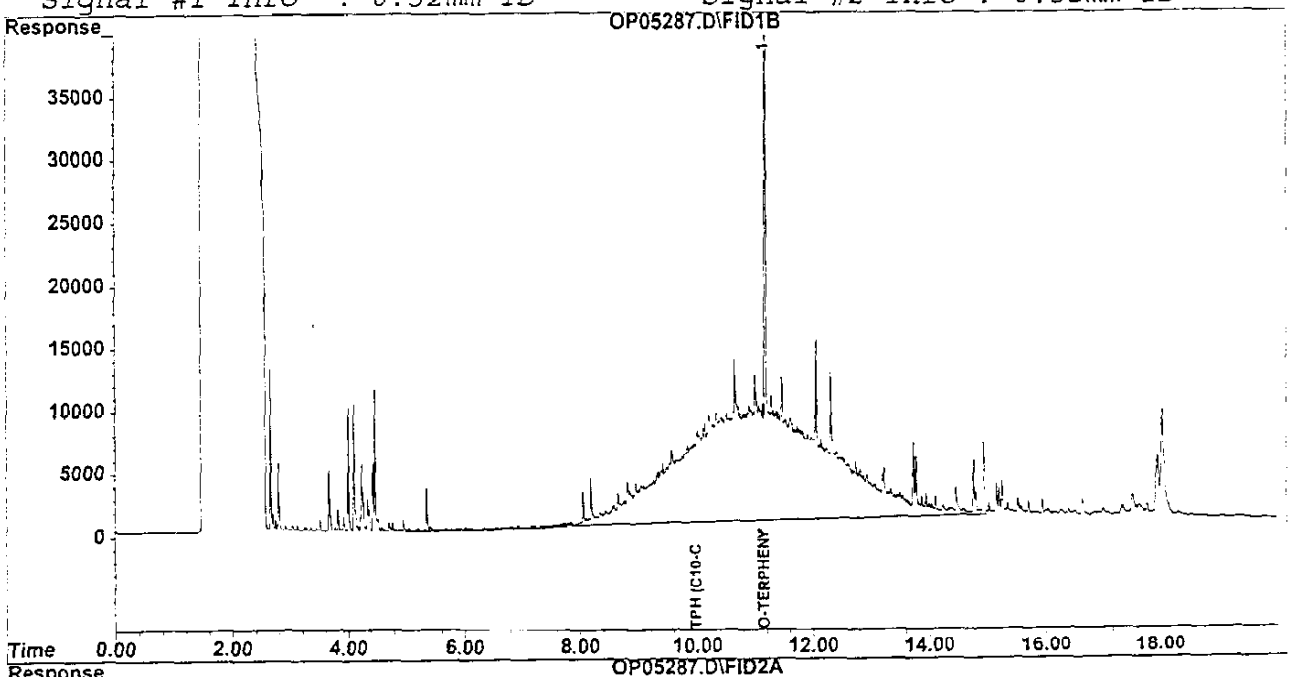
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

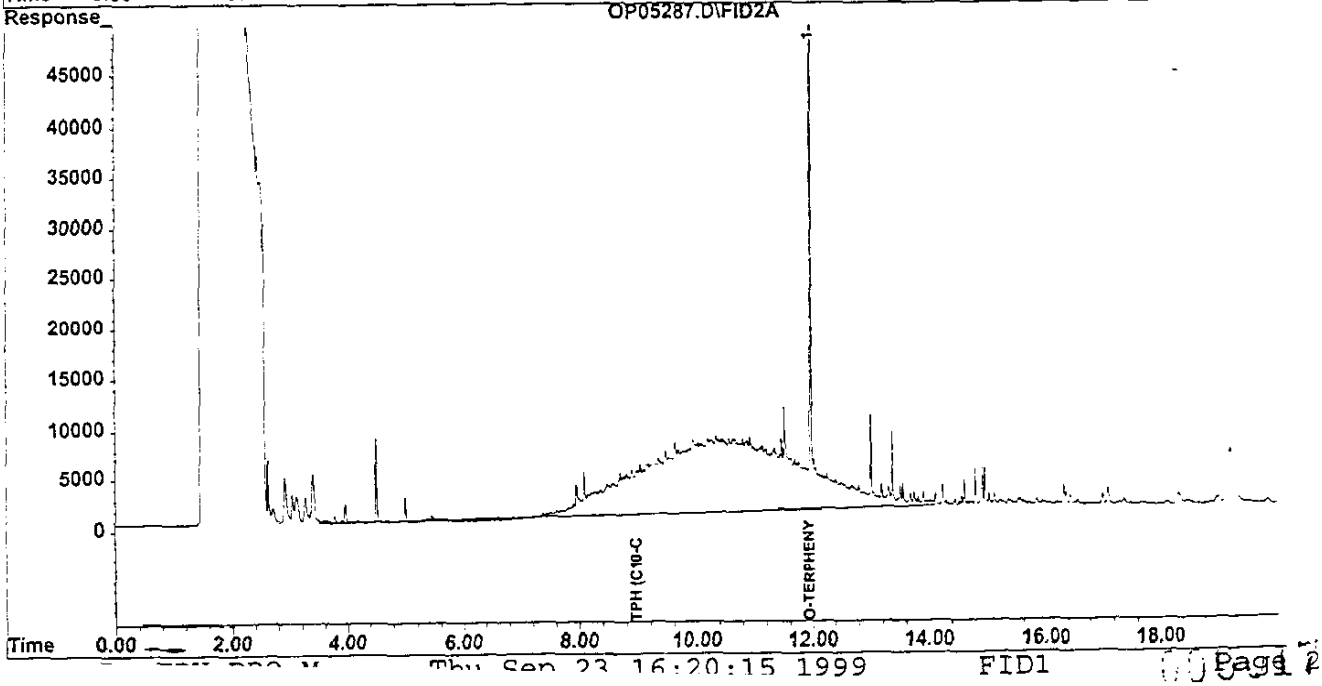
Quantitation Report

Signal #1 : C:\HPCHEM\2\DATA\0923DRO\OP05287.D\FID1B.CH Vial: 12
Signal #2 : C:\HPCHEM\2\DATA\0923DRO\OP05287.D\FID2A.CH
Acq On : 23 Sep 1999 3:59 pm Operator: marke
Sample : f4924-3 Inst : FID 2
Misc : op994,gop253,soil,,,1, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 23 16:19 1999 Quant Results File: TPH_DRO.RES

Quant Method : C:\HPCHEM\2\METHODS\TPH_DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Thu Sep 23 10:15:02 1999
Response via : Multiple Level Calibration
DataAcq Meth : TPH_DRO.M

Volume Inj. : 2uL
Signal #1 Phase : DB-5 Signal #2 Phase: DB-17
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID





Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\2\DATA\0923DRO\OP05287.D\FID1B.CH Vial: 12
Signal #2 : C:\HPCHEM\2\DATA\0923DRO\OP05287.D\FID2A.CH
Acq On : 23 Sep 1999 3:59 pm Operator: marke
Sample : f4924-3 Inst : FID 2
Misc : op994,gop253,soil,,,1, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 23 16:19 1999 Quant Results File: TPH_DRO.RES

Quant Method : C:\HPCHEM\2\METHODS\TPH_DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Thu Sep 23 10:15:02 1999
Response via : Initial Calibration
DataAcq Meth : TPH_DRO.M

Volume Inj. : 2uL
Signal #1 Phase : DB-5 Signal #2 Phase: DB-17
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	PPM	PPM
System Monitoring Compounds						
1) S O-TERPHENYL	11.19	11.98	1724997	1738007	48.651	49.882
Spiked Amount 50.000 Range 40 - 140 Recovery =					97.30%	99.76%
Target Compounds						
2) H TPH (C10-C28)	10.00	9.00	17308871	14981990	514.433	484.260

300 Dy

DRO=17

000018

(f) RT Delta: 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Report of Analysis

Client Sample ID:	912-01A		
Lab Sample ID:	F4924-4	**Date Sampled:**	09/21/99
Matrix:	SO - Soil	**Date Received:**	09/22/99
Method:	SW846 8015 M	**Percent Solids:**	78.0
Project:	Bainbridge		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP05290.D	1	09/23/99	ME	09/23/99	OP994	GOP253
Run #2							

CAS No.	Compound	Result	RDL	Units	Q
	TPH (C10-C28)	ND	11	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	94%		40-140%

ND = Not detected
RDL = Reported Detection Limit
E = Indicates value exceeds calibration range

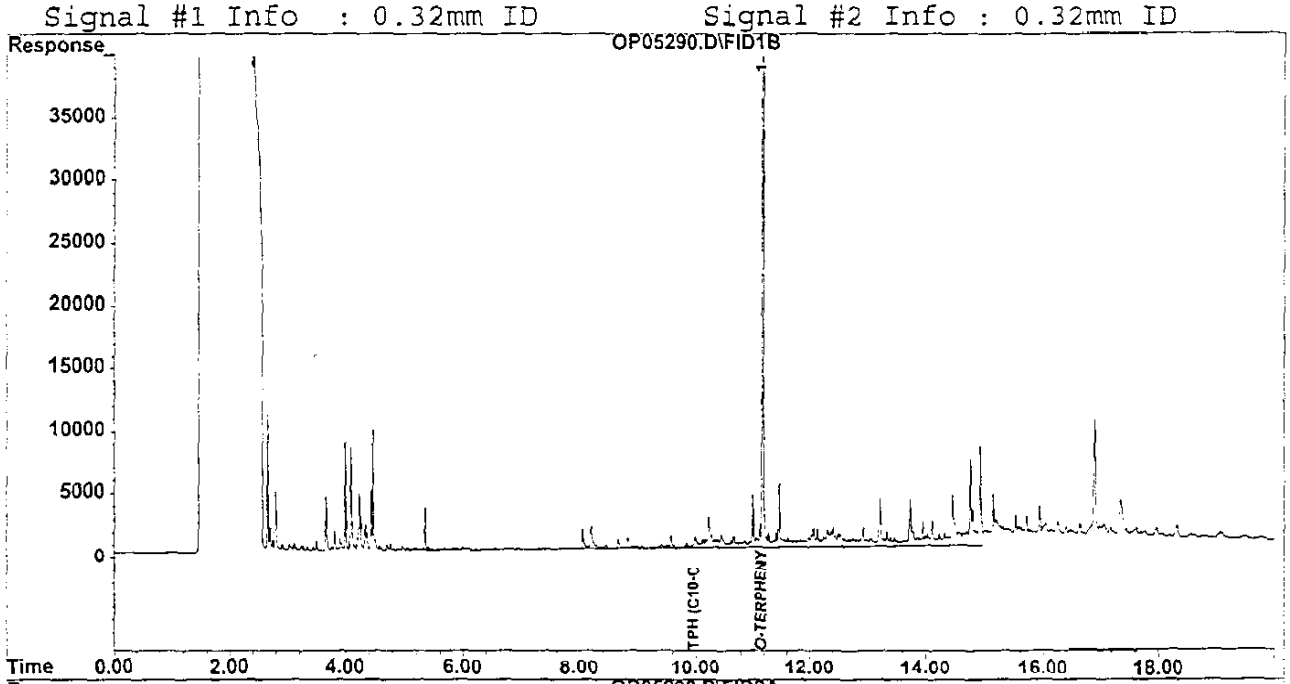
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

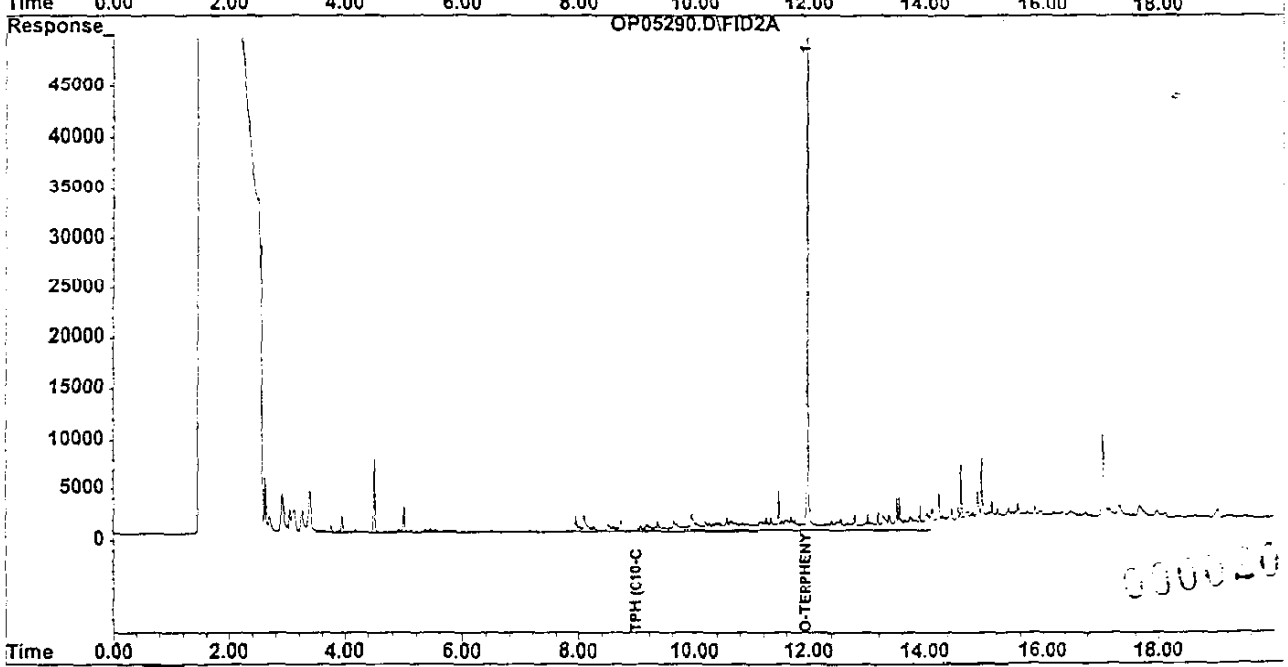
Quantitation Report

Signal #1 : C:\HPCHEM\2\DATA\0923DRO\OP05290.D\FID1B.CH Vial: 15
Signal #2 : C:\HPCHEM\2\DATA\0923DRO\OP05290.D\FID2A.CH
Acq On : 23 Sep 1999 5:19 pm Operator: marke
Sample : f4924-4 Inst : FID 2
Misc : op994,gop253,soil,,,1, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 24 8:38 1999 Quant Results File: TPH_DRO.RES

Quant Method : C:\HPCHEM\2\METHODS\TPH_DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Thu Sep 23 10:15:02 1999
Response via : Multiple Level Calibration
DataAcq Meth : TPH_DRO.M

Volume Inj. : 2uL
Signal #1 Phase : DB-5 Signal #2 Phase: DB-17
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID





Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\2\DATA\0923DRO\OP05290.D\FID1B.CH Vial: 15
Signal #2 : C:\HPCHEM\2\DATA\0923DRO\OP05290.D\FID2A.CH
Acq On : 23 Sep 1999 5:19 pm Operator: marke
Sample : f4924-4 Inst : FID 2
Misc : op994,gop253,soil,,,1, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 24 8:38 1999 Quant Results File: TPH_DRO.RES

Quant Method : C:\HPCHEM\2\METHODS\TPH_DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Thu Sep 23 10:15:02 1999
Response via : Initial Calibration
DataAcq Meth : TPH_DRO.M

Volume Inj. : 2uL
Signal #1 Phase : DB-5 Signal #2 Phase: DB-17
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	PPM	PPM
System Monitoring Compounds						
1) S O-TERPHENYL	11.19	11.98	1661180	1692775	46.851	48.584
Spiked Amount 50.000 Range 40 - 140 Recovery =					93.70%	97.17%
Target Compounds						
2) H TPH (C10-C28)	10.00	9.00	2599806	2690934	77.268	86.979

BPL

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

SURROGATE RECOVERIES SUMMARY

SGC.02

Semivolatile Surrogate Recovery Summary

Job Number: F4924
Account: ITPAMONR IT Corporation
Project: Bainbridge

Method: SW846 8015 M **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]
F4924-1	OP05285.D	95.0
F4924-2	OP05286.D	93.0
F4924-3	OP05287.D	97.0
F4924-4	OP05290.D	94.0
OP994-BS	OP05284.D	107.0
OP994-MB	OP05283.D	100.0
OP994-MS	OP05288.D	99.0
OP994-MSD	OP05289.D	93.0

Surrogate Compounds	Recovery Limits
S1 = o-Terphenyl	40-140%

(a) Recovery from GC signal #1

MATRIX SPIKE/ MATRIX SPIKE DUPLICATE/ BLANK SPIKE SUMMARY

Blank Spike Summary

Job Number: F4924
Account: ITPAMONR IT Corporation
Project: Bainbridge

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP994-BS	OP05284.D	1	09/23/99	ME	09/23/99	OP994	GOP253

The QC reported here applies to the following samples: **Method:** SW846 8015 M

F4924-1, F4924-2, F4924-3, F4924-4

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH (C10-C28)	33.3	36.6	110	40-135

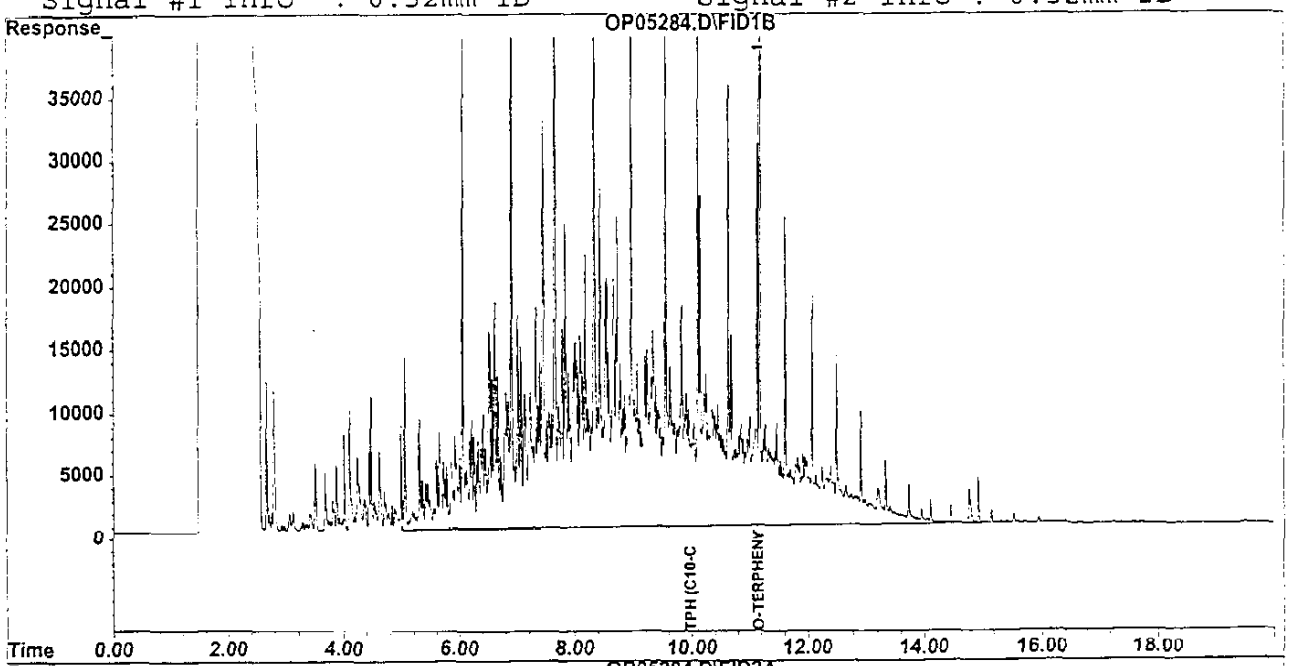
CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	107%	40-140%

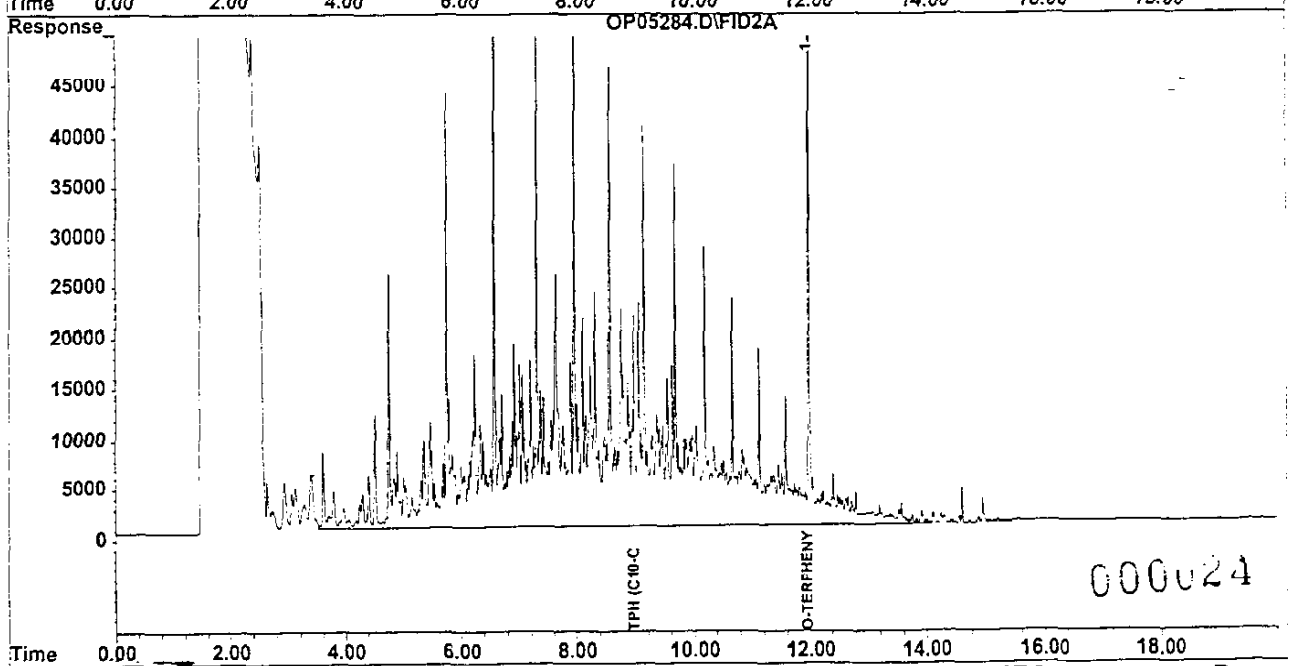
Quantitation Report

Signal #1 : C:\HPCHEM\2\DATA\0923DRO\OP05284.D\FID1B.CH Vial: 9
Signal #2 : C:\HPCHEM\2\DATA\0923DRO\OP05284.D\FID2A.CH
Acq On : 23 Sep 1999 2:39 pm Operator: marke
Sample : op994-bs Inst : FID 2
Misc : op994,gop253,soil,,,1, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 23 15:01 1999 Quant Results File: TPH_DRO.RES

Quant Method : C:\HPCHEM\2\METHODS\TPH_DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Thu Sep 23 10:15:02 1999
Response via : Multiple Level Calibration
DataAcq Meth : TPH_DRO.M

Volume Inj. : 2uL
Signal #1 Phase : DB-5 Signal #2 Phase: DB-17
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID





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Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\2\DATA\0923DRO\OP05284.D\FID1B.CH Vial: 9
Signal #2 : C:\HPCHEM\2\DATA\0923DRO\OP05284.D\FID2A.CH
Acq On : 23 Sep 1999 2:39 pm Operator: marke
Sample : op994-bs Inst : FID 2
Misc : op994,gop253,soil,,,1, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 23 15:01 1999 Quant Results File: TPH_DRO.RES

Quant Method : C:\HPCHEM\2\METHODS\TPH_DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Thu Sep 23 10:15:02 1999
Response via : Initial Calibration
DataAcq Meth : TPH_DRO.M

Volume Inj. : 2uL
Signal #1 Phase : DB-5 Signal #2 Phase: DB-17
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	PPM	PPM
System Monitoring Compounds						
1) S O-TERPHENYL	11.19	11.98	1902657	1892775	53.661	54.324
Spiked Amount 50.000 Range 40 - 140 Recovery =					107.32%	108.65%
Target Compounds						
2) H TPH (C10-C28)	10.00	9.00	37036961	34525867	1100.766	1115.974

000025

(6) DT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F4924
Account: ITPAMONR IT Corporation
Project: Bainbridge

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP994-MS	OP05288.D	1	09/23/99	ME	09/23/99	OP994	GOP253
OP994-MSD	OP05289.D	1	09/23/99	ME	09/23/99	OP994	GOP253
F4924-3	OP05287.D	1	09/23/99	ME	09/23/99	OP994	GOP253

The QC reported here applies to the following samples: **Method:** SW846 8015 M

F4924-1, F4924-2, F4924-3, F4924-4

CAS No.	Compound	F4924-3 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	19.6		38.1	58.4	102	53.9	90	8	40-135/40

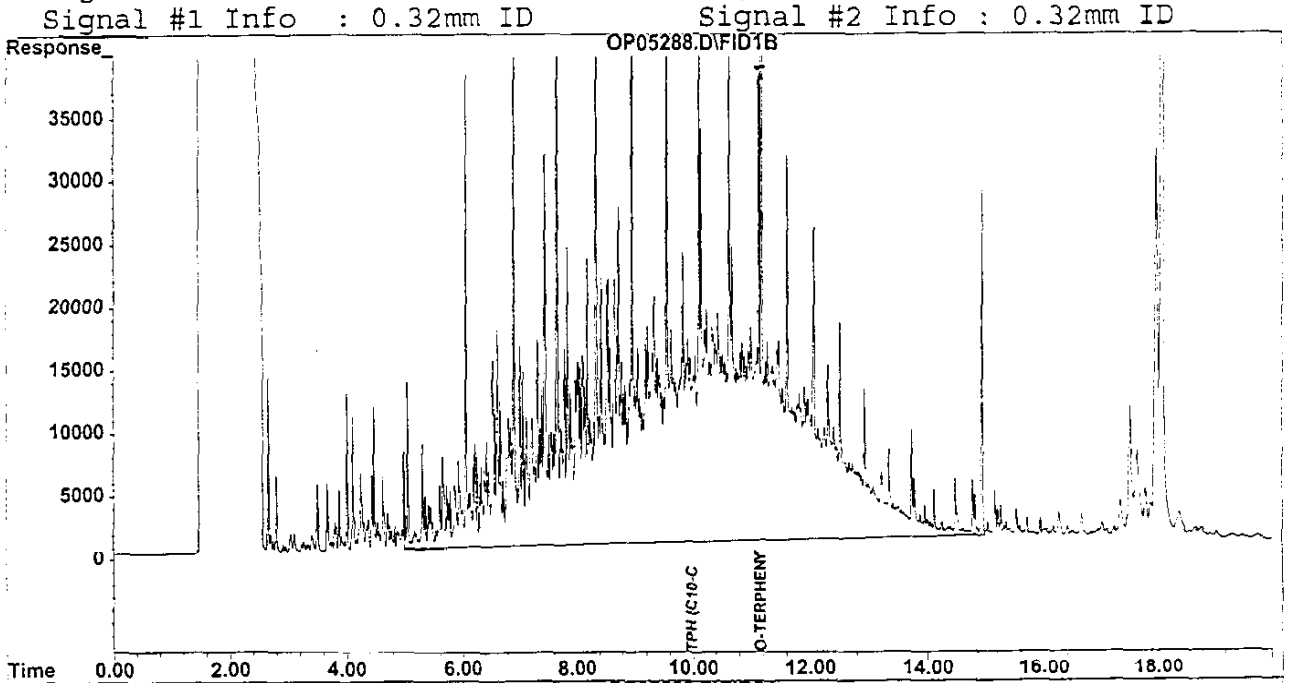
CAS No.	Surrogate Recoveries	MS	MSD	F4924-3	Limits
84-15-1	o-Terphenyl	99%	93%	97%	40-140%

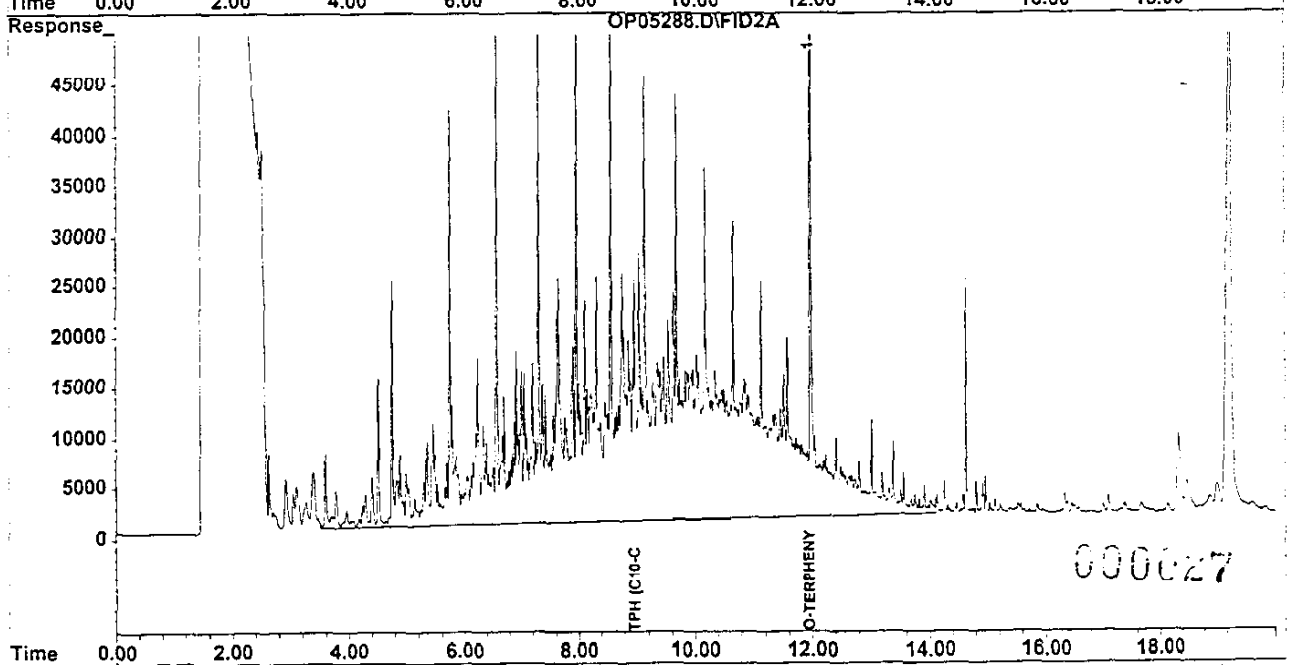
Quantitation Report

Signal #1 : C:\HPCHEM\2\DATA\0923DRO\OP05288.D\FID1B.CH Vial: 13
Signal #2 : C:\HPCHEM\2\DATA\0923DRO\OP05288.D\FID2A.CH
Acq On : 23 Sep 1999 4:25 pm Operator: marke
Sample : op994-ms Inst : FID 2
Misc : op994,gop253,soil,,,1, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 23 16:46 1999 Quant Results File: TPH_DRO.RES

Quant Method : C:\HPCHEM\2\METHODS\TPH_DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Thu Sep 23 10:15:02 1999
Response via : Multiple Level Calibration
DataAcq Meth : TPH_DRO.M

Volume Inj. : 2uL
Signal #1 Phase : DB-5 Signal #2 Phase: DB-17
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID





000027

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\2\DATA\0923DRO\OP05288.D\FID1B.CH Vial: 13
Signal #2 : C:\HPCHEM\2\DATA\0923DRO\OP05288.D\FID2A.CH
Acq On : 23 Sep 1999 4:25 pm Operator: marke
Sample : op994-ms Inst : FID 2
Misc : op994,gop253,soil,,,1, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 23 16:46 1999 Quant Results File: TPH_DRO.RES

Quant Method : C:\HPCHEM\2\METHODS\TPH_DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Thu Sep 23 10:15:02 1999
Response via : Initial Calibration
DataAcq Meth : TPH_DRO.M

Volume Inj. : 2uL
Signal #1 Phase : DB-5 Signal #2 Phase: DB-17
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	PPM	PPM
System Monitoring Compounds						
1) S O-TERPHENYL	11.19	11.98	1763176	1814095	49.727m	52.065m
Spiked Amount 50.000 Range 40 - 140 Recovery =					99.45%	104.13%
Target Compounds						
2) H TPH (C10-C28)	10.00	9.00	51613733	47076530	1533.999	1521.647

000028

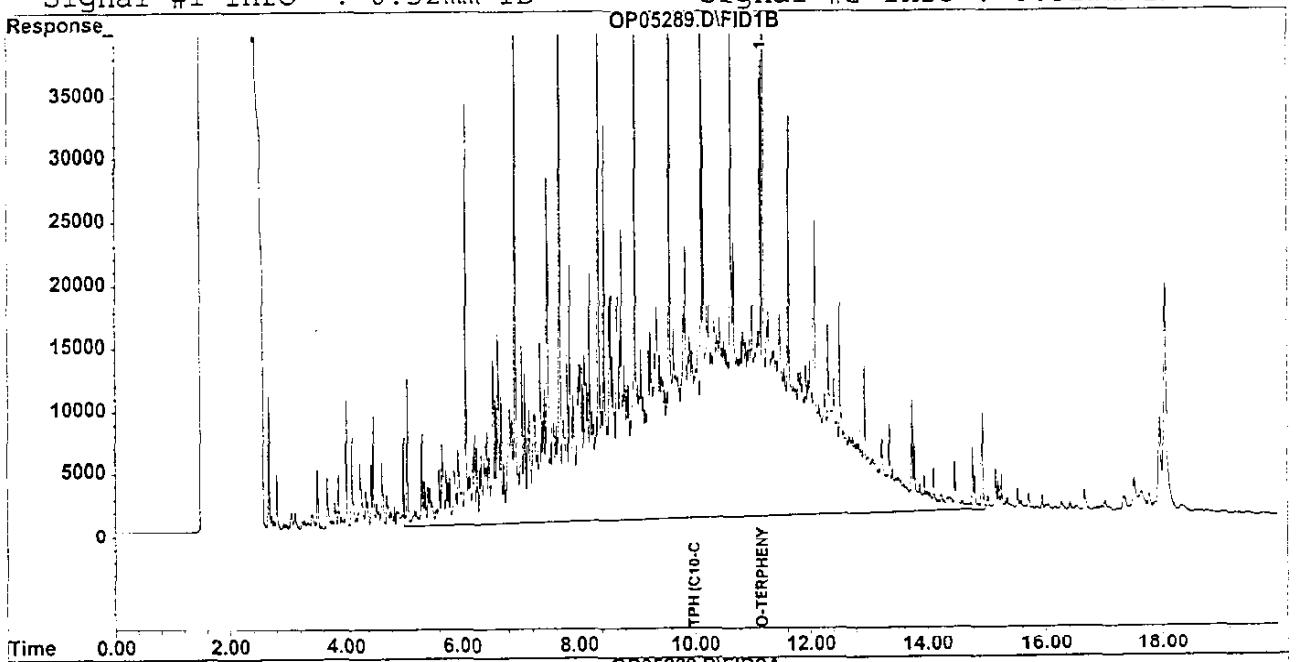
(f) RT Delta: 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

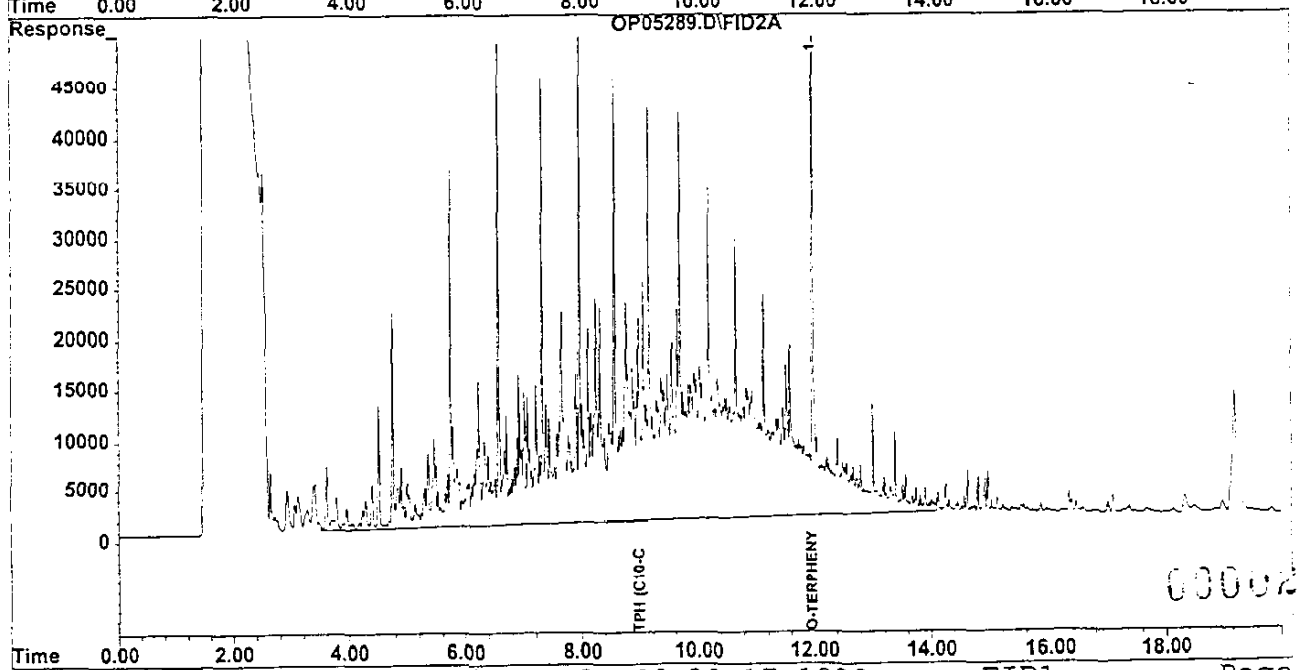
Quantitation Report

Signal #1 : C:\HPCHEM\2\DATA\0923DRO\OP05289.D\FID1B.CH Vial: 14
Signal #2 : C:\HPCHEM\2\DATA\0923DRO\OP05289.D\FID2A.CH
Acq On : 23 Sep 1999 4:52 pm Operator: marke
Sample : op994-msd Inst : FID 2
Misc : op994,gop253,soil,,,1, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 24 8:38 1999 Quant Results File: TPH_DRO.RES

Quant Method : C:\HPCHEM\2\METHODS\TPH_DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Thu Sep 23 10:15:02 1999
Response via : Multiple Level Calibration
DataAcq Meth : TPH_DRO.M

Volume Inj. : 2uL
Signal #1 Phase : DB-5 Signal #2 Phase: DB-17
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID





000026

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\2\DATA\0923DRO\OP05289.D\FID1B.CH Vial: 14
Signal #2 : C:\HPCHEM\2\DATA\0923DRO\OP05289.D\FID2A.CH
Acq On : 23 Sep 1999 4:52 pm Operator: marke
Sample : op994-msd Inst : FID 2
Misc : op994,gop253,soil,,,1, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 24 8:38 1999 Quant Results File: TPH_DRO.RES

Quant Method : C:\HPCHEM\2\METHODS\TPH DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Thu Sep 23 10:15:02 1999
Response via : Initial Calibration
DataAcq Meth : TPH_DRO.M

Volume Inj. : 2uL
Signal #1 Phase : DB-5 Signal #2 Phase: DB-17
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	PPM	PPM
System Monitoring Compounds						
1) S O-TERPHENYL	11.19	11.98	1646970	1703064	46.450m	48.879m
Spiked Amount 50.000 Range 40 - 140 Recovery =					92.90%	97.76%
Target Compounds						
2) H TPH (C10-C28)	10.00	9.00	47628320	42944598	1415.549	1388.091

000030

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

METHOD BLANK SUMMARY

Method Blank Summary

Job Number: F4924
Account: ITPAMONR IT Corporation
Project: Bainbridge

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP994-MB	OP05283.D	1	09/23/99	ME	09/23/99	OP994	GOP253

The QC reported here applies to the following samples: **Method:** SW846 8015 M

F4924-1, F4924-2, F4924-3, F4924-4

CAS No.	Compound	Result	RDL	Units	Q
	TPH (C10-C28)	ND	8.3	mg/kg	

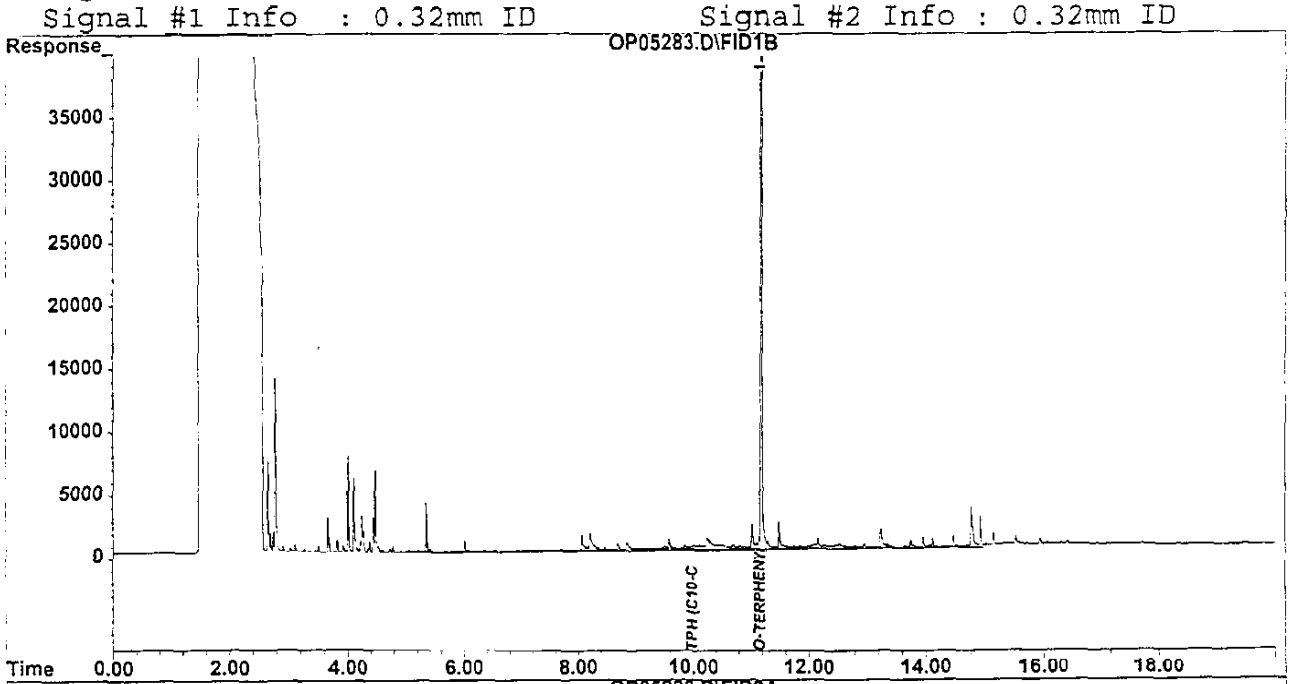
CAS No.	Surrogate Recoveries		Limits
84-15-1	o-Terphenyl	100%	40-140%

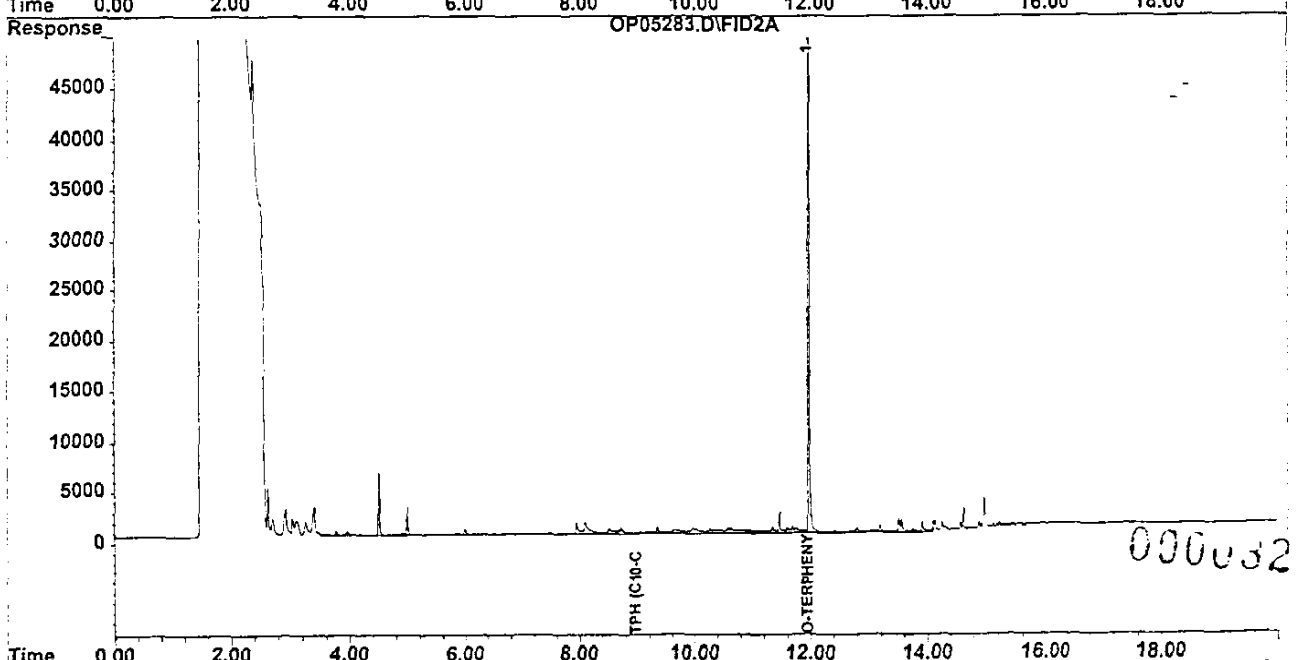
Quantitation Report

Signal #1 : C:\HPCHEM\2\DATA\0923DRO\OP05283.D\FID1B.CH Vial: 8
Signal #2 : C:\HPCHEM\2\DATA\0923DRO\OP05283.D\FID2A.CH
Acq On : 23 Sep 1999 2:12 pm Operator: marke
Sample : op994-mb Inst : FID 2
Misc : op994,gop253,soil,,,1, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 23 14:41 1999 Quant Results File: TPH_DRO.RES

Quant Method : C:\HPCHEM\2\METHODS\TPH_DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Thu Sep 23 10:15:02 1999
Response via : Multiple Level Calibration
DataAcq Meth : TPH_DRO.M

Volume Inj. : 2uL
Signal #1 Phase : DB-5 Signal #2 Phase: DB-17
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID





000032

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\2\DATA\0923DRO\OP05283.D\FID1B.CH Vial: 8
Signal #2 : C:\HPCHEM\2\DATA\0923DRO\OP05283.D\FID2A.CH
Acq On : 23 Sep 1999 2:12 pm Operator: marke
Sample : op994-mb Inst : FID 2
Misc : op994,gop253,soil,,,1, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 23 14:41 1999 Quant Results File: TPH_DRO.RES

Quant Method : C:\HPCHEM\2\METHODS\TPH_DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Thu Sep 23 10:15:02 1999
Response via : Initial Calibration
DataAcq Meth : TPH_DRO.M

Volume Inj. : 2uL
Signal #1 Phase : DB-5 Signal #2 Phase: DB-17
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	PPM	PPM
System Monitoring Compounds						
1) S O-TERPHENYL	11.19	11.98	1769146	1772493	49.896	50.871
Spiked Amount 50.000 Range 40 - 140 Recovery =					99.79%	101.74%
Target Compounds						
2) H TPH (C10-C28)	10.00	9.00	1287868	1284665	38.276	41.524

BP

000033

(#)=Amounts differ by > 25% (m)=manual int.

