FINAL CLEANUP REPORT

PACIFIC PRIDE FUELING FACILITY
HALF-ACRE PORTION OF KITTITAS COUNTY PARCEL # 263835
903 W. 1ST STREET
CLE ELUM, WASHINGTON 98922

SUBMITTED TO:

JEFF JAMES
JAMES OIL COMPANY
666 GRIFFIN AVENUE
ENUMCLAW, WASHINGTON 98022

PREPARED BY:

Donna Hewitt L.G.

DLH ENVIRONMENTAL CONSULTING
2400 NW 80TH STREET
PMB 114
SEATTLE, WASHINGTON 98117

JULY 29, 2010

RECEIVED
AUG 30 2010
DEPARTMENT OF ECOLOGY - CENTRAL REGIONAL OFFICE

TABLE OF CONTENTS

1.0 BACKGROUND

The subject site (referred to in this report as the "Site") is identified as an approximate ½ acre area in the center of property currently owned by the Estate of Wayne A. Hill. James Oil leased the "Site" from on or about November 24, 1988 through September 30, 2009. The Estate of Wayne A. Hill property is identified as a 3.39 acre parcel located at 903 W. 1st Street in Cle Elum, Washington. According to the Kittitas County Assessor's office, the parcel number for the Hill property is #263835, and is legally described as: SEC. 27; TWP. 20; RGE. 15; PTN. NE1/4 SW1/4 & PTN. NW1/4 SW1/4 (PTN SURVEY B30/P203) PTN VAC RANGER STATION RD (ORD 1194).

The Pacific Pride fueling facility was constructed in 1999 as a cooperative effort of James Oil Company, Inc. and Wayne A. Hill. The "Site" was constructed in late1998. The fueling facility consisted of two above ground fuel storage tanks (AST's), dispensers, turbines, monitoring equipment, TLS, Pacific Pride Fuel Controller, a canopy and various piping and electrical equipment associated with the fueling process.

According to Mr. James all of the above ground equipment including the AST's, turbines, dispensers, TLS, Pacific Pride Fuel Controller, and above ground piping and electrical was owned by James Oil Company. Also, according to Mr. James, Wayne Hill, (now the Estate of Wayne A. Hill), purchased and owned all below ground piping and electrical, sumps, islands, canopy, and fueling slabs.

James Oil's use of the "Site" terminated at the end of September 2009. According to Jeff James, the above ground equipment, owned by James Oil, was removed in the first ten days of October 2009 by James Oil. The Estate owned property was removed in April 2010. James Oil and the Estate are now working cooperatively to clean up the site and receive and NFA letter.

On November 5, 2007, White Shield, Inc. (WSI) was retained to conduct a site visit at 903 W. 1st Street in Cle Elum, Washington with Ms. Renee Hill, Trustee for the Wayne A. Hill estate (property owner). Subsequently, WSI was retained in 2008 and 2009 to collect soil and water samples to assess the potential of hydrocarbon releases associated with the Pacific Pride Fueling Facility. The characterization of the soil documented in the WSI reports (Appendices E and F) indicated that diesel/heavy oil in the soil was confirmed above the current MTCA limits of 2000 ppm. Detailed information with regard to site information, soil sample locations, and subsurface soil conditions can be found in the WSI reports located in the above-mentioned appendices of this report.

2.0 PROJECT DESCRIPTION/SCOPE OF WORK

The scope of work for this project consisted of overseeing the removal of a concrete pad located on the "Site"; the removal of remaining fuel product piping, vent lines, and other fueling facility materials located underneath the concrete pad; the removal of confirmed impacted soil; and the investigation of stained soil areas adjacent to the concrete pad that were discovered during previous studies. DLH Environmental Consulting (DLH) was retained by James Oil Company (property lessee) to provide oversite of the afore mentioned tasks and to collect the required soil samples during initial excavation and to collect confirmational soil samples once the impacted soils were removed. DLH was responsible for taking all soil samples to the project laboratory for analysis. The project laboratory was Friedman & Bruya, Inc. located in Seattle, Washington.

In addition to the work conducted by DLH, a representative of Pacific Groundwater Group (PGG) was onsite during this project on behalf of the property owner Estate of

Wayne A. Hill. PGG also took soil samples for analysis and has provided that information in Appendix G.

3.0 "SITE" CONDITIONS

The "Site" consists of a leveled area north of W. 1st Street. It consists of a large concrete pad surrounded by a mixture of asphalt and gravel access roads on the north, south and east, and graveled and relatively leveled property on the west where the former ASTs were located. There is a cemetery to the northwest, a few buildings/garages to the east, a logging company equipment storage yard to the west, and an on-ramp to Interstate I-90 located directly south. The vacant buildings/garages to the east and the logging company equipment storage yard to the west are on the Estate of Wayne A. Hill property. The property and surrounding topography slope gently south/southeast toward the Yakima river. The property is approximately 2000 feet above sea level.

Prior to the decommissioning of the fueling facility in September 2009 there was a large canopy covering the concrete pad. The canopy was removed as a part of the decommissioning but the concrete footings that held the canopy were left in place underneath the concrete pad. During the removal of impacted soils the southern concrete footing was removed.

3.1 "Site" Soils

"Site" soils are basically described as a mixture of brownish sands and gravels with some silt. In several areas, there was dark reddish silty soil, and in other areas there were indications of fill materials such as old wood, wood chips, and other debris. More detailed soil data can be found in the White Shield, Inc. reports located in Appendices F and G and as documented by PGG In Appendix G.

3.2 Groundwater

Groundwater information noted in previous WSI reports (Appendix E and F) indicate that groundwater could be approximately 30 feet below ground level and flow direction could be toward the Yakima River located approximately 3/8 mile to the southeast.

Groundwater samples were collected from 2- temporary wells on October 29, 2009 by both White Shield, Inc. and DLH (see Appendix F). Results of that study indicated that gasoline, BTEX, and diesel were not detected above the laboratory reporting limits. No groundwater was encountered during the excavation activities of this current project.

3.3 Removal Activities

On April 27, 2010, both DLH Environmental Consulting and Pacific Groundwater Group representatives were onsite to conduct "Site" removal activities. Demolition and soil excavation services were provided by a HAZWOPER - trained excavator operator. The concrete pad was removed and soil was excavated starting at the north side of the concrete pad area, then along the west side of the concrete pad area. Both of these areas were noted in the former WSI reports as being suspected of having hydrocarbon contamination (stained soil and stains on the concrete pad). Once those areas had been excavated and soil samples collected for analysis, we proceeded to remove the soil in and around the former fuel dispenser locations and the associated product lines. All fueling system equipment had been removed from the ground up prior to this scope of work. What materials remained were underneath the concrete pad. Fuel dispensers had been removed only to the top of the concrete and therefore the spill buckets and product piping were still in place.

Green "Environ" flexible product piping was found under the concrete pad area still attached to the remaining fuel dispenser system. This is a double-walled product and was found to contain small amounts of free product (diesel). The free product was found contained in the secondary (interstitial) containment, which could possibly indicate that the product lines had failed. This free product, approximately 2-3 gallons, was disposed of in 55-gallon drums located onsite that had been formerly used for soil cuttings during drilling activities. Also at this time, all of the soil in the 55-gallon drums was emptied into a dump truck along with other excavated materials for disposal.

The soil around these product pipes, including pea gravel used as backfill, was also removed and disposed of. During the rest of the day and the following day (April 28, 2010) soil was continually removed, loaded into dump trucks, and transported to CEMEX soil facility in Everett, WA.

After the initial impacted areas were dug out, sampled, and analyzed and after analysis was received from the project laboratory, additional soil was removed on May 18, 2010. The main area of concern at that time was diesel-impacted soil in and around the southern concrete canopy footing. A fuel dispenser had been located north of this footing and if the dispenser or product lines associated with this dispenser leaked and the sump failed, it is likely that the leaking product would come into contact with this concrete footing and migrate downward along the footing. The bottom of the footing was approximately 9 -10 feet below ground level. The footing was removed and properly disposed of (see Appendix D) and soil was continually excavated in and around this area until confirmational soil sampling was completed.