INITIAL CALIBRATION SUMMARY

SGC.05

Response Factor Report FID 2

Method : C:\HPCHEM\2\METHODS\TPH_DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Thu Sep 23 12:34:11 1999

Calibration Files
1 =OP05277.D 2 =OP05278.D 3 =OP05279.D
4 =OP05280.D 5 =OP05281.D

	Compound	1	2	3	4	5	Avg	%RSD
1) S	O-TERPHENYL	3.729	3.327	3.707	3.350	3.616	3.546 E4	5.48
2) H	TPH (C10-C28)	3.564	3.115	3.516	3.198	3.430	3.365 E4	5.88

Signal #2 Calibration Files
1 =OP05277.D 2 =OP05278.D 3 =OP05279.D
4 =OP05280.D 5 =OP05281.D

	Compound	1	2	3	4	5	Avg	%RSD
1) S	O-TERPHENYL	3.669	3.194	3.637	3.357	3.564	3.484 E4	5.81
2) H	TPH (C10-C28)	3.151	2.824	3.270	2.996	3.228	3.094 E4	5.93

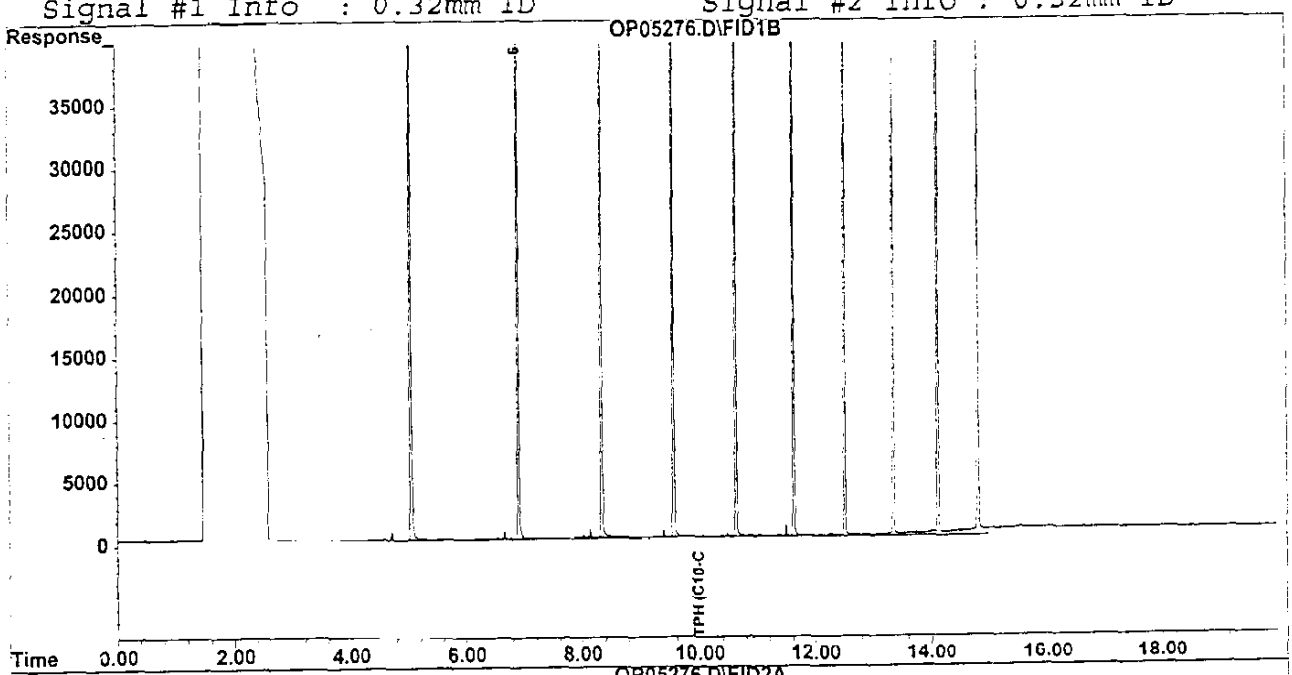
(#) = Out of Range

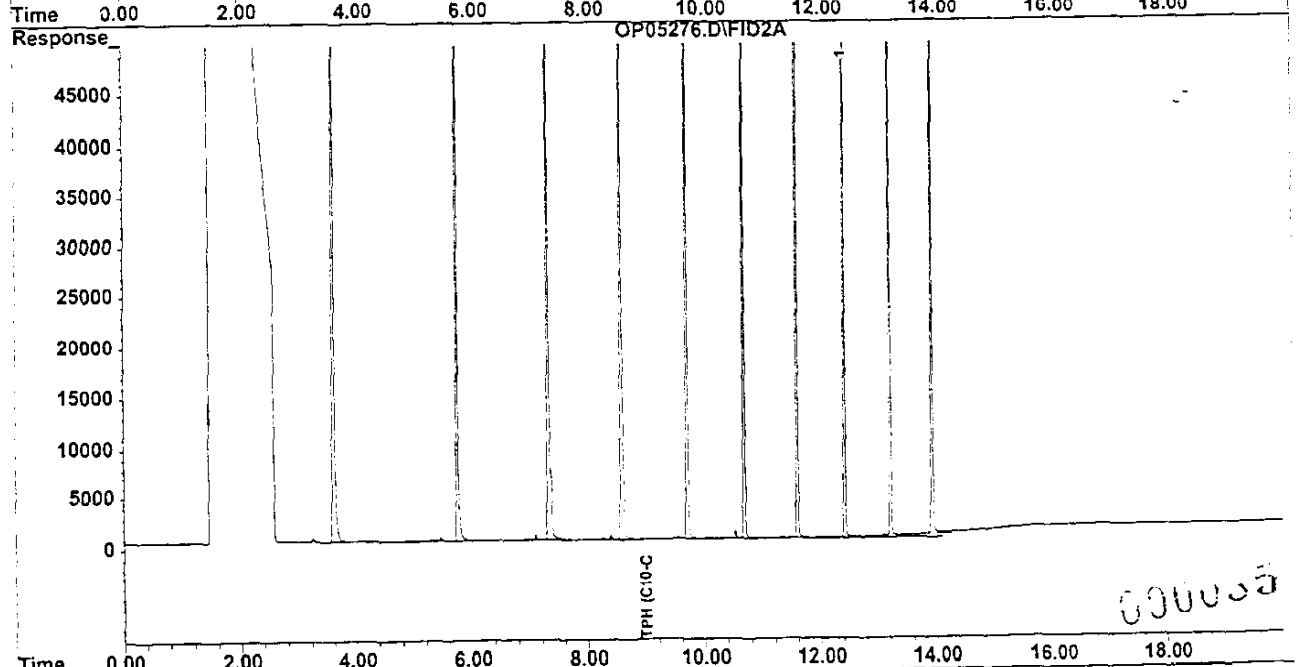
Quantitation Report

Signal #1 : C:\HPCHEM\2\DATA\0923DRO\OP05276.D\FID1B.CH Vial: 1
Signal #2 : C:\HPCHEM\2\DATA\0923DRO\OP05276.D\FID2A.CH
Acq On : 23 Sep 1999 9:25 am Operator: marke
Sample : dro rt std c10-c28 Inst : FID 2
Misc : op976,gop253,water,,,1, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 23 9:48 1999 Quant Results File: TPH_DRO.RES

Quant Method : C:\HPCHEM\2\METHODS\TPH_DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Thu Sep 23 09:48:04 1999
Response via : Multiple Level Calibration
DataAcq Meth : TPH_DRO.M

Volume Inj. : 2uL
Signal #1 Phase : DB-5 Signal #2 Phase: DB-17
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID





000058

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\2\DATA\0923DRO\OP05276.D\FID1B.CH Vial: 1
Signal #2 : C:\HPCHEM\2\DATA\0923DRO\OP05276.D\FID2A.CH
Acq On : 23 Sep 1999 9:25 am Operator: marke
Sample : dro rt std c10-c28 Inst : FID 2
Misc : op976,gop253,water,,,1, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 23 9:48 1999 Quant Results File: TPH_DRO.RES

Quant Method : C:\HPCHEM\2\METHODS\TPH_DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Thu Sep 23 09:48:04 1999
Response via : Initial Calibration
DataAcq Meth : TPH_DRO.M

Volume Inj. : 2uL
Signal #1 Phase : DB-5 Signal #2 Phase: DB-17
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	PPM	PPM
System Monitoring Compounds						
1) S O-TERPHENYL	0.00	0.00	0	0	N.D.	N.D.
Spiked Amount	50.000	Range	40 - 140	Recovery	=	0.00%# 0.00%#
Target Compounds						
2) H TPH (C10-C28)	10.00	9.00	17101271	16570050	576.525	620.494

000030

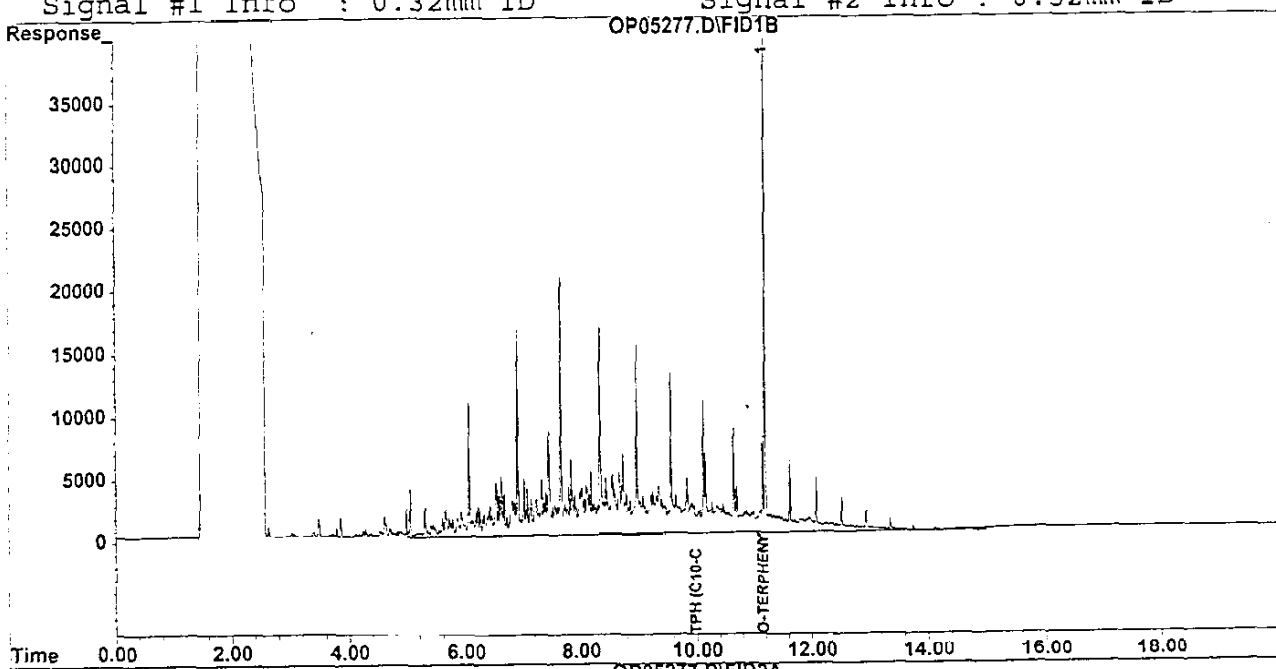
1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

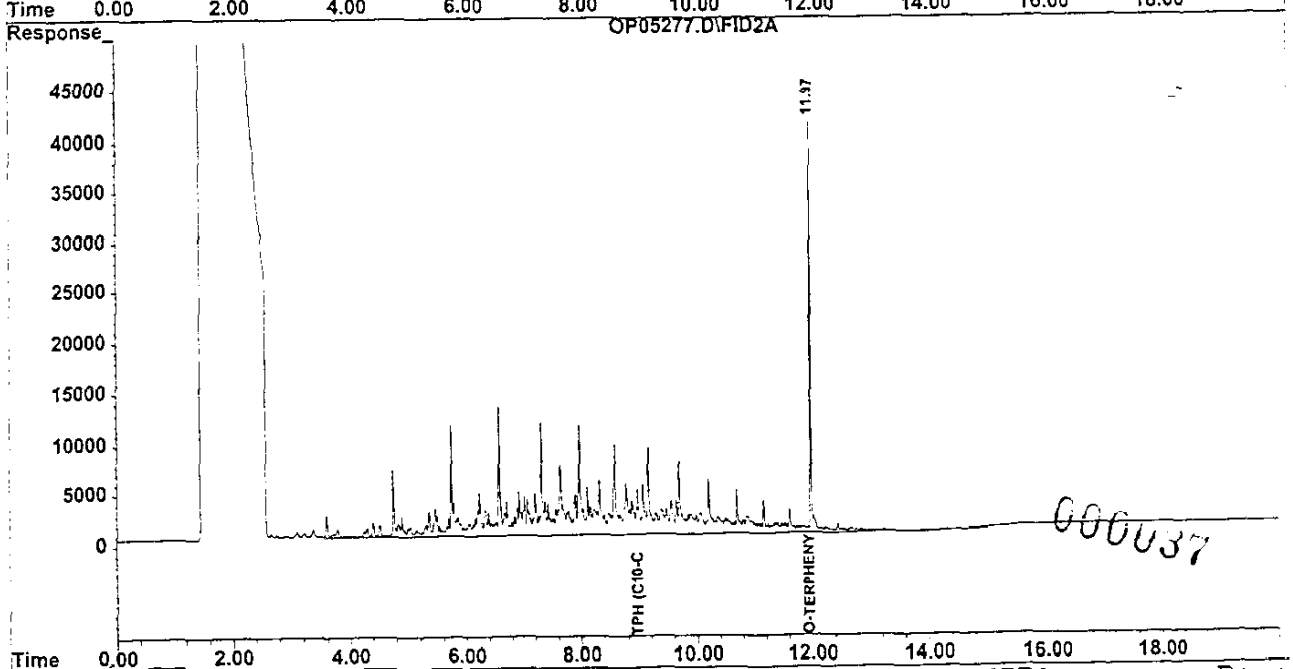
Quantitation Report

Signal #1 : C:\HPCHEM\2\DATA\0923DRO\OP05277.D\FID1B.CH Vial: 2
Signal #2 : C:\HPCHEM\2\DATA\0923DRO\OP05277.D\FID2A.CH
Acq On : 23 Sep 1999 9:51 am Operator: marke
Sample : 250ppm dro s650 Inst : FID 2
Misc : op976,gop253,water,,,1, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 23 10:16 1999 Quant Results File: TPH_DRO.RES

Quant Method : C:\HPCHEM\2\METHODS\TPH_DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Thu Sep 23 10:15:02 1999
Response via : Multiple Level Calibration
DataAcq Meth : TPH_DRO.M

Volume Inj. : 2uL
Signal #1 Phase : DB-5 Signal #2 Phase: DB-17
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID





000037

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\2\DATA\0923DRO\OP05277.D\FID1B.CH Vial: 2
Signal #2 : C:\HPCHEM\2\DATA\0923DRO\OP05277.D\FID2A.CH
Acq On : 23 Sep 1999 9:51 am Operator: marke
Sample : 250ppm dro s650 Inst : FID 2
Misc : op976,gop253,water,,,1, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 23 10:16 1999 Quant Results File: TPH_DRO.RES

Quant Method : C:\HPCHEM\2\METHODS\TPH_DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Thu Sep 23 10:15:02 1999
Response via : Initial Calibration
DataAcq Meth : TPH_DRO.M

Volume Inj. : 2uL
Signal #1 Phase : DB-5 Signal #2 Phase: DB-17
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	PPM	PPM
System Monitoring Compounds						
1) S O-TERPHENYL	11.19	11.97	466109	458617	14.932	14.490m
Spiked Amount 50.000 Range 40 - 140 Recovery =					29.86%#	28.98%#
Target Compounds						
2) H TPH (C10-C28)	10.00	9.00	8909363	7876848	300.356	294.962

000038

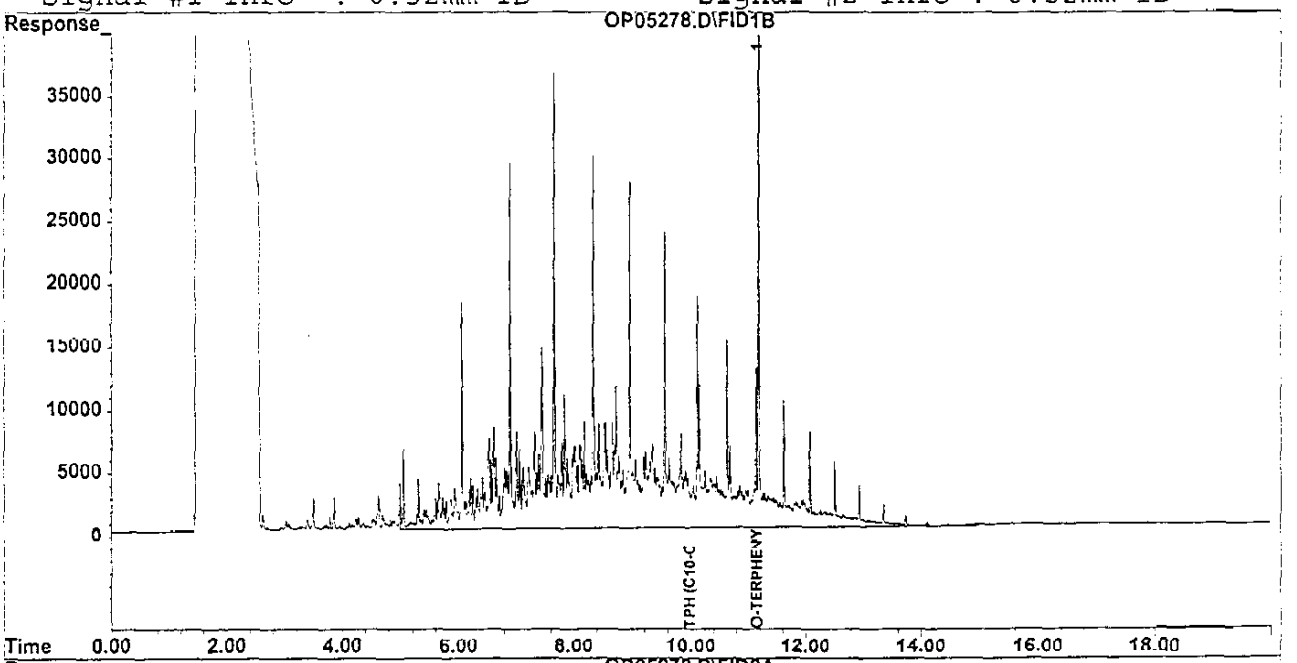
Range (#)=Amounts differ by > 25% (m)=manual int.

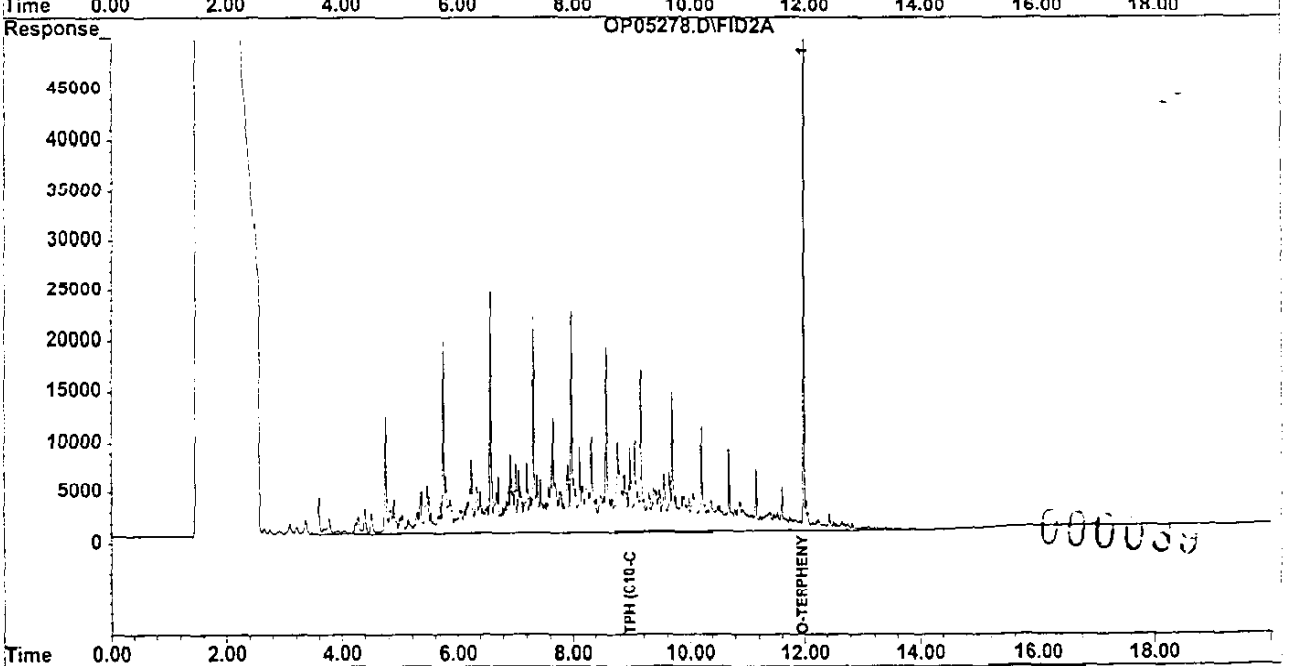
Quantitation Report

Signal #1 : C:\HPCHEM\2\DATA\0923DRO\OP05278.D\FID1B.CH Vial: 3
Signal #2 : C:\HPCHEM\2\DATA\0923DRO\OP05278.D\FID2A.CH
Acq On : 23 Sep 1999 10:18 am Operator: marke
Sample : 500ppm dro s649 Inst : FID 2
Misc : op976,gop253,water,,,1, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 23 10:39 1999 Quant Results File: TPH_DRO.RES

Quant Method : C:\HPCHEM\2\METHODS\TPH_DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Thu Sep 23 10:15:02 1999
Response via : Multiple Level Calibration
DataAcq Meth : TPH_DRO.M

Volume Inj. : 2uL
Signal #1 Phase : DB-5 Signal #2 Phase: DB 17
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID





Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\2\DATA\0923DRO\OP05278.D\FID1B.CH Vial: 3
Signal #2 : C:\HPCHEM\2\DATA\0923DRO\OP05278.D\FID2A.CH
Acq On : 23 Sep 1999 10:18 am Operator: marke
Sample : 500ppm dro s649 Inst : FID 2
Misc : op976,gop253,water,,,1, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 23 10:39 1999 Quant Results File: TPH_DRO.RES

Quant Method : C:\HPCHEM\2\METHODS\TPH_DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Thu Sep 23 10:15:02 1999
Response via : Initial Calibration
DataAcq Meth : TPH_DRO.M

Volume Inj. : 2uL
Signal #1 Phase : DB-5 Signal #2 Phase: DB-17
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	PPM	PPM
System Monitoring Compounds						
1) S O-TERPHENYL	11.19	11.98	831658	798595	26.044	24.827
Spiked Amount 50.000 Range 40 - 140 Recovery =					52.09%	49.65%
Target Compounds						
2) H TPH (C10-C28)	10.00	9.00	15575475	14120608	510.959	512.721

000040

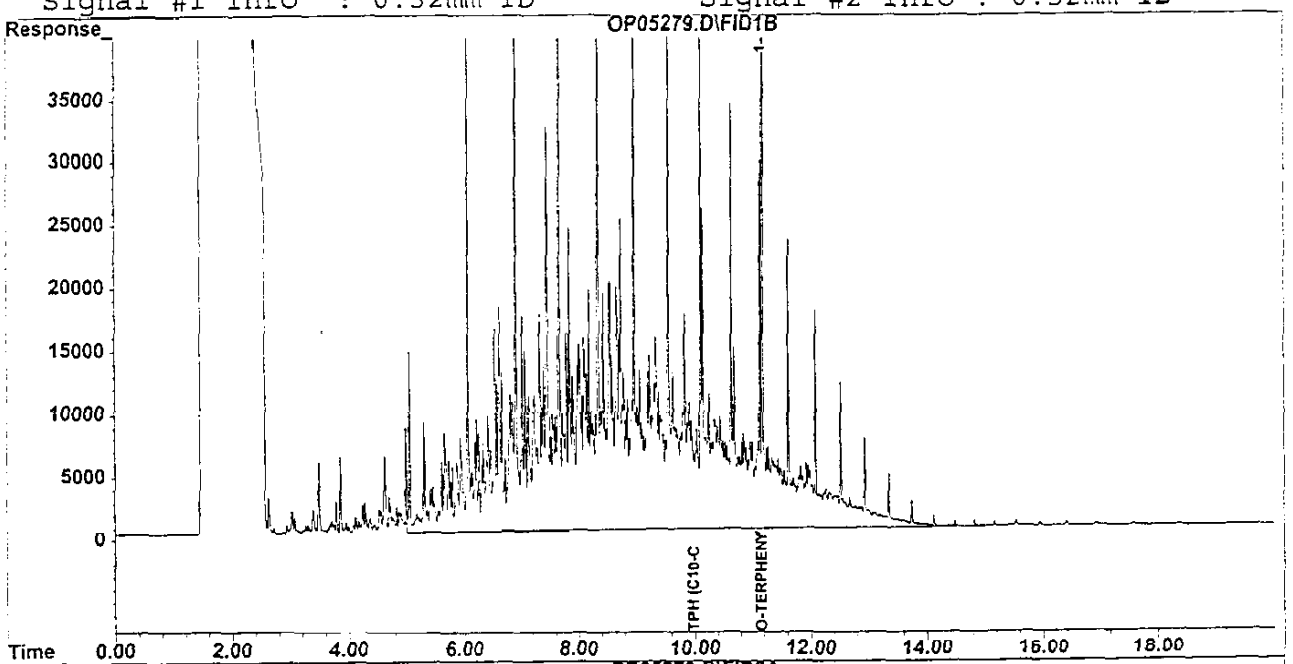
(*) RT Delta: 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

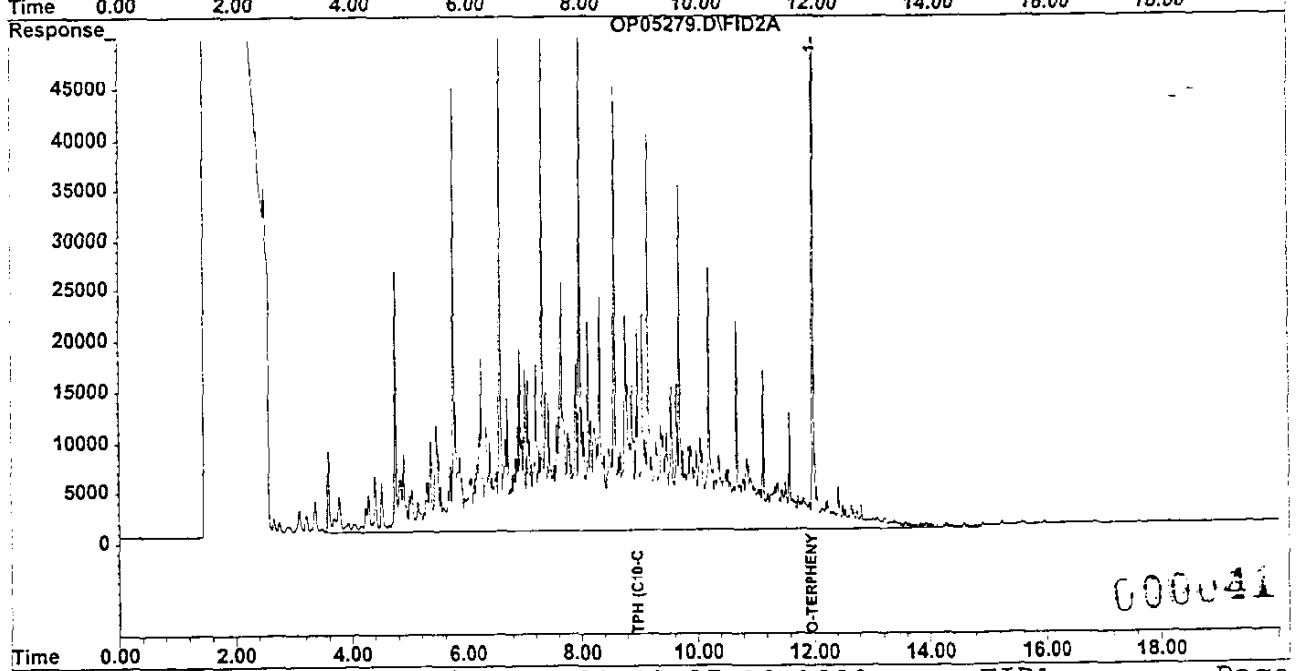
Quantitation Report

Signal #1 : C:\HPCHEM\2\DATA\0923DRO\OP05279.D\FID1B.CH Vial: 4
Signal #2 : C:\HPCHEM\2\DATA\0923DRO\OP05279.D\FID2A.CH
Acq On : 23 Sep 1999 10:44 am Operator: marke
Sample : 1000ppm dro s648 Inst : FID 2
Misc : op976,gop253,water,,,1, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 23 11:08 1999 Quant Results File: TPH_DRO.RES

Quant Method : C:\HPCHEM\2\METHODS\TPH_DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Thu Sep 23 10:15:02 1999
Response via : Multiple Level Calibration
DataAcq Meth : TPH_DRO.M

Volume Inj. : 2uL
Signal #1 Phase : DB-5 Signal #2 Phase: DB-17
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID





000041

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\2\DATA\0923DRO\OP05279.D\FID1B.CH Vial: 4
Signal #2 : C:\HPCHEM\2\DATA\0923DRO\OP05279.D\FID2A.CH
Acq On : 23 Sep 1999 10:44 am Operator: marke
Sample : 1000ppm dro s648 Inst : FID 2
Misc : op976,gop253,water,,,1, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 23 11:08 1999 Quant Results File: TPH_DRO.RES

Quant Method : C:\HPCHEM\2\METHODS\TPH_DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Thu Sep 23 10:15:02 1999
Response via : Initial Calibration
DataAcq Meth : TPH_DRO.M

Volume Inj. : 2uL
Signal #1 Phase : DB-5 Signal #2 Phase: DB-17
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	PPM	PPM
System Monitoring Compounds						
1) S O-TERPHENYL	11.19	11.98	1853565	1818328	55.974m	55.111
Spiked Amount 50.000 Range 40 - 140 Recovery =					111.95%	110.22%
Target Compounds						
2) H TPH (C10-C28)	10.00	9.00	35155756	32699857	1113.763	1140.819

000042

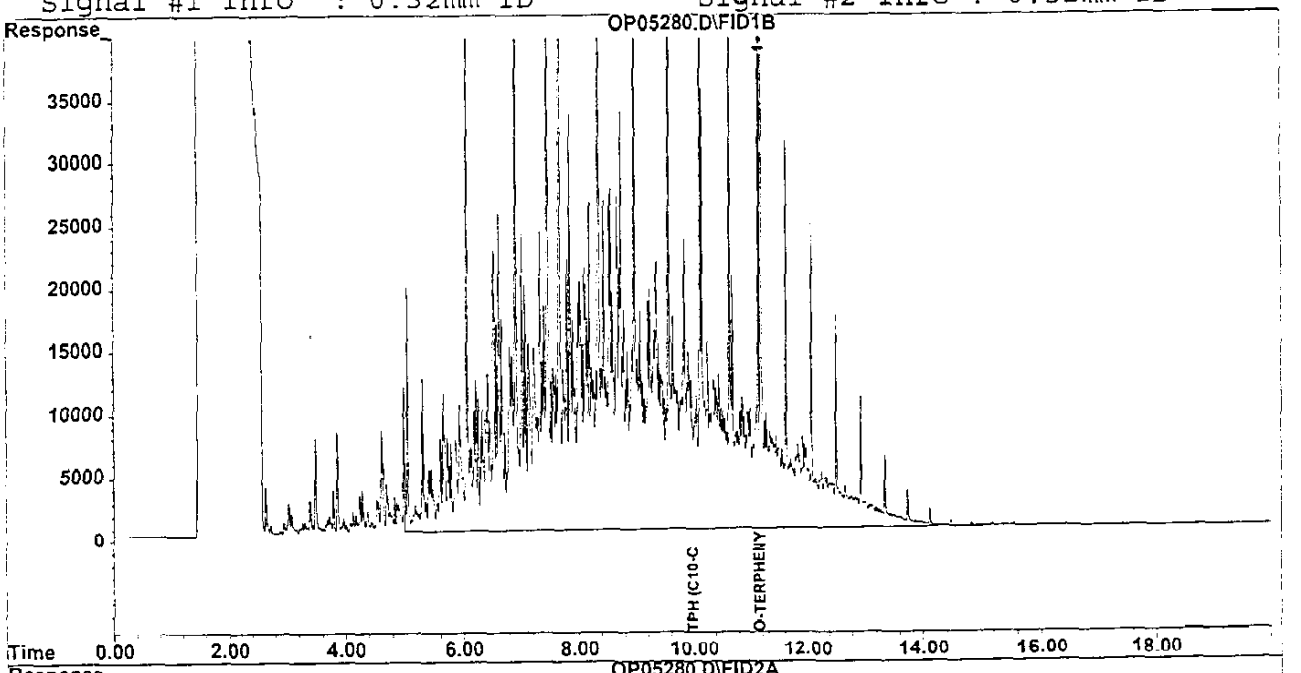
(f) RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

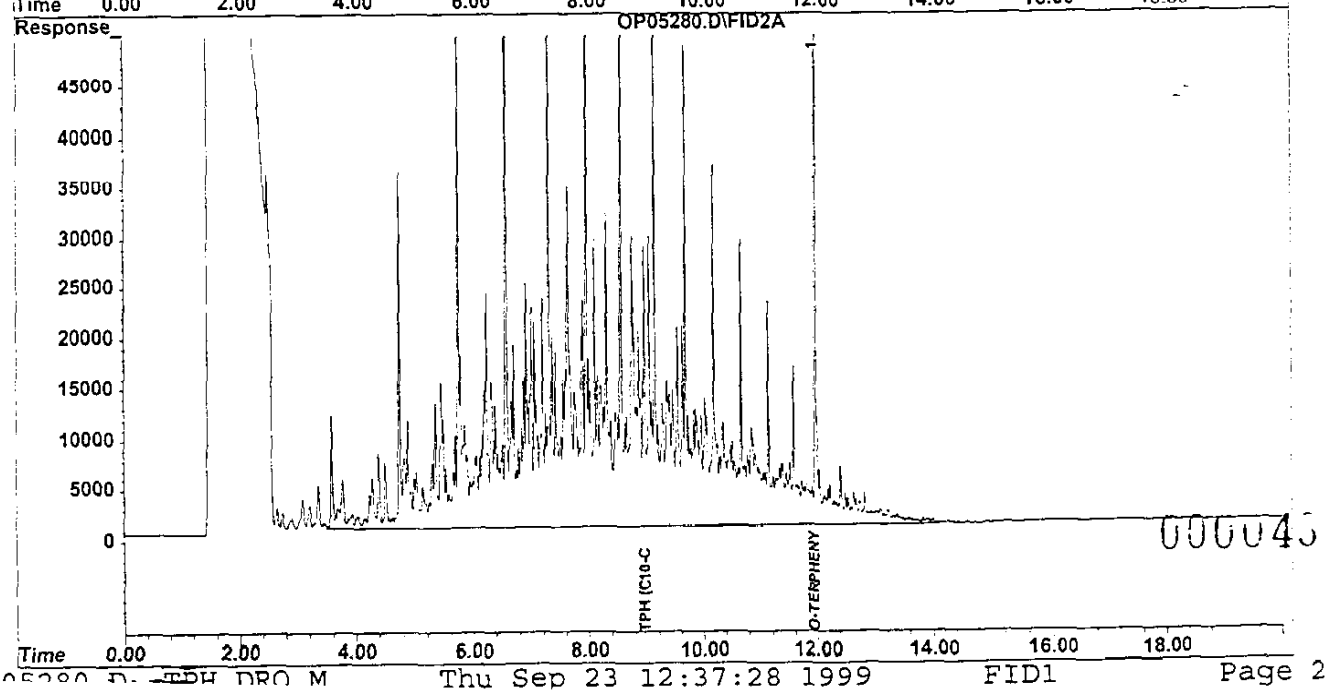
Quantitation Report

Signal #1 : C:\HPCHEM\2\DATA\0923DRO\OP05280.D\FID1B.CH Vial: 5
Signal #2 : C:\HPCHEM\2\DATA\0923DRO\OP05280.D\FID2A.CH
Acq On : 23 Sep 1999 11:11 am Operator: marke
Sample : 1500ppm dro s647 Inst : FID 2
Misc : op976,gop253,water,,,1, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 23 12:32 1999 Quant Results File: TPH_DRO.RES

Quant Method : C:\HPCHEM\2\METHODS\TPH_DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Thu Sep 23 10:15:02 1999
Response via : Multiple Level Calibration
DataAcq Meth : TPH_DRO.M

Volume Inj. : 2uL
Signal #1 Phase : DB-5 Signal #2 Phase: DB-17
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID





000043

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\2\DATA\0923DRO\OP05280.D\FID1B.CH Vial: 5
Signal #2 : C:\HPCHEM\2\DATA\0923DRO\OP05280.D\FID2A.CH
Acq On : 23 Sep 1999 11:11 am Operator: marke
Sample : 1500ppm dro s647 Inst : FID 2
Misc : op976,gop253,water,,,1, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 23 12:32 1999 Quant Results File: TPH_DRO.RES

Quant Method : C:\HPCHEM\2\METHODS\TPH_DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Thu Sep 23 10:15:02 1999
Response via : Initial Calibration
DataAcq Meth : TPH_DRO.M