For the purpose of this report the "Site" is divided into the following four areas. Please refer to the figures in Appendix A to see area locations.

- Area A: the northern portion of the "Site"
- Area B: the western portion of the "Site"
- Area C: the south-central portion of the "Site" (this is where most of the impacted soil was removed surrounding a large concrete canopy footing)
- Area D: the southeast portion of the "Site".

3.4 Hydrocarbon Testing

Soil samples were collected for the analysis of both NWTPH-Dx, NWTPH-Gx and BTEX. However, the chromatograms generated from the NWTPH-Dx analysis indicated that no gasoline or BTEX was present, and therefore the samples were not analyzed for gasoline or BTEX. All EPA-established sample-handling protocols, including chain of custody procedures, were observed during the course of the project.

The following three tables document the soil sampling and analysis. Refer to the figures located in Appendix A for additional data and sample locations.

Table A
Soil Samples Collected on 4/27/2010 – Analytical Results

SAMPLE #	SAMPLE LOCATION Refer to drawings located in Appendix A. Discrete samples unless otherwise noted	ANALYSIS	RESULTS In parts per million (ppm) unless noted
42710-01	Area A: composite sample along northwest corner of excavation area, 1.5 ft bgl	NWTPH-Dx	Diesel < 50 Heavy oil < 250
42710-02	Area A: 2-3 ft southwest of sample # 01, 2 ft bgl	NWTPH-Dx	Diesel < 50 Heavy oil < 250
42710-03	Area A: composite sample along the northeast corner of the excavated area, 2 ft bgl	NWTPH-Dx	Diesel 1,300 Heavy oil 4,500
42710-04	Area A: south of sample # 03, 3.5 ft bgl	NWTPH-Dx	Diesel < 50 Heavy oil < 250
42710-05	Area B: 5 ft east of the western edge of the area, 7 ft bgl. East of sample #-06	NWTPH-Dx	Diesel 1,700 Heavy oil < 250
42710-06	Area B: sidewall sample 3 ft bgl. On the western edge of the site area	NWTPH-Dx	Diesel 3,200 Heavy oil < 250
Stock 1	Area A: composite stockpiled soils generated during excavation activities from samples 01, 02, 03, and 04	NWTPH-Dx	Diesel 1,200 Heavy oil < 250
Stock 2	Area B: composite stockpiled soils generated during excavation activities from samples 05 and 06	NWTPH-Dx	Diesel 3,700 Heavy oil < 250

NWTPH = Washington Total Petroleum Hydrocarbon
Dx = Hydrocarbon identification for diesel and motor oil range C10-C36
None Detected = < 50 ppm (diesel range), < 250 ppm (motor oil range)
bgl = below ground level
MTCA Cleanup for Diesel and Heavy Oil is 2000 ppm

Table B
Soil Samples Collected on 4/28/2010 – Analytical Results

SAMPLE #	SAMPLE LOCATION Refer to drawings located in Appendix A. Discrete samples unless otherwise noted	ANALYSIS	RESULTS in parts per million (ppm) unless noted
42810-07	Area C: below concrete canopy footing, 9 ft bgl	NWTPH-Dx	Diesel 90 Heavy oil < 250
42810-08	Area D: composite sidewall sample, 2 ft bgl, after minor excavation	NWTPH-Dx	Diesel < 50 Heavy oil < 250
42810-09	Area C: below canopy footing, 13 ft bgl	NWTPH-Dx	Diesel 4,400 Heavy oil < 250
42810-10	Area C: north sidewall	NWTPH-Dx	Diesel 400 Heavy oil < 250
42810-11	Area C: west sidewall, 12 ft bgl	NWTPH-Dx	Diesel 750 Heavy oil < 250
42810-12	Area C: east sidewall, 12 ft bgl	NWTPH-Dx	Diesel < 50 Heavy oil < 250
42810-13	Area C: south sidewall, 13 ft bgl	NWTPH-Dx	Diesel < 50 Heavy oil < 250
stock 3	Area C: composite sample of soil excavated from Area C	NWTPH-Dx	Diesel 320 Heavy oil 590
42810-14	Area C: bottom of excavation-sidewall sample (eastern portion), 13 ft bgl	NWTPH-Dx	Diesel < 50 Heavy oil < 250
42810-15	Area B: south sidewall sample after excavation, 4 ft bgl.	NWTPH-Dx	Diesel < 50 Heavy oil < 250

NWTPH = Washington Total Petroleum Hydrocarbon
Dx = Hydrocarbon Identification for diesel and motor oil range C10-C36
None Detected = < 50 ppm (diesel range), < 250 ppm (motor oil range)
bgl = below ground level
MTCA Cleanup for Diesel and Heavy Oil is 2000 ppm

Table C
Final Confirmational Soil Samples Collected on 5/18/2010 – Analytical Results

SAMPLE #	SAMPLE LOCATION Refer to drawings located in Appendix A. Discrete samples unless otherwise noted	ANALYSIS	RESULTS in parts per million (ppm) unless noted
51810-16	Area C: bottom of excavation, 17 ft bgl	NWTPH-Dx	Diesel < 50 Heavy oil < 250
51810-17	Area C: west sidewall of excavation, 14 ft bgl	NWTPH-Dx	Diesel 500 Heavy oil < 250
51810-18	Area C: south sidewall of excavation, 13 ft bgl	NWTPH-Dx	Diesel < 50 Heavy oil < 250
51810-19	Area C: east sidewall of excavation, 14 ft bgl	NWTPH-Dx	Diesel < 50 Heavy oil < 250
51810-20	Area C: bottom of excavation-sidewall sample on southeast corner of excavation, 14 ft bgl	NWTPH-Dx	Diesel < 50 Heavy oil < 250
51810-21	Area C: north sidewall of excavation, 14 ft bgl	NWTPH-Dx	Diesel < 50 Heavy oil < 250
51810-22	Area D: sidewall sample on southeast side excavation, 2 ft bgl, after over-excavation of stained area	NWTPH-Dx	Diesel 96 Heavy oil 400
51810-23	Area B: west sidewall sample of Area B after over-excavation, 7 ft bgl	NWTPH-Dx	Diesel < 50 Heavy oil < 250
51810-24	Area A: material under asphalt on north side of Area A, after over-excavation	NWTPH-Dx	Diesel 190 Heavy oil 470
51810-25	Area A: material under sample #24 on north side of Area A, after over-excavation	NWTPH-Dx	**Diesel 2700 *** **Heavy oil 5600 ***
51810-26	Area A: material under sample #25 on north side of Area A, after over-excavation	NWTPH-Dx	Diesel < 50 Heavy oil < 250

NWTPH = Washington Total Petroleum Hydrocarbon
Dx = Hydrocarbon identification for diesel and motor oil range C10-C36
None Detected = < 50 ppm (diesel range), < 250 ppm (motor oil range)
bgl = below ground level
MTCA Cleanup for Diesel and Heavy Oil is 2000 ppm

*** A duplicate sample of this material was collected and analyzed by PGG and found to be below cleanup levels (Appendix G).**

4.0 CONCLUSIONS

Based on laboratory analysis of the soil samples collected during this project, diesel and heavy oil impacted soil associated with the James Oil Company - Pacific Pride Fueling Facility "Site" has been removed and properly disposed of. Specifically the "Site" is identified as the approximate ½ acre area in the center of property currently owned by Estate of Wayne A Hill. And, the Estate's property is identified as a 3.39 acre parcel located at 903 W. 1st Street in Cle Elum, Washington. According to the Kittitas County Assessors office, the parcel number for the Hill property is #263835 and is described as being in the Northeast 1/4, Southwest 1/4, Section 27, Township 20 North, Range 15 East.

The following materials were removed from the "Site":

- **Diesel-impacted soil:** 1066.97 tons of diesel-impacted soil were disposed of at CEMEX soil remediation facility located in Everett, Washington. This included soil cuttings from previous studies that had been stored in 55-gallon steel drums. Once the soil from the drums was removed, the drums were disposed of at ICS-WA located in Seattle, Washington. **NOTE: The impacted soil contained both Diesel and Heavy oil range hydrocarbons.**

- **Diesel- impacted concrete:** One diesel-impacted concrete footing was disposed of at the Kittitas solid waste facility in Ellensburg, Washington.

- **Non-impacted concrete:** Concrete from the concrete pad located at the "Site" was disposed of at the Kittitas solid waste facility in Ellensburg, Washington.

- PVC product lines and miscellaneous construction debris associated with the fueling system were either removed and taken to the local dump or re-used by Jeff James at another fueling facility.

Stained concrete and soil noted in previous WSI reports have been excavated and impacted soils and impacted concrete have been removed and properly disposed. Any stained soil or concrete outside of the "Site" area is beyond the scope of, and exempt from, this study and report.

5.0 RECOMMENDATIONS

Based on the conclusions that all of the hydrocarbon impacted soil associated with the James Oil Company / Estate of Wayne A. Hill - Pacific Pride Fueling Facility "Site" as identified in this report has been removed and no recommendations will be made at this time.

6.0 LIMITATIONS

This report has been prepared for specific application to this project in a manner consistent with the level of care and skill normally exercised by members of the environmental science profession currently practicing under similar conditions in the area. DLH Environmental Consulting shall not be responsible for conditions or consequences arising from relevant facts that were withheld, concealed, or not fully disclosed at the time this evaluation was performed.

Recommendations and conclusions contained in this report are based on the evaluation of technical information made available and reviewed during the course of this survey.

The findings, conclusions and recommendations stated in this report apply exclusively to the "Site" formerly leased by James Oil Company as indicated in the report and no

other areas of the Estate's property. This report in no way confirms that the Estate's property surrounding the "Site" is free of contamination. This report is solely based on field observations, soil sample collection, and analysis of the soil collected. Since the "Site" was a leased portion of a larger piece of property, this report in no way can be used for any other portions of the Estate of Wayne A Hill property. No other warranty, expressed or implied, is made concerning the professional conclusions or recommendations, except as specifically noted in this report.

DLH Environmental Consulting has no control over the accuracy of information provided by outside consultants, contractors, and agencies and, therefore, disclaims responsibility for any inaccuracies incurred. The underlying philosophy in formulating the conclusions and recommendations was to reduce uncertainties regarding the property and pertaining to environmental hazards, to the degree possible. Therefore, the results of this assessment should be viewed as reasonably accurate estimates, given the project limitations of the existing environmental condition of the property.

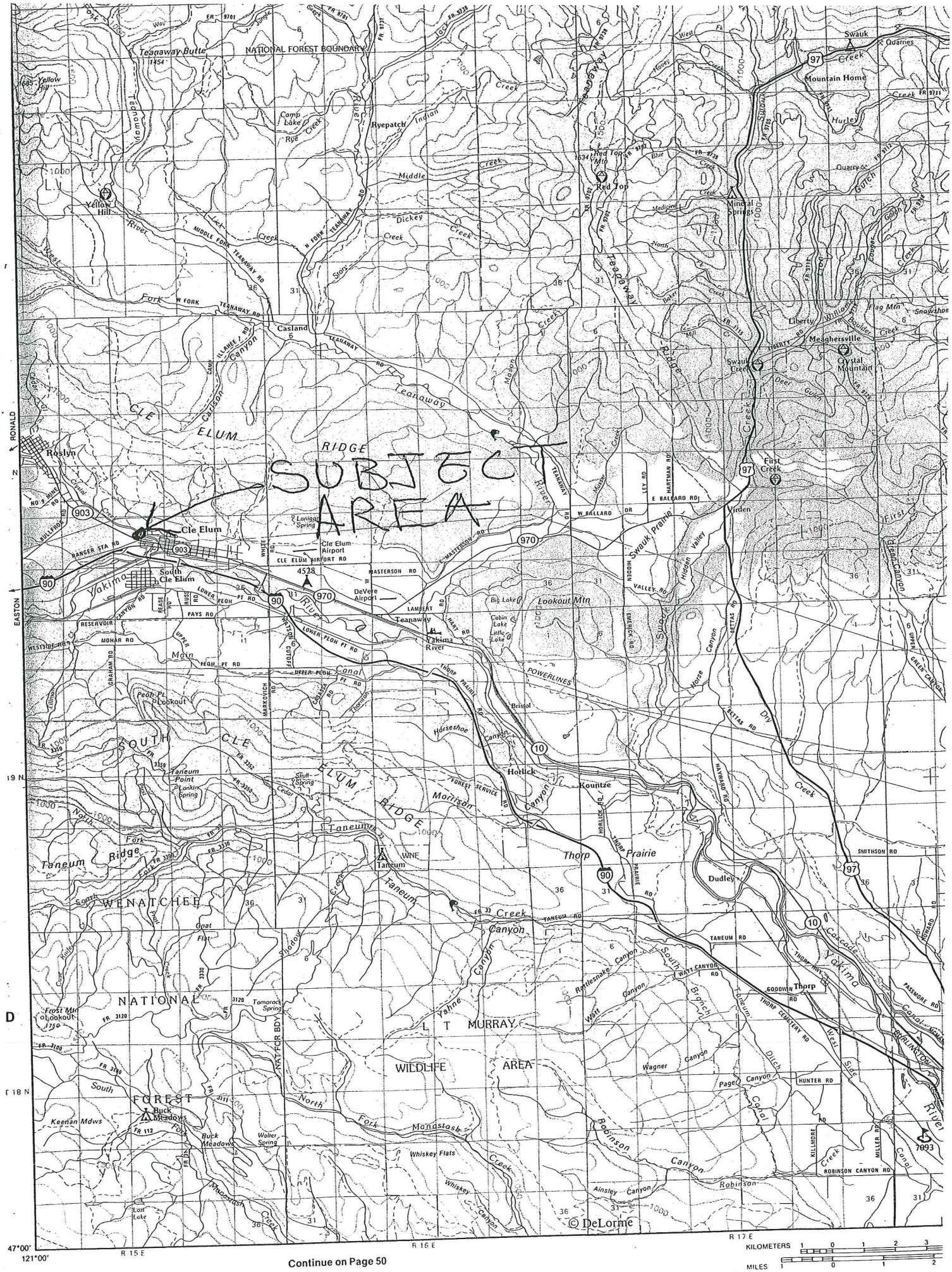
This report is for the exclusive use of James Oil Company, the Estate of Wayne A. Hill and their representatives and the Washington State Department of Ecology (WDOE) as necessary. If new information becomes available as a result of future site work, which may include excavations, borings, studies, etc., DLH Environmental Consulting reserves the right to reevaluate the conclusions of this report and to provide amendments as required. This report covers the soil removal activities that took place in April and May 2010.