Volume Inj. : 2uL
Signal #1 Phase : DB-5 Signal #2 Phase: DB-17
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	PPM	PPM
System Monitoring Compounds						
1) S O-TERPHENYL	11.19	11.98	2512529	2518080	74.018m	74.819m
Spiked Amount 50.000 Range 40 - 140 Recovery = 148.04%# 149.64%#						
Target Compounds						
2) H TPH (C10-C28)	10.00	9.00	47977381	44934506	1482.245	1521.702

000044

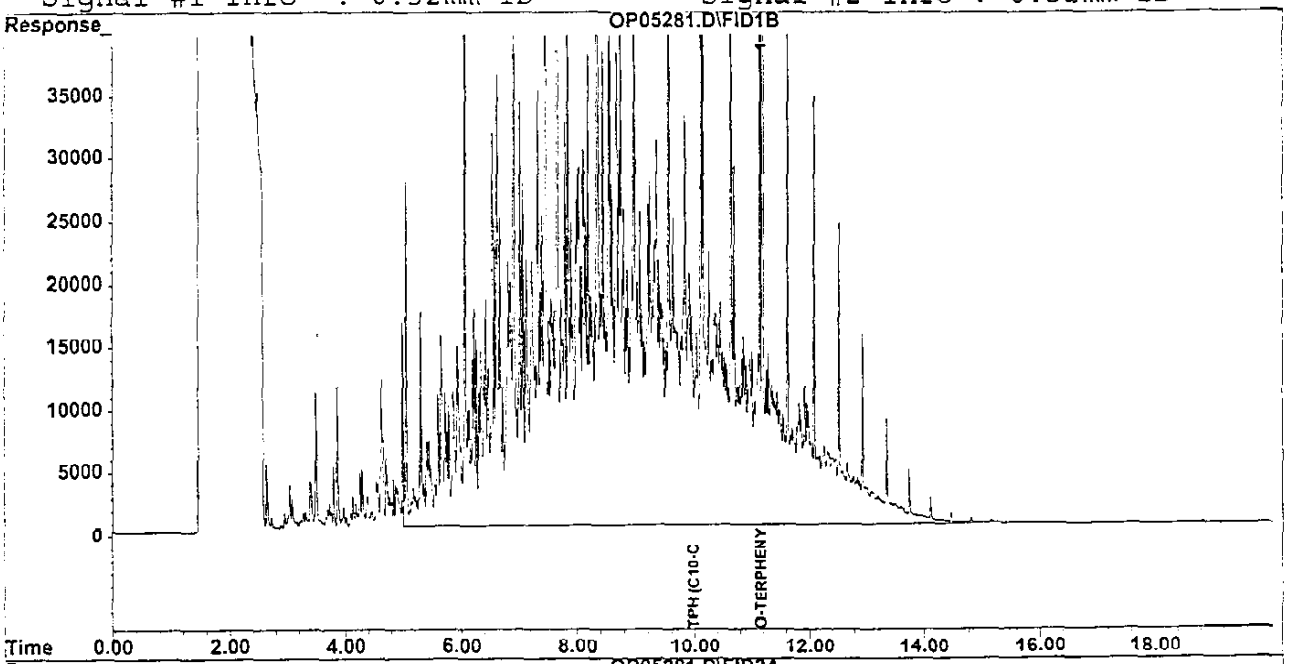
(f) RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

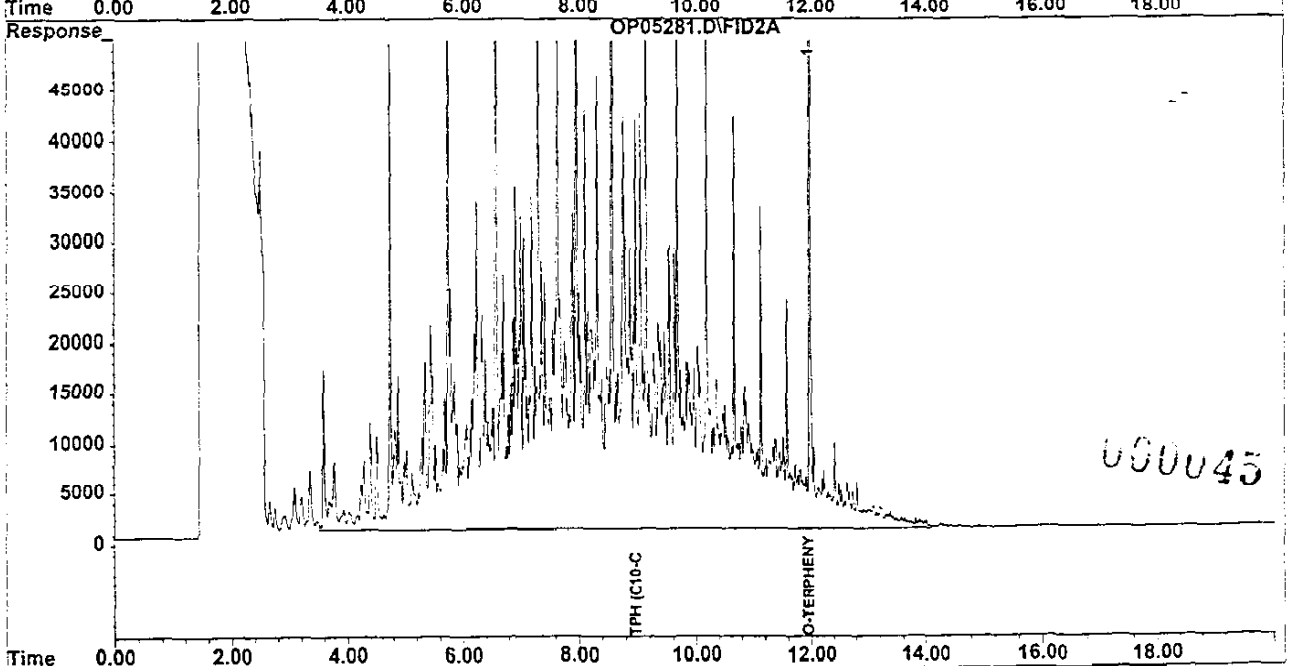
Quantitation Report

Signal #1 : C:\HPCHEM\2\DATA\0923DRO\OP05281.D\FID1B.CH Vial: 6
Signal #2 : C:\HPCHEM\2\DATA\0923DRO\OP05281.D\FID2A.CH
Acq On : 23 Sep 1999 11:38 am Operator: marke
Sample : 2000ppm dro s646 Inst : FID 2
Misc : op976,gop253,water,,,1, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 23 12:33 1999 Quant Results File: TPH_DRO.RES

Quant Method : C:\HPCHEM\2\METHODS\TPH_DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Thu Sep 23 10:15:02 1999
Response via : Multiple Level Calibration
DataAcq Meth : TPH_DRO.M

Volume Inj. : 2uL
Signal #1 Phase : DB-5 Signal #2 Phase: DB-17
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID





000045

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\2\DATA\0923DRO\OP05281.D\FID1B.CH Vial: 6
Signal #2 : C:\HPCHEM\2\DATA\0923DRO\OP05281.D\FID2A.CH
Acq On : 23 Sep 1999 11:38 am Operator: marke
Sample : 2000ppm dro s646 Inst : FID 2
Misc : op976,gop253,water,,,1, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 23 12:33 1999 Quant Results File: TPH_DRO.RES

Quant Method : C:\HPCHEM\2\METHODS\TPH_DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Thu Sep 23 10:15:02 1999
Response via : Initial Calibration
DataAcq Meth : TPH_DRO.M

Volume Inj. : 2uL
Signal #1 Phase : DB-5 Signal #2 Phase: DB-17
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	PPM	PPM
System Monitoring Compounds						
1) S O-TERPHENYL	11.20	11.98	3615738	3563867	104.009m	103.750m
Spiked Amount 50.000 Range 40 - 140 Recovery = 208.02%# 207.50%#						
Target Compounds						
2) H TPH (C10-C28)	10.00	9.00	68607096	64569269	2071.856	2127.610

000046

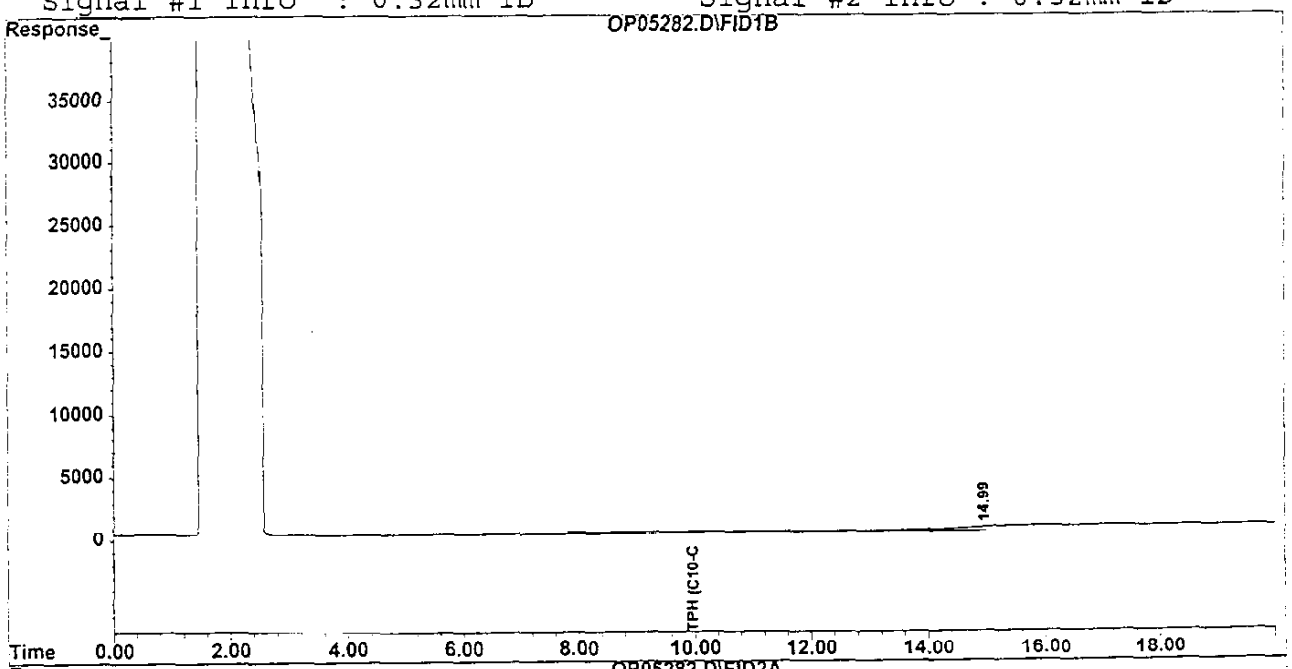
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

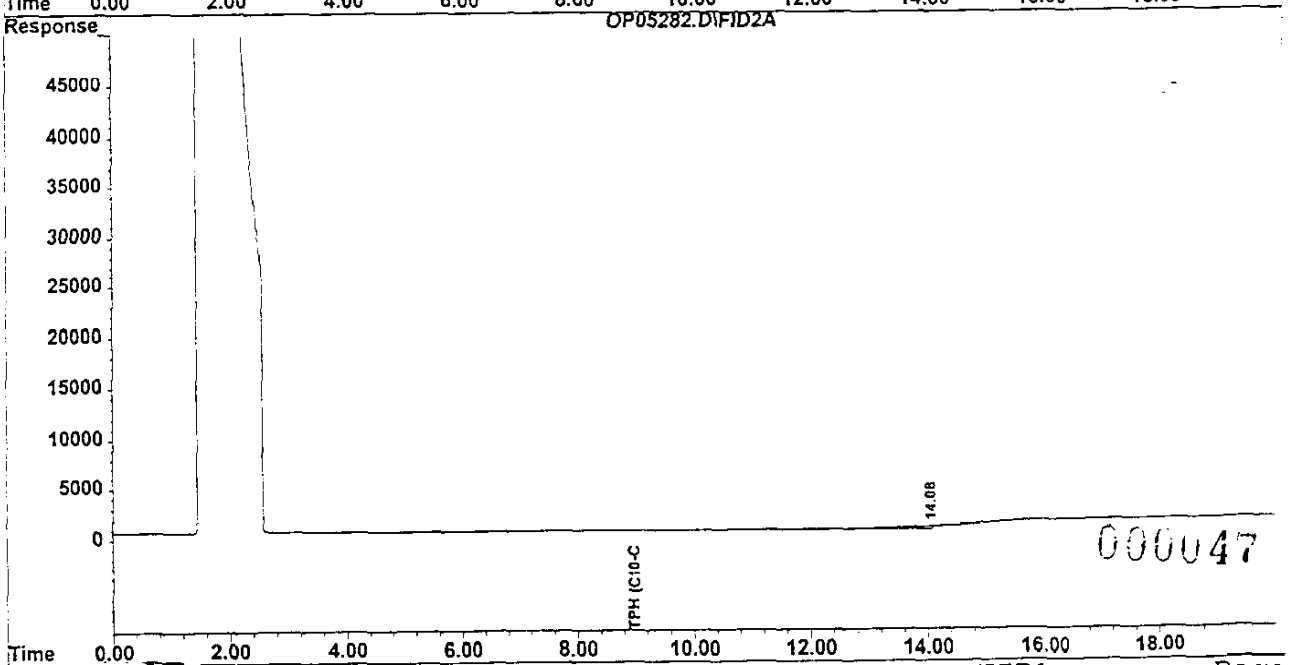
Quantitation Report

Signal #1 : C:\HPCHEM\2\DATA\0923DRO\OP05282.D\FID1B.CH Vial: 7
Signal #2 : C:\HPCHEM\2\DATA\0923DRO\OP05282.D\FID2A.CH
Acq On : 23 Sep 1999 12:04 pm Operator: marke
Sample : solvent blank Inst : FID 2
Misc : op976,gop253,water,,,1, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 23 12:35 1999 Quant Results File: TPH_DRO.RES

Quant Method : C:\HPCHEM\2\METHODS\TPH_DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Thu Sep 23 10:15:02 1999
Response via : Multiple Level Calibration
DataAcq Meth : TPH_DRO.M

Volume Inj. : 2uL
Signal #1 Phase : DB-5 Signal #2 Phase: DB-17
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID





000047

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\2\DATA\0923DRO\OP05282.D\FID1B.CH Vial: 7
Signal #2 : C:\HPCHEM\2\DATA\0923DRO\OP05282.D\FID2A.CH
Acq On : 23 Sep 1999 12:04 pm Operator: marke
Sample : solvent blank Inst : FID 2
Misc : op976,gop253,water,,,1, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 23 12:35 1999 Quant Results File: TPH_DRO.RES

Quant Method : C:\HPCHEM\2\METHODS\TPH_DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Thu Sep 23 10:15:02 1999
Response via : Initial Calibration
DataAcq Meth : TPH_DRO.M

Volume Inj. : 2uL
Signal #1 Phase : DB-5 Signal #2 Phase: DB-17
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	PPM	PPM
System Monitoring Compounds						
1) S O-TERPHENYL	0.00	0.00	0	0	N.D.	N.D.
Spiked Amount 50.000	Range	40 - 140	Recovery	=	0.00%#	0.00%#
Target Compounds						
2) H TPH (C10-C28)	10.00	9.00	273044	252069	8.115	8.148

BAL

000048

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

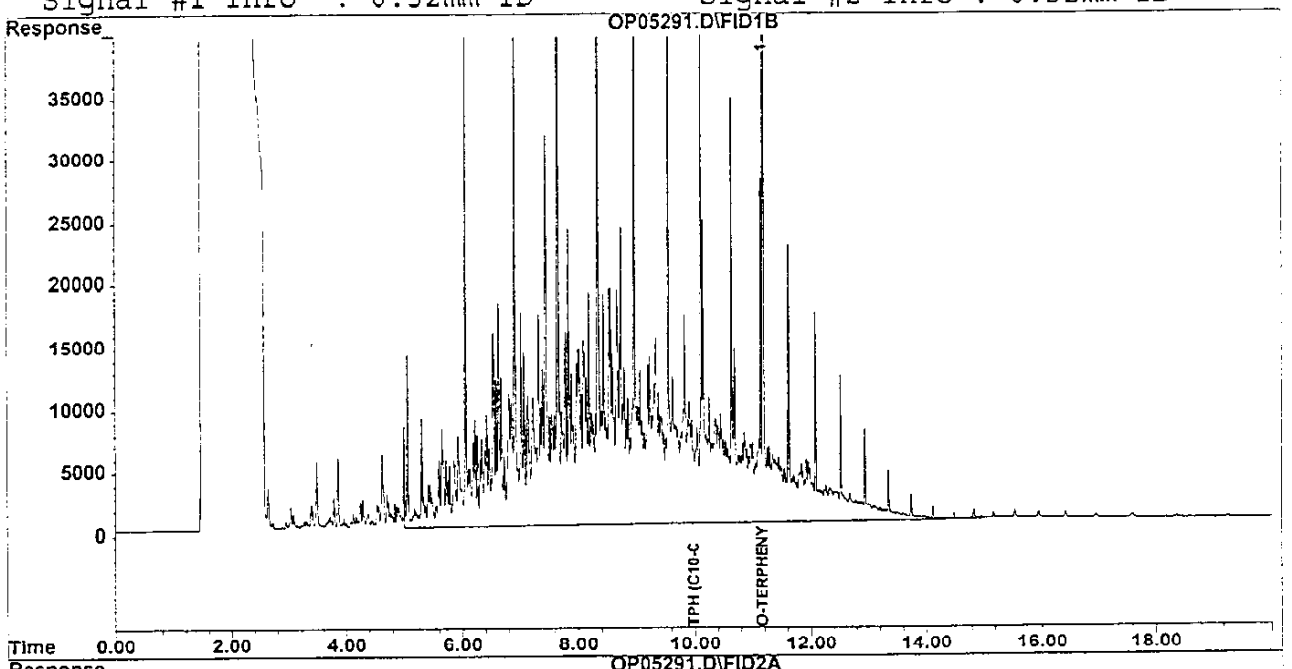
CONTINUING CALIBRATION SUMMARY

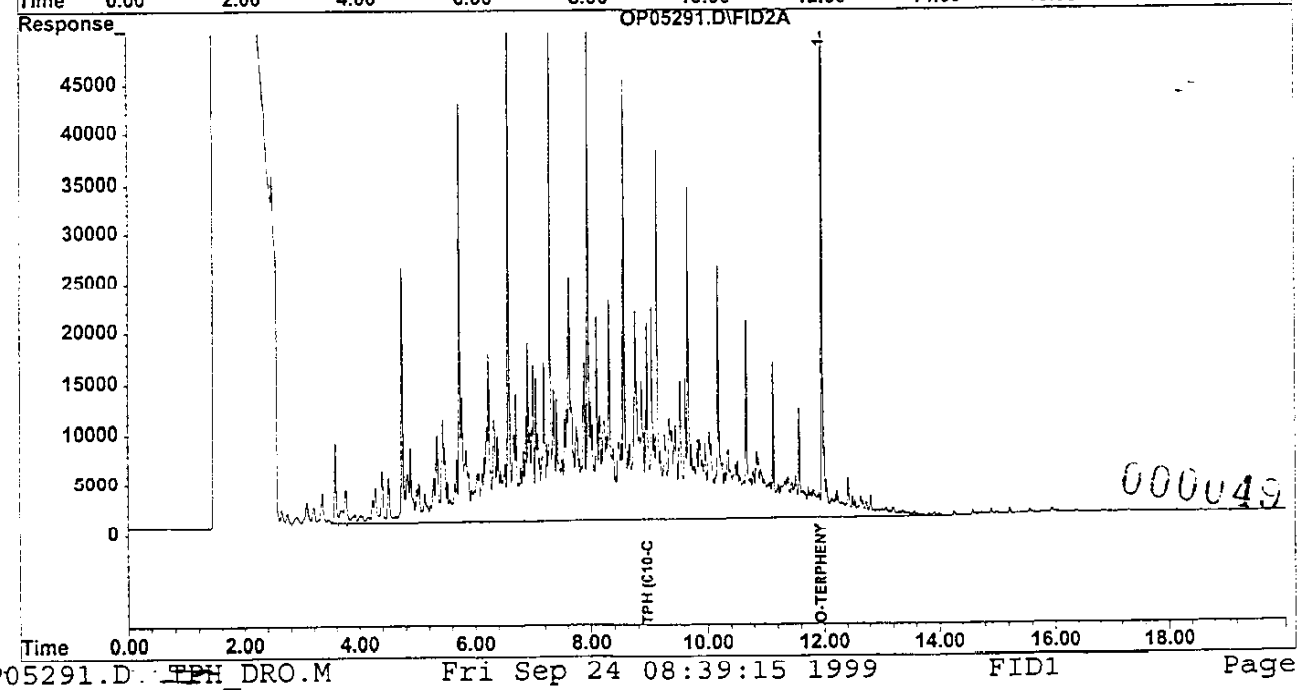
Quantitation Report

Signal #1 : C:\HPCHEM\2\DATA\0923DRO\OP05291.D\FID1B.CH Vial: 16
Signal #2 : C:\HPCHEM\2\DATA\0923DRO\OP05291.D\FID2A.CH
Acq On : 23 Sep 1999 5:45 pm Operator: marke
Sample : 1000ppm DRO ccv s648 Inst : FID 2
Misc : op994,gop253,soil,,,1, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 24 8:39 1999 Quant Results File: TPH_DRO.RES

Quant Method : C:\HPCHEM\2\METHODS\TPH_DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Thu Sep 23 10:15:02 1999
Response via : Multiple Level Calibration
DataAcq Meth : TPH_DRO.M

Volume Inj. : 2uL
Signal #1 Phase : DB-5 Signal #2 Phase: DB-17
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID





000049

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\2\DATA\0923DRO\OP05291.D\FID1B.CH Vial: 16
Signal #2 : C:\HPCHEM\2\DATA\0923DRO\OP05291.D\FID2A.CH
Acq On : 23 Sep 1999 5:45 pm Operator: marke
Sample : 1000ppm DRO ccv s648 Inst : FID 2
Misc : op994,gop253,soil,,,1, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 24 8:39 1999 Quant Results File: TPH_DRO.RES

Quant Method : C:\HPCHEM\2\METHODS\TPH_DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Thu Sep 23 10:15:02 1999
Response via : Initial Calibration
DataAcq Meth : TPH_DRO.M

Volume Inj. : 2uL
Signal #1 Phase : DB-5 Signal #2 Phase: DB-17
Signal #1 Info : 0.32mm ID Signal #2 Info : 0.32mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	PPM	PPM
System Monitoring Compounds						
1) S O-TERPHENYL	11.19	11.98	1900253	1811146	53.593	51.981
Spiked Amount 50.000 Range 40 - 140 Recovery = 107.19% 103.96%						
Target Compounds						
2) H TPH (C10-C28)	10.00	9.00	33800481	31436371	1004.576	1016.112

000050

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\0923DRO\OP05291.D\FID1B.CH Vial: 16
Signal #2 : C:\HPCHEM\2\DATA\0923DRO\OP05291.D\FID2A.CH
Acq On : 23 Sep 1999 5:45 pm Operator: marke
Sample : 1000ppm DRO ccv s648 Inst : FID 2
Misc : op994,gop253,soil,,,1, Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\HPCHEM\2\METHODS\TPH_DRO.M (Chemstation Integrator)
Title : TPH by 8015B_DRO
Last Update : Thu Sep 23 10:15:02 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 : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	S	O-TERPHENYL	35.457	38.005 E3	-7.2	103	0.00
2	H	TPH (C10-C28)	33.647	33.800 E3	-0.5	96	0.00

Signal #2

1	S	O-TERPHENYL	34.843	36.223 E3	-4.0	100	0.00
2	H	TPH (C10-C28)	30.938	31.436 E3	-1.6	96	0.00

000051

SEQUENCE LOG SUMMARY

Sequence Name: C:\HPCHEM\2\SEQUENCE\0923DRO.S
Comment:
Operator: marke
Data Path: C:\HPCHEM\2\DATA\0923DRO\
Pre-Seq Cmd:
Post-Seq Cmd:

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

Line	Type	Vial	DataFile	Method	Sample Name
1	Sample	1	OP05276	TPH_DRO	dro rt std c10-c28
2	Sample	2	OP05277	TPH_DRO	250ppm dro s650
3	Sample	3	OP05278	TPH_DRO	500ppm dro s649
4	Sample	4	OP05279	TPH_DRO	1000ppm dro s648
5	Sample	5	OP05280	TPH_DRO	1500ppm dro s647
6	Sample	6	OP05281	TPH_DRO	2000ppm dro s646
7	Sample	7	OP05282	TPH_DRO	solvent blank
8	Sample	8	OP05283	TPH_DRO	op994-mb
9	Sample	9	OP05284	TPH_DRO	op994-bs
10	Sample	10	OP05285	TPH_DRO	f4924-1
11	Sample	11	OP05286	TPH_DRO	f4924-2
12	Sample	12	OP05287	TPH_DRO	f4924-3
13	Sample	13	OP05288	TPH_DRO	op994-ms
14	Sample	14	OP05289	TPH_DRO	op994-msd
15	Sample	15	OP05290	TPH_DRO	f4924-4
16	Sample	16	OP05291	TPH_DRO	1000ppm DRO ccv s648

000002

GC ANALYS OG

DATE: 9/23/99	METHODS: TPH DRO	ANALYST: ME
COLUMN TYPE: DB-5/17	METHOD FILE: TPH-DRO	RUN BATCH: GOP253
INSTRUMENT: FID2	CALIB. DATE: 9/23/99	AMOUNT INJECTED: 2 ul

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	SAMPLE AMOUNT	MATRIX	EXT. BATCH	DILUTION FACTOR	RUN OK	COMMENTS
OP05276	1	RT STD DRO C10-C28	TPHDRO					✓	
77	2	250ppm DRO						✓	S650
78	3	500						✓	S644
79	4	1000						✓	S648
80	5	1500						✓	S647 curve
81	6	2000						✓	S646 passed
82	7	Solvent Blank						✓	BDL
83	8	OP994-MB		30.0g/1ml	S	OP994	X1		BDL
84	9	-BS							✓
85	10	F4424-1							DRO=42
86	11	-2							DRO=34
87	12	-3							DRO=17
88	13	OP994-MS							✓
89	14	-MSD							✓
90	15	F4424-4							BDL
91	16	1000 ppm DRO							S648 passed

9/21/99

atrix: Designate "W" for Water, "S" for Soil, and "O" for Oil

ample Amount: Initial Sample Weight (g) or Volume (ml) / Final Volume (ml)

Analyst's Signature: [signature] 00002

EXTRACTION LOG SUMMARY

SGC.08

SOLID SAMPLE PREP REPORT

Date: 9.23.99 Method: DRO Analyst: LJ/VM/RA/MS Batch#: OP 994

Batch Started On: 9.23.99 Prior Number Of Samples in Batch: Ø Closed:

Sample ID	Amount Extracted (g)	Surrogate Amount	Spike Amount	Final Volume (ml)	Comments
OP994-MB	30.0g	0.5ml		1.0ml	
BS	↓	↓	0.5ml	↓	
F492A-1	30.1g	↓	↓	↓	
-2	↓	↓	↓	↓	
-3	30.0g	↓	↓	↓	
-4	30.1g	↓	↓	↓	
OP994-MS	30.0g	↓	0.5ml	↓	F492A-3
MSD	↓	↓	↓	↓	↓

Surrogate ID: E458 Conc: 100ppm Exp. Date*: 3.16.00

Spike ID: E462 Conc: 2000ppm Exp. Date*: 2.8.00

*Expiration Date is 6 months from the date made or last verified.

CH2CL2 Lot #: 994655 Hexane Lot # Other (specify)

Comments: Bath temp at 70°C

Relinquished By: [signature] Date: 9-23-99

Accepted By: [signature] Date: 9/23/99

000054

Gascoyne Laboratories, Inc.

Baltimore, MD 21224

(410) 633-1800

FAX NO.
(410) 633-5443

www.gascoyne.com

REPORT OF ANALYSIS

Report No: 9903988

IT/OHM Corporation
2790 Mosside Blvd.
Monroeville, PA 15146

Attn: Larry Stearns

This report of analysis contains test results for the following samples submitted to Gascoyne Laboratories, Inc. for project BAINBRIDGE:

Client Sample I.D.,	Sample Type	Lab Sample No.	Received by Gascoyne
TANK 1A; grab, 21-Jul-1999(1400)	Soil	990015486	21-Jul-1999

This Report contains the following:

A) Cover Letter
B) Test Results
C) Chain-of-Custody

All samples were analyzed following EPA protocols and other recognized methodologies as specified in the report. All laboratory Quality Control(QC) data associated with this report are within established control limits unless otherwise noted in this report.

Gascoyne Laboratories, Inc. laboratory identification numbers:

Maryland :109; Delaware: MD015; Virginia: 00152; New Jersey: 60637; Pennsylvania: 68-339; New York: 11158; A2LA: 410.01; AIHA:8885; US Army Corps of Engineers; and EPA ICR: ICRMD003.

The analyses specified in this report may or may not be included in the scopes of the above listed certifications.

This cover page is an integral part of this report and must be included with all copies of this report.

James H Newman — 8/2/99

Final report reviewed by: James H. Newman, Client Services Manager — Report issue date

Gascoyne Laboratories, Inc.

Baltimore, MD 21224

(410) 633-1800

FAX NO.
(410) 633-5443

www.gascoyne.com

REPORT OF ANALYSIS

Report no: **9903988**

Client: **IT/OHM Corporation**

Sample Id: **Submitted samples: TANK 1A; grab collected on 21-Jul-99(14:00)**
Laboratory Sample Number: 990015486

Parameter	Test Results	Laboratory Reporting Limit	Method	Analyst	Date of Analysis
Diesel Range Organics(C10-C28)	<10 ppm-arb	10 ppm-arb	EPA-8015B	MST	22-Jul-99(13:40)
n-Pentacosane(surrogate)	88 % Rec	NA	EPA-8015B	MST	22-Jul-99(13:40)

Sample/Test Notes:
Extraction started 07/21/99 17:50. Dilution factor = 1.

oline Range Organics(C6-C10)	<10 ppm-arb	10 ppm-arb	EPA-8015B	NJ	22-Jul-99(09:22)
Trifluorotoluene(surrogate)	103 % Rec	NA	EPA-8015B	NJ	22-Jul-99(09:22)

Sample/Test Notes:
Sample received with headspace.

Residue at 105°C	90.6 %-arb	0.01 %-arb	CLP-SOW-ILM04.0	DMW	22-Jul-99(10:43)

Cooler Receipt Report

Number of Coolers Received: 2
Client: IT

Receipt Date/Time: 7/21/99 1611
WO# 9903988

Exterior Inspection::

Cracks or Breaks: ☒ No ○ Yes
Custody Tape: ☒ Yes ○ No ○ NA
Tape Intact: ☒ Yes ○ No ○ NA

Shipper: ☐ UPS ☐ FEDEX ☒ GLI ☐ Client ☐ Courier ☐ Other:
Waybill Number:
Shipping Container Type: ☒ Cooler ○ Box ○ Other ○ None

Interior Inspection:

Chain of Custody: ☒ Yes ○ No
Number of Containers: 9
Type of Containers: 3V, 1 3oz 3 clear C's 2 Amber C's
Type of Samples: ☒ Water ☒ Soil ☐ Filter ☐ Air ☐ Wipes ☐ Oil ☐ Other:
Broken Bottles: ○ No ○ Yes
Headspace in VOA(>6mm)? ☒ No ○ Yes ○ NA
Headspace in K soil bottle? ○ No ○ Yes ☒ NA

Packing Material:
○ Peanuts ○ Bubble Wrap ○ Vermiculite ○ Foam ☒ None ○ Other
Radiation Scan: ☒ Negative mR/hr
Coolant: ☒ Wet Ice ○ Blue Ice ○ Dry Ice ○ None
Temperature:(circle thermometer used for determination)
Thermometer: IR Horiba SN# 632015 Digital VWR SN# NA

Cooler Received	Cooler No.	Temp	Cooler Received	Cooler No.	Temp
1	1	0.2 °C	4		°C
2	8	8.2 °C	5		°C
3		°C	6		°C

Note: If no Temp Blank, average of three sample containers: °C
Sample bottle Ids and COC agree. ☒ Yes ○ No

pH Checking with strips completed. ☒ Yes ○ No pH Criteria met: ☒ Yes ○ No
All acid preserved <2 NaOH preserved >12 All others >2 and <10 (usually 4-8)
Sample ID: Chemical ID: mls added: initials
Sample ID: Chemical ID: mls added: initials
Sample ID: Chemical ID: mls added: initials
Sample ID: Chemical ID: mls added: initials
Sample ID: Chemical ID: mls added: initials

Comments: Tank 908 - improper cont - with headspace
Tank 1A (soil) received with headspace TW 7/22/99 MH 7/21/99

Performed By: Christopher M [signature] (Signature)
Date/Time: 7/21/99 1611

Container Types: A (300ml plastic) B (1000ml plastic) C (1000ml glass) D (1000ml glass amber) E (4oz glass amber) K (4oz glass) L (20ml glass) M (16oz glass) O (4oz plastic) S (4oz sterile polypropylene) V (40ml VOA vial)

49/21/99

440 3483 4.2 0.2

INTERNATIONAL TECHNOLOGY CORPORATION

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD*

Reference Document No. 559837
Page 1 of 1

8/1

Project Name/No. [1] Bainbridge 919528
Sample Team Members [2] Treuter/Klinger
Profit Center No. [3] —
Project Manager [4] L. Stearns
Purchase Order No. [6] 919568701
Required Report Date [11] 3 days

Samples Shipment Date [7] 7/21/99
Lab Destination [8] Gascoyne Labs 410-633-1800
Lab Contact [9] Tina Kelly @ 134
Project Contact/Phone [12] Dick Treuter 410-378-3450
Carrier/Waybill No. [13] Lab pickup

Bill to: [5] IT Corp
2790 Mosside Blvd
Monroeville, PA 15146

Report to: [10] 412-380-0699
Fax to Larry Stearns
IT Corp
2790 Mosside Blvd
Monroeville, PA 15146

ONE CONTAINER PER LINE

Sample Number [14]	Sample Description/Type [15]	Date/Time Collected [16]	Container Type [17]	Sample Volume [18]	Preservative [19]	Requested Testing Program [20]	Condition on Receipt [21]	Disposal Record No. [22]
180 Tank 1A	Grab Brnsilt soil Floor exc @ 8'	7/21/99 1400	1-8oz	8oz	4°C	TPH GRO/DRO Modified 8015 T5061105		MS/MSD
							FOR LAB USE ONLY	
								QC 3
							FOR LAB USE ONLY	

Special Instructions: [23] Fax results to Larry Stearns @ 412-380-0699

Possible Hazard Identification: [24] Petroleum Hydrocarbons
Non-hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☒

Sample Disposal: [25]
Return to Client ☐ Disposal by Lab ☒ Archive _____ (mos.)

Turnaround Time Required: [26]
Normal ☐ Rush ☒ 3 days

QC Level: [27]
I. ☐ II. ☐ III. ☒ Project Specific (specify): Navy NFESC Guide

1. Relinquished by [28] (Signature/Affiliation) Dick Treuter / Dick Treuter/IT	Date: 7/21/99 Time: 1500	1. Received by [28] (Signature/Affiliation) 64	Date: 7/21/99 Time: 1800
2. Relinquished by (Signature/Affiliation) 64	Date: 7/21/99 Time: 1611	2. Received by (Signature/Affiliation)	Date: 7/21/99 Time: 1611
3. Relinquished by (Signature/Affiliation)	Date: Time:	3. Received by (Signature/Affiliation)	Date: Time:

Comments: [29] Dick Treuter 410-378-3232, Tom Joyner 609-588-6190 and Frank Zepka 202-433-7018
Fax results to

7/22/99

MCA3/15/91

White: To accompany samples
Yellow: Field copy
*See back of form for special instructions.

CASE NARRATIVE
GASCOYNE LABORATORIES, INC.

Report Number: 9903988-QC
Report To: *OHM/IT*
2790 Mosside Blvd.
Monroeville, PA 15146

July 28, 1999
Page 1 of 1

Project: Bainbridge 919568

Date Samples Received: July 21, 1999

Sample Numbers	Sampling Date	Matrix	Laboratory ID
Tank 1A	07/21/99	Soil	990015486

The sample was collected by the client and was transported to Gascoyne Laboratories via Gascoyne Laboratories courier. The courier relinquished the sample to Gascoyne personnel in the sample control department for log-in. The sample container was checked and it was noted that the container was in satisfactory condition, with the following exception: the sample container had headspace. This is footnoted on the Report of Analysis, where applicable.

The following requested test parameters were performed by Gascoyne Laboratories:

* Petroleum Hydrocarbon analysis (Gasoline Range and Diesel Range), using EPA Method 8015B

Reference: Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Office of Solid Waste and Emergency Response, USEPA, Wash., DC, November 1986; Final Update I (07/92), Final Update II (09/94), Final Update III (12/96)

The client requested Matrix Spike/ Matrix Spike Duplicate analysis for sample 99015486.

All laboratory quality control parameters were met.

Enclosed are the following:

1. Report of Analysis
2. Chain-of-Custody and Cooler Receipt Form
3. Case Narrative
4. Quality Control Data Package – 62 pages

GASCOYNE LABORATORIES, INC.

June A. Main
Quality Assurance Officer

GASCOYNE LABORATORIES, INC
BALTIMORE, MD 21224-6697

REPORT NO. 9903988-QC
REPORT TO: OHM / IT

PETROLEUM HYDROCARBON ANALYSIS

GASOLINE RANGE AND DIESEL RANGE

EPA 8015B

QUALITY CONTROL SUMMARY DATA

GASCOYNE LABORATORIES, INC. BALTIMORE, MD 21224

REPORT NO: 9903988
REPORT TO: IT/OHM CORPORATION

METHOD: EPA 8015B
MATRIX:SOIL

PARAMETER	METHOD BLANK	LCS	LCS LIMITS %	MS	MSD	SPIKE AMOUNT	MS/MSD LIMITS %	RPD	RPD LIMITS %	SAMPLE ID
GASOLINE RANGE ORGANICS (GRO)	<10	92	80-125	97	98	125	71-128	1.0	30	990015486

Notes: (1) Results expressed as ppm.

GASCOYNE LABORATORIES, INC. BALTIMORE, MD 21224

REPORT NO: 9903988
REPORT TO: IT/OHM CORPORATION

METHOD: EPA 8015B
MATRIX:SOIL

PARAMETER	METHOD BLANK	LCS	LCS LIMITS %	MS	MSD	SPIKE AMOUNT	MS/MSD LIMITS %	RPD	RPD LIMITS %	SAMPLE ID
DIESEL RANGE ORGANICS (DRO)	<10	96	59-102	95	95	1000	35-134	0.0	30	990015486

Notes: (1) Results expressed as ppm.

GASCOYNE LABORATORIES, INC. BALTIMORE, MD 21224

REPORT NO: 9903988
REPORT TO: IT/OHM CORPORATION

CONTINUING CALIBRATION

METHOD: EPA 8015B

ANALYTE	%R CCV-1
GRO	100
DRO	102

GASCOYNE LABORATORIES, INC. BALTIMORE, MD 21224

REPORT NO: 9903988
REPORT TO: IT/OHM CORPORATION

SURROGATE RECOVERIES

SAMPLE ID	GRO %R TFT	DRO % R PENT
99015486	103	88
99015486 MS	NA	89
990015486 MSD	NA	9[illegible]
MB	102	92
LCS	NA	96
CONTROL LIMITS:	75-131	73-125

TFT	TRIFLUOROTOLUENE
PENT	n-PENTACOSANE
MS	Matrix Spike
MSD	Matrix Spike Duplicate
LD	Laboratory Duplicate
MB	Method Blank
LCS	Laboratory Control Sample

Concentration of Surrogate added (soil):
TFT: 5 mg/kg
n-PENT: 50 mg/kg

26 Jul 99 10:59 AM
Sequence: C:\HPCHEM\2\SEQUENCE\21JUL99.SEQ

DRO Daily Calibration/ QC Data

Sample Log Table

Seq. Line	Vial Num.	Sample Name	Sample Multiplier Amount	ISTD Amount	Cal. Line	Method Name	Inj/ Vial
REAR							
1	21	MECL2 BLANK				2µl DROS	1
1	22	IX-176-4 MARKERS				DROS	1
1	23	IX-164-1 CAL				DROS	1
1	24	IX-166-4 SURR				DROS	1
1	25	9903922-MB 1-1				DROS	1
1	26	03922-15197 1-1				DROS	1
1	27	03922-15198 1-1				DROS	1
1	28	03922-15199 1-1				DROS	1
1	29	03922-15200 1-1				DROS	1
1	30	03922-15201 1-1				DROS	1
1	31	03922-15202 1-1				DROS	1
1	32	MECL2 BLANK				DROS	1
1	33	9903973-MB 1-1				DROS	1
1	34	03973-15441 1-1				DROS	1
1	35	IX-147-3 DRO^				DROS	1
1	36	03973-15442 1-1				DROS	1
1	37	03973-15443 1-1				DROS	1
1	38	03973-15444 1-1				DROS	1
1	39	03973-15445 1-1				DROS	1
1	40	9903988-MB 1-1				DROS	1
1	41	9903988-LCS 1-1				DROS	1
	42	03988-15486 1-1				DROS	1
1	43	03988-15486MS				DROS	1
1	44	03988-15486MSD				DROS	1
1	45	9903987-MB 100-1				DROS	1
1	46	IX-147-3 DRO^				DROS	1
1	47	03987-15483 95-1				DROS	1
1	48	MECL2 BLANK				DROS	1
1	49	3987-15483 1.9-1	20µl [95-1] + 980µl MeCl2 (RC-15-9)			DROS	1
1	50	03987-15484 5-1	0.5ml [10-1] + 0.5ml MeCl2 (RC-15-9)			DROS	1
1	51	03987-15484 10-1				DROS	1
1	52	03987-15484LD				DROS	1
1	53	9903987-MB RP				DROS	1
1	54	9903990-MB 1-1				DROS	1
1	55	03990-15489 1-1				DROS	1
1	56	IX-147-3 DRO^				DROS	1

GASCOYNE LABORATORIES, INC., Baltimore, MD 21224-6697

Checklist: Dept. 10-005
Effective Date: 04/24/98
Page: 1

Organic Chemistry GC CALIBRATION Review Checklist

Analysis: DRO Method: 8015B SOP ORG-017-00
Number: ORG-017-00

Analyst Performing Test: [illegible] Date of Analysis: 29Apr99

1st Tier Reviewer: [illegible] Date of Review: 29Apr99

2nd Tier Reviewer: [illegible] Date of Review: 29Apr99

Initial Calibration Curve:	Yes	No	N/A	1st Tier Comments	2nd Tier
1. Number of calibration standards used for method cited 5	✓			Calibration Std Source: see 15-11; STDS	✓
2. Any points removed or reanalyzed in the curve? Low Std___ High Std___ Other_____ Reanalysis		✓			✓
3. Was the % RSD <10% (GC)? a. If average response factor was not used, was 1st order curve used?	✓				✓
4. Were internal standard recoveries acceptable?			✓		✓
5. Was the ICV acceptable? ICV Criteria: ± 15 % (GC)	✓			ICV Source: see 15-11; STDS	✓
6. Was the ICB acceptable (<1/2 reporting limit)?	✓				✓
7. Was reporting limit verified (acceptable standard analysis)?	✓				✓
8. Was calibration curve created using correct files and was calibration file updated for date and time?	✓				✓
9. Logbook entries verified (Date, Time, Initials, Std. Source)?	✓				✓

Comments: updated DROS with w/ average response factor for DRO/SURR.

2nd Tier Reviewer
Comments:

****

Analyst Performing Test: [illegible] Date of Analysis: 21Jul99 Start Time: 12:58pm

1st Tier Reviewer: [illegible] Date of Review: 21Jul99

2nd Tier Reviewer: [illegible] Date of Review: 21Jul99

Continuing (Daily) Calibration:	Yes	No	N/A	1st Tier Comments	2nd Tier
1. Was correct calibration curve used for quantitation?	✓				✓
2. Was the daily/batch CCV acceptable? CCV Criteria: ± 15 % (GC)	✓			CCV Source: see 15-11; STDS	✓
3. Was the CCB acceptable (<1/2 reporting limit)?	✓				✓
4. Were retention times updated if required?	✓			as needed for DROmax	✓
5. Were internal standard recoveries acceptable?			✓		✓
6. If CCV failure, was new CCV analyzed and acceptable?			✓	New CCV Source:	✓
7. If CCV failure, was recalibration performed?			✓		✓

Comments:

2nd Tier Reviewer
Comments:

GASCOYNE LABORATORIES, INC., Baltimore, MD 21224-6697

Checklist: Dept. 10-004
Effective Date: 04/24/98
Page: 1 of 1

Organic Chemistry (GC/Purge & Trap) DATA Review Checklist

alysis: DRO Method: 8015B SOP Number: ORG-012-00

Analyst Performing Test: MSR Date of Analysis: 21 Jul 99

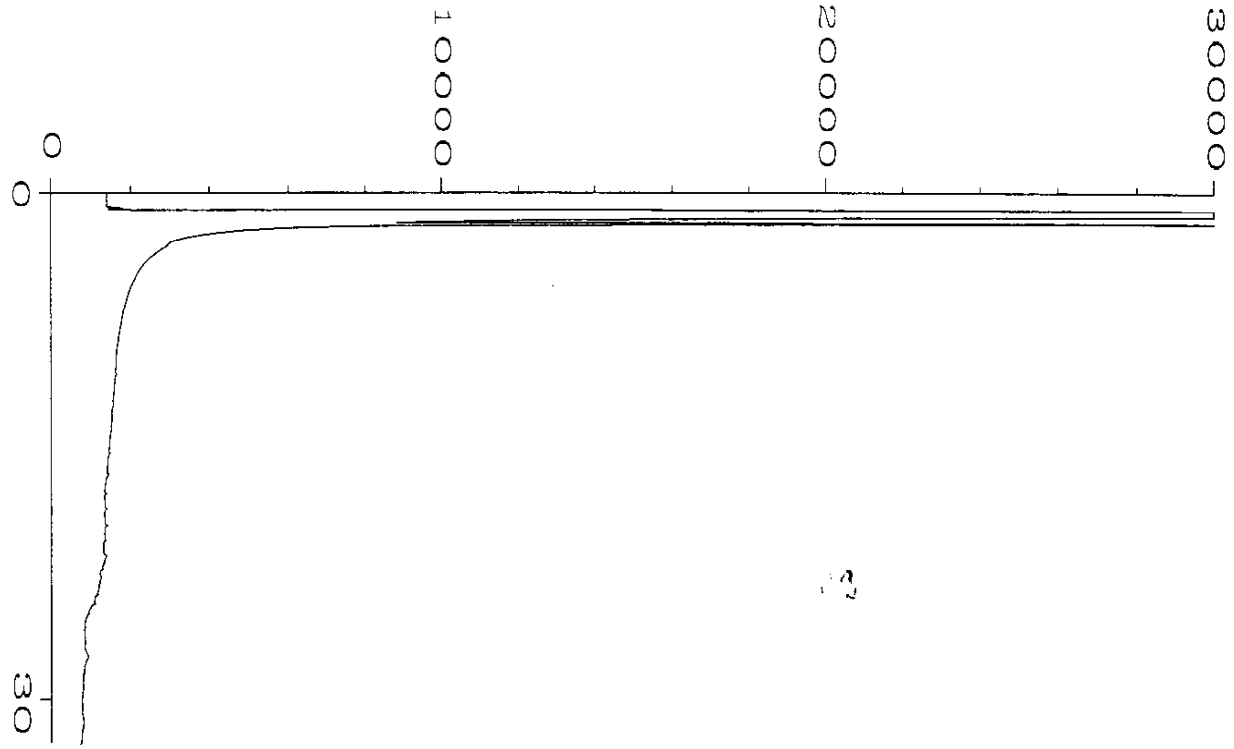
1st Tier Reviewer: MSR Date of Review: 22 Jul 99

2nd Tier Reviewer: [illegible] Date of Review: 23 Jul 99

Sample Analysis:	Yes	No	N/A	1st Tier Comments	2nd Tier
1. Was the preservation of samples checked and recorded?	✓			Refrigerated	✓
2. Were samples extracted/analyzed within holding time? If NO: a. Expired upon receipt___ b. Reanalysis past Holding Time____ c. Other	✓				✓
3. Was ICAL/CCAL Checklist completed?	✓				✓
4. Was Method Blank acceptable?	✓	✓			✓
5. Was Lab Control Sample (LCS) Analysis Acceptable?	✓			LCS Source See 20-41-20-	✓
6. Was Matrix Spike analyzed?	✓			Spike Solution Source	✓
6a. Was Matrix Spike Duplicate analyzed?	✓				✓
7. Were MS/MSD Recoveries acceptable?	✓				✓
8. Were RPDs of MS/MSDs Acceptable?	✓				✓
9. Were Laboratory Duplicates analyzed?	✓	✓			✓
10. Were RPDs acceptable?	✓		✓	>41% RPD	✓
11. Surrogate recoveries acceptable?	✓	✓			✓
12. Were calculations checked?	✓				✓
13. Were results verified using confirmation column?		✓			✓
14. Any method deviations performed? Explain below.		✓			✓

Comments: (4) Reprep of DRO WX-MB. Surr. % Rec. Low. Reprep/Reanalysis OK

2nd Tier Reviewer Comments: (11) Surr % Rec. unacceptable. No sample left to reprep. Data flagged.



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External Standard Report

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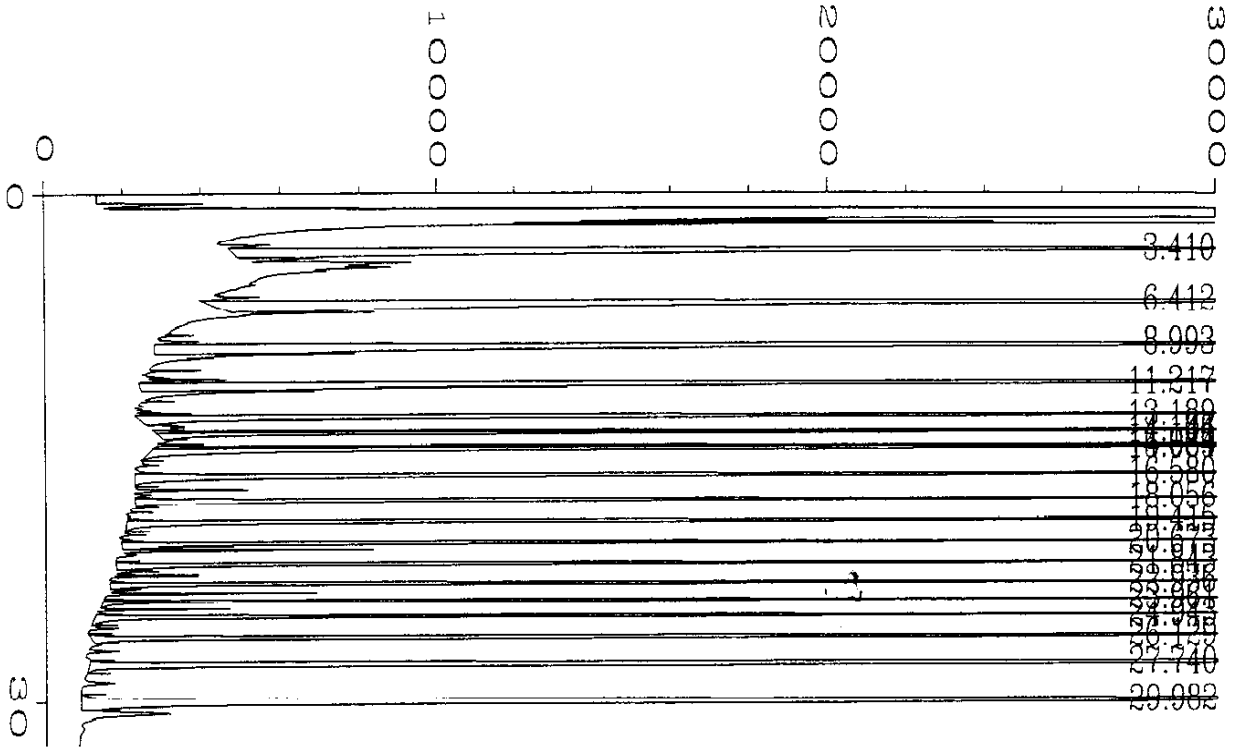
Data File Name	: C:\HPCHEM\2\DATA\21JUL99\021R0101.D		
Operator	: MST/SLB	Page Number	: 1
Instrument	: HP #2	Vial Number	: 21
Sample Name	: MECL2 BLANK	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 21 Jul 99 12:58 PM	Instrument Method	: DROS.MTH
Report Created on	: 21 Jul 99 01:32 PM	Analysis Method	: DROS.MTH
Last Recalib on	: 29 APR 99 02:57 PM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 2 in C:\HPCHEM\2\DATA\21JUL99\021R0101.D

Ret Time	Area	Type	Width	Ref#	ug/ml	Name
12.300	* not found *			1		#2 FUEL OIL
20.200	* not found *			1		C25-SURROGATE

Not all calibrated peaks were found

==========



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External Standard Report

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L 1 File Name	: C:\HPCHEM\2\DATA\21JUL99\022R0101.D		
Operator	: MST/SLB	Page Number	: 1
Instrument	: HP #2	Vial Number	: 22
Sample Name	: IX-176-4 MARKERS	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 21 Jul 99 01:33 PM	Instrument Method	: DROS.MTH
Report Created on	: 21 Jul 99 02:20 PM	Analysis Method	: DROS.MTH
Last Recalib on	: 29 APR 99 02:57 PM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 2 in C:\HPCHEM\2\DATA\21JUL99\022R0101.D

Ret Time	Area	Type	Width	Ref#	ug/ml	Name
12.300	* not found *			1		#2 FUEL OIL
20.673	1898537	VV	0.051	1	269.573	C25-SURROGATE

Not all calibrated peaks were found

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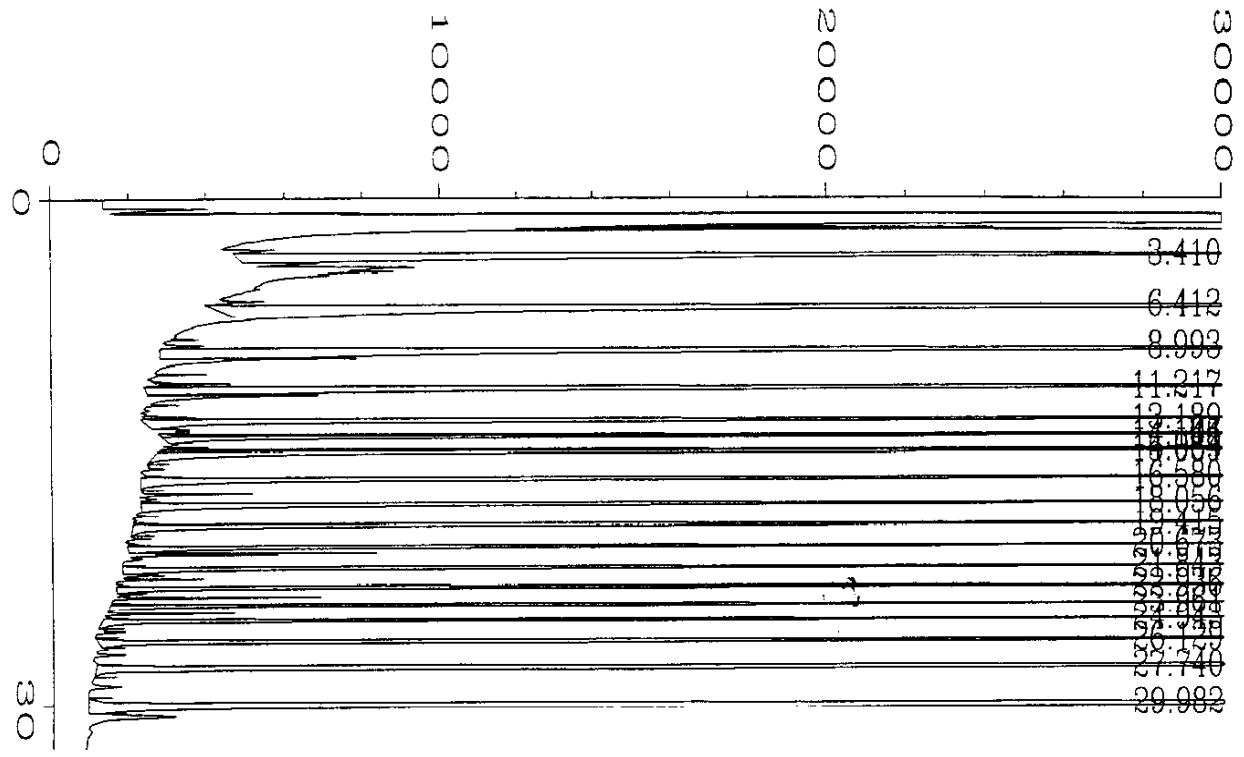

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Area Percent Report

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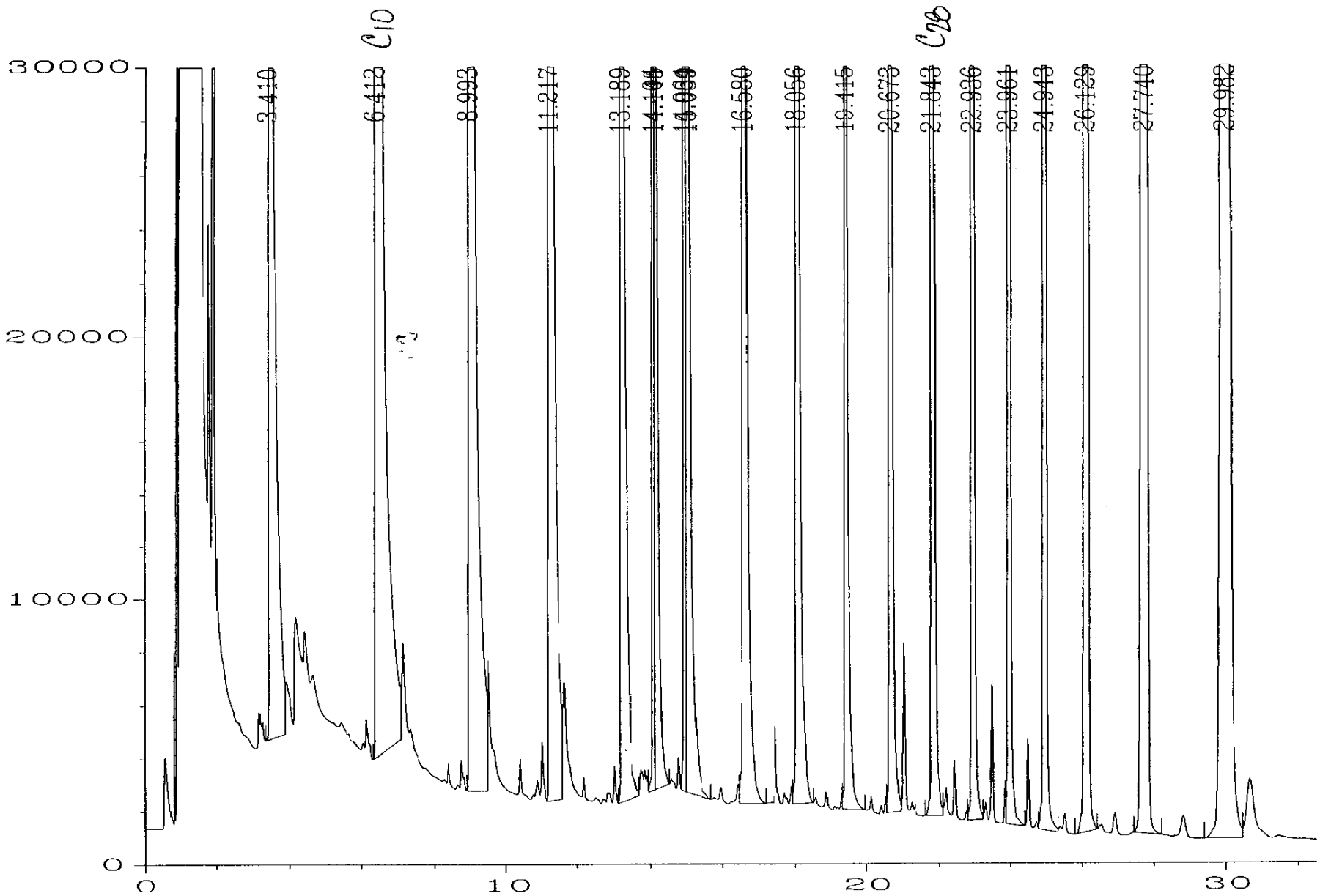
a File Name	: C:\HPCHEM\2\DATA\21JUL99\022R0101.D		
Operator	: MST/SLB	Page Number	: 1
Instrument	: HP #2	Vial Number	: 22
Sample Name	: IX-176-4 MARKERS	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 21 Jul 99 01:33 PM	Instrument Method	: DROS.MTH
Report Created on:	21 Jul 99 02:20 PM	Analysis Method	: DROS.MTH

Sig. 2 in C:\HPCHEM\2\DATA\21JUL99\022R0101.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	3.410	1818143	614194	BV	0.043	4.6982
2	6.412	1782694	401052	PV	0.061	4.6066
3	8.993	1837189	356555	PV	0.070	4.7475
4	11.217	1819217	409654	PV	0.062	4.7010
5	13.189	1835911	585308	PV	0.047	4.7442
6	14.104	1782910	702531	VV	0.039	4.6072
7	14.145	2214299	838468	VV	0.039	5.7220
8	14.964	1622600	568577	PV	0.044	4.1929
9	15.039	2346782	731126	VB	0.048	6.0643
10	16.580	1915829	543159	VB	0.053	4.9507
11	18.056	1921621	569849	VV	0.052	4.9656
12	19.415	1905047	578537	VB	0.050	4.9228
13	20.673	1898537	591313	VV	0.051	4.9060
14	21.843	1961831	616036	BV	0.048	5.0696
15	22.936	1977749	617095	VV	0.050	5.1107
16	23.961	2035717	625280	VB	0.050	5.2605
17	24.943	2018400	558812	VV	0.056	5.2157
18	26.129	2015334	398533	BV	0.078	5.2078
19	27.740	1970886	271188	BB	0.114	5.0930
20	29.982	2017623	183080	BV	0.167	5.2137



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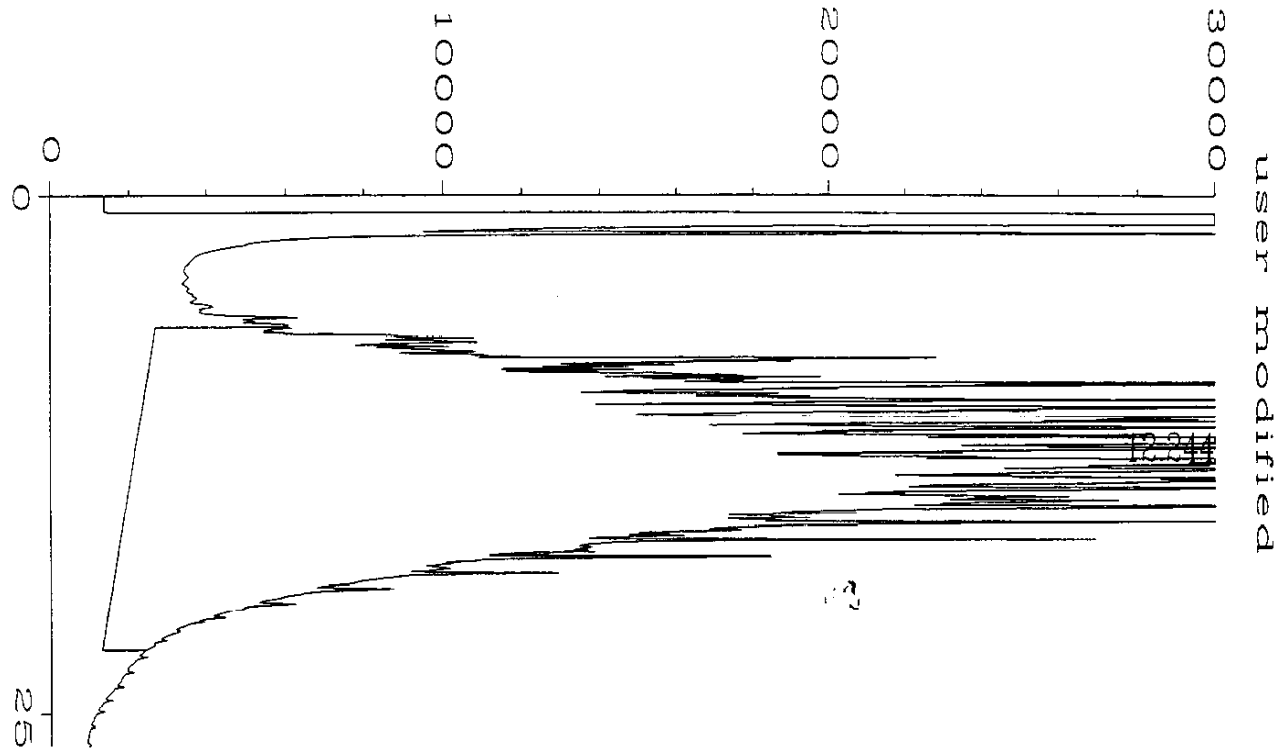

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External Standard Report

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a File Name	: C:\HPCHEM\2\DATA\21JUL99\023R0101.D		
Operator	: MST/SLB	Page Number	: 1
Instrument	: HP #2	Vial Number	: 23
Sample Name	: IX-164-1 CAL	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 21 Jul 99 02:16 PM	Instrument Method	: DROS.MTH
Report Created on:	21 Jul 99 03:05 PM	Analysis Method	: DROS.MTH
Last Recalib on	: 29 APR 99 02:57 PM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

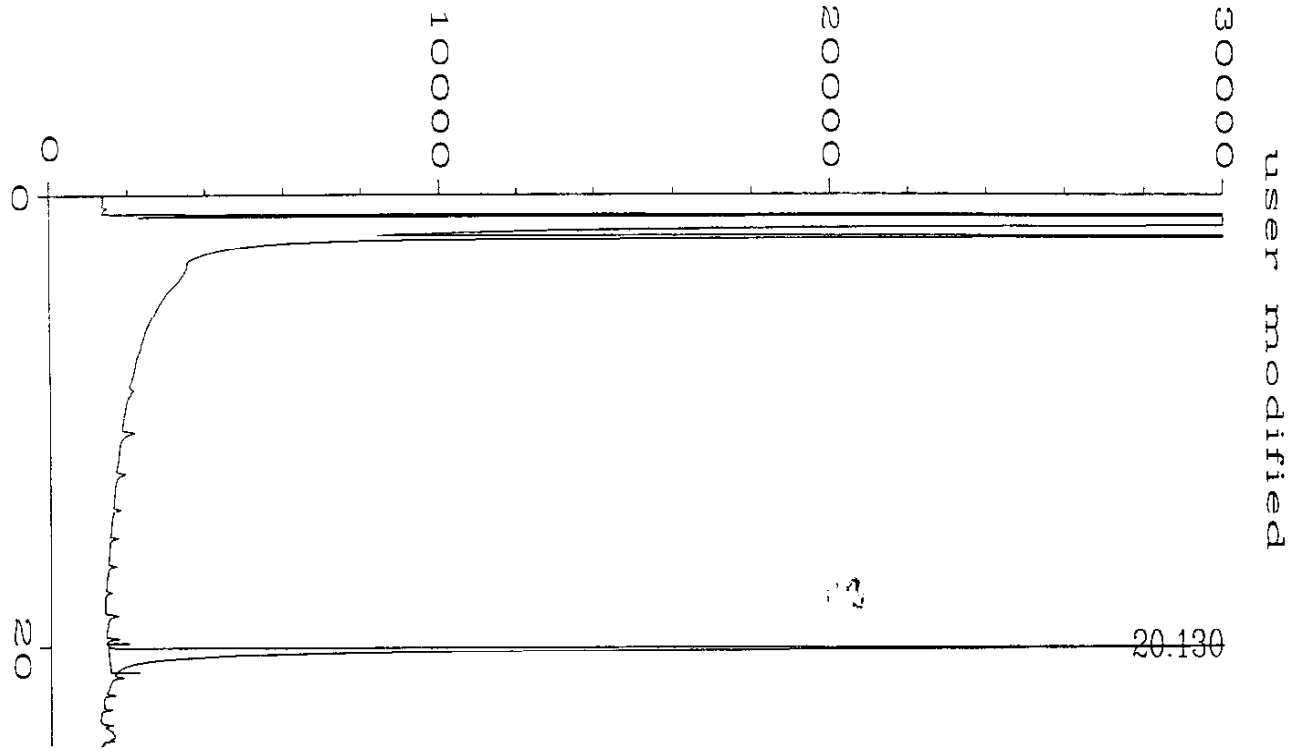
Sig. 2 in C:\HPCHEM\2\DATA\21JUL99\023R0101.D

Ret Time	Area	Type	Width	Ref#	ug/ml	Name
12.244	1.39704E+007	MM	3.055	1	2094.309	#2 FUEL OIL /2000= 105%
20.200	* not found *			1		C25-SURROGATE

Not all calibrated peaks were found

User Modified

==========



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External Standard Report

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I . File Name	: C:\HPCHEM\2\DATA\21JUL99\024R0101.D		
Operator	: MST/SLB	Page Number	: 1
Instrument	: HP #2	Vial Number	: 24
Sample Name	: IX-166-4 SURR	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 21 Jul 99 02:50 PM	Instrument Method	: DROS.MTH
Report Created on	: 21 Jul 99 03:23 PM	Analysis Method	: DROS.MTH
Last Recalib on	: 29 APR 99 02:57 PM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 2 in C:\HPCHEM\2\DATA\21JUL99\024R0101.D

Ret Time	Area	Type	Width	Ref#	ug/ml	Name
12.200	* not found *			1		#2 FUEL OIL
20.130	355063	MM	0.152	1	50.415	C25-SURROGATE/50=101%

Not all calibrated peaks were found

User Modified

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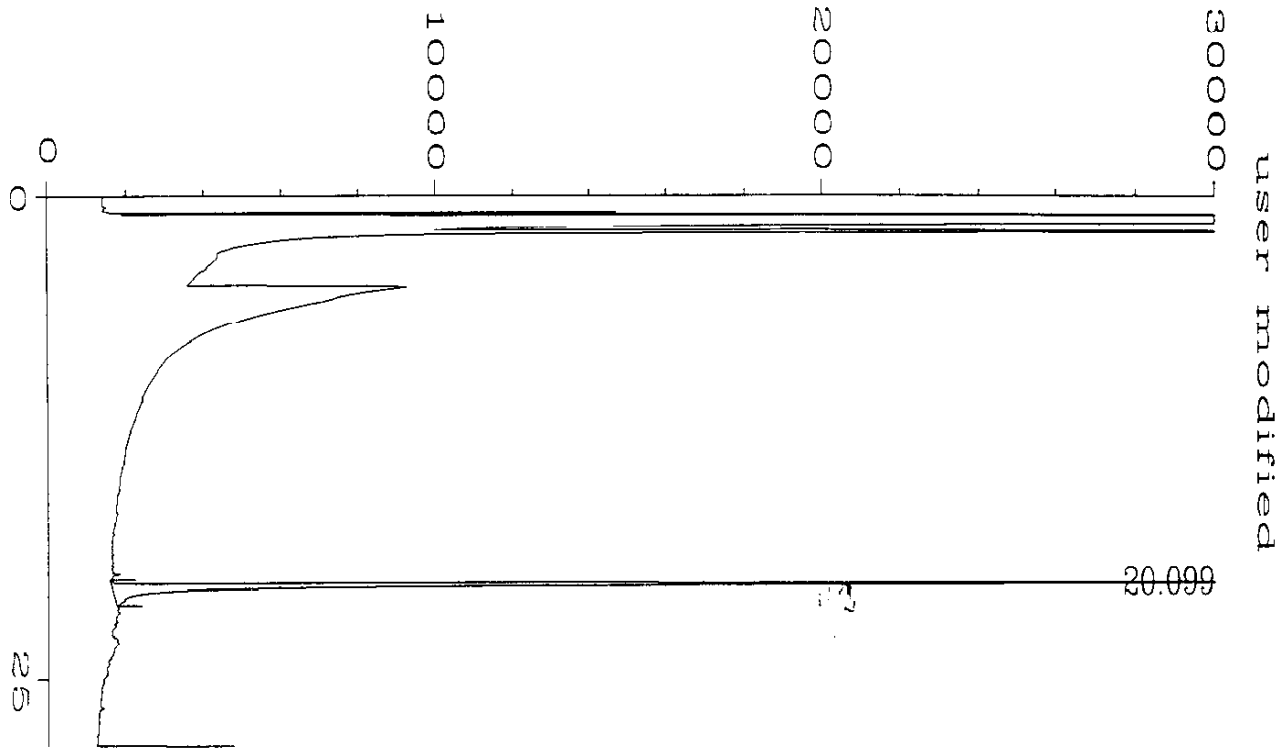

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External Standard Report

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a File Name	: C:\HPCHEM\2\DATA\21JUL99\040R0101.D		
Operator	: MST/SLB	Page Number	: 1
Instrument	: HP #2	Vial Number	: 40
Sample Name	: 9903988-MB 1-1	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 22 Jul 99 12:27 PM	Instrument Method	: DROS.MTH
Report Created on:	22 Jul 99 01:08 PM	Analysis Method	: DROS.MTH
Last Recalib on	: 29 APR 99 02:57 PM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 2 in C:\HPCHEM\2\DATA\21JUL99\040R0101.D

Ret Time	Area	Type	Width	Ref#	ug/ml	Name
7.900	* not found *			1		#2 FUEL OIL <10
20.099	323067	MM	0.112	1	45.872	C25-SURROGATE 150 (92)

Not all calibrated peaks were found

User Modified

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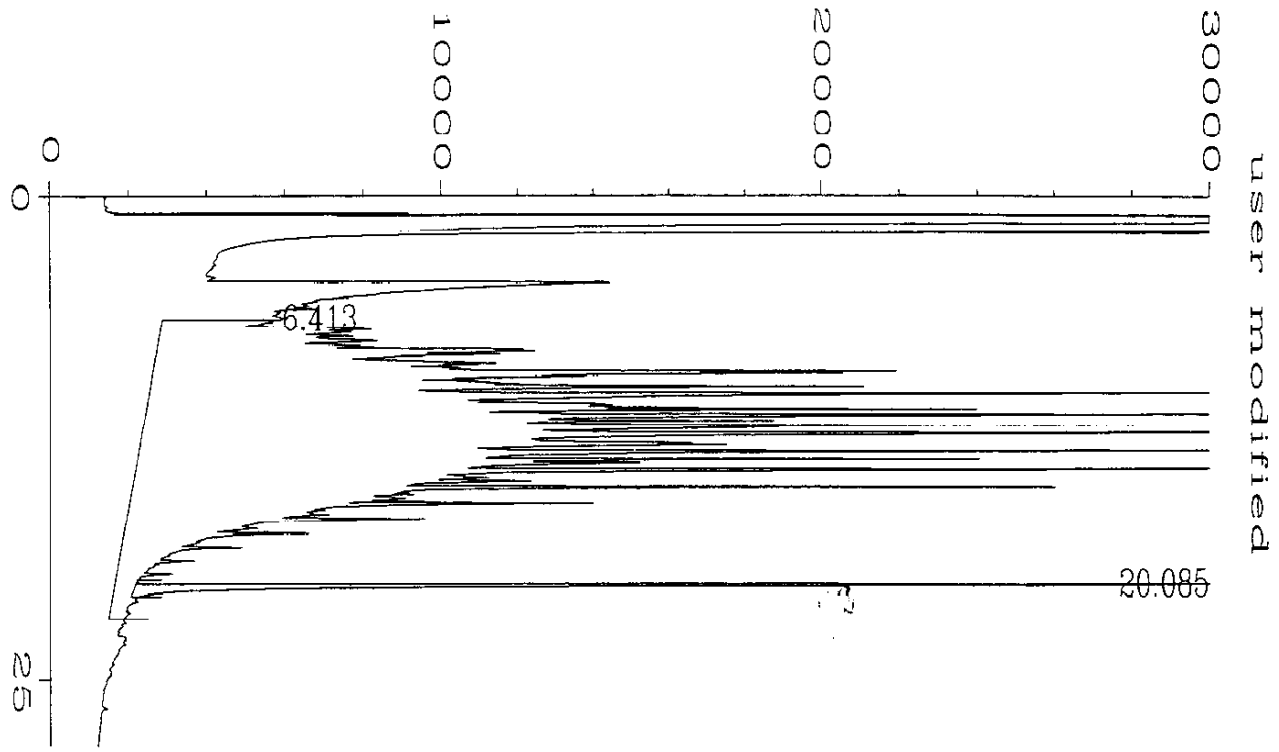

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External Standard Report

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File Name	: C:\HPCHEM\2\DATA\21JUL99\041R0101.D		
Operator	: MST/SLB	Page Number	: 1
Instrument	: HP #2	Vial Number	: 41
Sample Name	: 9903988-LCS 1-1	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 22 Jul 99 01:04 PM	Instrument Method	: DROS.MTH
Report Created on:	22 Jul 99 01:40 PM	Analysis Method	: DROS.MTH
Last Recalib on	: 29 APR 99 02:57 PM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 2 in C:\HPCHEM\2\DATA\21JUL99\041R0101.D

Ret Time	Area	Type	Width	Ref#	ug/ml	Name
6.413	6464310	MM R	1.783	1	969.065	#2 FUEL OIL /1000 (97)
20.085	336464	MM T	0.094	1	47.774	C25-SURROGATE 150 (96)

User Modified

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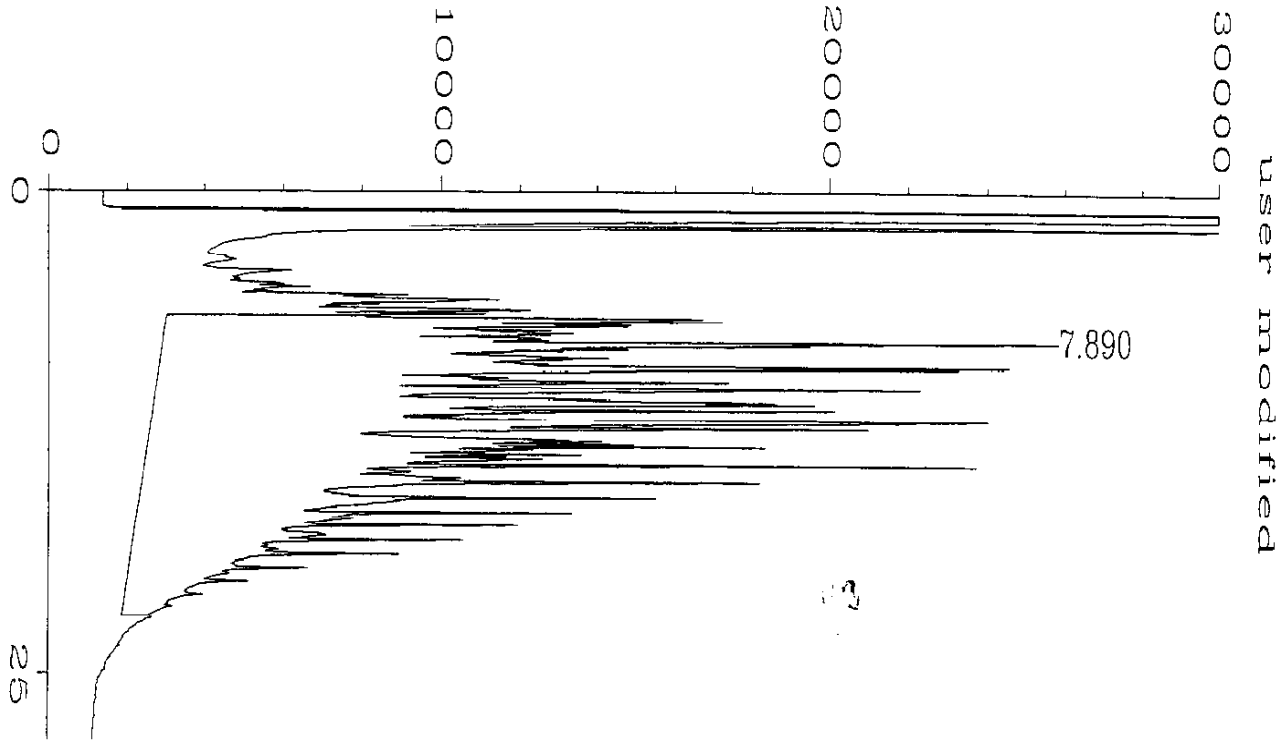


External Standard Report

Data File Name	: C:\HPCHEM\2\DATA\21JUL99\046R0101.D		
Operator	: MST/SLB	Page Number	: 1
Instrument	: HP #2	Vial Number	: 46
Sample Name	: IX-147-3 DRO^	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 22 Jul 99 04:03 PM	Instrument Method	: DROS.MTH
Report Created on	: 22 Jul 99 05:13 PM	Analysis Method	: DROS.MTH
Last Recalib on	: 29 APR 99 02:57 PM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

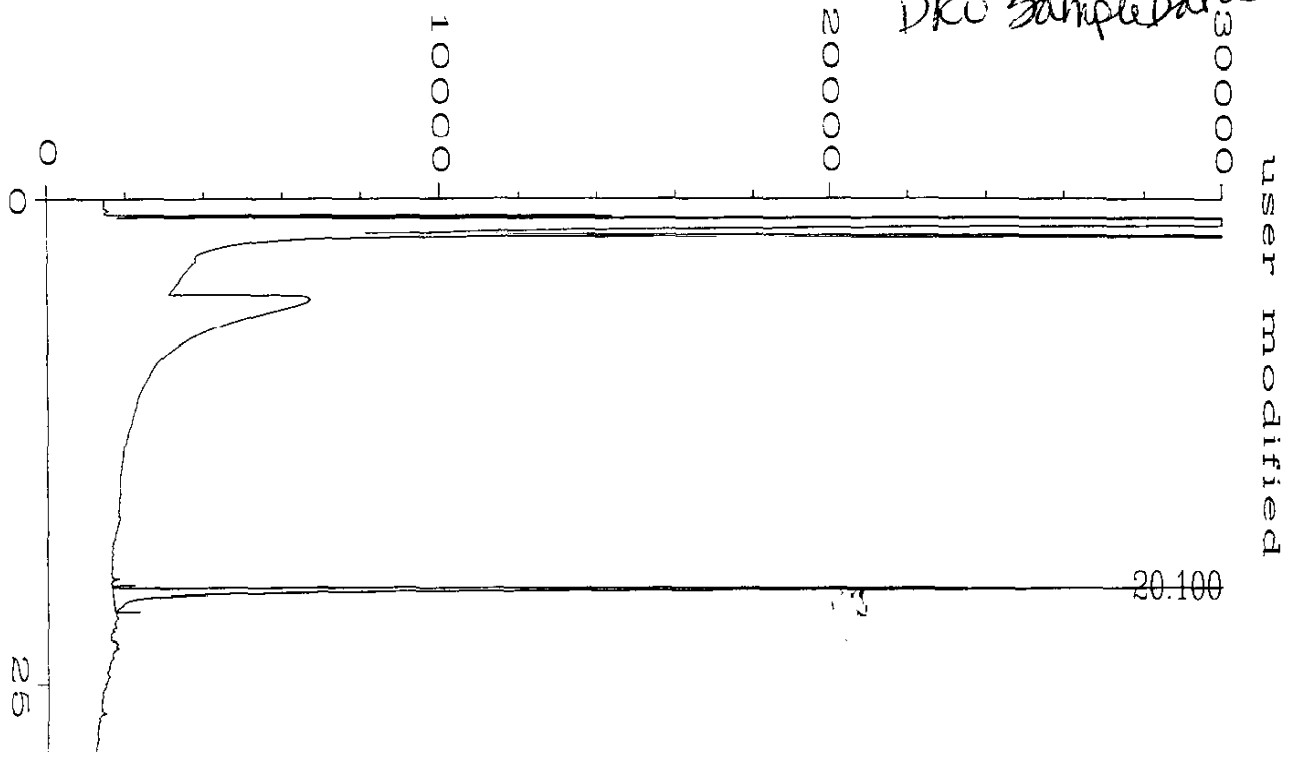
Sig. 2 in C:\HPCHEM\2\DATA\21JUL99\046R0101.D

Ret Time	Area	Type	Width	Ref#	ug/ml	Name
7.890	6804324	MM	4.942	1	1020.036	#2 FUEL OIL (1000 = 102%)
20.200	* not found *			1		C25-SURROGATE

Not all calibrated peaks were found

User Modified

DRO SampleData



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External Standard Report

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I . File Name	: C:\HPCHEM\2\DATA\21JUL99\042R0101.D		
Operator	: MST/SLB	Page Number	: 1
Instrument	: HP #2	Vial Number	: 42
Sample Name	: 03988-15486 1-1	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 22 Jul 99 01:40 PM	Instrument Method	: DROS.MTH
Report Created on	: 22 Jul 99 02:20 PM	Analysis Method	: DROS.MTH
Last Recalib on	: 29 APR 99 02:57 PM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 2 in C:\HPCHEM\2\DATA\21JUL99\042R0101.D