APPENDIX A

SITE MAP

SITE FIGURES

SITE PHOTOGRAPHS


SUBJECT AREA
NATIONAL FOREST BOUNDARY
Teanaway Butte
Yellow Hill
Roslyn
Cle Elum
South Cle Elum
Casland
Teanaway
Ryepatch
Camp Lake
Middle Fork Teanaway River
North Fork Teanaway River
West Fork Teanaway River
Dickey Creek
Stony Creek
Red Top
Mineral Springs
Swauk
Mountain Home
Hurley
Quarry Gulch
Liberty
Meadowsville
Crystal Mountain
Flag Mtn
Swauk Creek
First Creek
Deer Gulch
Swauk Prairie
Virden
Lookout Mtn
Big Lake
Cabin Lake
Little Lake
DeVere Airport
Cle Elum Airport
Lanigan Spring
Yakima River
Thorp Prairie Canal
Bristol
Horseshoe Canyon
Hollick
Kountze
Thorp
Dudley
Taneum Point
Lookout
Peoh Pt Lookout
Taneum Ridge
Taneum Creek
Taneum Canyon
Frost Mtn Lookout
Tamarack Spring
Buck Meadows
Keenan Mdws
Walter Spring
Whiskey Flats
Manastash Creek
Robinson Canyon
Ainsley Canyon
Rattlesnake Canyon
Wagner Canyon
Page Canyon
Goat Flat
Shadow
Lost Lake
Cascade
Yakima
Smithson Rd
Taneum Rd
Thorp Cemetery Rd
Hunter Rd
Robinson Canyon Rd
Killmore Rd
Miller Rd
Hartman Rd
E Ballard Rd
W Ballard Dr
Masterson Rd
Lambert Rd
Hiawatha Rd
Bettas Rd
Hidden Valley Rd
Emerick Rd
Powerlines
Forest Service Rd
Thorp Prairie Rd
Goodwin Rd
Watt Canyon Rd
Lower Peoh Pt Rd
Upper Peoh Pt Rd
Pays Rd
Mohar Rd
Westside Rd
Graham Rd
Markovich Rd
Thornton Rd
Ranger Sta Rd
Bullfrog Rd
No 9 Mine Rd
Cle Elum Airport Rd
Teanaway Rd
Manastash Ridge
Cle Elum Ridge
Stuart Range
Wenatchee National Forest
L T Murray Wildlife Area
South Fork Manastash
North Fork Manastash
Nat For Bdy
Yakima Canyon
Green Canyon
Conrad
Entrance
Passmore Rd
Gibson
Coal Creek
Miller Creek
Killmore Creek
Ditch
Canal
Side
Fork
Branch
Creek
Canyon
Ridge
Gulch
Mtn
Hill
Lake
Spring
Flat
Meadows
Forest
Wildlife Area
Quarries
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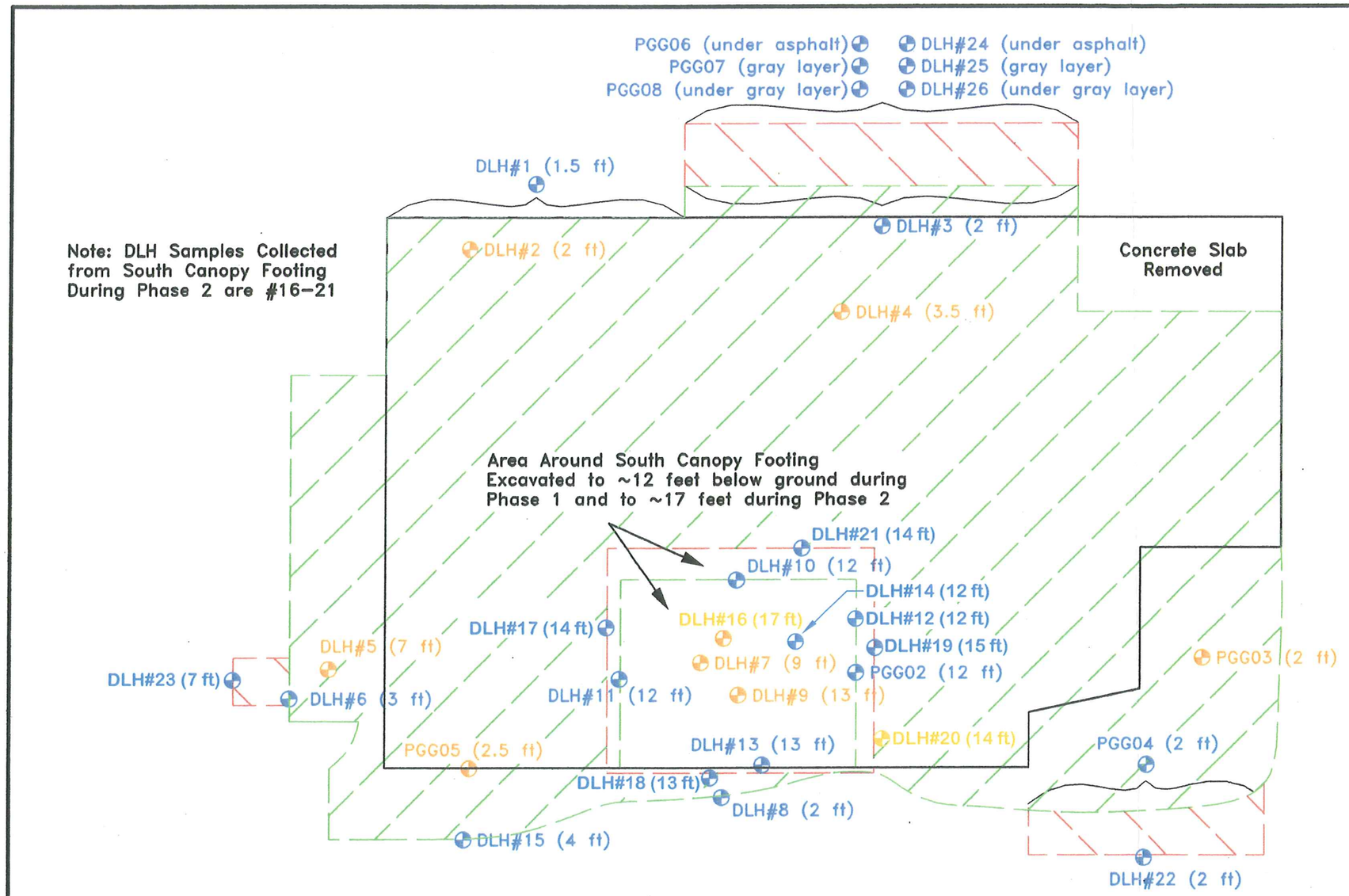
© DeLorme
KILOMETERS
MILES
R 15 E
R 16 E
R 17 E
19 N
18 N
47°00'
121°00'



LEGEND

- Former Concrete Slab (Removed Phase 1)
- Approximate Limits of Phase 1 Excavation (various depths)
- Approximate Limits of Phase 2 Excavation (various depths)
- DLH#6 — Approximate Location Sidewall Soil Sample (DLH = Donna Hewitt sample, PGG = PGG sample)
- PGG05 — Approximate Location Floor Soil Sample (DLH = Donna Hewitt sample, PGG = PGG sample)