Ret Time	Area	Type	Width	Ref#	ug/ml	Name
6.400	* not found *			1		#2 FUEL OIL 210
20.100	309270	MM	0.111	1	43.913	C25-SURROGATE 150=881

Not all calibrated peaks were found

User Modified

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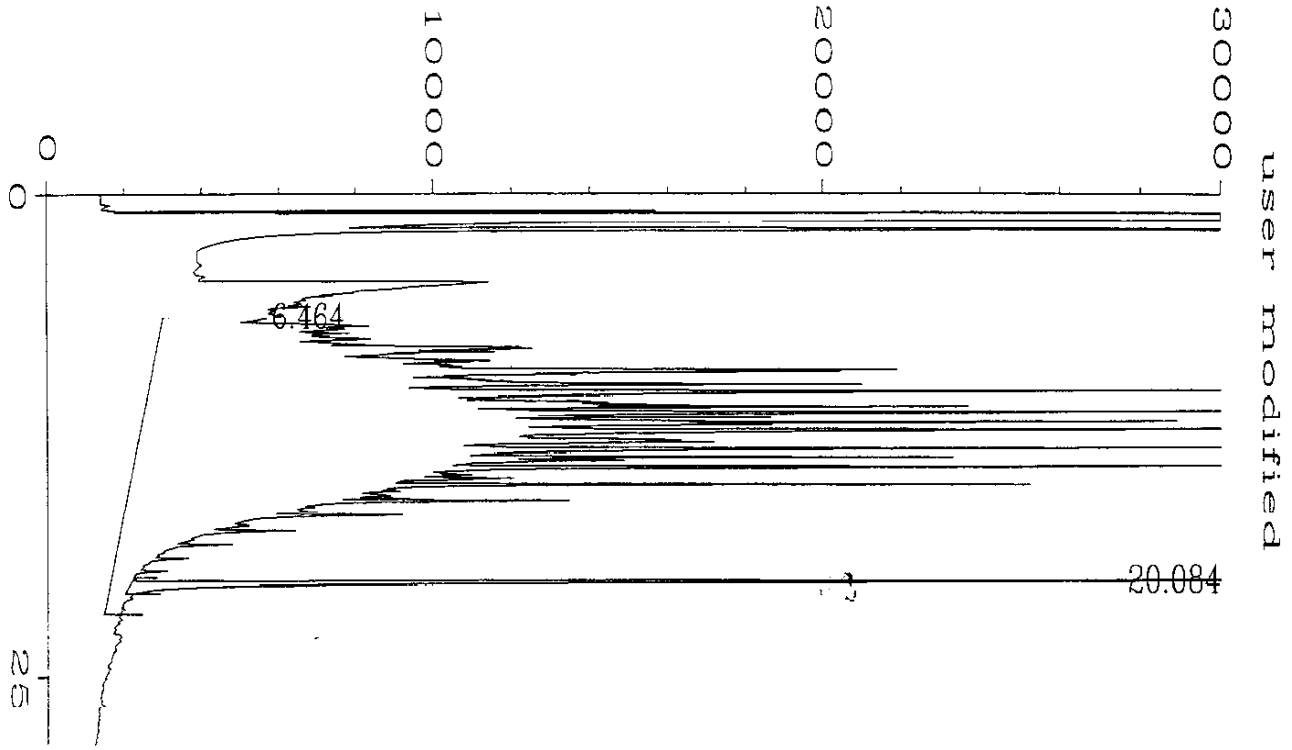

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External Standard Report

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Data File Name	: C:\HPCHEM\2\DATA\21JUL99\043R0101.D		
Operator	: MST/SLB	Page Number	: 1
Instrument	: HP #2	Vial Number	: 43
Sample Name	: 03988-15486MS	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 22 Jul 99 02:16 PM	Instrument Method:	DROS.MTH
Report Created on:	22 Jul 99 02:53 PM	Analysis Method	: DROS.MTH
Last Recalib on	: 29 APR 99 02:57 PM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 2 in C:\HPCHEM\2\DATA\21JUL99\043R0101.D

Ret Time	Area	Type	Width	Ref#	ug/ml	Name
6.464	6318178	MM R	1.873	1	947.158	#2 FUEL OIL /1000 95%
20.084	313835	MM T	0.094	1	44.561	C25-SURROGATE /50 89%

User Modified

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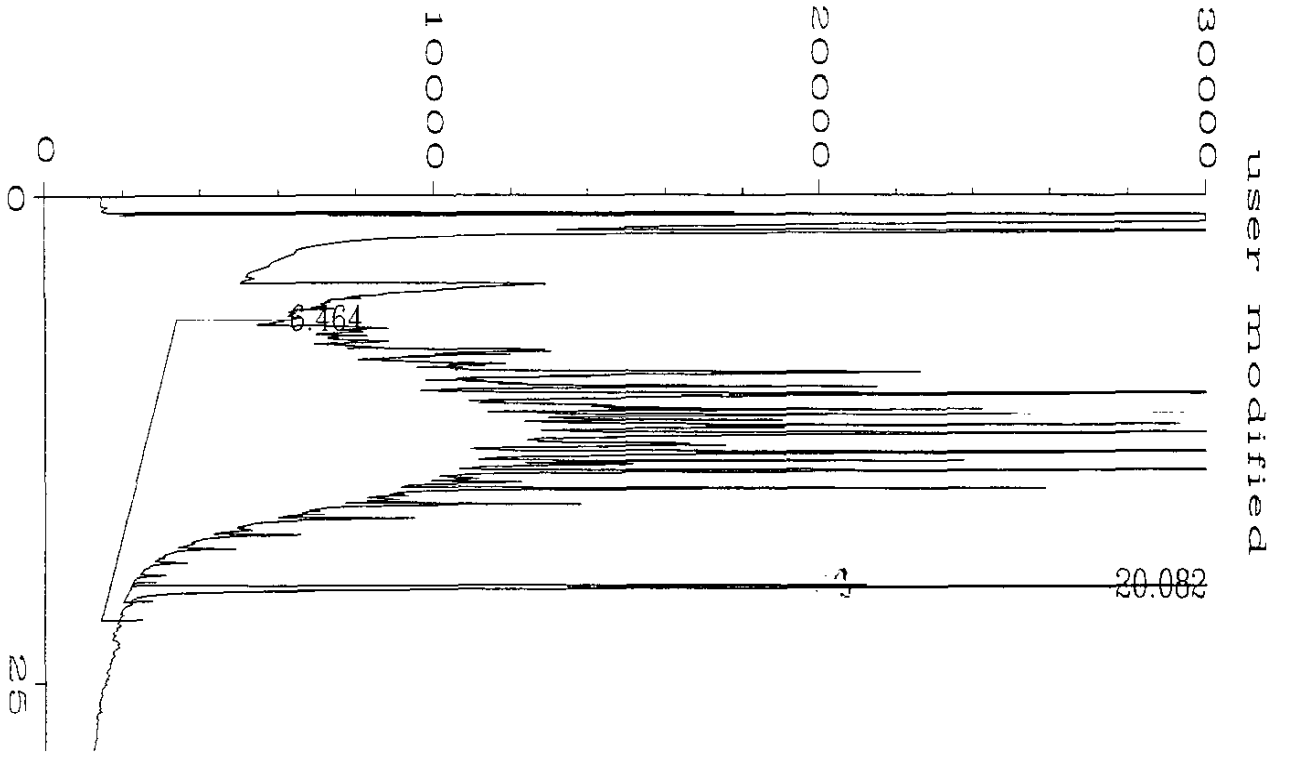

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External Standard Report

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Data File Name	: C:\HPCHEM\2\DATA\21JUL99\044R0101.D		
Operator	: MST/SLB	Page Number	: 1
Instrument	: HP #2	Vial Number	: 44
Sample Name	: 03988-15486MSD	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 22 Jul 99 02:51 PM	Instrument Method	: DROS.MTH
Report Created on	: 22 Jul 99 03:27 PM	Analysis Method	: DROS.MTH
Last Recalib on	: 29 APR 99 02:57 PM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 2 in C:\HPCHEM\2\DATA\21JUL99\044R0101.D

Ret Time	Area	Type	Width	Ref#	ug/ml	Name
6.464	6339151	MM R	1.840	1	950.302	#2 FUEL OIL /1m) 55%
20.082	319643	MM T	0.094	1	45.386	C25-SURROGATE /50-91%

User Modified

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DRO
SOIL PREPARATION BOOK
(ORGANICS EXTRACTION)
EPA 8015B

		Date	Init	Report #	Dash	Client Id	Init wt. (g)
15:15	1	7/21/99	WL	9903973	MB	[redacted]	10.005
	2	↓	↓	↓	13088 15441	↓	10.145
	3	↓	↓	↓	13089 15442	↓	10.065
	4	↓	↓	↓	13090 15443	↓	10.06
	5	↓	↓	↓	13091 15444	↓	10.115
	6	↓	↓	↓	13092 15445	↓	10.085
	7						
17:50	8	7/21/99	WAL	9903988	MB	IT	10.00
	9	↓	↓	↓	LCS	↓	10.00
	10	↓	↓	↓	15406 Tank I	↓	10.01
	11	↓	↓	↓	Tank I MS	↓	10.01
	12	↓	↓	↓	Tank I MSD	↓	10.00
	13	Filter paper RC-16 16 cis			Na2SO4 RC-17-1A, 1:1 Solv RS		33-12
13:40	14	7/21/99	WAL	9903990	MB	[redacted]	10.04
	15	↓	↓	↓	15489	↓	10.02
	16						
	17						
	18						
	19						
	20						

HQN:DROSOIL

085

DRO
SOIL PREPARATION BOOK
(ORGANICS EXTRACTION)
EPA 8015B

	Surrogate	Matrix Spike	Comments	FV (ml)	Comp Date	Init
1	1ml X-4-4	N/A	DRO SX [1:1] Start @ 13:15	10ml	7/21/99	WAR
2	1ml X-4-4	N/A	DRO SX [1:1]	10ml		
3	1ml X-4-4	N/A	DRO SX [1:1]	10ml		
4	1ml X-4-4	N/A	DRO SX [1:1]	10ml		
5	1ml X-4-4	N/A	DRO SX [1:1]	10ml		
6	1ml X-4-4	N/A	DRO SX [1:1]	10ml		
7						
8	X-4-4 1ml		DROSX [1:1]	10ml	7/21/99	WAR
9	1ml	X-3-1 1ml	DROSX [1:1]	10ml		
10	1ml		DROSX [1:1]	10ml		
11	1ml	X-3-1 1ml	DROSX [1:1]	10ml		
12	1ml	X-3-1 1ml	DROSX [1:1]	10ml		
13	MECL2 RC-16-BB		Zymark Cond 45°C A			
14	X-4-4 1ml	N/A	DROSX [1:1]	10ml	7/22/99	WAR
15	1ml		DROSX [1:1]	10ml		
16						
17						
18						
19						
20						

HQN:DROSOIL

~~086~~ JAW 7/28/99

019

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Calibration Report DRO Initial Calibration Data

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Data File Name : C:\HPCHEM\2\DATA\29APR99\012R0101.D
erator : MST/SLB
strument : HP #2
Sample Name : IX-129-8 CAL5
Run Time Bar Code:
Acquired on : 29 Apr 99 01:34 PM
Report Created on: 29 Apr 99 02:10 PM
Last Recalib on : 29 Apr 99 01:35 PM
Multiplier : 1

Page Number : 1
Vial Number : 12
Injection Number : 1
Sequence Line : 1
Instrument Method: DROS.MTH
Analysis Method : DRO.MTH
Sample Amount : 0
ISTD Amount :

Calibration Table

Pk#	RT	Lvl	ug/ml	Amt/Area	Ref Istd I#	Name
1	12.948	1	4000.0	1.491e-004	1	#2 FUEL OIL
		2	2000.0	1.5426e-004		
		3	1000.0	1.5448e-004		
		4	200.0	1.428e-004		
		5	10.0	1.4889e-004		
2	20.241	1	100.0	1.2872e-004	1	C25-SURROGATE
		2	75.0	1.3924e-004		
		3	50.0	1.3496e-004		
		4	25.0	1.4201e-004		
		5	10.0	1.6501e-004		

Calibration Settings

Title:

Reference window: 5.000 %
Non-reference window: 5.000 %
Units of amount: ug/ml
Multiplier: 1.0
RF uncal peaks: 0.0
Sample Amount: 0.0

Sample ISTD Information

No Sample ISTD Amounts

Multilevel Information

Fit: Linear
Origin: Force

Warnings and Errors during Calibration:

Not all calibrated peaks were found

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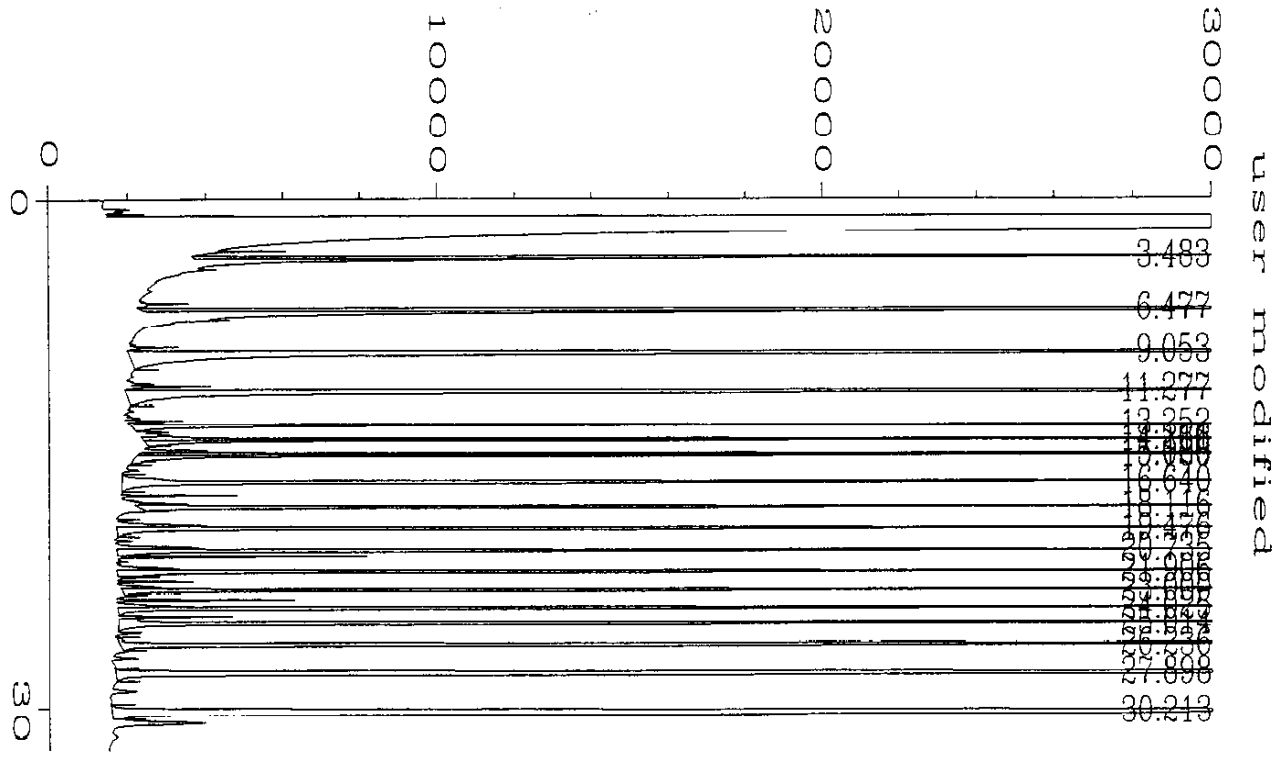
DRO Calibration Table

Pk#	RT	Level	ug/l (ppb)	Amt/Area	Ref ISTD#	Name	
1	12.948	1	4000.0	1.4910E-04	1	DRO (#2 FUEL OIL)	
		2	2000.0	1.5426E-04		AVG	1.4991E-04
		3	1000.0	1.5448E-04		STD DEV	4.7973E-06
		4	200.0	1.4280E-04		%RSD	3.20%
		5	10.0	1.4889E-04			
2	20.241	1	100.0	1.2872E-04	1	C25 - SURROGATE	
		2	75.0	1.3924E-04		AVG	1.4199E-04
		3	50.0	1.3496E-04		STD DEV	1.3811E-05
		4	25.0	1.4201E-04		%RSD	9.73%
		5	10.0	1.6501E-04			



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Area Percent Report

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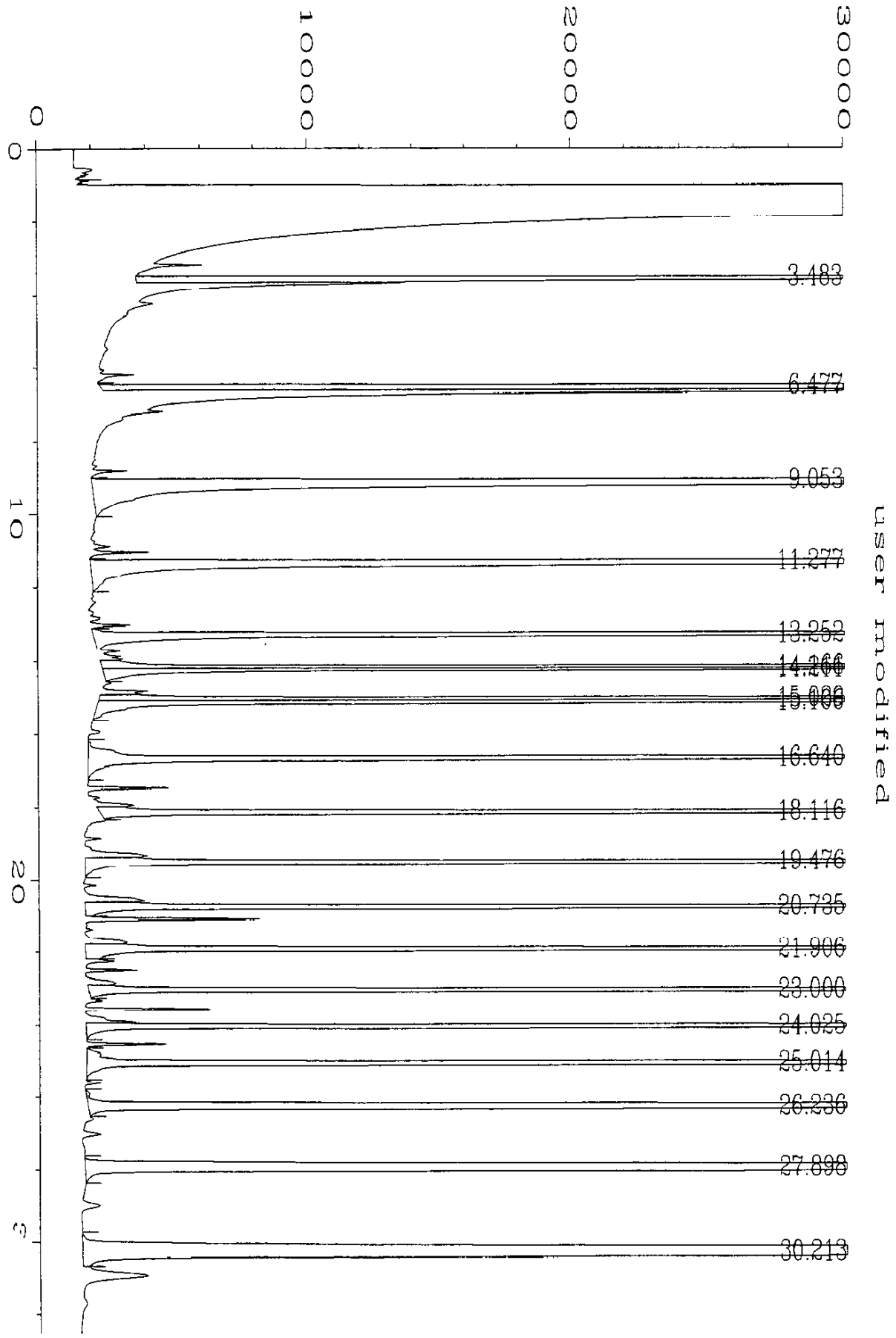
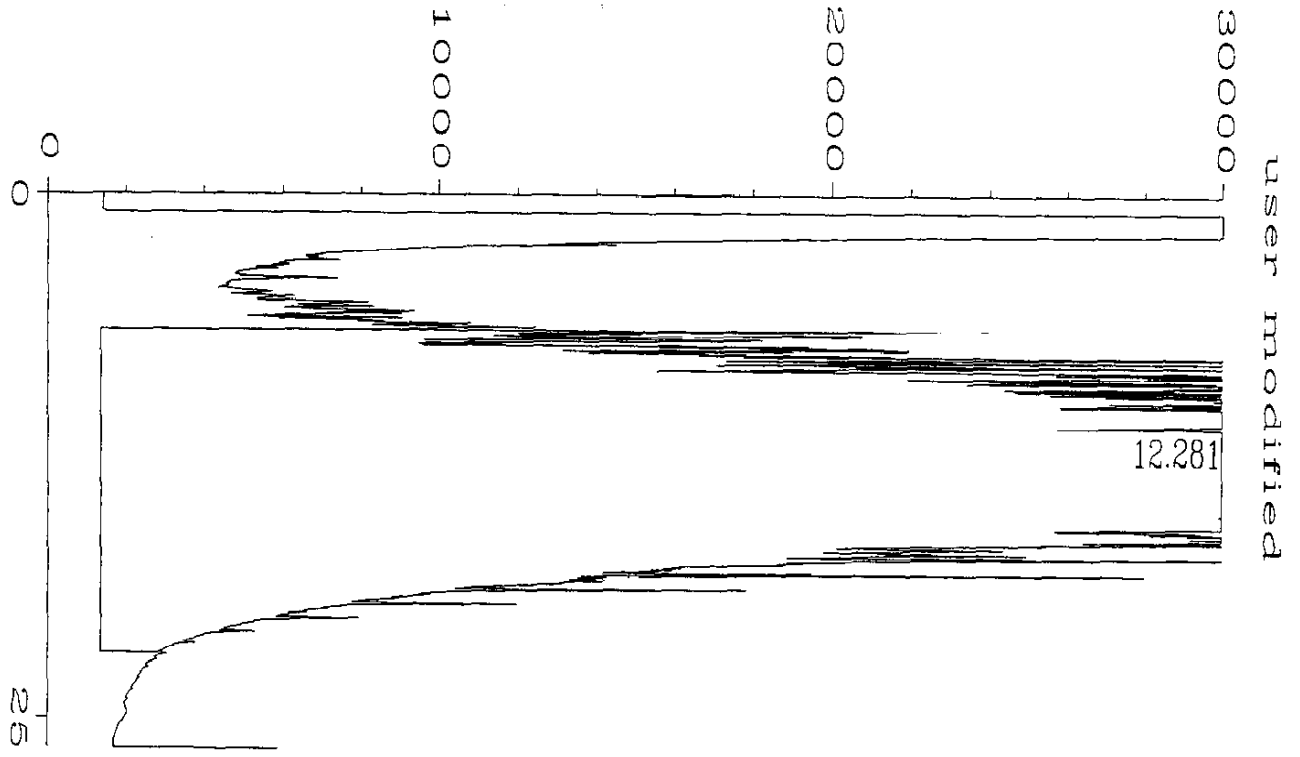
a File Name	: C:\HPCHEM\2\DATA\29APR99\002R0101.D		
Operator	: MST/SLB	Page Number	: 1
Instrument	: HP #2	Vial Number	: 2
Sample Name	: IX-34-3 MARKERS	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 29 Apr 99 08:16 AM	Instrument Method	: DROS.MTH
Report Created on	: 30 Apr 99 10:45 AM	Analysis Method	: DROS.MTH

Sig. 2 in C:\HPCHEM\2\DATA\29APR99\002R0101.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	3.483	1494569	648381	PF	0.035	4.5006
2	6.477	1261455	451540	BF	0.041	3.7986
3	9.053	1644999	449483	FB	0.052	4.9536
4	11.277	1632608	504564	PB	0.047	4.9163
5	13.252	1616484	581158	VV	0.043	4.8677
6	14.166	1780326	654442	VV	0.041	5.3611
7	14.211	1745592	703169	VV	0.037	5.2565
8	15.029	1656769	589011	VV	0.044	4.9890
9	15.106	1840856	650059	VB	0.043	5.5434
10	16.640	1697477	569748	BB	0.046	5.1116
11	18.116	1682407	569313	VV	0.046	5.0662
12	19.476	1669449	548791	VB	0.047	5.0272
13	20.735	1664012	544128	VV	0.048	5.0108
14	21.906	1709109	545305	VV	0.049	5.1466
15	23.000	1692172	535608	VV	0.050	5.0956
16	24.025	1729835	532607	VB	0.051	5.2091
17	25.014	1706600	453195	VB	0.058	5.1391
18	26.236	1680140	319117	BV	0.084	5.0594
19	27.898	1638089	218561	BB	0.116	4.9328
20	30.213	1665233	149096	BV	0.168	5.0145


0
10000
20000
30000
0
10
20
30
3.483
6.477
9.053
11.277
13.252
14.266
15.000
16.640
18.116
19.476
20.735
21.906
23.000
24.025
25.014
26.236
27.898
30.213
user modified



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External Standard Report

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Data File Name	: C:\HPCHEM\2\DATA\29APR99\003R0101.D		
Operator	: MST/SLB	Page Number	: 1
Instrument	: HP #2	Vial Number	: 3
Sample Name	: IX-175-5 CAL1	Injection Number	: 1
Run Time Bar Code	:	Sequence Line	: 1
Acquired on	: 29 Apr 99 08:55 AM	Instrument Method	: DROS.MTH
Report Created on	: 29 Apr 99 03:09 PM	Analysis Method	: DROS.MTH
Last Recalib on	: 29 Apr 99 02:57 PM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 2 in C:\HPCHEM\2\DATA\29APR99\003R0101.D

Ret Time	Area	Type	Width	Ref#	ug/ml	Name
12.281	2.6903E+007	MM	2.629	1	4033.031	#2 FUEL OIL
20.200	* not found *			1		C25-SURROGATE

Not all calibrated peaks were found

User Modified

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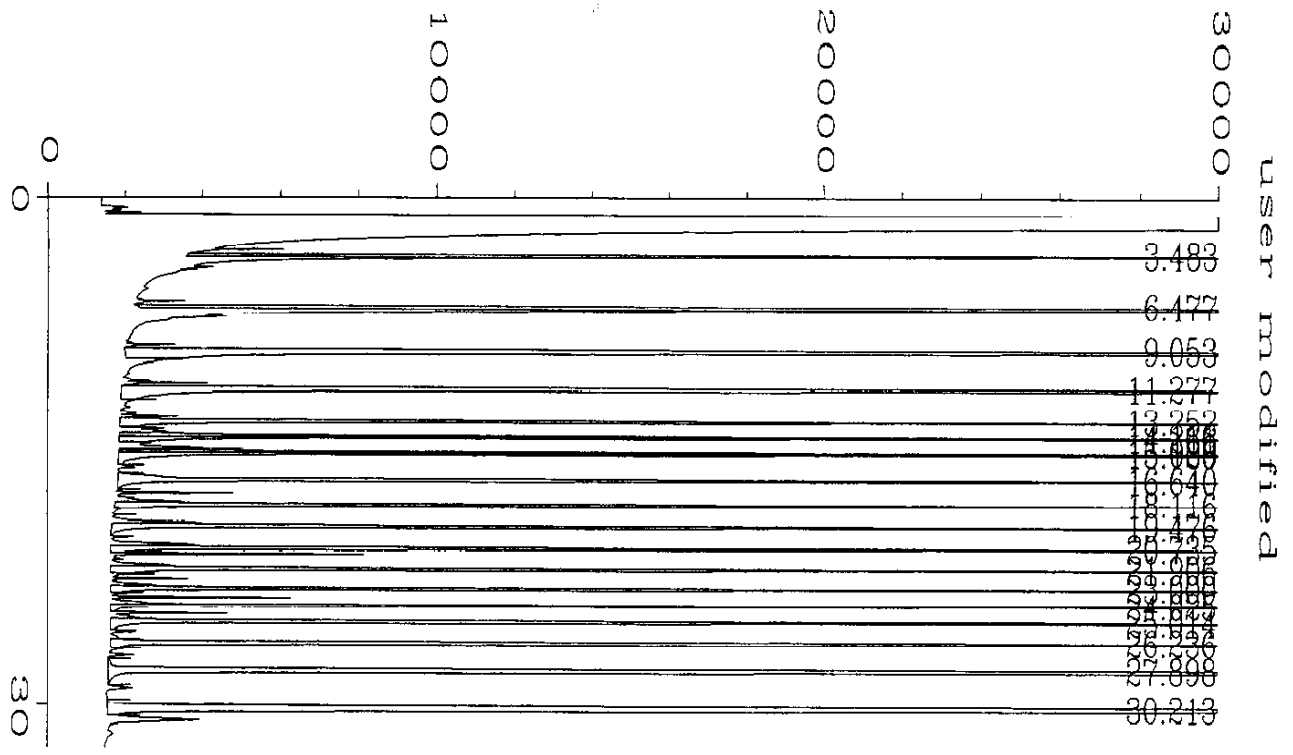

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External Standard Report

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L . File Name	: C:\HPCHEM\2\DATA\29APR99\002R0101.D		
Operator	: MST/SLB	Page Number	: 1
Instrument	: HP #2	Vial Number	: 2
Sample Name	: IX-34-3 MARKERS	Injection Number	: 1
Run Time Bar Code	:	Sequence Line	: 1
Acquired on	: 29 Apr 99 08:16 AM	Instrument Method	: DROS.MTH
Report Created on	: 29 Apr 99 09:52 AM	Analysis Method	: DRO.MTH
Last Recalib on	: 19 DEC 98 02:40 PM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 2 in C:\HPCHEM\2\DATA\29APR99\002R0101.D

Ret Time	Area	Type	Width	Ref#	ug/ml	Name
12.563	* not found *			1		#2 FUEL OIL
20.735	1665501	VV	0.048	1	195.610	C25-SURROGATE

Not all calibrated peaks were found

User Modified

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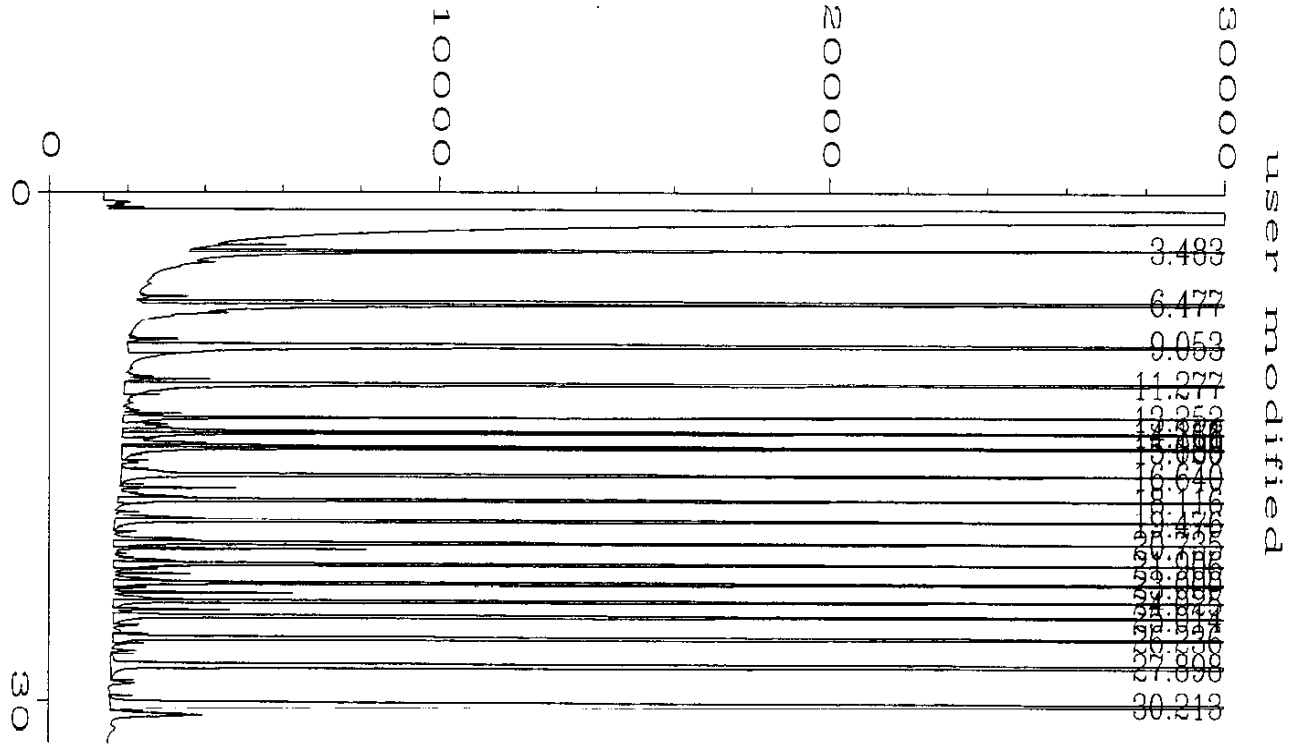

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Area Percent Report

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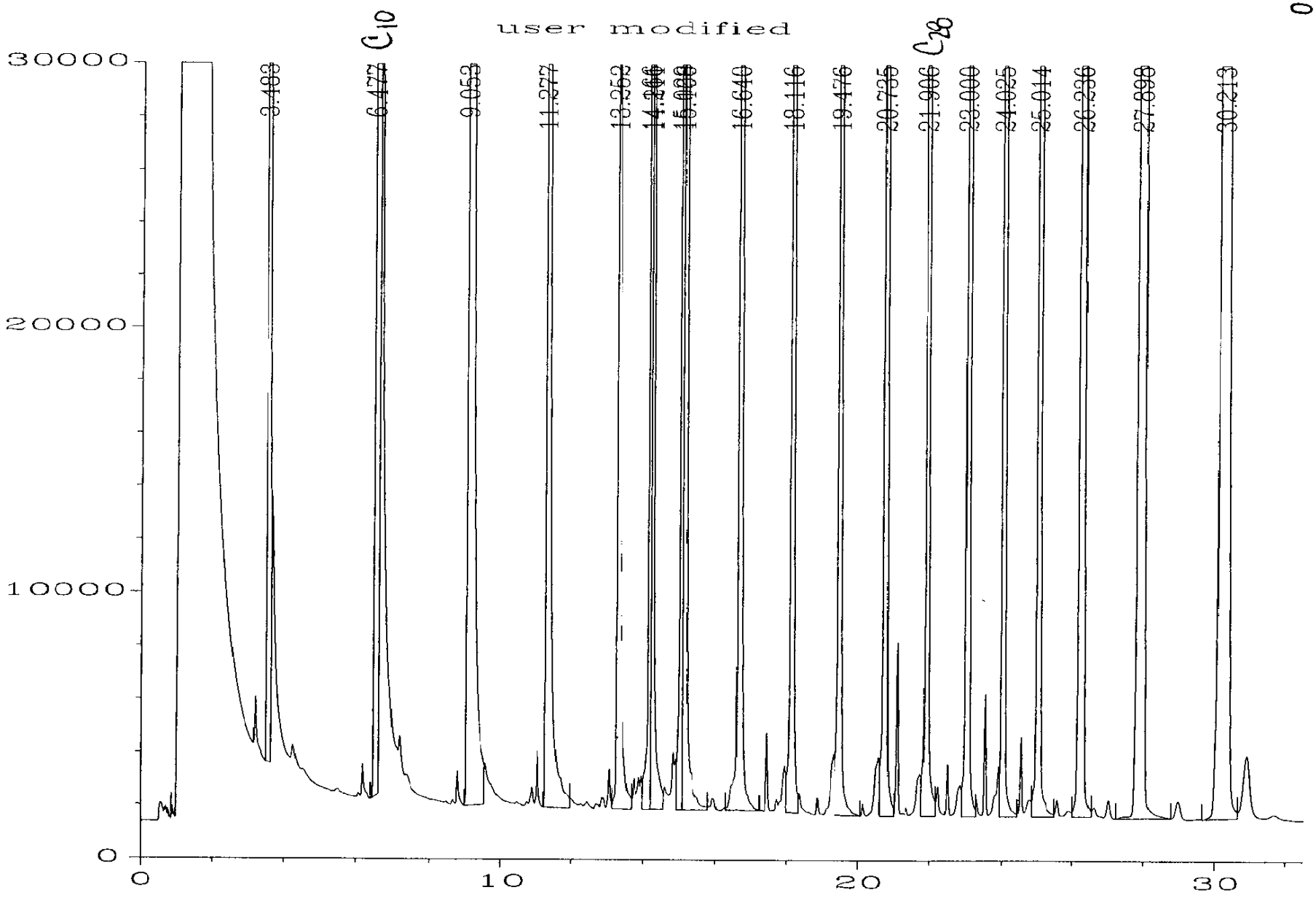
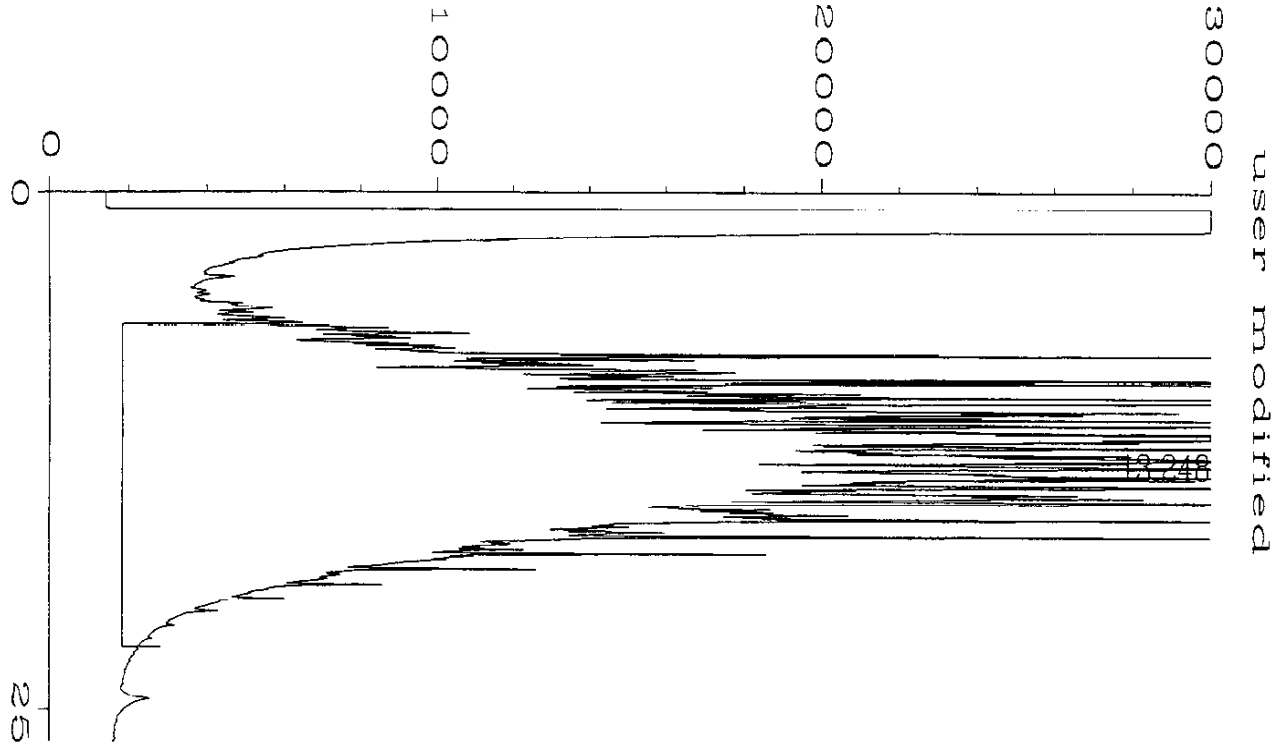
File Name	: C:\HPCHEM\2\DATA\29APR99\002R0101.D		
Operator	: MST/SLB	Page Number	: 1
Instrument	: HP #2	Vial Number	: 2
Sample Name	: IX-34-3 MARKERS	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 29 Apr 99 08:16 AM	Instrument Method	: DROS.MTH
Report Created on:	29 Apr 99 09:53 AM	Analysis Method	: DRO.MTH

Sig. 2 in C:\HPCHEM\2\DATA\29APR99\002R0101.D

Pk#	Ret Time	Area	Height	Type	Width	Area %
1	3.483	1495052	648405	PF	0.035	4.4937
2	6.477	1261446	451540	FF	0.041	3.7916
3	9.053	1629675	449494	FV	0.052	4.8983
4	11.277	1634718	504581	PV	0.048	4.9135
5	13.252	1623741	581325	VV	0.043	4.8805
6	14.166	1786801	654957	VV	0.041	5.3706
7	14.211	1757830	703701	VV	0.037	5.2835
8	15.029	1660817	589410	VV	0.044	4.9920
9	15.106	1851161	650426	VV	0.044	5.5641
10	16.640	1697118	569747	VV	0.046	5.1011
11	18.116	1693658	569839	VV	0.046	5.0907
12	19.476	1671186	548822	VV	0.047	5.0231
13	20.735	1665501	544189	VV	0.048	5.0060
14	21.906	1710757	545372	VV	0.049	5.1421
15	23.000	1696683	535801	VV	0.050	5.0998
16	24.025	1732631	532691	VV	0.051	5.2078
17	25.014	1705875	453295	VV	0.058	5.1274
18	26.236	1684362	319109	VV	0.083	5.0627
19	27.898	1645207	218655	BB	0.117	4.9450
20	30.213	1665655	149104	BV	0.168	5.0065



Sig. 2 in C:\HPCHEM\2\DATA\29APR99\002R0101.D



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External Standard Report

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a File Name	: C:\HPCHEM\2\DATA\29APR99\004R0101.D		
Operator	: MST/SLB	Page Number	: 1
Instrument	: HP #2	Vial Number	: 4
Sample Name	: IX-164-1 CAL2	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 29 Apr 99 09:28 AM	Instrument Method	: DROS.MTH
Report Created on	: 29 Apr 99 03:11 PM	Analysis Method	: DROS.MTH
Last Recalib on	: 29 Apr 99 02:57 PM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 2 in C:\HPCHEM\2\DATA\29APR99\004R0101.D

Ret Time	Area	Type	Width	Ref#	ug/ml	Name
13.248	1.25916E+007	MM	2.800	1	1887.613	#2 FUEL OIL
20.200	* not found *			1		C25-SURROGATE