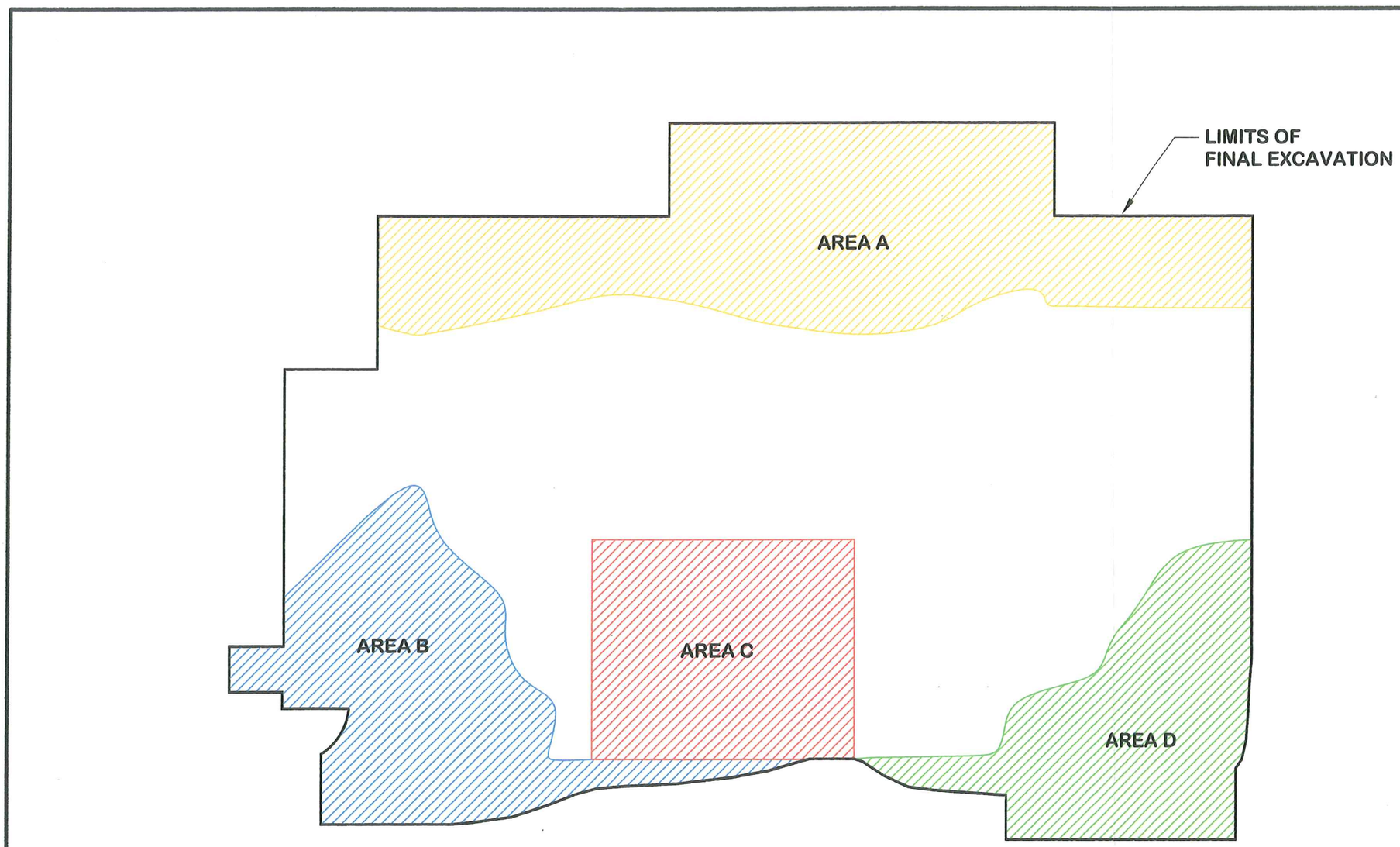
0 5 10
Scale in Feet

FIGURE 1

James Oil Pacific Pride Site Map and Sample Locations, Cle Elum WA

MAY-JUNE 2010

DLH ENVIRONMENTAL CONSULTING



LEGEND

AREA A

AREA B

AREA C

AREA D

0 5 10
Scale In Feet

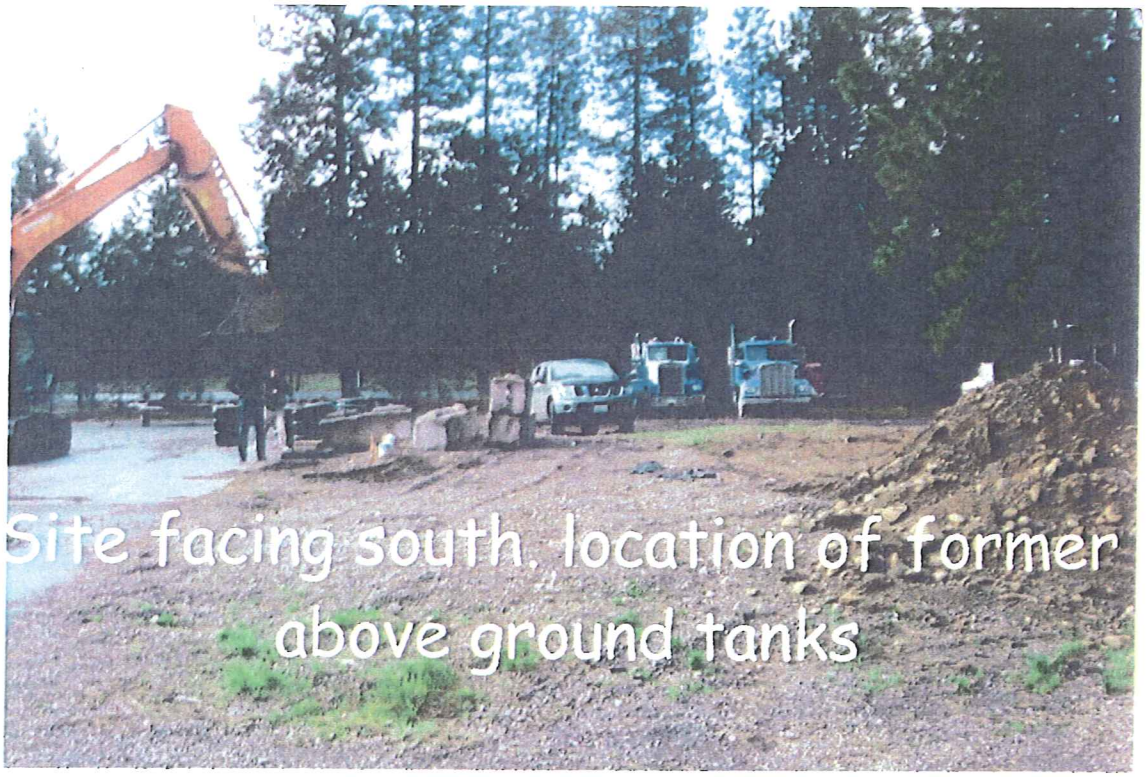
FIGURE 2
James Oil Pacific Pride Site Map and Sample Locations, Cle Elum WA

MAY-JUNE 2010

DLH ENVIRONMENTAL CONSULTING

Subject site facing north

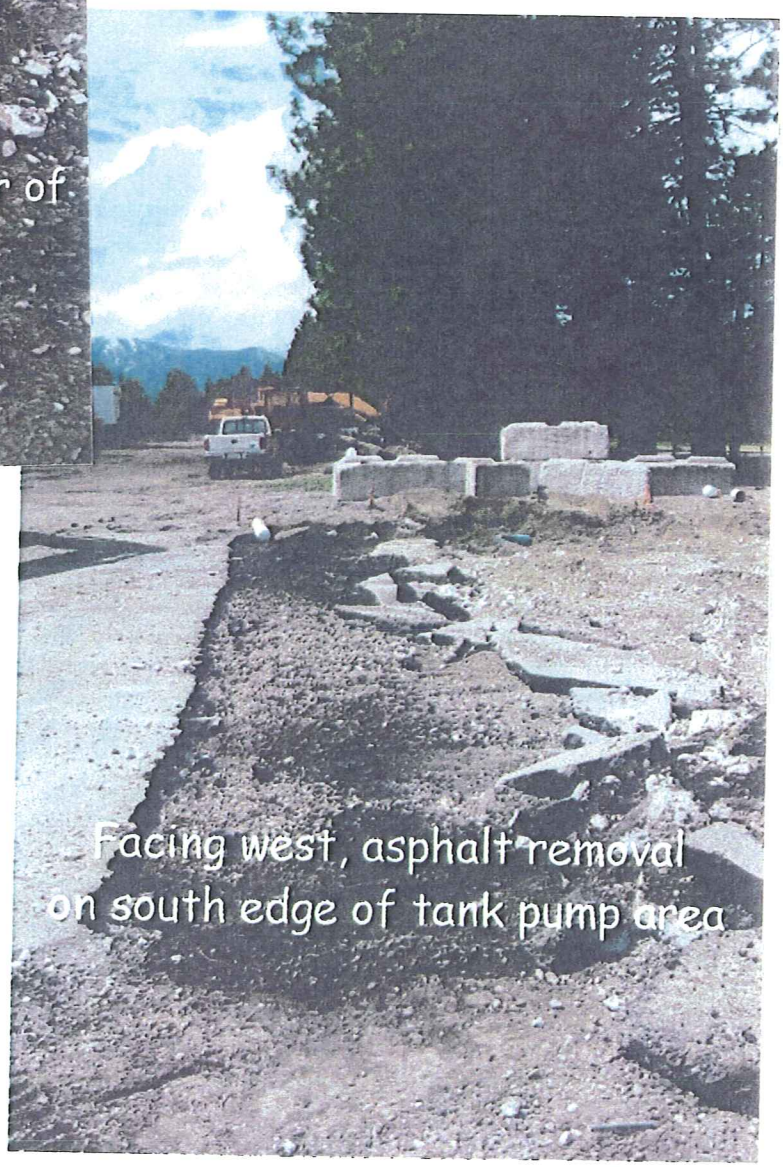
Subject site facing west



Site facing south, location of former above ground tanks

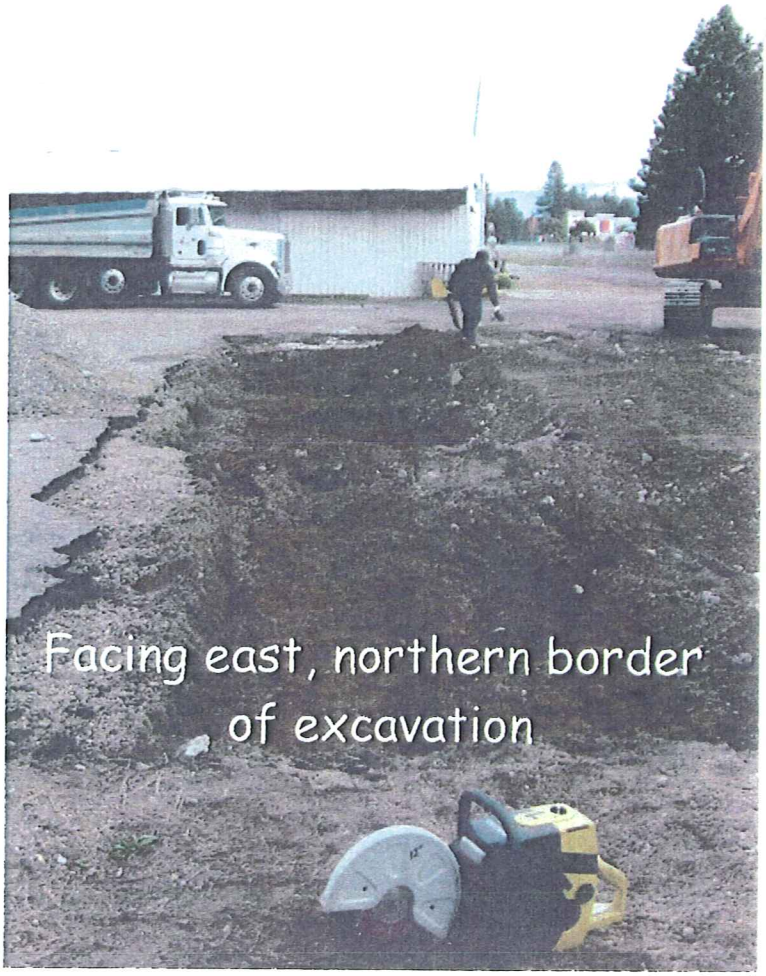
facing east, asphalt removal along south tank pump area

Site facing east
asphalt removal along north border of
tank pump area



Facing west, asphalt removal
on south edge of tank pump area


Subject site facing southeast


Facing east, northern border
of excavation


Stained concrete removed and
properly disposed of

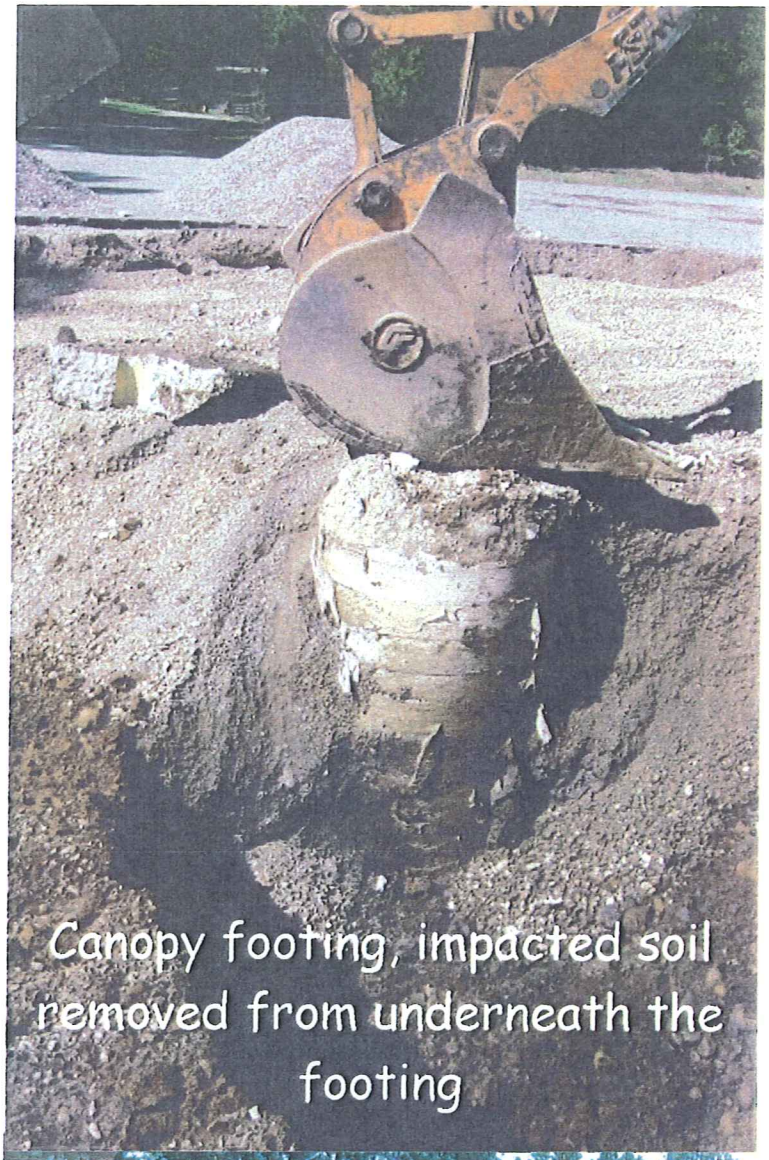

Removal of pump sump

Green product piping (all removed)

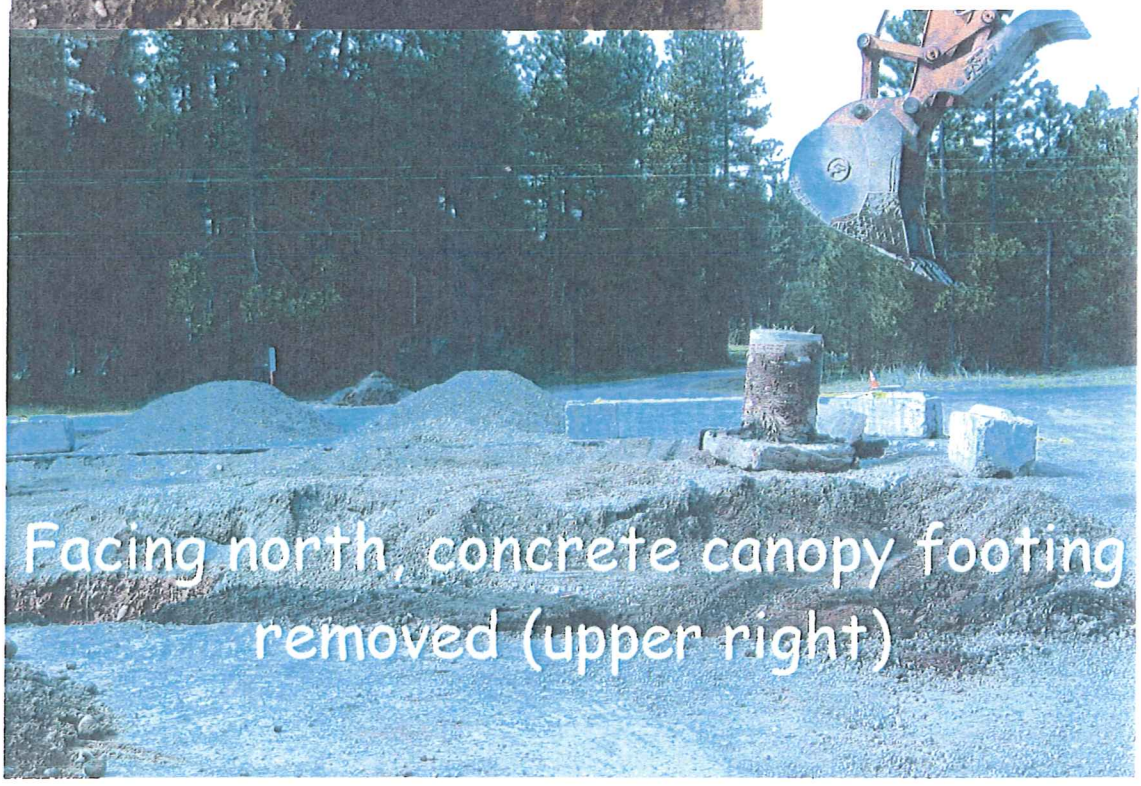
Green "Environ" product piping,
product found in secondary containment
of pipes