Not all calibrated peaks were found

User Modified

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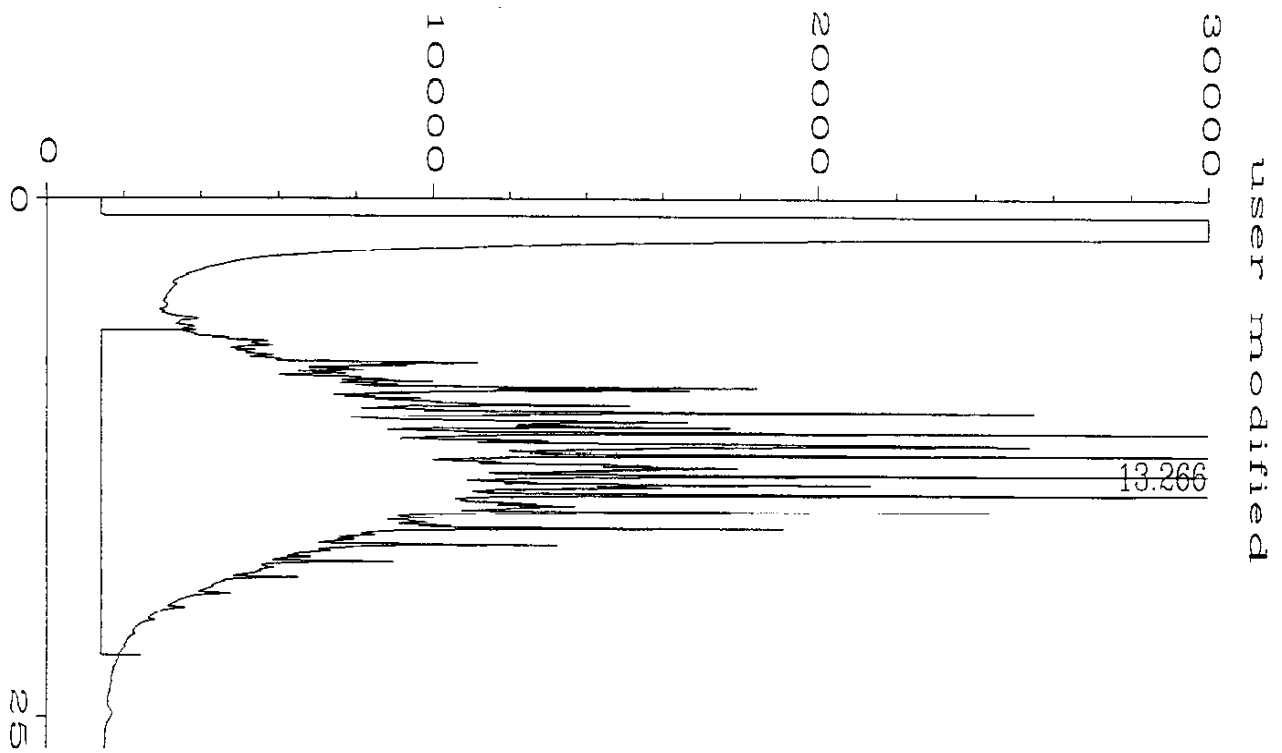

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External Standard Report

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Data File Name	: C:\HPCHEM\2\DATA\29APR99\005R0101.D		
Operator	: MST/SLB	Page Number	: 1
Instrument	: HP #2	Vial Number	: 5
Sample Name	: IX-176-1 CAL3	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 29 Apr 99 10:00 AM	Instrument Method	: DROS.MTH
Report Created on	: 29 Apr 99 02:58 PM	Analysis Method	: DROS.MTH
Last Recalib on	: 29 Apr 99 02:57 PM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 2 in C:\HPCHEM\2\DATA\29APR99\005R0101.D

Ret Time	Area	Type	Width	Ref#	ug/ml	Name
13.266	6629765	MM	3.324	1	993.868	#2 FUEL OIL
20.200	* not found *			1		C25-SURROGATE

Not all calibrated peaks were found

User Modified

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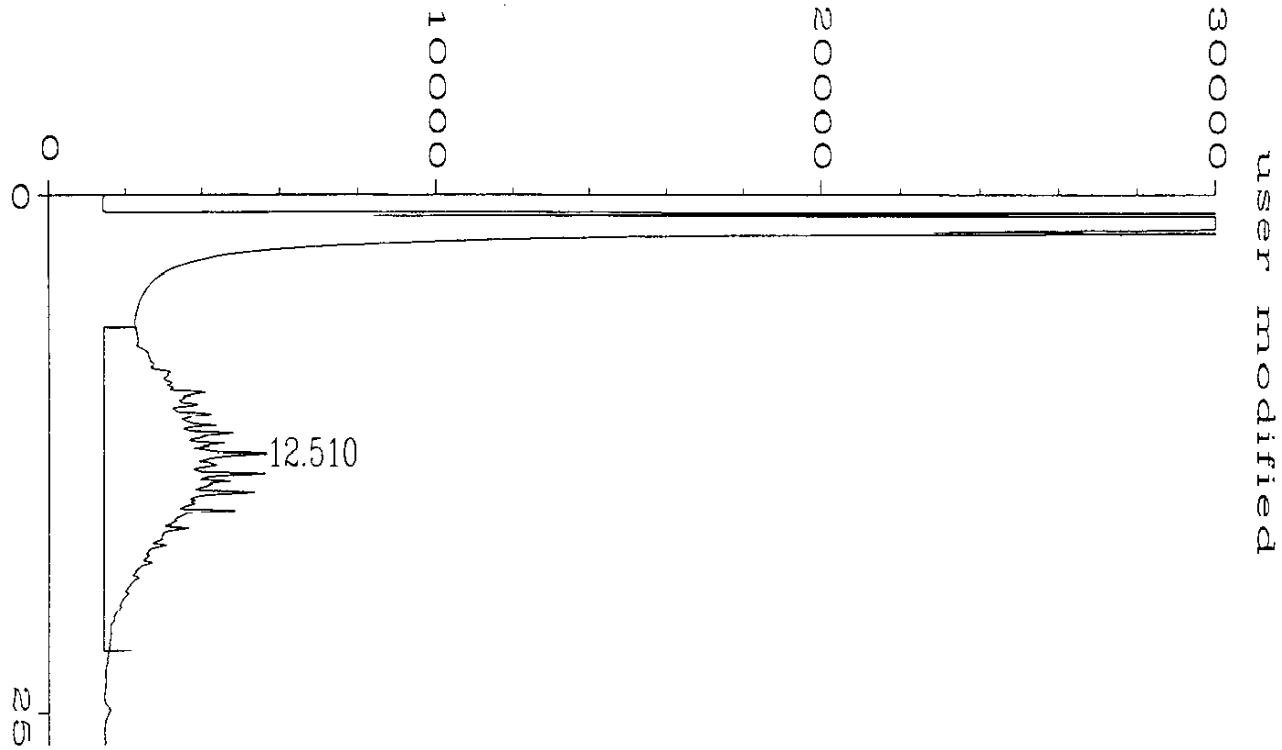

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External Standard Report

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a File Name	: C:\HPCHEM\2\DATA\29APR99\006R0101.D		
Operator	: MST/SLB	Page Number	: 1
Instrument	: HP #2	Vial Number	: 6
Sample Name	: IX-176-2 CAL4	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 29 Apr 99 10:32 AM	Instrument Method	: DROS.MTH
Report Created on	: 29 Apr 99 02:59 PM	Analysis Method	: DROS.MTH
Last Recalib on	: 29 Apr 99 02:57 PM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 2 in C:\HPCHEM\2\DATA\29APR99\006R0101.D

Ret Time	Area	Type	Width	Ref#	ug/ml	Name
12.510	1477188	MM	5.800	1	221.445	#2 FUEL OIL
20.200	* not found *			1		C25-SURROGATE

Not all calibrated peaks were found

User Modified

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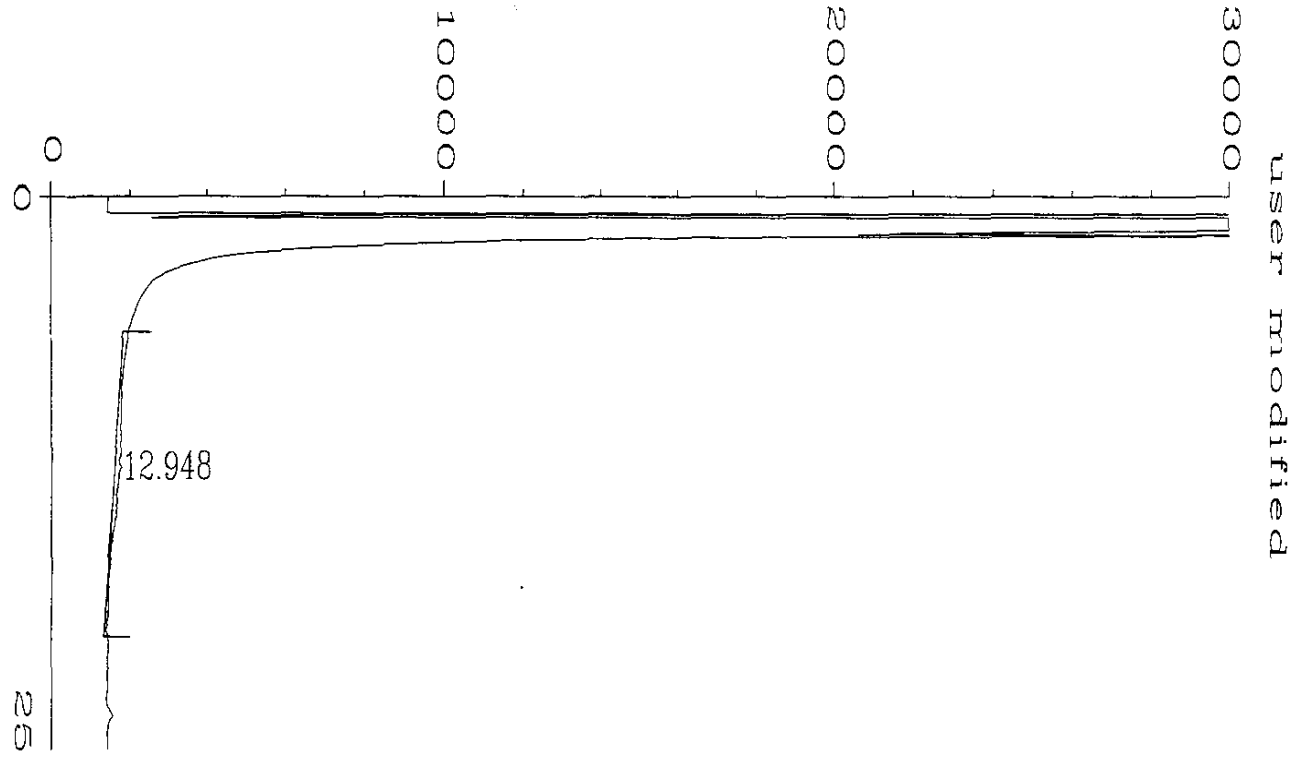

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External Standard Report

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ıta File Name	: C:\HPCHEM\2\DATA\29APR99\007R0101.D		
ɔperator	: MST/SLB	Page Number	: 1
Instrument	: HP #2	Vial Number	: 7
Sample Name	: IX-176-3 CAL5	Injection Number	: 1
Run Time Bar Code	:	Sequence Line	: 1
Acquired on	: 29 Apr 99 11:04 AM	Instrument Method	: DROS.MTH
Report Created on	: 29 Apr 99 03:04 PM	Analysis Method	: DROS.MTH
Last Recalib on	: 29 Apr 99 02:57 PM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 2 in C:\HPCHEM\2\DATA\29APR99\007R0101.D

Ret Time	Area	Type	Width	Ref#	ug/ml	Name
12.948	68641	MM	6.695	1	10.290	#2 FUEL OIL
20.200	* not found *			1		C25-SURROGATE

Not all calibrated peaks were found

User Modified

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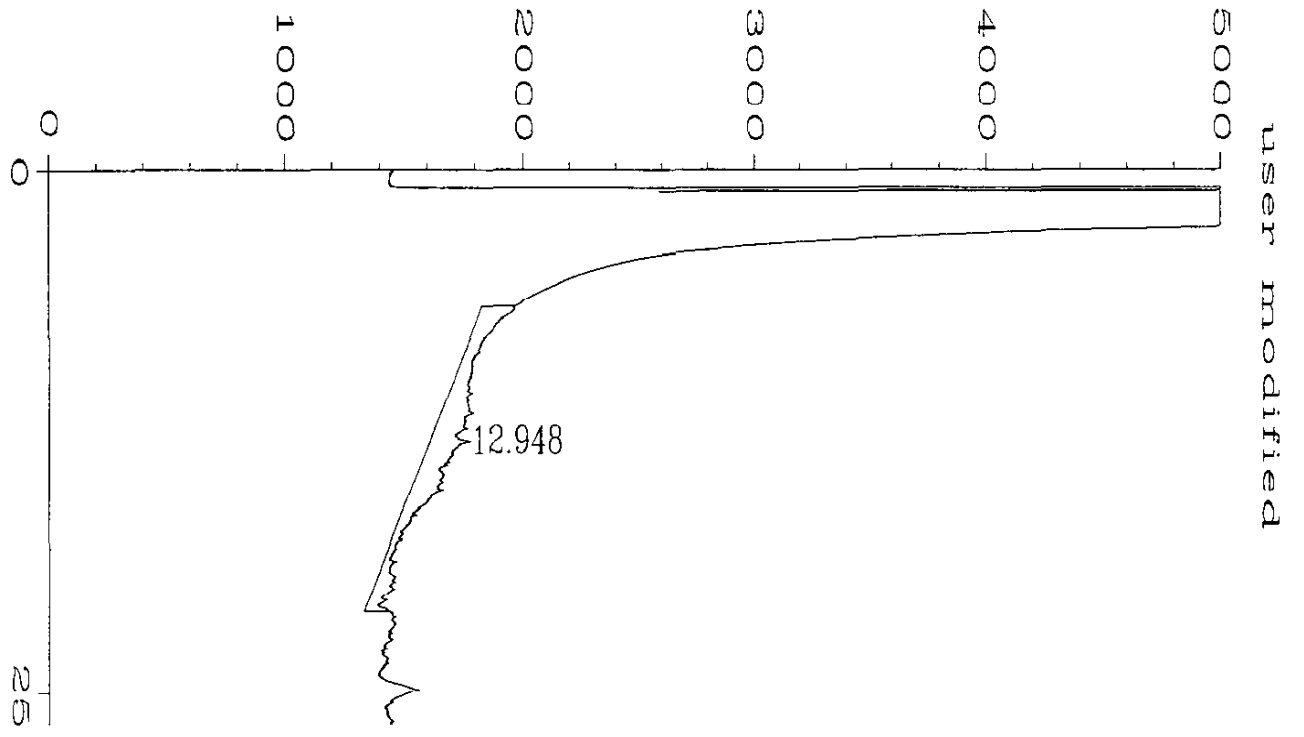

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External Standard Report

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ata File Name	: C:\HPCHEM\2\DATA\29APR99\007R0101.D		
operator	: MST/SLB	Page Number	: 1
Instrument	: HP #2	Vial Number	: 7
Sample Name	: IX-176-3 CAL5	Injection Number	: 1
Run Time Bar Code	:	Sequence Line	: 1
Acquired on	: 29 Apr 99 11:04 AM	Instrument Method	: DROS.MTH
Report Created on	: 29 Apr 99 03:04 PM	Analysis Method	: DROS.MTH
Last Recalib on	: 29 Apr 99 02:57 PM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

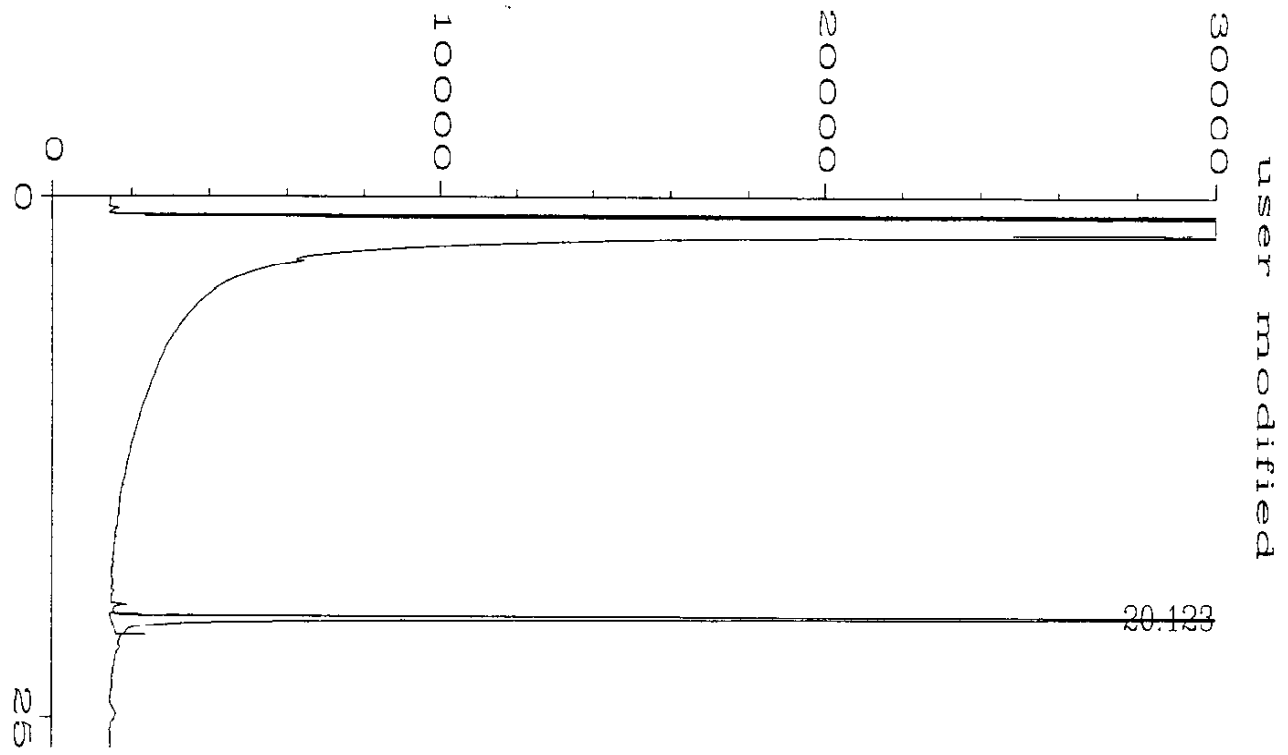
Sig. 2 in C:\HPCHEM\2\DATA\29APR99\007R0101.D

Ret Time	Area	Type	Width	Ref#	ug/ml	Name
12.948	68641	MM	6.695	1	10.290	#2 FUEL OIL
20.200	* not found *			1		C25-SURROGATE

Not all calibrated peaks were found

User Modified

==========



External Standard Report

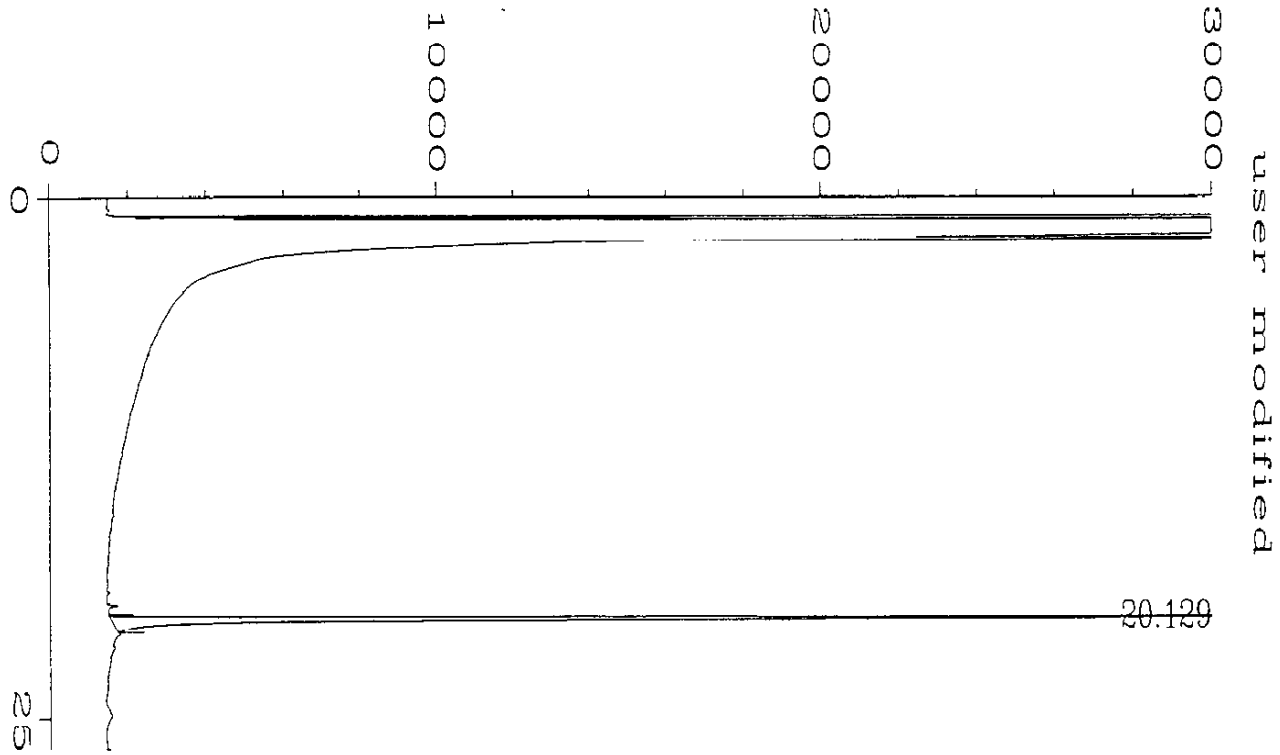
ata File Name	: C:\HPCHEM\2\DATA\29APR99\008R0101.D		
Operator	: MST/SLB	Page Number	: 1
Instrument	: HP #2	Vial Number	: 8
Sample Name	: IX-129-4 CAL1	Injection Number	: 1
Run Time Bar Code	:	Sequence Line	: 1
Acquired on	: 29 Apr 99 11:37 AM	Instrument Method	: DROS.MTH
Report Created on	: 29 Apr 99 03:05 PM	Analysis Method	: DROS.MTH
Last Recalib on	: 29 Apr 99 02:57 PM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 2 in C:\HPCHEM\2\DATA\29APR99\008R0101.D

Ret Time	Area	Type	Width	Ref#	ug/ml	Name
12.900	* not found *			1		#2 FUEL OIL
20.123	711396	MM	0.075	1	101.011	C25-SURROGATE

Not all calibrated peaks were found

User Modified



External Standard Report

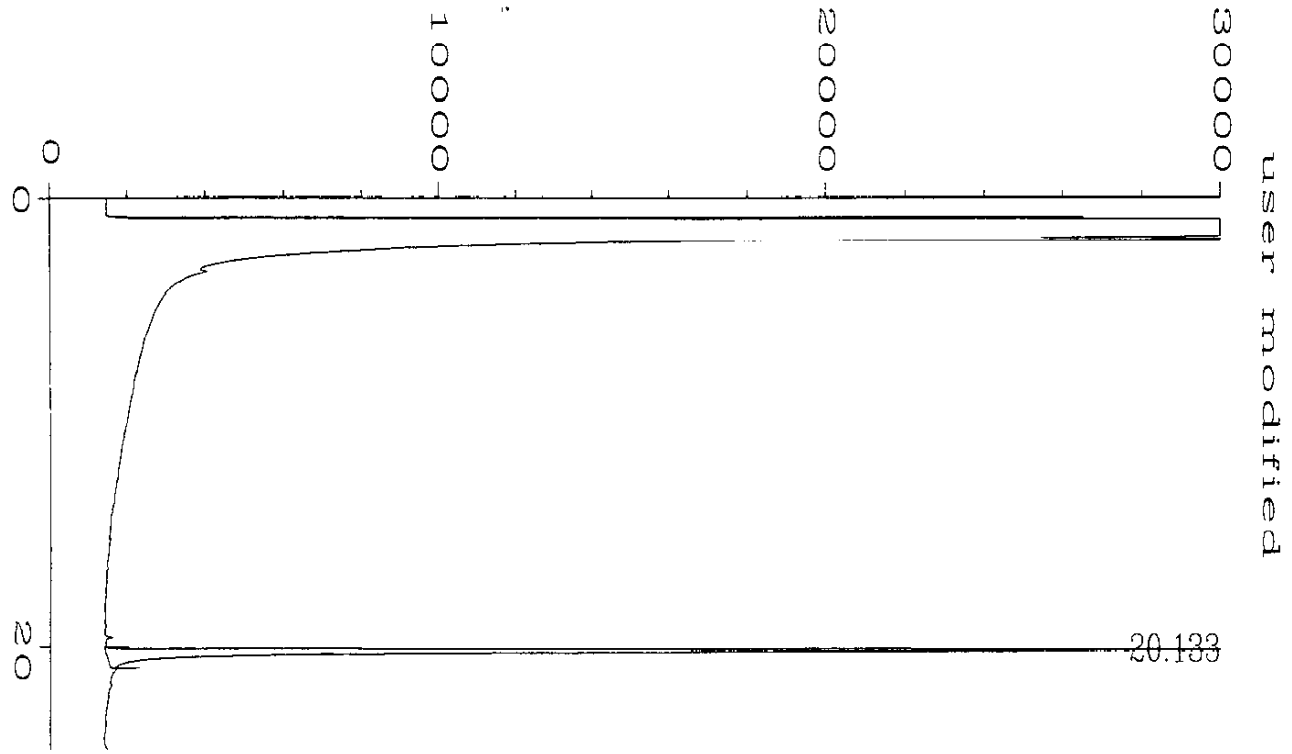
Data File Name	: C:\HPCHEM\2\DATA\29APR99\009R0101.D		
Operator	: MST/SLB	Page Number	: 1
Instrument	: HP #2	Vial Number	: 9
Sample Name	: IX-129-5 CAL2	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 29 Apr 99 12:08 PM	Instrument Method	: DROS.MTH
Report Created on	: 29 Apr 99 03:06 PM	Analysis Method	: DROS.MTH
Last Recalib on	: 29 Apr 99 02:57 PM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 2 in C:\HPCHEM\2\DATA\29APR99\009R0101.D

Ret Time	Area	Type	Width	Ref#	ug/ml	Name
12.900	* not found *			1		#2 FUEL OIL
20.129	534157	MM	0.081	1	75.845	C25-SURROGATE

Not all calibrated peaks were found

User Modified



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External Standard Report

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Data File Name	: C:\HPCHEM\2\DATA\29APR99\010R0101.D		
Operator	: MST/SLB	Page Number	: 1
Instrument	: HP #2	Vial Number	: 10
Sample Name	: IX-129-6 CAL3	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 29 Apr 99 12:41 PM	Instrument Method	: DROS.MTH
Report Created on	: 29 Apr 99 03:06 PM	Analysis Method	: DROS.MTH
Last Recalib on	: 29 Apr 99 02:57 PM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 2 in C:\HPCHEM\2\DATA\29APR99\010R0101.D

Ret Time	Area	Type	Width	Ref#	ug/ml	Name
12.900	* not found *			1		#2 FUEL OIL
20.133	369117	MM	0.094	1	52.411	C25-SURROGATE

Not all calibrated peaks were found

User Modified

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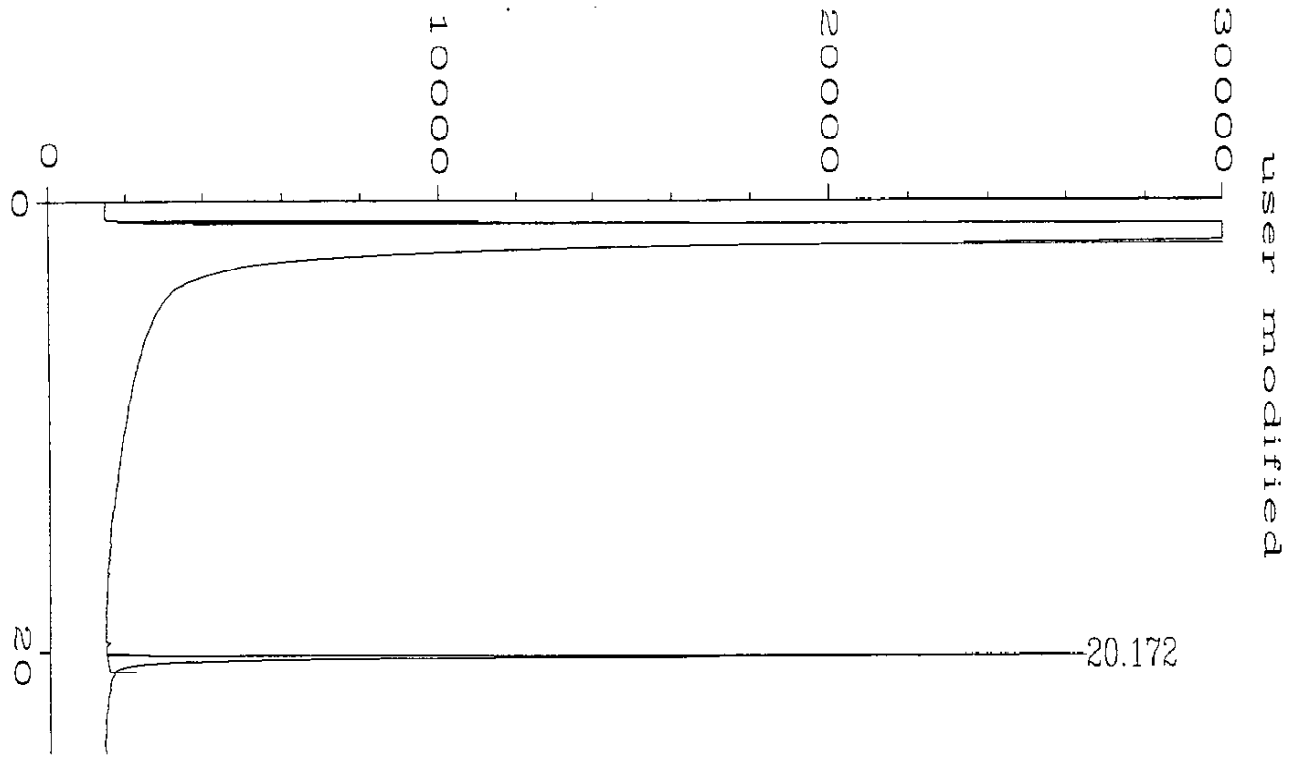


External Standard Report

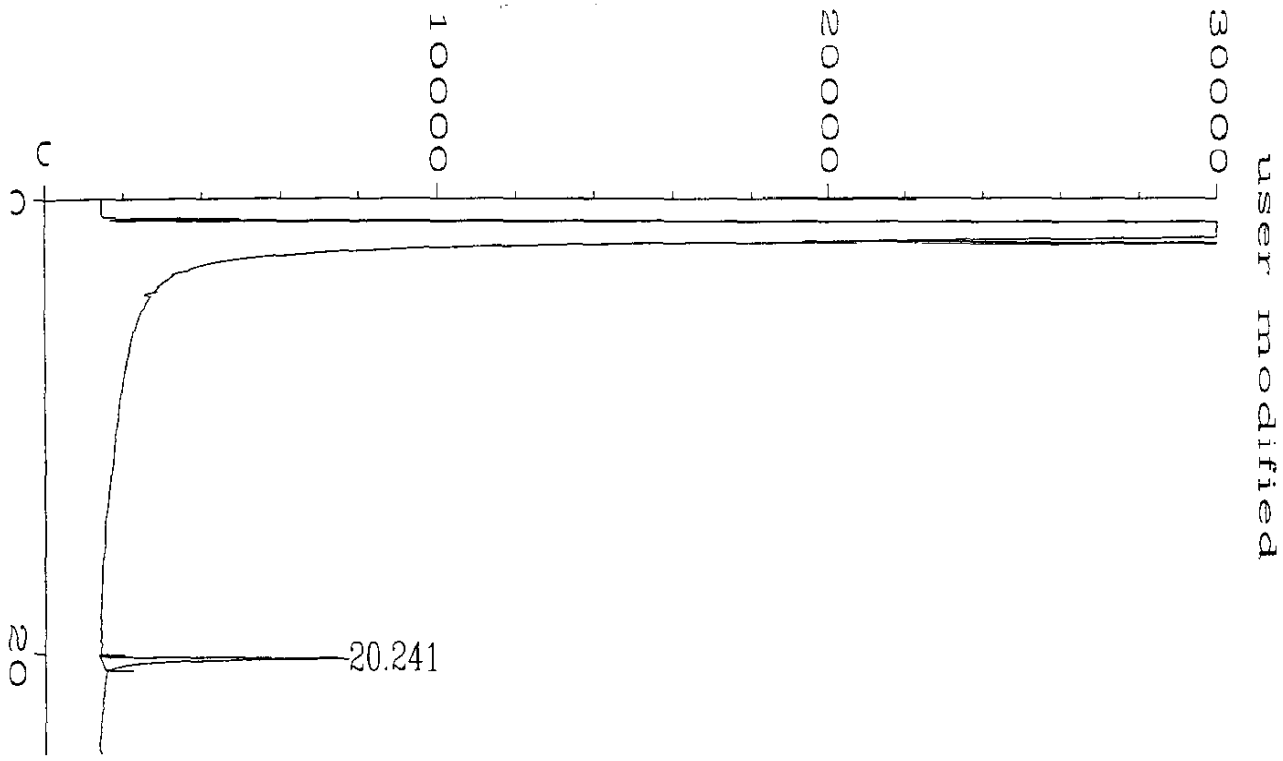
Data File Name	: C:\HPCHEM\2\DATA\29APR99\011R0101.D		
Operator	: MST/SLB	Page Number	: 1
Instrument	: HP #2	Vial Number	: 11
Sample Name	: IX-129-7 CAL4	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 29 Apr 99 01:07 PM	Instrument Method	: DROS.MTH
Report Created on	: 29 Apr 99 03:07 PM	Analysis Method	: DROS.MTH
Last Recalib on	: 29 Apr 99 02:57 PM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 2 in C:\HPCHEM\2\DATA\29APR99\011R0101.D

Ret Time	Area	Type	Width	Ref#	ug/ml	Name
12.900	* not found *			1		#2 FUEL OIL
20.172	178582	MM	0.119	1	25.357	C25-SURROGATE

Not all calibrated peaks were found

User Modified



External Standard Report

.le me	: C:\HPCHEM\2\DATA\29APR99\012R0101.D		
or	: MST/SLB	Page Number	: 1
ment	: HP #2	Vial Number	: 12
Name	: IX-129-8 CAL5	Injection Number	: 1
me Bar Code	:	Sequence Line	: 1
ed on	: 29 Apr 99 01:34 PM	Instrument Method	: DROS.MTH
Created on	: 29 Apr 99 03:07 PM	Analysis Method	: DROS.MTH
ecalib on	: 29 Apr 99 02:57 PM	Sample Amount	: 0
lier	: 1	ISTD Amount	:

in C:\HPCHEM\2\DATA\29APR99\012R0101.D

me	Area	Type	Width	Ref#	ug/ml	Name
00	* not found *			1		#2 FUEL OIL
41	59820	MM	0.158	1	8.494	C25-SURROGATE

l calibrated peaks were found

odified

Book No._____ TITLE July 22, 1999

n Page No.__

GRO Daily Calibration/QC Data

ate	Chamber	Report #	Sample ID	pH	Dil	Anal
324-1	1	20 ppb BTEX CCV	10µl H-40-1/100ml	-	10ml	NJ
32430	2	2000 ppb GRO CCV	10µl H-39-4/100ml	-	10 ml	
32431	3	BTEX/GRO Method Blank		-	10ml	
32432	4	Soil Prep Blank		-	100µl	
32433	5	IT Tank 1A	3988 - 15486	-	100µl	
32434	6	IT Tank 1A GMS	+5µl H-40-4	-	100µl	
32435	7	IT Tank 1A GMSD	↓	-	100µl	
32436	8	IT UST Comp 2 100x	3987-15483	7	100µl	
32437	9	IT Tank 908 10x	3987-15484	7	1ml	
32438	10	GRO Soil LCS	5µl H-40-4	-	100µl	
32439	11	IT UST Comp 2 GMS	+5µl H-40-4	7	~~50µl~~ 100µl	NJ 7/23/99
32440	12	IT UST Comp 2 GMSD	↓	7	150µl	
32441	13	1000 ppb GRO LCS	40µl H-40-4/100ml	-	10ml	
32442	14	[redacted] CS 10		-	100µl	
32443	15	[redacted] CS 11		-	100µl	
32444	16	[redacted] CS 12		-	100µl	

To Page No._____

nessed & Understood by me, | Date | Invented by | Date

Recorded by

TITLE July 22, 1999 (Continued)

Project No.

Book No.

From Page No.

le	Chamber	Report # Sample ID	pH	Dil	Ana
32445	1	IT Comp 2ST2 200x	7	50 µl	N
32446	2	IT Comp 2ST2 GMS +5µl H-40-4	7	50 µl	
32447	3	IT Comp 2ST2 GMSD	7	50 µl	
32448	4	YRD Gnd LCS	–	110 µl	
32449	5	1,000 ppt YRD LCS 40µl H-40-4/100ml	–	10ml	

To Page No.