Southwest corner of excavation

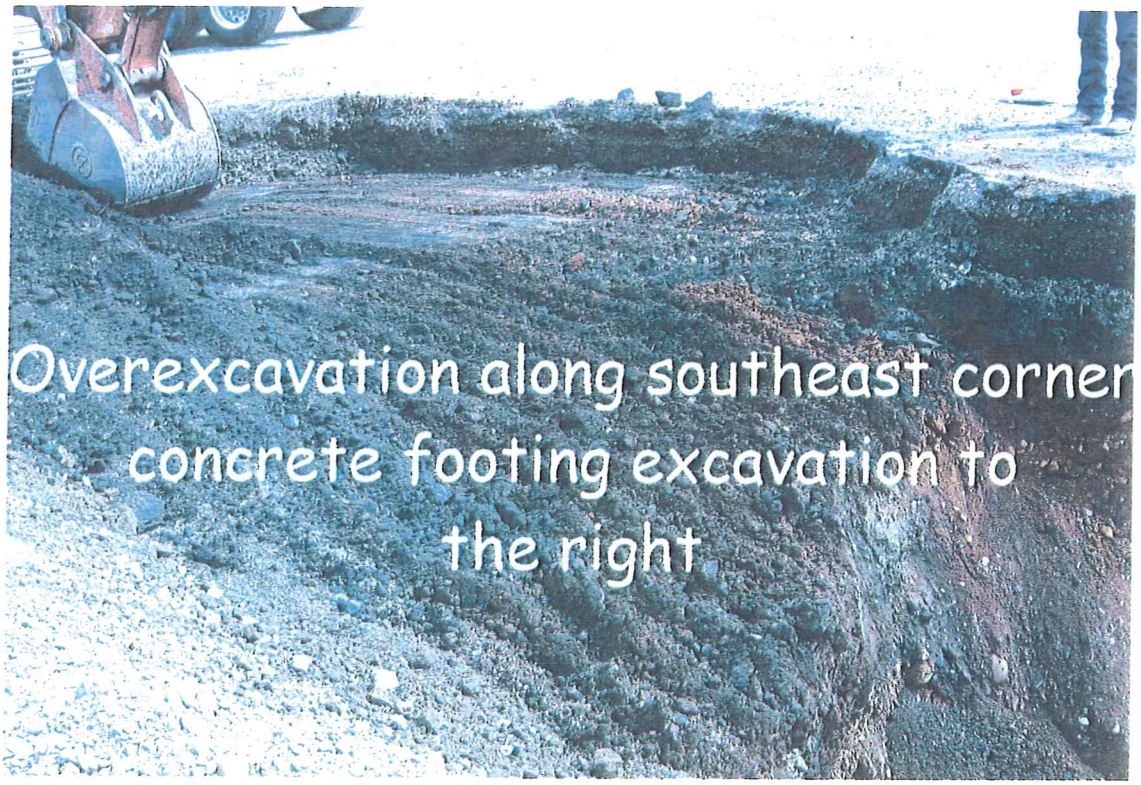
Southwest corner of excavation during soil removal



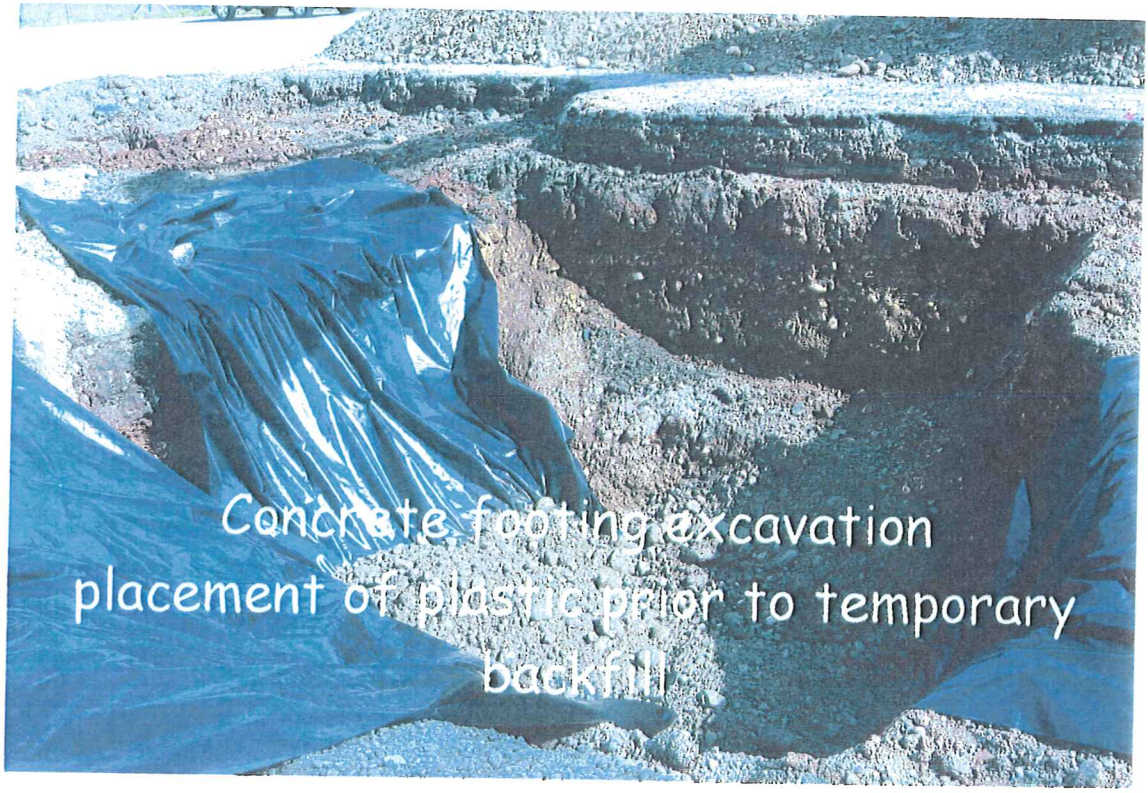
Canopy footing, impacted soil removed from underneath the footing



Facing north, concrete canopy footing removed (upper right)



Overexcavation along southeast corner concrete footing excavation to the right



Concrete footing excavation placement of plastic prior to temporary backfill

APPENDIX B

LABORATORY REPORTS

CHROMATOGRAMS

CHAIN OF CUSTODY FORMS

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Charlene Morrow, M.S.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
FAX: (206) 283-5044
e-mail: fbi@isomedia.com

May 4, 2010

Donna Hewitt, Project Manager
DLH Environmental Consulting
2400 NW 80th St., 114
Seattle, WA 98117-4449

Dear Ms. Hewitt:

Included are the results from the testing of material submitted on April 27, 2010 from the James Oil, F&BI 004289 project. There are 4 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
DLH0504R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on April 27, 2010 by Friedman & Bruya, Inc. from the DLH Environmental Consulting James Oil, F&BI 004289 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	DLH Environmental Consulting
004289-01	42710-01
004289-02	42710-02
004289-03	42710-03
004289-04	42710-04
004289-05	42710-05
004289-06	42710-06
004289-07	Stock1
004289-08	Stock2

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/04/10
Date Received: 04/27/10
Project: James Oil, F&BI 004289
Date Extracted: 04/28/10
Date Analyzed: 04/28/10 and 04/29/10