Witnessed & Understood by me, | Date | Invented by | Date

GASCOYNE LABORATORIES, INC., Baltimore, MD 21224-6697

Checklist: Dept. 10-003
Effective Date: 04/24/98
Page: 1 of 1

Organic Chemistry (GC/Purge & Trap) CALIBRATION Review Checklist

Analysis: VPH Method: 8015 B SOP Number: Org-012-00

Analyst Performing Test: NG Date of Analysis: 12/17-18/98

Tier Reviewer: NG Date of Review: 12/18/98

2nd Tier Reviewer: DP Date of Review: 12/21/98

Initial Calibration Curve	Yes	No	N/A	1st Tier Comments	2nd Tier
1. Number of calibration standards used for method cited 6			✓	Calibration Std Source: H-19-1	✓
2. Any points removed or reanalyzed in the curve?		✓			✓
3. Was the % RSD <10% (GC) or <20% (GC/MS)? a. If average response factor was not used, was 1st order curve used?	✓				✓
4. Was the ICV acceptable? ICV Criteria: ± 15 % (GC)	✓			ICV Source: H-17-3	✓
5. Was the ICB acceptable (<1/2 reporting limit)?	✓				✓
6. Was reporting limit verified (acceptable standard analysis)?	✓				✓
7. Was calibration curve created using correct files and was calibration file updated for date and time?	✓				✓
8. Logbook entries verified (Date, Time, Initials, Std. Source)?	✓				✓

Comments:

2nd Tier Reviewer
Comments:

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Analyst Performing Test: NG Date of Analysis: 7/22/99 Start Time: 750

1st Tier Reviewer: NG Date of Review: 7/23/99

2nd Tier Reviewer: TMB Date of Review: 7/23/99

Continuing (Daily) Calibration	Yes	No	N/A	1st Tier Comments	2nd Tier
1. Was correct calibration curve used for quantitation?	✓				✓
2. Was the daily/batch CCV acceptable? CCV Criteria: ± 15 % (GC)	✓			CCV Source: SU 10-13	✓
3. Was the CCB acceptable (<1/2 reporting limit)?	✓				✓
4. Were retention times updated if required?			✓		✓
5. If CCV failure, was new CCV analyzed and acceptable?			✓	New CCV Source:	✓

Comments:

2nd Tier Reviewer
Comments:

GASCOYNE LABORATORIES, INC., Baltimore, MD 21224-6697

Checklist: Dept. 10-004
Effective Date: 04/24/98
Page: 1 of 1

Organic Chemistry (GC/Purge & Trap) DATA Review Checklist

Analysis: GRO Method: 8015B SOP Number: Org-012-00

Analyst Performing Test: NJ Date of Analysis: 7/22/99

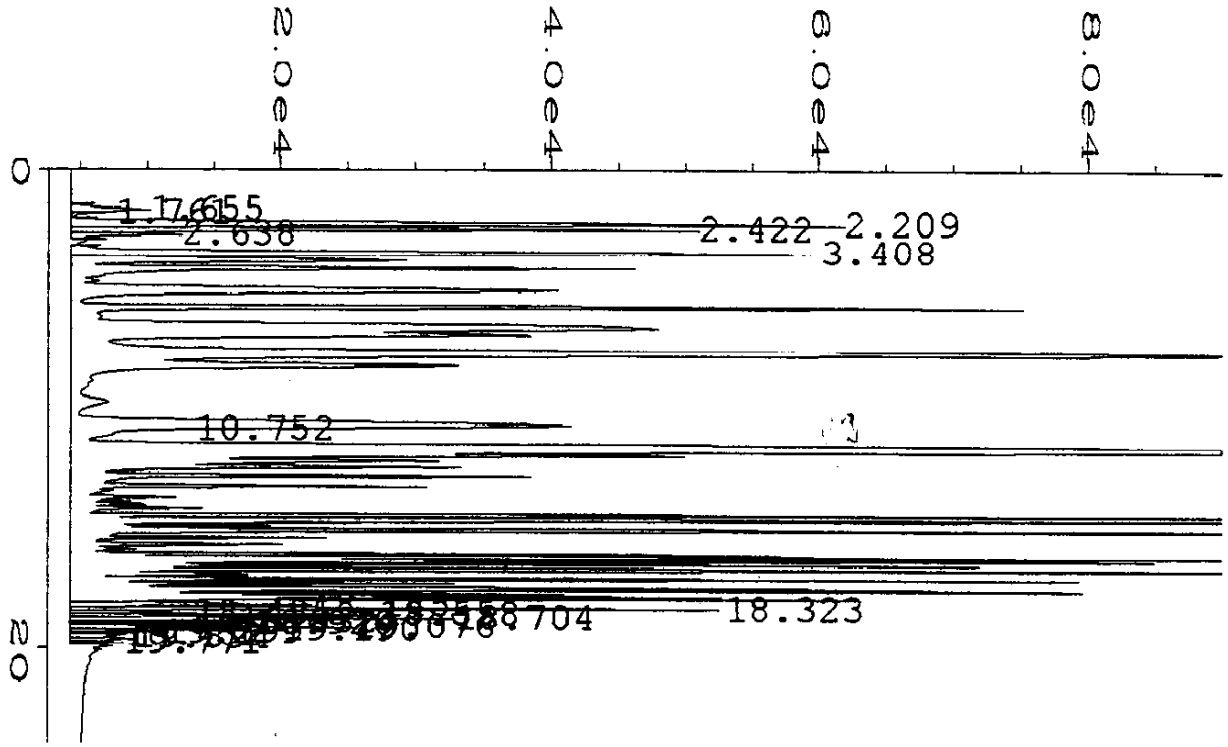
1st Tier Reviewer: NJ Date of Review: 7/23/99

2nd Tier Reviewer: MRB Date of Review: 7/23/99

Sample Analysis:	Yes	No	N/A	1st Tier Comments	2nd Tier
1. Was the preservation of samples checked and recorded?	✓				✓
2. Were samples extracted/analyzed within holding time? If NO: a. Expired upon receipt___ b. Reanalysis past Holding Time____ c. Other	✓				✓
3. Was ICAL/CCAL Checklist completed?	✓				✓
4. Was Method Blank acceptable?	✓				✓
5. Was Lab Control Sample (LCS) Analysis Acceptable?	✓			LCS Source 5410-13	✓
6. Was Matrix Spike analyzed?	✓			Spike Solution Source 5410-13	✓
6a. Was Matrix Spike Duplicate analyzed?	✓				✓
7. Were MS/MSD Recoveries acceptable?	✓				✓
8. Were RPDs of MS/MSDs Acceptable?	✓				✓
9. Were Laboratory Duplicates analyzed?		✓			✓
10. Were RPDs acceptable?			✓		✓
11. Surrogate recoveries acceptable?	✓				✓
12. Were calculations checked?	✓				✓
13. Were results verified using confirmation column?		✓			✓
14. Any method deviations performed? Explain below.		✓			✓

Comments:

2nd Tier Reviewer
Comments:

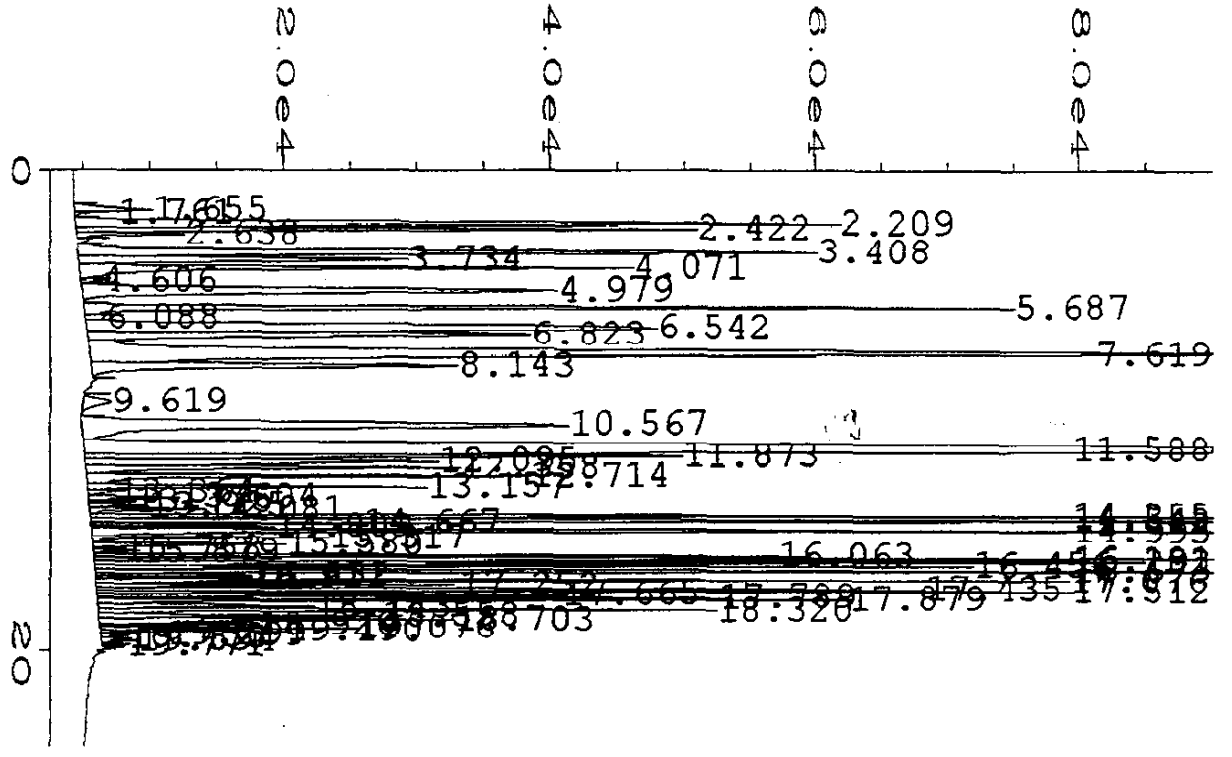


External Standard Report

Data File Name	: C:\HPCHEM\3\DATA\JUL2299\FHP32430.D		
Operator	: nj	Page Number	: 1
Instrument	: HP3FIDPID	Vial Number	: 2
Sample Name	: vph dcc-20	Injection Number	:
Run Time Bar Code:		Sequence Line	:
Acquired on	: 22 Jul 99 07:50 AM	Instrument Method	: 3FBTEXSC.MTH
Report Created on	: 22 Jul 99 08:16 AM	Analysis Method	: 3FVPHSCW.MTH
Last Recalib on	: 18 DEC 98 11:38 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 1 in C:\HPCHEM\3\DATA\JUL2299\FHP32430.D

Ret Time	Area	Type	Width	Ref#	ug/L	Name
10.752	1.93859E+007	HH +	0.000	1	2002.563	VPH(GRO)



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External Standard Report

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Data File Name	: C:\HPCHEM\3\DATA\JUL2299\FHP32430.D		
Operator	: nj	Page Number	: 1
Instrument	: HP3FIDPID	Vial Number	: 2
Sample Name	: vph dcc-20	Injection Number	:
Run Time Bar Code:		Sequence Line	:
Acquired on	: 22 Jul 99 07:50 AM	Instrument Method	: 3FBTEXSC.MTH
Report Created on	: 22 Jul 99 08:14 AM	Analysis Method	: 3FBTEXSC.MTH
Last Recalib on	: 22 JUN 99 07:58 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 1 in C:\HPCHEM\3\DATA\JUL2299\FHP32430.D

Ret Time	Area	Type	Width	Ref#	ug/kg	Name
1.655	50799	BV	0.118	1	19.463	MTBE
5.687	530308	PV	0.117	1	43.010	BENZENE
8.143	333075	VV	0.182	1	44.149	TRIFLUOROTOLUENE
11.588	4501136	VV	0.136	1	358.529	TOLUENE
14.355	453571	VV	0.056	1	39.317	ETHYLBENZENE
14.542	1643003	VV	0.060	1	137.902	1,3+1,4XYLENE
.993	787013	VV	0.077	1	64.777	1,2XYLENE
16.292	364959	VV	0.079	1	32.019	1,2,4-(CH3)3BENZENE
16.673	828837	VV	0.049	1	70.266	1,3,5-(CH3)3BENZENE
19.076	60267	VV	0.053	1	10.500	NAPHTHALENE

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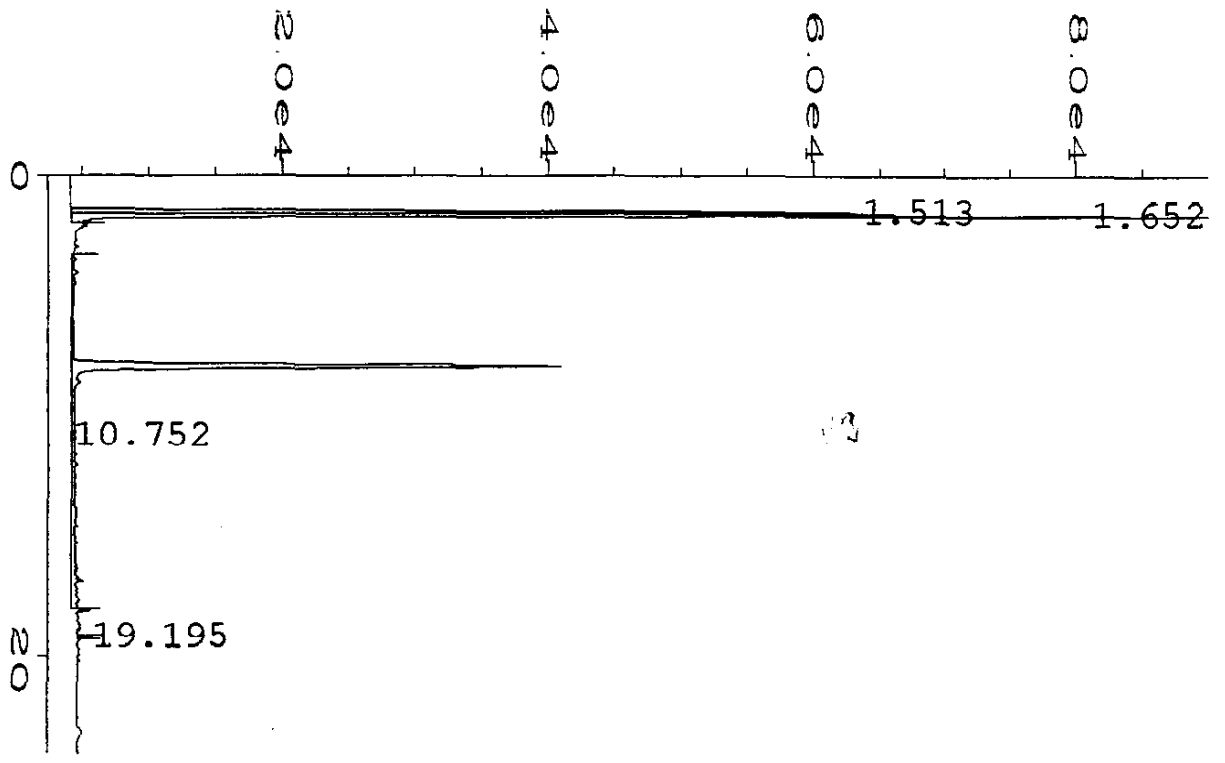
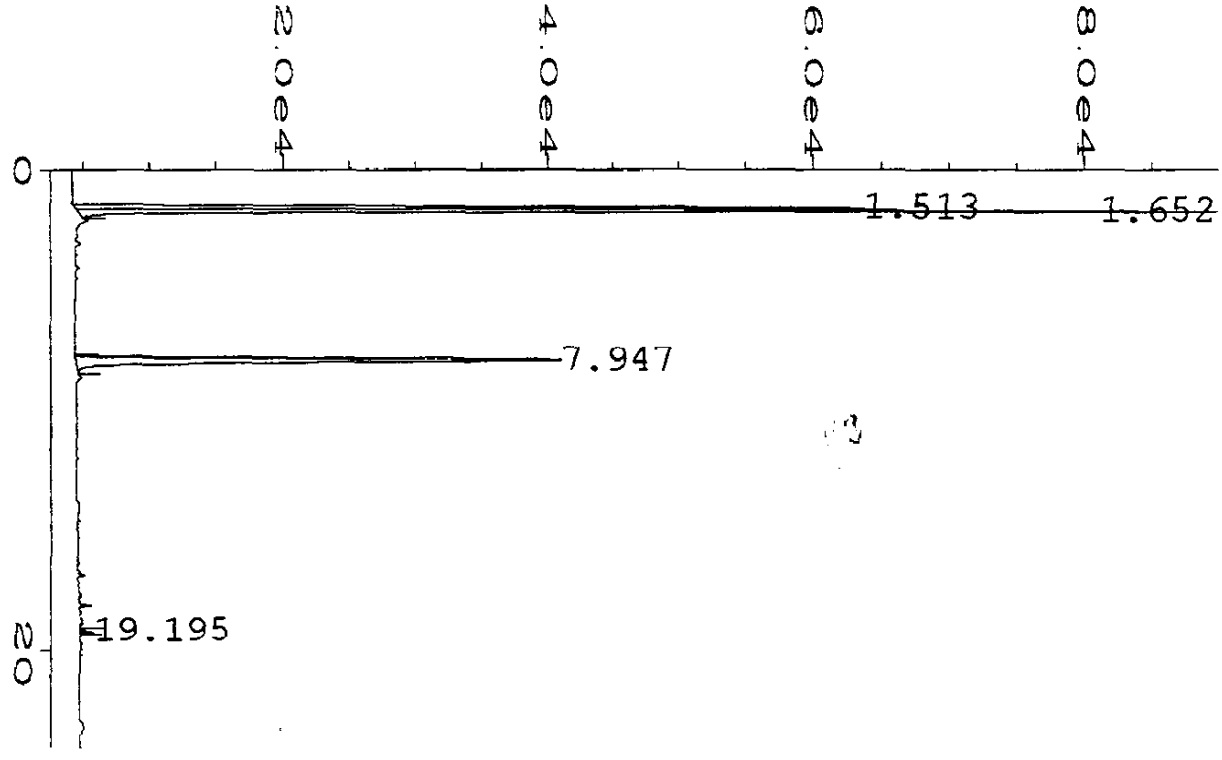


External Standard Report

Data File Name	: C:\HPCHEM\3\DATA\JUL2299\FHP32432.D		
Operator	: nj	Page Number	: 1
Instrument	: HP3FIDPID	Vial Number	: 4
Sample Name	: soil prep blank	Injection Number	:
Run Time Bar Code:		Sequence Line	:
Acquired on	: 22 Jul 99 08:51 AM	Instrument Method:	3FBTEXSC.MTH
Report Created on:	22 Jul 99 10:49 AM	Analysis Method	: 3FVPHSCS.MTH
Last Recalib on	: 18 DEC 98 02:50 PM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 1 in C:\HPCHEM\3\DATA\JUL2299\FHP32432.D

Ret Time	Area	Type	Width	Ref#	mg/kg	Name
10.752	603971	HH +	0.000	1	0.0683	VPH(GRO)

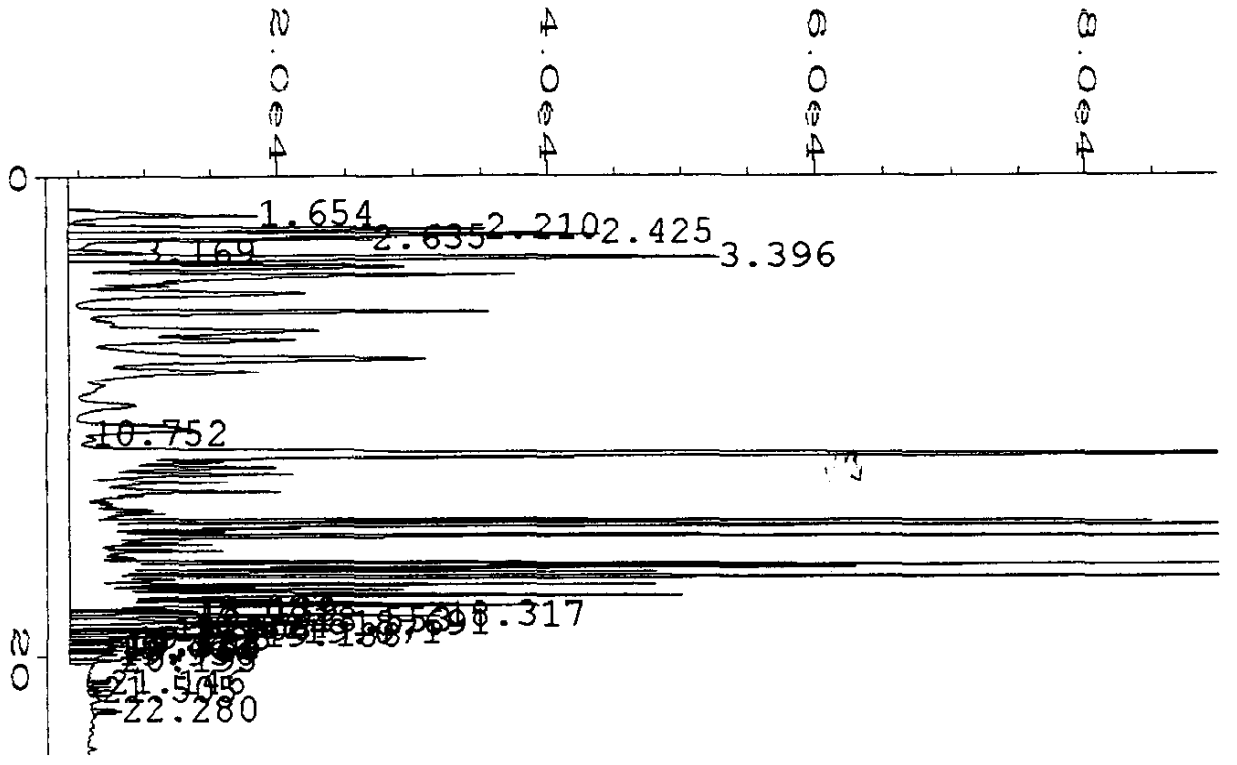


External Standard Report

Data File Name	: C:\HPCHEM\3\DATA\JUL2299\FHP32432.D		
Operator	: nj	Page Number	: 1
Instrument	: HP3FIDPID	Vial Number	: 4
Sample Name	: soil prep blank	Injection Number	:
Run Time Bar Code	:	Sequence Line	:
Acquired on	: 22 Jul 99 08:51 AM	Instrument Method	: 3FBTEXSC.MTH
Report Created on	: 22 Jul 99 09:15 AM	Analysis Method	: 3FBTEXSC.MTH
Last Recalib on	: 22 JUN 99 07:58 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 1 in C:\HPCHEM\3\DATA\JUL2299\FHP32432.D

Ret Time	Area	Type	Width	Ref#	ug/kg	Name
1.652	559358	VV	0.090	1	214.313	MTBE
5.734	* not found *			1		BENZENE
7.947	383505	BB	0.163	1	50.834	TRIFLUOROTOLUENE
11.624	* not found *			1		TOLUENE
14.381	* not found *			1		ETHYLBENZENE
14.576	* not found *			1		1,3+1,4XYLENE
15.017	* not found *			1		1,2XYLENE
16.312	* not found *			1		1,2,4-(CH3)3BENZENE
16.693	* not found *			1		1,3,5-(CH3)3BENZENE
19.195	3604	BV	0.053	1	0.628	NAPHTHALENE



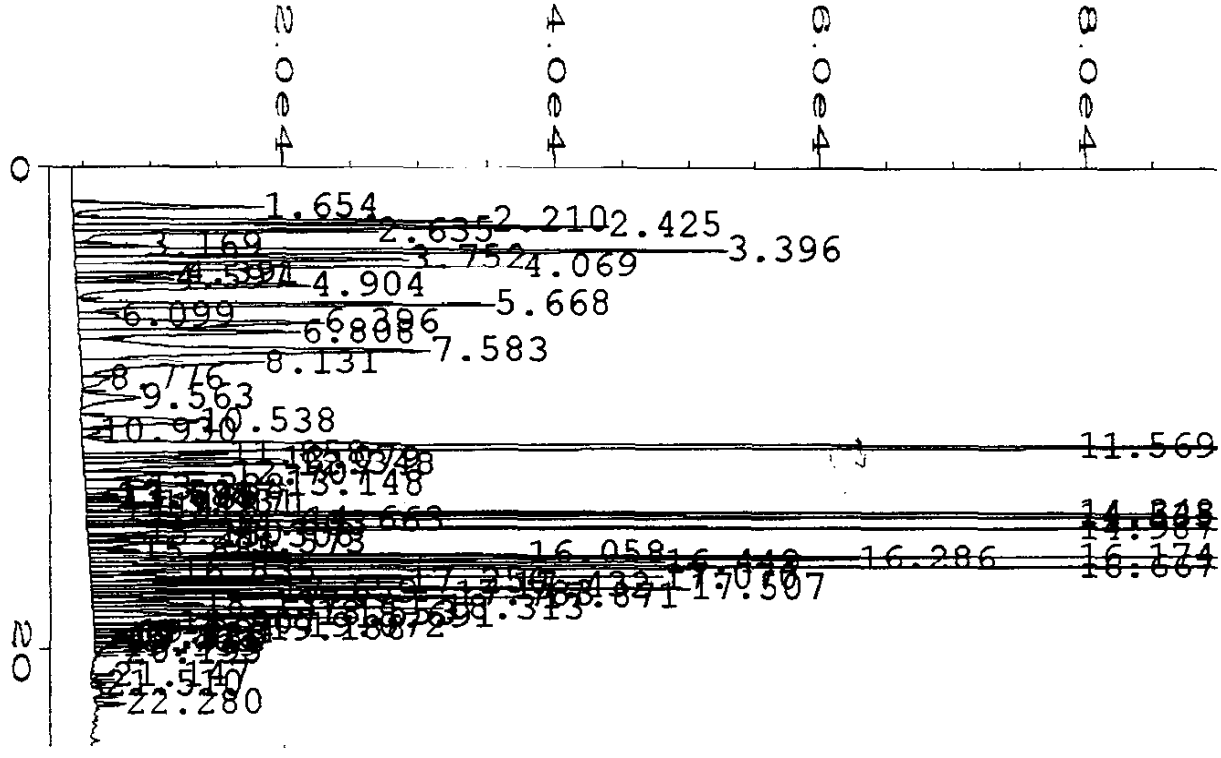
External Standard Report

Data File Name	: C:\HPCHEM\3\DATA\JUL2299\FHP32438.D		
Operator	: nj	Page Number	: 1
Instrument	: HP3FIDPID	Vial Number	: 10
Sample Name	: gro sx lcs	Injection Number	:
Run Time Bar Code:		Sequence Line	:
Acquired on	: 22 Jul 99 11:57 AM	Instrument Method	: 3FBTEXSC.MTH
Report Created on	: 22 Jul 99 01:28 PM	Analysis Method	: 3FVPHSCS.MTH
Last Recalib on	: 18 DEC 98 02:50 PM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 1 in C:\HPCHEM\3\DATA\JUL2299\FHP32438.D

Ret Time	Area	Type	Width	Ref#	mg/kg	Name
10.752	1.02063E+007	HH +	0.000	1	1.155	VPH(GRO)

115.5/125 92%



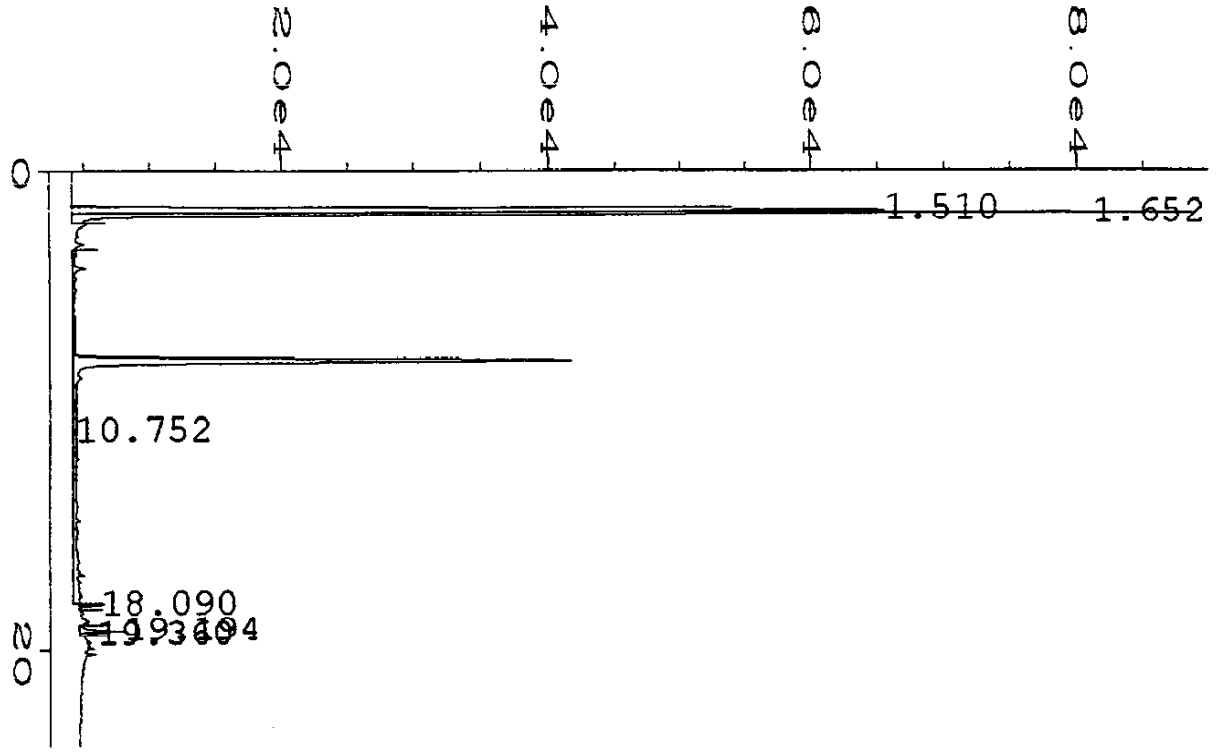
External Standard Report

Data File Name	: C:\HPCHEM\3\DATA\JUL2299\FHP32438.D		
Operator	: nj	Page Number	: 1
Instrument	: HP3FIDPID	Vial Number	: 10
Sample Name	: gro sx lcs	Injection Number	:
Run Time Bar Code:		Sequence Line	:
Acquired on	: 22 Jul 99 11:57 AM	Instrument Method:	3FBTEXSC.MTH
Report Created on:	22 Jul 99 12:21 PM	Analysis Method	: 3FBTEXSC.MTH
Last Recalib on	: 22 JUN 99 07:58 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 1 in C:\HPCHEM\3\DATA\JUL2299\FHP32438.D

Ret Time	Area	Type	Width	Ref#	ug/kg	Name
1.654	140579	BV	0.132	1	53.862	MTBE
5.668	272660	VV	0.133	1	22.114	BENZENE
8.131	236572	VV	0.242	1	31.358	TRIFLUOROTOLUENE
11.569	1541587	VV	0.116	1	122.792	TOLUENE
14.348	286429	VV	0.060	1	24.829	ETHYLBENZENE
14.535	954857	VV	0.085	1	80.144	1,3+1,4XYLENE
14.987	443325	VV	0.079	1	36.489	1,2XYLENE
.286	211170	VV	0.061	1	18.526	1,2,4-(CH3)3BENZENE
16.667	552503	VV	0.086	1	46.840	1,3,5-(CH3)3BENZENE
19.072	61260	VV	0.064	1	10.673	NAPHTHALENE

GRO Sample Data



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External Standard Report

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Data File Name	: C:\HPCHEM\3\DATA\JUL2299\FHP32433.D		
Operator	: nj	Page Number	: 1
Instrument	: HP3FIDPID	Vial Number	: 5
Sample Name	: it tank 1a	Injection Number	:
Run Time Bar Code	: 3988.15486	Sequence Line	:
Acquired on	: 22 Jul 99 09:22 AM	Instrument Method	: 3FBTEXSC.MTH
Report Created on	: 22 Jul 99 10:49 AM	Analysis Method	: 3FVPHSCS.MTH
Last Recalib on	: 18 DEC 98 02:50 PM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 1 in C:\HPCHEM\3\DATA\JUL2299\FHP32433.D

Ret Time	Area	Type	Width	Ref#	mg/kg	Name
10.752	600224	HH +	0.000	1	0.0679	VPH(GRO)
					- .0683	

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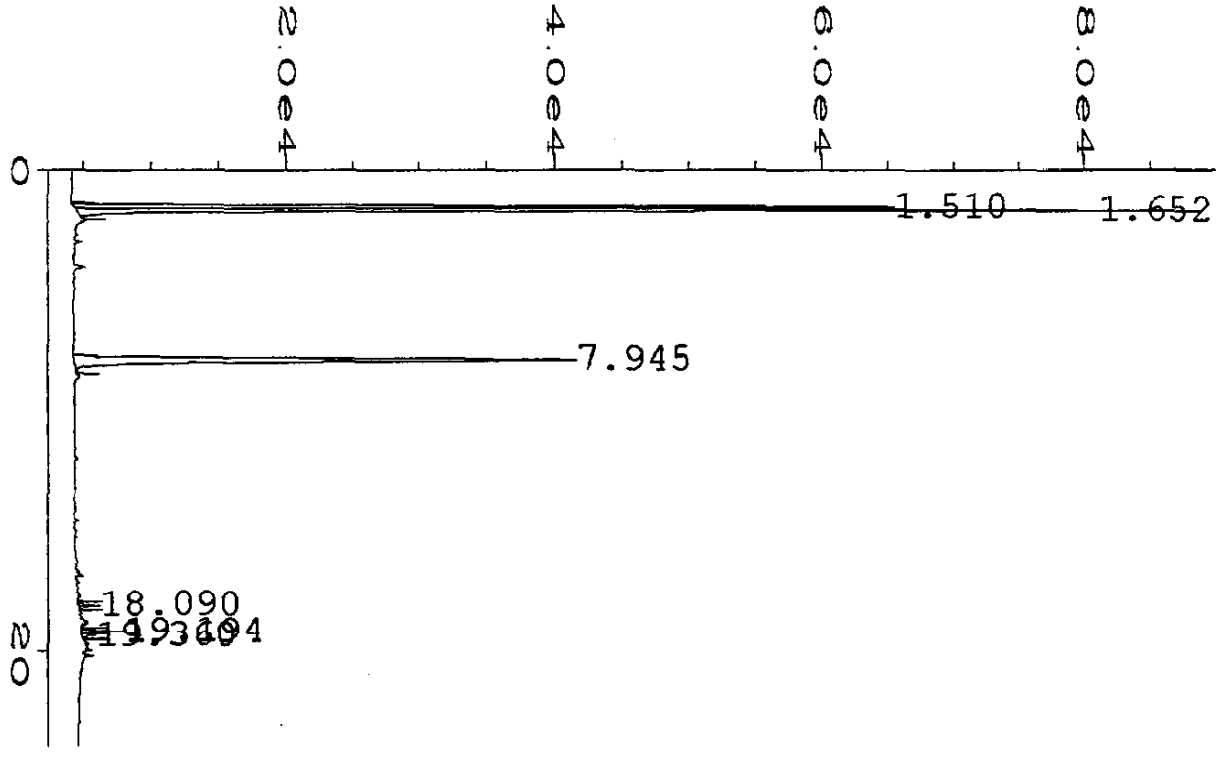


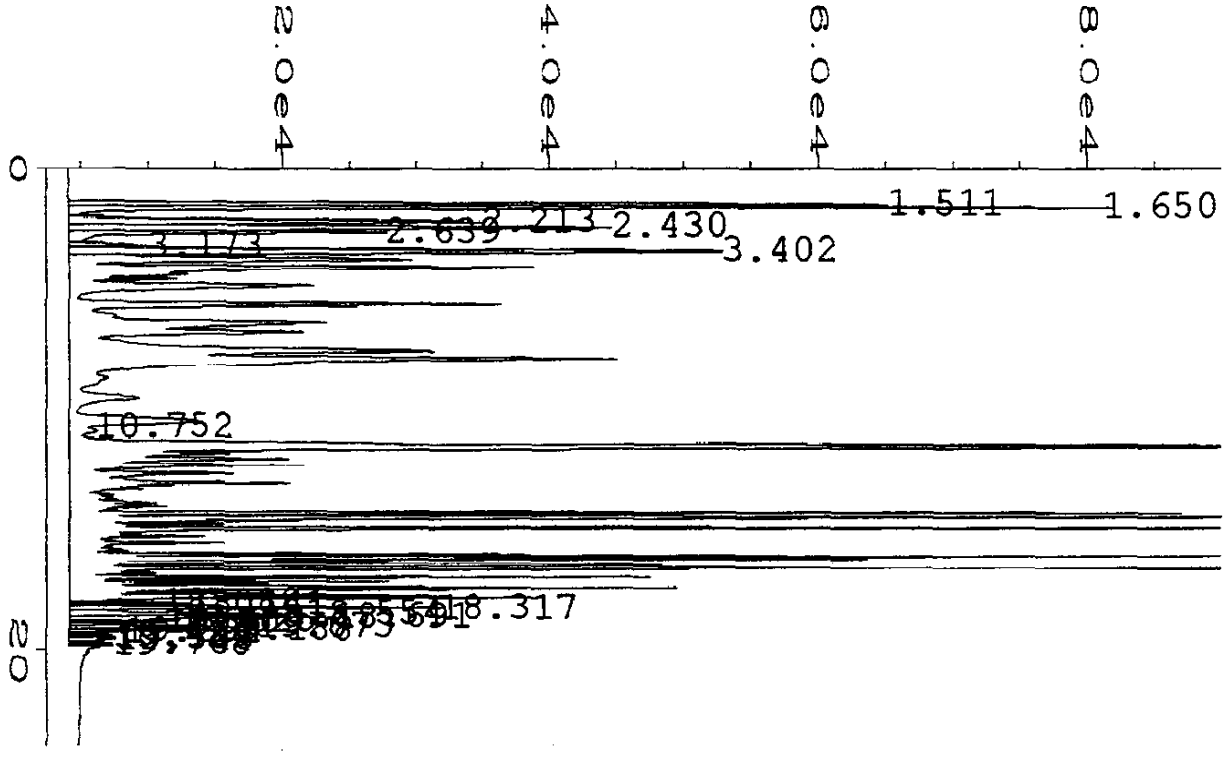
External Standard Report

Data File Name : C:\HPCHEM\3\DATA\JUL2299\FHP32433.D
Operator : nj
Instrument : HP3FIDPID
Sample Name : it tank 1a
Run Time Bar Code:
Acquired on : 22 Jul 99 09:22 AM
Report Created on: 22 Jul 99 09:46 AM
Last Recalib on : 22 JUN 99 07:58 AM
Multiplier : 1

Page Number : 1
Vial Number : 5
Injection Number :
Sequence Line :
Instrument Method: 3FBTEXSC.MTH
Analysis Method : 3FBTEXSC.MTH
Sample Amount : 0
ISTD Amount :

Sig. 1 in C:\HPCHEM\3\DATA\JUL2299\FHP32433.D

Ret Time	Area	Type	Width	Ref#	ug/kg	Name
1.652	534348	VV	0.091	1	204.730	MTBE
5.734	* not found *			1		BENZENE
7.945	389709	BB	0.162	1	51.656	TRIFLUOROTOLUENE 103%
11.624	* not found *			1		TOLUENE
14.381	* not found *			1		ETHYLBENZENE
14.576	* not found *			1		1,3+1,4XYLENE
[illegible].017	* not found *			1		1,2XYLENE
[illegible].312	* not found *			1		1,2,4-(CH3)3BENZENE
16.693	* not found *			1		1,3,5-(CH3)3BENZENE
19.194	10332	BV	0.052	1	1.800	NAPHTHALENE



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External Standard Report

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Data File Name	: C:\HPCHEM\3\DATA\JUL2299\FHP32434.D		
Operator	: nj	Page Number	: 1
Instrument	: HP3FIDPID	Vial Number	: 6
Sample Name	: it tank 1a gms	Injection Number	:
Run Time Bar Code	:	Sequence Line	:
Acquired on	: 22 Jul 99 09:53 AM	Instrument Method	: 3FBTEXSC.MTH
Report Created on	: 22 Jul 99 10:58 AM	Analysis Method	: 3FVPHSCS.MTH
Last Recalib on	: 18 DEC 98 02:50 PM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 1 in C:\HPCHEM\3\DATA\JUL2299\FHP32434.D

Ret Time	Area	Type	Width	Ref#	mg/kg	Name
10.752	1.06682E+007	HH +	0.000	1	100 1.207 -(-.04)	VPH(GRO) 120.14/135 97%

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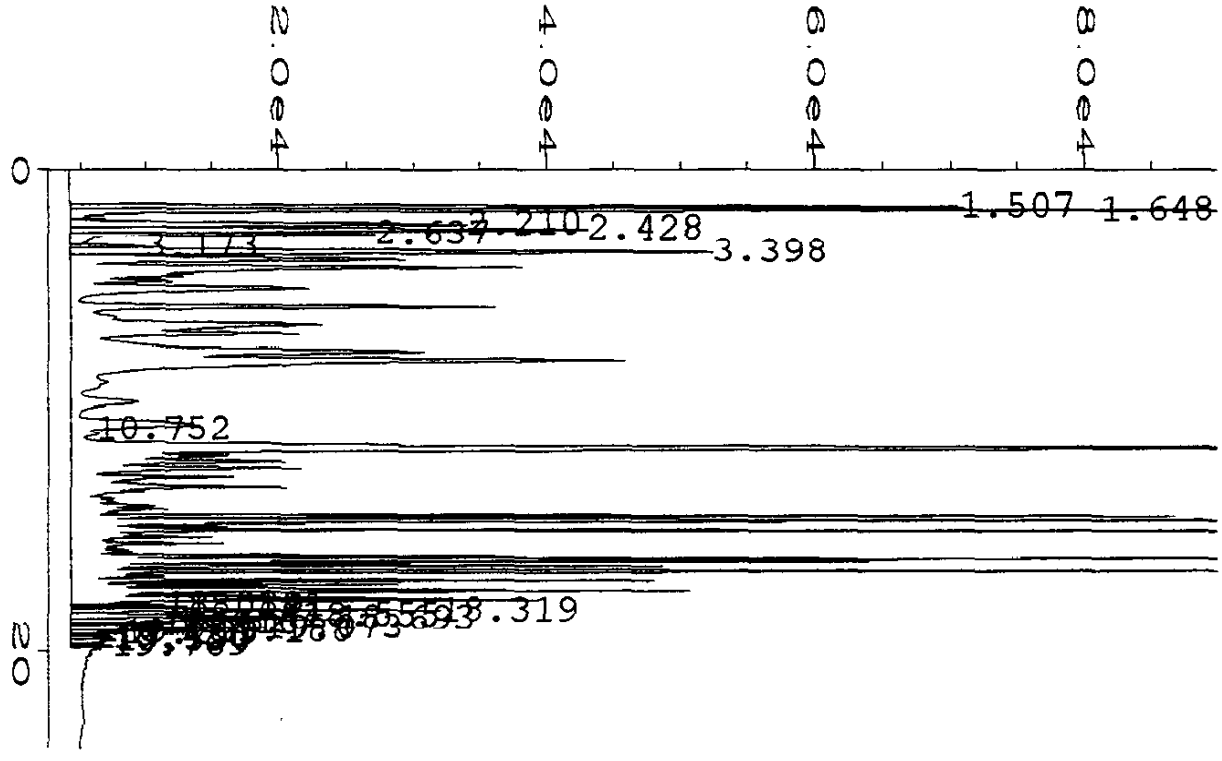
050



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External Standard Report

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Data File Name	: C:\HPCHEM\3\DATA\JUL2299\FHP32435.D		
Operator	: nj	Page Number	: 1
Instrument	: HP3FIDPID	Vial Number	: 7
Sample Name	: it tank 1a gmd	Injection Number	:
Run Time Bar Code:		Sequence Line	:
Acquired on	: 22 Jul 99 10:24 AM	Instrument Method:	3FBTEXSC.MTH
Report Created on:	22 Jul 99 10:50 AM	Analysis Method	: 3FVPHSCS.MTH
Last Recalib on	: 18 DEC 98 02:50 PM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 1 in C:\HPCHEM\3\DATA\JUL2299\FHP32435.D

Ret Time	Area	Type	Width	Ref#	mg/kg	Name
10.752	1.0718E+007	HH +	0.000	1	(100) 1.213	VPH(GRO)
					-(-.04)	121.34/125 = 98

==========

051

VOLATILE SOILS
EPA Method 8021B/8015B for GC

Date	Initials	Report #	Sample#	Client ID	Wt (gm)	Final Vol (ml)	Surrogate Added	Comments
7/12/99	hj	9903840	14925	991801-1	10.10	10	25µl H-41-3	
			14926	991802-2	10.17	10		
			14927	991801-3	10.00	10		
			14928	991801.4	10.14	10		
7/13/99	hj	9903855	14964	WDC-05	1.15	10	25µl H-41-3	Very strong fuel smell
7/15/99	hj	9903901	15130	Tank 1	10.31	10	25µl H-41-3	
			15131	Tank 2	10.44	10		
			15132	Tank 3	10.00	10		
			15133	Tank 4	10.10	10		
7/20/99	hj	990		Dist Pile	10.17	10	25µl H-41-3	
7/22/99	THP	9903990	15488	CS 10	10.21	10	25µl H-41-3	
	THP		15489	CS 11	9.98	10		
	THP		15490	CS12	9.99	10		
	NJ	9903988	15486	1E Tank 1A	10.00	10		

Page Number: 019

HQN:VOLS8021

052

GRO Initial Calibration Data

21 Jun 99 08:37 AM
Method: C:\HPCHEM\3\METHODS\3FVPHMCS.MTH

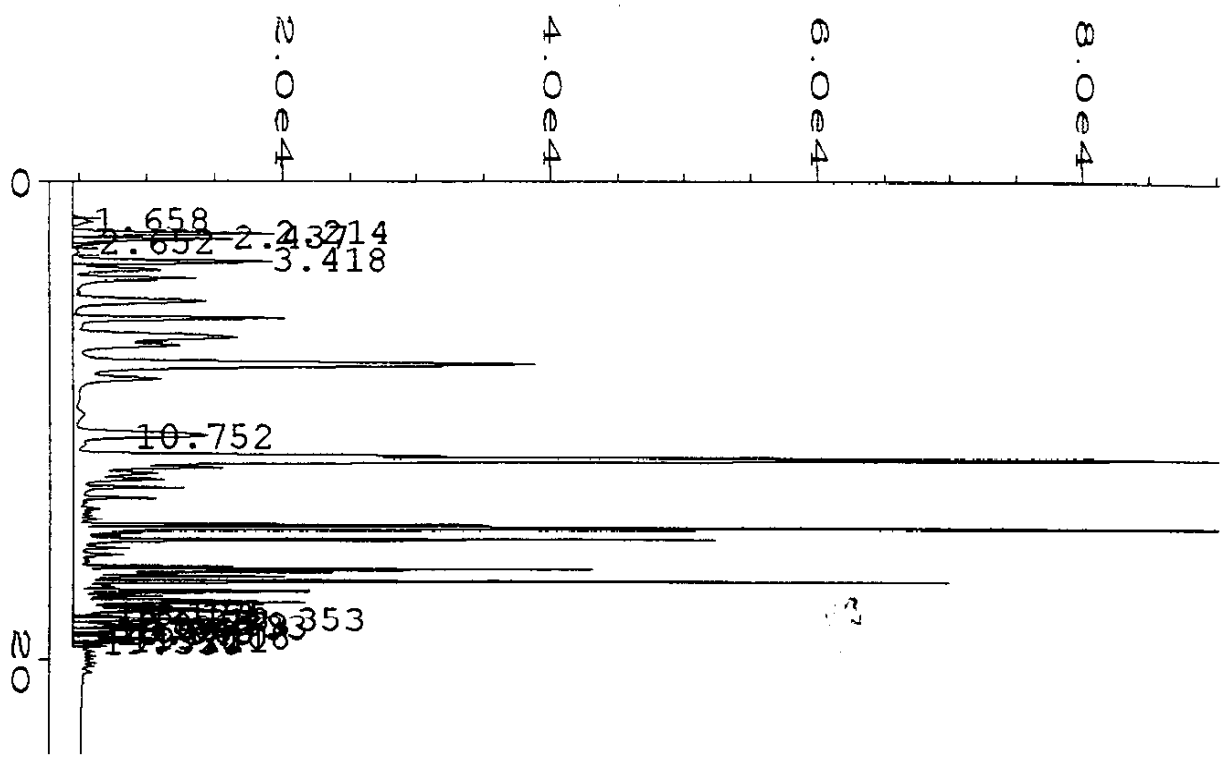
Calibration Table

Pk#	RT	Lvl	~~ng~~ ug/L	Amt/Area	Ref Istd I#	Name
1	10.705	1	0.5	1.0359e-007	1	VPH(GRO)
		2	1.0	1.047e-007		
		3	2.0	1.0714e-007		
		4	5.0	1.1245e-007		
		5	10.0	1.17e-007		
		6	40.0	1.3403e-007		
		7	80.0	1.4079e-007		
		8	100.0	1.4327e-007		

21 Jun 99 08:36 AM
Method: C:\HPCHEM\3\METHODS\3FVPHSCS.MTH

Calibration Table

Pk#	RT	Lvl	mg/kg	Amt/Area	Ref Istd I#	Name
1	10.705	1	200.0	1.1315e-007	1	VPH(GRO)



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External Standard Report

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Data File Name	: C:\HPCHEM\3\DATA\DEC1798\FHP3417.D		
Operator	: NJ	Page Number	: 1
Instrument	: HP3FIDPID	Vial Number	: 12
Sample Name	: ~~500ppb~~ 0.5ppm gro cal	Injection Number	:
Run Time Bar Code:		Sequence Line	:
Acquired on	: 17 Dec 98 05:16 PM	Instrument Method	: 3FBTEXSC.MTH
Report Created on	: 18 Dec 98 02:53 PM	Analysis Method	: 3FVPHSCS.MTH
Last Recalib on	: 18 Dec 98 02:50 PM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 1 in C:\HPCHEM\3\DATA\DEC1798\FHP3417.D

Ret Time	Area	Type	Width	Ref#	mg/kg	Name
10.752	4692832	HH +	0.000	1	0.531	VPH(GRO) 10

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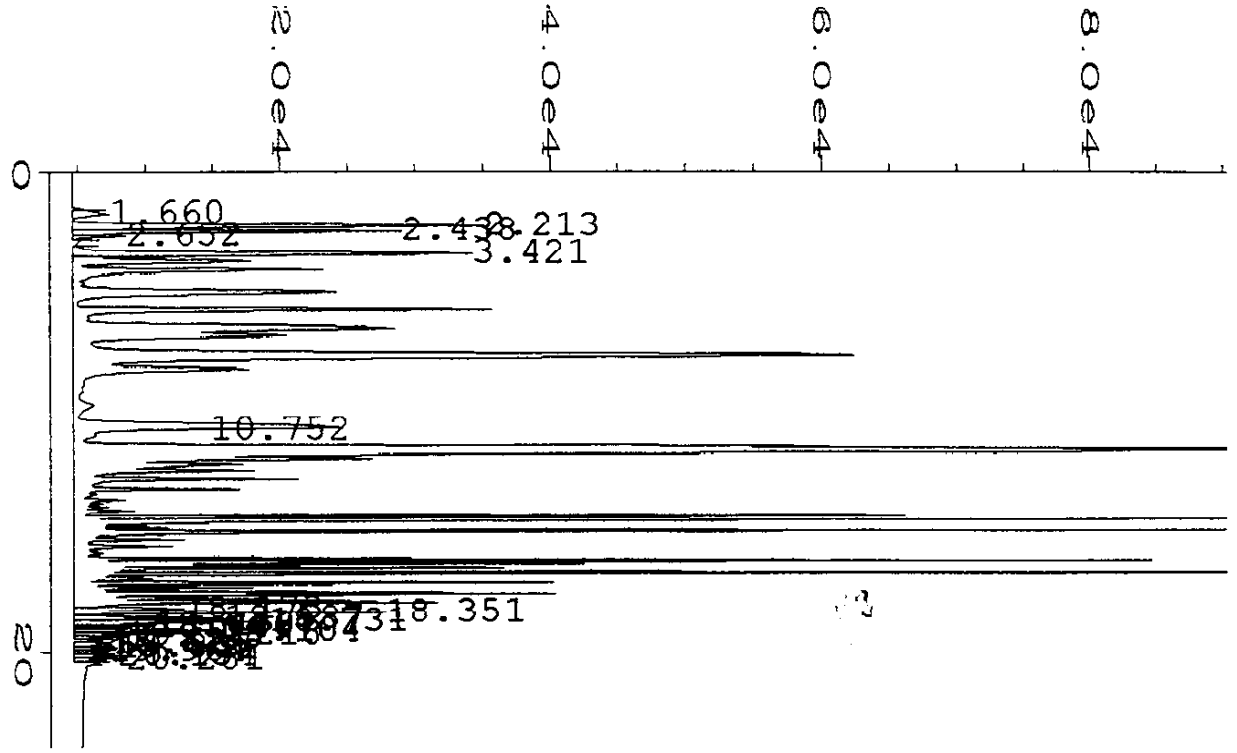

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External Standard Report

D. . File Name : C:\HPCHEM\3\DATA\DEC1798\FHP3418.D
Operator : NJ
Instrument : HP3FIDPID
Sample Name : ~~1000ppb~~ 1 ppm gro cal
Run Time Bar Code: 1 Ppm
Acquired on : 17 Dec 98 05:47 PM
Report Created on: 18 Dec 98 02:53 PM
Last Recalib on : 18 Dec 98 02:50 PM
Multiplier : 1

Page Number : 1
Vial Number : 13
Injection Number :
Sequence Line :
Instrument Method: 3FBTEXSC.MTH
Analysis Method : 3FVPHSCS.MTH
Sample Amount : 0
ISTD Amount :

Sig. 1 in C:\HPCHEM\3\DATA\DEC1798\FHP3418.D

Ret Time	Area	Type	Width	Ref#	mg/kg	Name
10.752	9280995	HH +	0.000	1	1.050	VPH(GRO) 105

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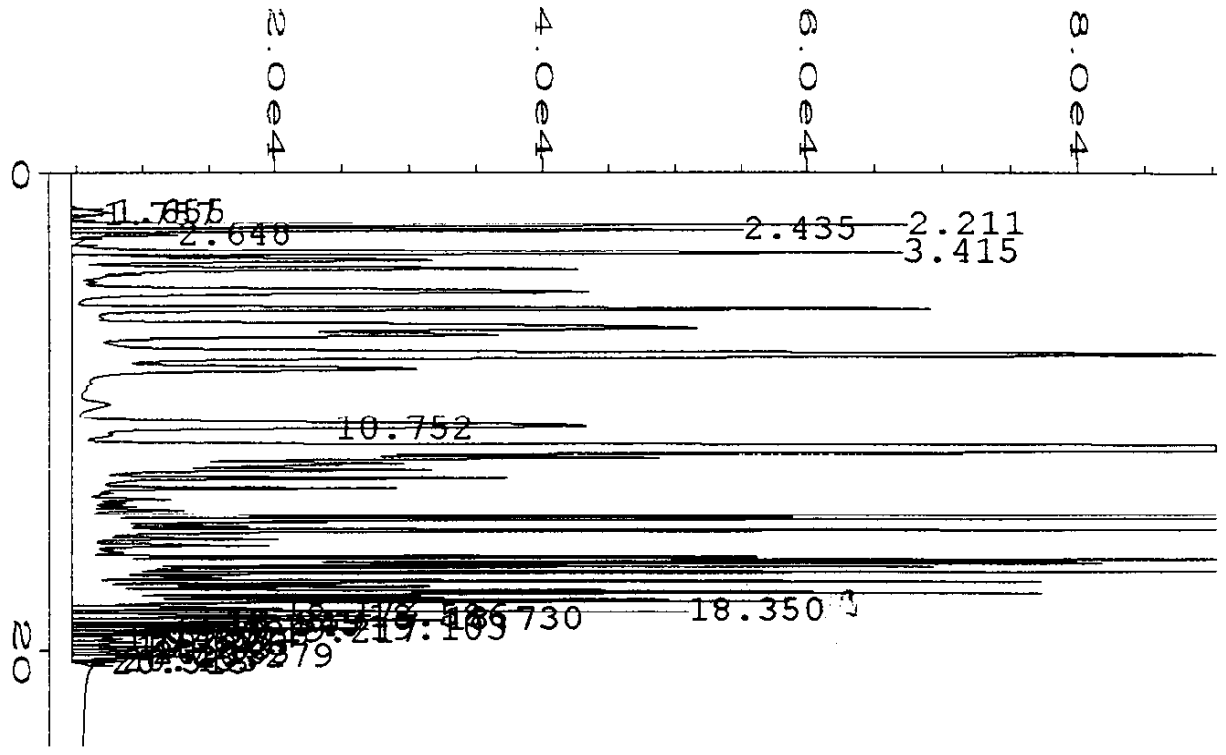
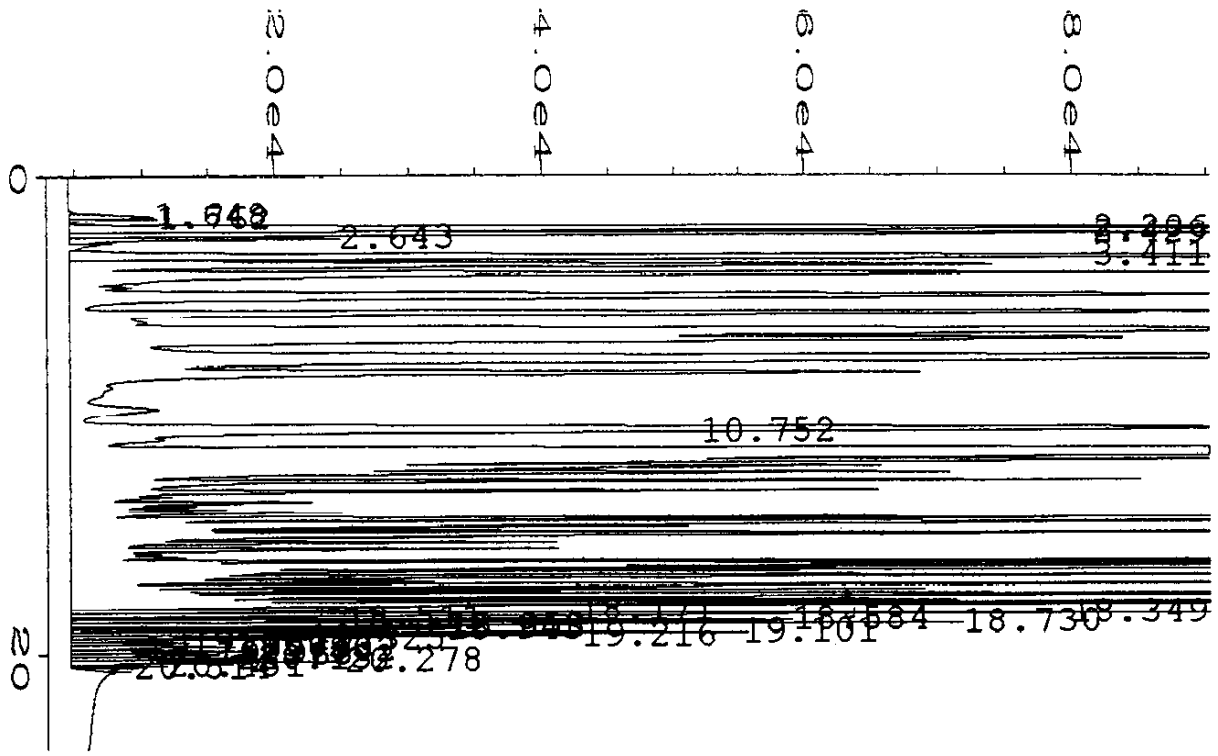


External Standard Report

Data File Name	: C:\HPCHEM\3\DATA\DEC1798\FHP3419.D		
Operator	: NJ	Page Number	: 1
Instrument	: HP3FIDPID	Vial Number	: 14
Sample Name	: 200gro cal	Injection Number	:
Run Time Bar Code:		Sequence Line	:
Acquired on	: 17 Dec 98 06:18 PM	Instrument Method	: 3FBTEXSC.MTH
Report Created on	: 18 Dec 98 02:53 PM	Analysis Method	: 3FVPHSCS.MTH
Last Recalib on	: 18 Dec 98 02:50 PM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 1 in C:\HPCHEM\3\DATA\DEC1798\FHP3419.D

Ret Time	Area	Type	Width	Ref#	mg/kg	Name
10.752	1.80906E+007	HH +	0.000	1	2.047	VPH(GRO) 102

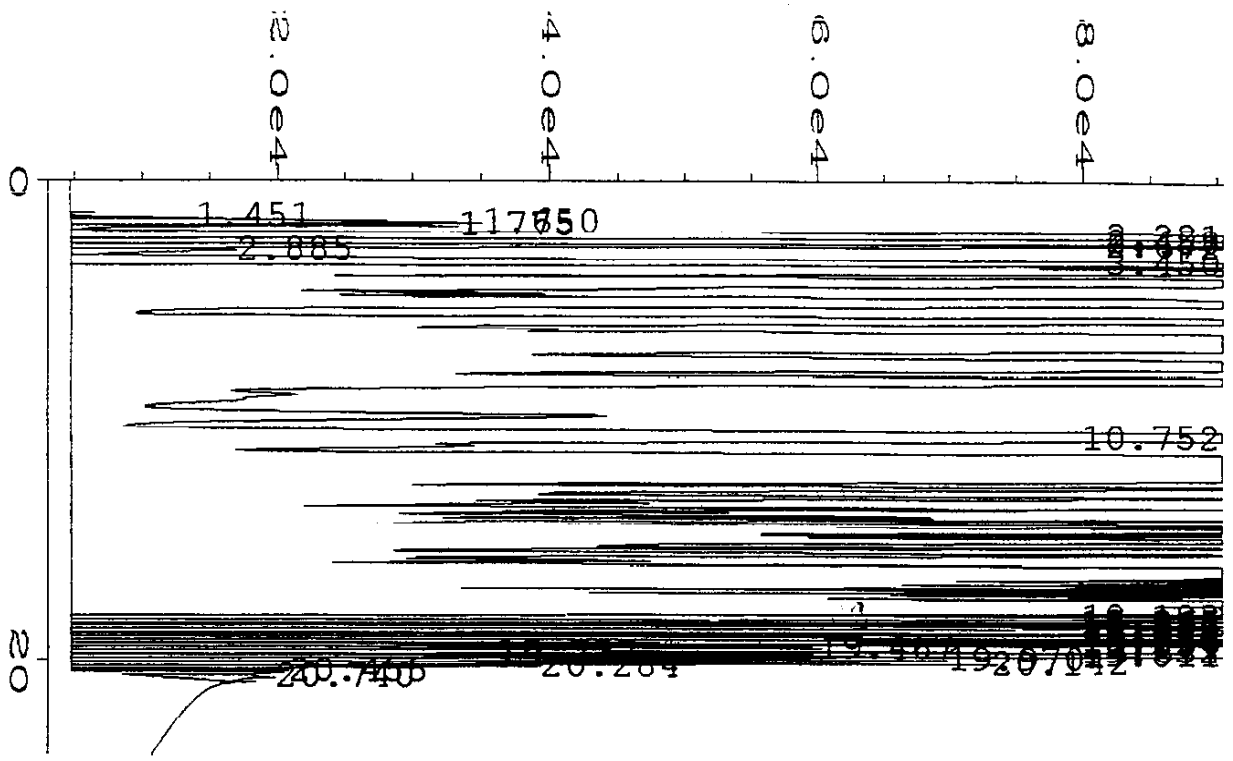


External Standard Report

Data File Name	: C:\HPCHEM\3\DATA\DEC1798\FHP3420.D		
Operator	: NJ	Page Number	: 1
Instrument	: HP3FIDPID	Vial Number	: 15
Sample Name	: 5000 gro cal	Injection Number	:
Run Time Bar Code:	5PPM	Sequence Line	:
Acquired on	: 17 Dec 98 06:49 PM	Instrument Method	: 3FBTEXSC.MTH
Report Created on	: 18 Dec 98 02:54 PM	Analysis Method	: 3FVPHSCS.MTH
Last Recalib on	: 18 Dec 98 02:50 PM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 1 in C:\HPCHEM\3\DATA\DEC1798\FHP3420.D

Ret Time	Area	Type	Width	Ref#	mg/kg	Name
10.752	4.29057E+007	HH +	0.000	1	4.855	VPH(GRO) 97



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External Standard Report

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D. . File Name	: C:\HPCHEM\3\DATA\DEC1898\FHP3430.D		
Operator	: NJ	Page Number	: 1
Instrument	: HP3FIDPID	Vial Number	: 3
Sample Name	: 40ppm grosx cal	Injection Number	:
Run Time Bar Code:		Sequence Line	:
Acquired on	: 18 Dec 98 01:42 PM	Instrument Method	: 3FBTEXSC.MTH
Report Created on	: 18 Dec 98 02:52 PM	Analysis Method	: 3FVPHSCS.MTH
Last Recalib on	: 18 Dec 98 02:50 PM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 1 in C:\HPCHEM\3\DATA\DEC1898\FHP3430.D

Ret Time	Area	Type	Width	Ref#	mg/kg	Name
10.752	2.89986E+008	HH +	0.000	1	32.812	VPH(GRO) 82

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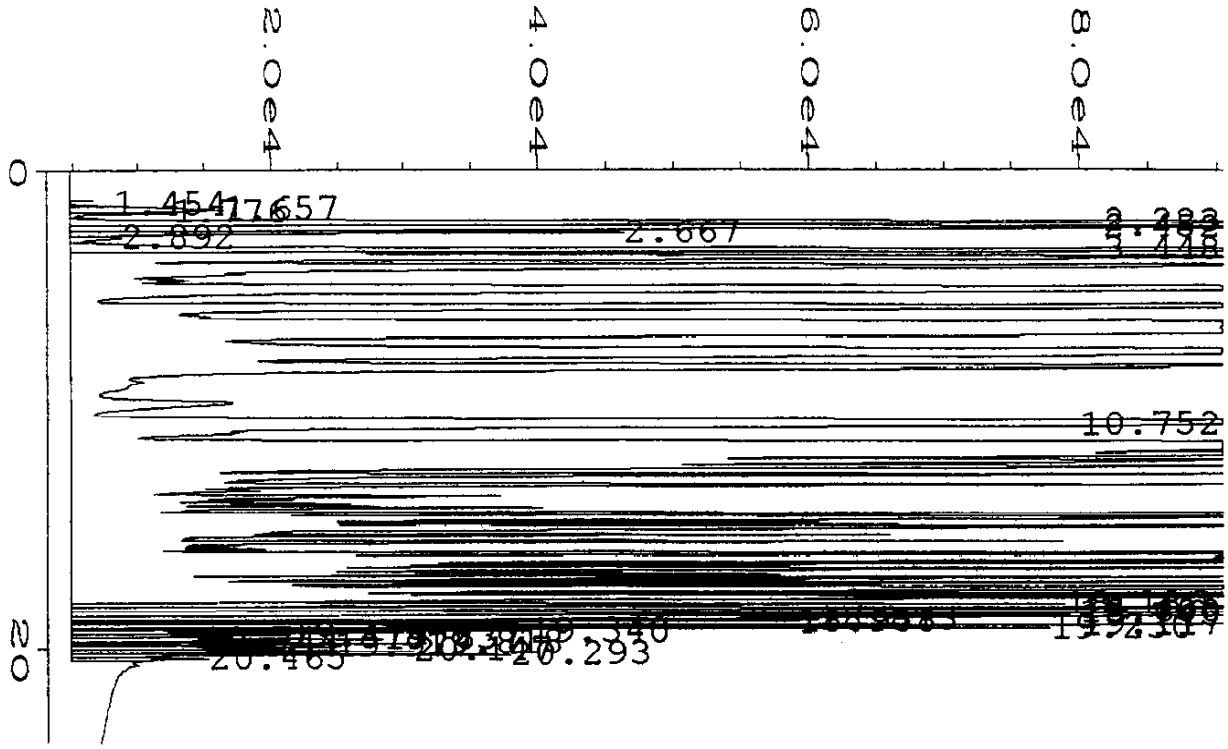

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External Standard Report

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Data File Name	: C:\HPCHEM\3\DATA\DEC1898\FHP3429.D		
Operator	: NJ	Page Number	: 1
Instrument	: HP3FIDPID	Vial Number	: 2
Sample Name	: 10ppm grosx cal	Injection Number	:
Run Time Bar Code:		Sequence Line	:
Acquired on	: 18 Dec 98 01:11 PM	Instrument Method	: 3FBTEXSC.MTH
Report Created on	: 18 Dec 98 02:52 PM	Analysis Method	: 3FVPHSCS.MTH
Last Recalib on	: 18 Dec 98 02:50 PM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 1 in C:\HPCHEM\3\DATA\DEC1898\FHP3429.D

Ret Time	Area	Type	Width	Ref#	mg/kg	Name
10.752	8.3071E+007	HH +	0.000	1	9.399	VPH(GRO) 94

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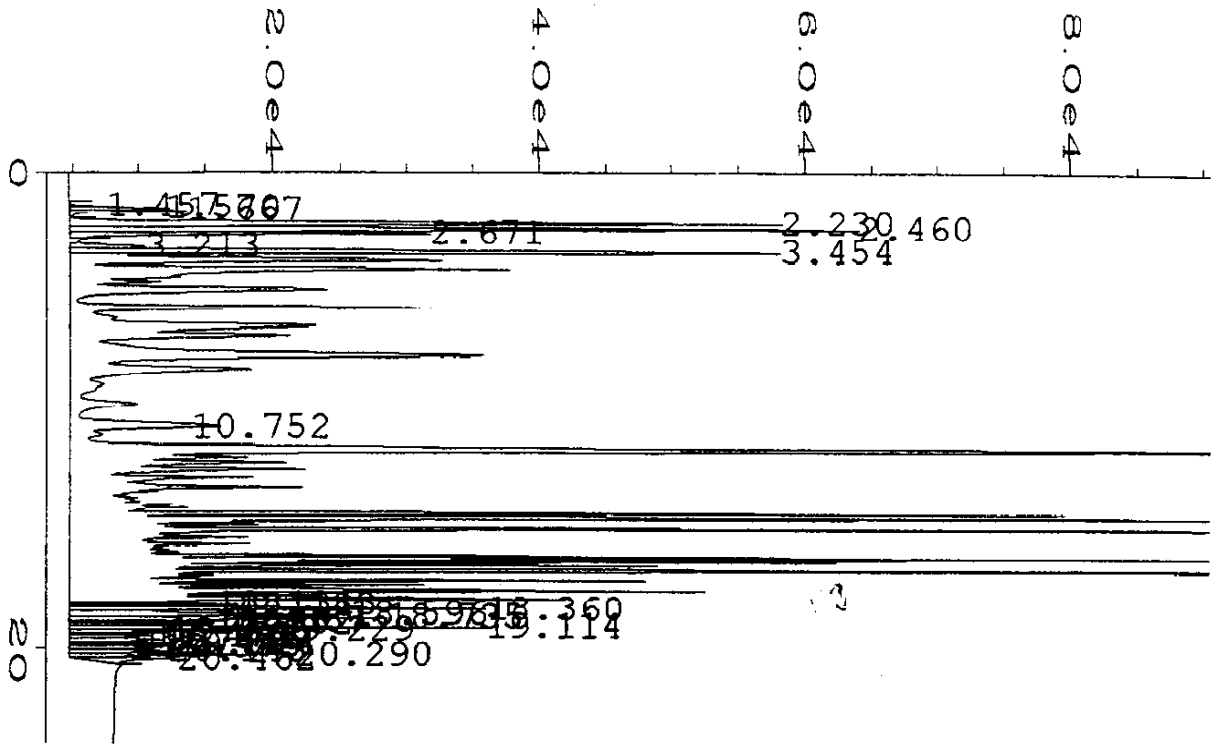
060



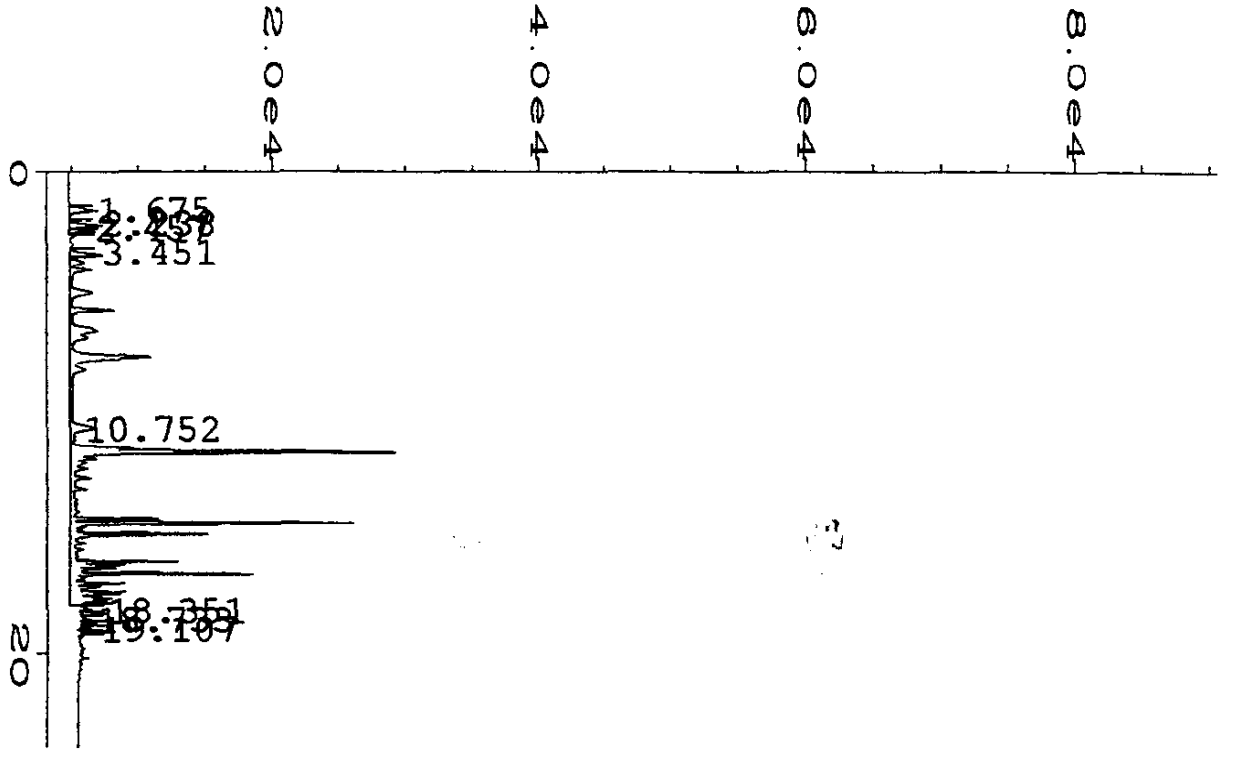
External Standard Report

L a File Name	: C:\HPCHEM\3\DATA\DEC1898\FHP3433.D		
Operator	: NJ	Page Number	: 1
Instrument	: HP3FIDPID	Vial Number	: 6
Sample Name	: ~~grow~~ M 12/17/98 ical	Injection Number	:
Run Time Bar Code	: grosX	Sequence Line	:
Acquired on	: 18 Dec 98 03:14 PM	Instrument Method	: 3FBTEXSC.MTH
Report Created on	: 18 Dec 98 04:09 PM	Analysis Method	: 3FVPHSCS.MTH
Last Recalib on	: 18 DEC 98 02:50 PM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 1 in C:\HPCHEM\3\DATA\DEC1898\FHP3433.D

Ret Time	Area	Type	Width	Ref#	mg/kg	Name
10.752	1.08786E+007	HH +	0.000	1	1.231	VPH(GRO)98

1231/125



External Standard Report

Data File Name	: C:\HPCHEM\3\DATA\DEC2998\FHP3532.D		
Operator	: NJ	Page Number	: 1
Instrument	: HP3FIDPID	Vial Number	: 2
Sample Name	: 0.1 ppm cal	Injection Number	:
Run Time Bar Code:		Sequence Line	:
Acquired on	: 29 Dec 98 11:34 AM	Instrument Method:	3FBTEXSC.MTH
Report Created on:	29 Dec 98 11:59 AM	Analysis Method	: 3FVPHSCS.MTH
Last Recalib on	: 18 DEC 98 02:50 PM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 1 in C:\HPCHEM\3\DATA\DEC2998\FHP3532.D

Ret Time	Area	Type	Width	Ref#	mg/kg	Name
10.752	1056319	HH +	0.000	1	0.120	VPH(GRO) 120%

Gascoyne Laboratories, Inc.

Baltimore, MD 21224

(410) 633-1800

FAX NO.
(410) 633-5443

www.gascoyne.com

REPORT OF ANALYSIS

Report No: 9903901

IT/OHM Corporation
2790 Mosside Blvd.
Monroeville, PA 15146

Attn: Larry Stearns

This report of analysis contains test results for the following samples submitted to Gascoyne Laboratories, Inc. for project 919568:

Client Sample I.D.,	Sample Type	Lab Sample No.	Received by Gascoyne
TANK 1; grab, 14-Jul-1999(1005)	Soil	990015130	15-Jul-1999
TANK 2; grab, 14-Jul-1999(1027)	Soil	990015131	15-Jul-1999
TANK 3; grab, 14-Jul-1999(1105)	Soil	990015132	15-Jul-1999
TANK 4; grab, 14-Jul-1999(1140)	Soil	990015133	15-Jul-1999

This Report contains the following:

A) Cover Letter
B) Test Results
C) Chain-of-Custody

All samples were analyzed following EPA protocols and other recognized methodologies as specified in the report. All laboratory Quality Control(QC) data associated with this report are within established control limits unless otherwise noted in this report.

Gascoyne Laboratories, Inc. laboratory identification numbers:

Maryland :109; Delaware: MD015; Virginia: 00152; New Jersey: 60637; Pennsylvania: 68-339; New York: 11158; A2LA: 410.01; AIHA:8885; US Army Corps of Engineers; and EPA ICR: ICRMD003.

The analyses specified in this report may or may not be included in the scopes of the above listed certifications.

This cover page is an integral part of this report and must be included with all copies of this report.

James H Newman — 7/29/99

Final report reviewed by: James H. Newman, Client Services Manager — Report issue date

Gascoyne Laboratories, Inc.

Baltimore, MD 21224

(410) 633-1800

FAX NO.
(410) 633-5443

www.gascoyne.com

REPORT OF ANALYSIS

Report no: **9903901**

Client: **IT/OHM Corporation**

Sample Id: **Submitted samples: TANK 1; grab collected on 14-Jul-99(10:05)**
Laboratory Sample Number: 990015130

Parameter	Test Results	Laboratory Reporting Limit	Method	Analyst	Date of Analysis
Diesel Range Organics(C10-C28)	670 ppm-arb	10 ppm-arb	EPA-8015B	MST	16-Jul-99(12:36)
n-Pentacosane(surrogate)	92 % Rec	NA	EPA-8015B	MST	16-Jul-99(12:36)

Sample/Test Notes:
Extraction started 07/16/99 08:15. Dilution factor = 1.

oline Range Organics(C6-C10)	<10 ppm-arb	10 ppm-arb	EPA-8015B	NJ	15-Jul-99(18:29)
Trifluorotoluene(surrogate)	96 % Rec	NA	EPA-8015B	NJ	15-Jul-99(18:29)

Sample/Test Notes:
Sample received with headspace.

Residue at 105°C	80.5 %-arb	0.01 %-arb	CLP-SOW-ILM04.0	DMW	16-Jul-99(10:35)

Gascoyne Laboratories, Inc.

Baltimore, MD 21224

(410) 633-1800

FAX NO.
(410) 633-5443

www.gascoyne.com

REPORT OF ANALYSIS

Report no: **9903901**

Client: **IT/OHM Corporation**

Sample Id: **Submitted samples: TANK 2; grab collected on 14-Jul-99(10:27)**
Laboratory Sample Number: 990015131

Parameter	Test Results	Laboratory Reporting Limit	Method	Analyst	Date of Analysis
Diesel Range Organics(C10-C28)	74 ppm-arb	10 ppm-arb	EPA-8015B	MST	16-Jul-99(13:18)
n-Pentacosane(surrogate)	93 % Rec	NA	EPA-8015B	MST	16-Jul-99(13:18)

Sample/Test Notes:
Extraction started 07/16/99 08:15. Dilution factor = 1.

oline Range Organics(C6-C10)	<10 ppm-arb	10 ppm-arb	EPA-8015B	NJ	15-Jul-99(19:00)
Trifluorotoluene(surrogate)	97 % Rec	NA	EPA-8015B	NJ	15-Jul-99(19:00)

Sample/Test Notes:
Sample received with headspace.

Residue at 105°C	86.3 %-arb	0.01 %-arb	CLP-SOW-ILM04.0	DMW	16-Jul-99(10:35)

Gascoyne Laboratories, Inc.

Baltimore, MD 21224

(410) 633-1800

FAX NO.
(410) 633-5443

www.gascoyne.com

REPORT OF ANALYSIS

Report no: **9903901**

Client: **IT/OHM Corporation**

Sample Id: **Submitted samples: TANK 3; grab collected on 14-Jul-99(11:05)**
Laboratory Sample Number: 990015132

Parameter	Test Results	Laboratory Reporting Limit	Method	Analyst	Date of Analysis
Diesel Range Organics(C10-C28)	<10 ppm-arb	10 ppm-arb	EPA-8015B	MST	16-Jul-99(14:00)
n-Pentacosane(surrogate)	96 % Rec	NA	EPA-8015B	MST	16-Jul-99(14:00)

Sample/Test Notes:
Extraction started 07/16/99 08:15. Dilution factor = 1.

oline Range Organics(C6-C10)	<10 ppm-arb	10 ppm-arb	EPA-8015B	NJ	15-Jul-99(19:31)
Trifluorotoluene(surrogate)	102 % Rec	NA	EPA-8015B	NJ	15-Jul-99(19:31)

Sample/Test Notes:
Sample received with headspace.

Residue at 105°C	92.3 %-arb	0.01 %-arb	CLP-SOW-ILM04.0	DMW	16-Jul-99(10:35)

Gascoyne Laboratories, Inc.

Baltimore, MD 21224

(410) 633-1800

FAX NO.
(410) 633-5443

www.gascoyne.com

REPORT OF ANALYSIS

Report no: ***9903901***

Client: **IT/OHM Corporation**

Sample Id: **Submitted samples: TANK 4; grab collected on 14-Jul-99(11:40)**
Laboratory Sample Number: 990015133

Parameter	Test Results	Laboratory Reporting Limit	Method	Analyst	Date of Analysis
Diesel Range Organics(C10-C28)	<10 ppm-arb	10 ppm-arb	EPA-8015B	MST	16-Jul-99(16:06)
n-Pentacosane(surrogate)	*86 % Rec*	*NA*	*EPA-8015B*	*MST*	*16-Jul-99(16:06)*

Sample/Test Notes:
Extraction started 07/16/99 08:15. Dilution factor = 1.

ɔline Range Organics(C6-C10)	<10 ppm-arb	10 ppm-arb	EPA-8015B	NJ	15-Jul-99(21:04)
Trifluorotoluene(surrogate)	95 % Rec	NA	EPA-8015B	NJ	15-Jul-99(21:04)

Sample/Test Notes:
Sample received with headspace.

Residue at 105°C	84.3 %-arb	0.01 %-arb	CLP-SOW-ILM04.0	DMW	16-Jul-99(10:35)

Cooler Receipt Report

Number of Coolers Received: 1
Client: I.T

Receipt Date/Time: 7/15/99 1550
WO# 9903901

Exterior Inspection::

Cracks or Breaks: ● No ○ Yes

Custody Tape: ● Yes ○ No ○ NA
Tape Intact: ● Yes ○ No ○ NA

Shipper: ☐ UPS ☐ FEDEX ● GLI ☐ Client ☐ Courier ☐ Other: _____

Waybill Number: _____

Shipping Container Type: ● Cooler ○ Box ○ Other ○ None

Interior Inspection:

Chain of Custody: ● Yes ○ No

Number of Containers: 4

Type of Containers: 4 (8oz)

Type of Samples: ☐ Water ● Soil ☐ Filter ☐ Air ☐ Wipes ☐ Oil ☐ Other: _____

Broken Bottles: ● No ○ Yes

Headspace in VOA(>6mm)? ○ No ○ Yes ○ NA

Headspace in K soil bottle? ~~○ No ○ Yes ● NA~~ checked MH 7/15/99 in lab

Packing Material:
○ Peanuts ○ Bubble Wrap ○ Vermiculite ○ Foam ● None ○ Other _____

Radiation Scan: ● Negative _____ mR/hr

Coolant: ● Wet Ice ○ Blue Ice ○ Dry Ice ○ None

Temperature:(circle thermometer used for determination)

Thermometer: IR Horiba SN# 632015 Digital VWR SN# NA

Cooler Received	Cooler No.	Temp	Cooler Received	Cooler No.	Temp
1	291	1.6 °C	4		°C
2		°C	5		°C
3		°C	6		°C

Note: If no Temp Blank, average of three sample containers: _____ °C

Sample bottle Ids and COC agree. ● Yes ○ No

pH Checking with strips completed. ○ Yes ● No pH Criteria met: ○ Yes ○ No Mtl

All acid preserved < 2 NaOH preserved > 12 All others > 2 and < 10 (usually 4-8)

Sample ID: _____ Chemical ID: _____ mls added _____ Initials _____

Sample ID: _____ Chemical ID: _____ mls added _____ Initials _____

Sample ID: _____ Chemical ID: _____ mls added _____ Initials _____

Sample ID: _____ Chemical ID: _____ mls added _____ Initials _____

Sample ID: _____ Chemical ID: _____ mls added _____ Initials _____

Comments: _____

Performed By: Melanie Houserecht (Signature) Date/Time: 7/15/99 1550

Container Types: A (300ml plastic) B (1000ml plastic) C (1000ml glass) D (1000ml glass amber) E (4oz glass amber) K (4oz glass) L (20ml glass) M (16oz glass) O (4oz plastic) S (4oz sterile polypropylene) V (40ml VOA vial)

7/19/99

9403901 #291 1.6

IT INTERNATIONAL TECHNOLOGY CORPORATION

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD*

Reference Document No. 559836 (15)

Page 1 of 1

Project Name/No. [1] Bainbridge 919568

Sample Team Members [2] Treater/Klinger

Profit Center No. [3] ——

Project Manager [4] C. Stearns

Purchase Order No. [6] 91956870

Required Report Date [11] 3 days 7/20/99

Samples Shipment Date [7] 7/15/99

Lab Destination [8] Gascoyne Labs

Lab Contact [9] 410-633-1800 Tina Kelly @134

Project Contact/Phone [12] 410-378-3450 Dick Treater

Carrier/Waybill No. [13] Lab pickup

Bill to: [5] IT Corp
2790 Mosside Blvd
Monroeville, PA 15146

Report to: [10] 412-380-0699 Fax to Larry Stearns
IT Corp
2790 Mosside Blvd
Monroeville, PA 15146

ONE CONTAINER PER LINE

Sample Number [14]	Sample Description/Type [15]	Date/Time Collected [16]	Container Type [17]	Sample Volume [18]	Pre-servative [19]	Requested Testing Program [20]	Condition on Receipt [21]	Disposal Record No. [22]
130 Tank 1	Grab Brn silt soil Floor of excavation	7/14/99 1005	1-8oz	8oz	4°C	TPH GRO/DRO Modified 8015	T. solids	
131 Tank 2	Grab Brn silt soil Floor of excavation	7/14/99 1027	|	|	|	|	|	MS/MSD
132 Tank 3	Grab Brn silt soil Floor of excavation	7/14/99 1105	|	|	|	|	|	
133 Tank 4	Grab Brn silt soil Floor of excavation	7/14/99 1140	|	|	|	|	|	QC 3

FOR LAB USE ONLY

FOR LAB USE ONLY

Special Instructions: [23] Fax results to Larry Stearns @ 412-380-0699

Possible Hazard Identification: [24] Petroleum Hydrocarbons
Non-hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☒

Sample Disposal: [25]
Return to Client ☐ Disposal by Lab ☒ Archive _____ (mos.)

Turnaround Time Required: [26]
Normal ☐ Rush ☒ 3 days

QC Level: [27]
I. ☒ II. ☐ III. ☒ Project Specific (specify): NAVY NFESC Guide

1. Relinquished by [28] (Signature/Affiliation) Dick Treater / Dick Treater/IT — Date: 7/15/99 Time: 1500	1. Received by [28] (Signature/Affiliation) [signature] GLI — Date: 7/15/99 Time: 1500
2. Relinquished by (Signature/Affiliation) [signature] GLI — Date: 7/15/99 Time: 1550	2. Received by (Signature/Affiliation) Melanie Housekeeper GLI — Date: 7-15-99 Time: 1550
3. Relinquished by (Signature/Affiliation) — Date: Time:	3. Received by (Signature/Affiliation) — Date: Time:

Comments: [29] Fax results to Dick Treater 410-378-3232, Tom Joyner 609-588-6190 and Frank Zepka 202-433-7018

TLE

[signature] 7/28/99

MCA 3/15/91

White: To accompany samples
Yellow: Field copy
*See back of form for special instructions.

CASE NARRATIVE
GASCOYNE LABORATORIES, INC.

Report Number: 9903901-QC
Report To: OHM/IT
2790 Mosside Blvd.
Monroeville, PA 15146

July 28, 1999

Project: Bainbridge 919568

Date Samples Received: July 15, 1999

Sample Numbers	Sampling Date	Matrix	Laboratory ID
Tank 1	07/14/99	Soil	990015130
Tank 2	07/14/99	Soil	990015131
Tank 3	07/14/99	Soil	990015132
Tank 4	07/14/99	Soil	990015133

The samples were collected by the client and were transported to Gascoyne Laboratories via Gascoyne Laboratories courier. The courier relinquished the samples to Gascoyne personnel in the sample control department for log-in. All sample containers were checked and it was noted that the containers were in satisfactory condition, with the following exceptions: All containers have headspace. This is footnoted on the Report of Analysis, where applicable.

The following requested test parameters were performed by Gascoyne Laboratories:

* Petroleum Hydrocarbon analysis (Gasoline Range and Diesel Range), using EPA Method 8015B

Reference: Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Office of Solid Waste and Emergency Response, USEPA, Wash., DC, November 1986; Final Update I (07/92), Final Update II (09/94), Final Update III (12/96)

The client requested Matrix Spike/ Matrix Spike Duplicate analysis for sample 99015132.

All laboratory quality control parameters were met.

Enclosed are the following:

1. Report of Analysis
2. Chain-of-Custody and Cooler Receipt Form
3. Case Narrative
4. Quality Control Data Package – 73 pages

GASCOYNE LABORATORIES, INC.

June A. Main
Quality Assurance Officer