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 50-150)
42710-01 004289-01	<50	<250	92
42710-02 004289-02	<50	<250	84
42710-03 004289-03	1,300 x	4,500	94
42710-04 004289-04	<50	<250	92
42710-05 004289-05	1,700	<250	88
42710-06 004289-06	3,200	<250	91
Stock1 004289-07	1,200	<250	93
Stock2 004289-08	3,700	<250	86
Method Blank 00-0626 MB	<50	<250	86

Date of Report: 05/04/10
Date Received: 04/27/10
Project: James Oil, F&BI 004289

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 004303-06 (Matrix Spike)

Analyte	Reporting Units	Spike Level	(Wet wt) Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	101	94	63-146	7

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	93	79-144

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 – More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc – The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j – The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc – The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr – The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

004289

SAMPLE CHAIN OF CUSTODY

ME 04/27/10 VSI

Page # 1 of 3

Send Report To Donna Hewith

Company DLH environmental Consulting

Address 2400 NW 80th st Pmb#114

City, State, ZIP Seattle, Wa 98117

Phone # 206-632-3133 Fax #

SAMPLERS (signature)

PROJECT NAME/NO. James Oil

PO #

REMARKS Please look @ chromatograms if other than diesel Run Gx/btex

TURNAROUND TIME
- [x] Standard (2 Weeks)
- [ ] RUSH
- Rush charges authorized by:

SAMPLE DISPOSAL
- [ ] Dispose after 30 days
- [ ] Return samples
- [ ] Will call with instructions

Sample ID	Lab ID	Date	Time	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS						Notes
						ANALYSES REQUESTED											
42710-01	01A-E	4/27/10	1:41	Soil	5	X											~~Composit @ 1.5' Side wall - North~~ 2'
02	02A-E		1:49			X											composit @ 1.5' Side wall - North
03	03A-E		1:54			X											composit @ 1.5' Side wall, North
04	04A-E		2:20			X											2.5'
05	05A-E		2:54			X											7'
06	06A-E		3:06			X											3'
Stock 1	07		3:32		1	X											
Stock 2	08		3:35		1	X											

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Donna Hewith	DLH	4/27/10	6:07
Received by:	Yelena Aranovich	FSB, Inc.	4/27/10	19:07
Relinquished by:				
Received by:				

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

FORMS\COC\COC.DOC

Samples received at 4 °C

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Charlene Morrow, M.S.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
FAX: (206) 283-5044
e-mail: fbi@isomedia.com

May 6, 2010

Donna Hewitt, Project Manager
DLH Environmental Consulting
2400 NW 80th St., 114
Seattle, WA 98117-4449

Dear Ms. Hewitt:

Included is the amended report from the testing of material submitted on April 27, 2010 from the James Oil, F&BI 004289 project. The sample chromatograms have been included, and the case narrative updated.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
DLH0504R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on April 27, 2010 by Friedman & Bruya, Inc. from the DLH Environmental Consulting James Oil, F&BI 004289 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	DLH Environmental Consulting
004289-01	42710-01
004289-02	42710-02
004289-03	42710-03
004289-04	42710-04
004289-05	42710-05
004289-06	42710-06
004289-07	Stock1
004289-08	Stock2

No gasoline was seen in the diesel chromatograms. Per the chain of custody, the samples were not analyzed for NWTPH-Gx/8021B.

All quality control requirements were acceptable.

Date of Report: 05/04/10
Date Received: 04/27/10
Project: James Oil, F&BI 004289
Date Extracted: 04/28/10
Date Analyzed: 04/28/10 and 04/29/10

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 50-150)
42710-01 004289-01	<50	<250	92
42710-02 004289-02	<50	<250	84
42710-03 004289-03	1,300 x	4,500	94
42710-04 004289-04	<50	<250	92
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42710-06 004289-06	3,200	<250	91
Stock1 004289-07	1,200	<250	93
Stock2 004289-08	3,700	<250	86
Method Blank 00-0626 MB	<50	<250	86

Date of Report: 05/04/10
Date Received: 04/27/10
Project: James Oil, F&BI 004289

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 004303-06 (Matrix Spike)

Analyte	Reporting Units	Spike Level	(Wet wt) Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	101	94	63-146	7

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	93	79-144

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 – More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc – The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j – The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

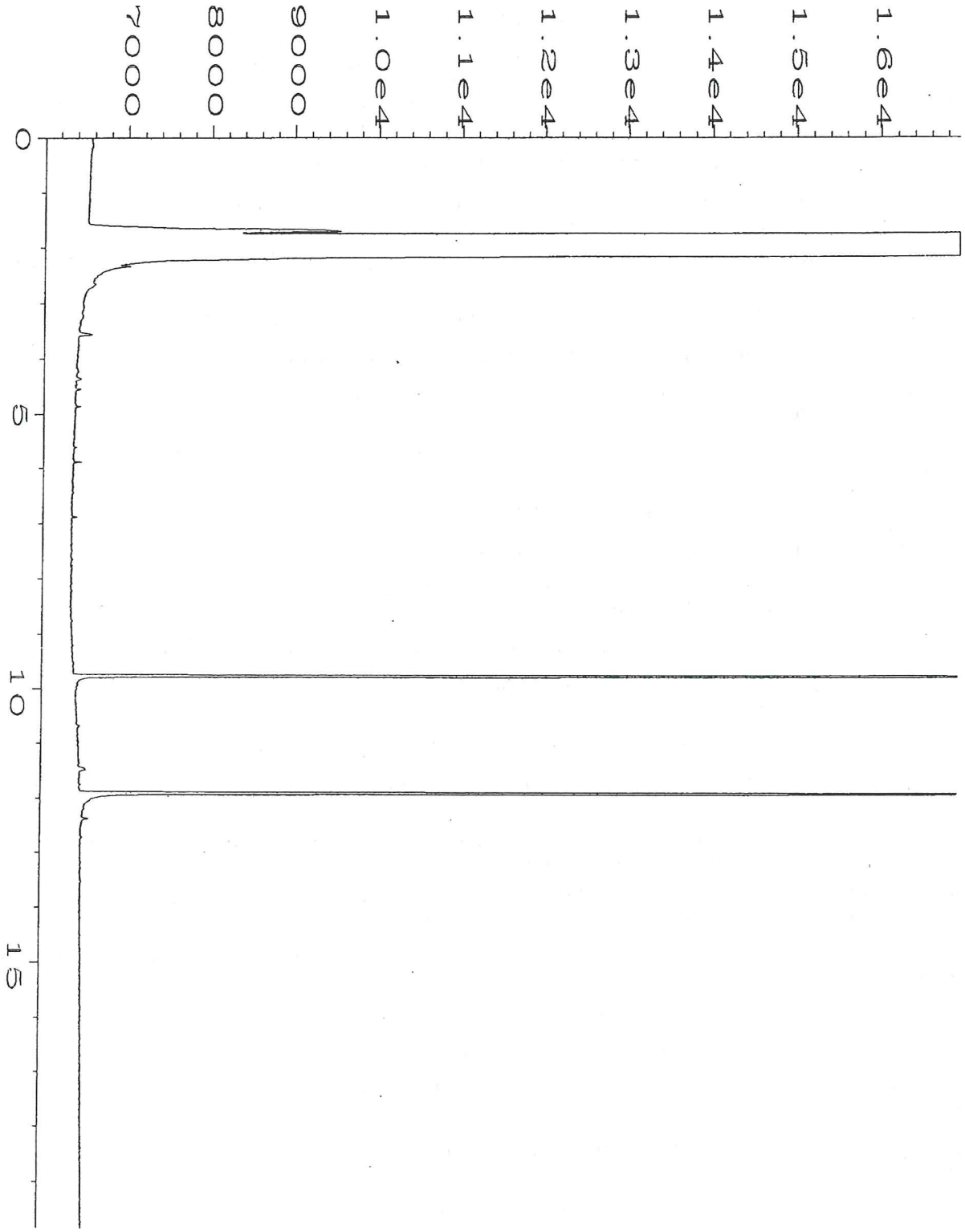
pc – The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr – The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

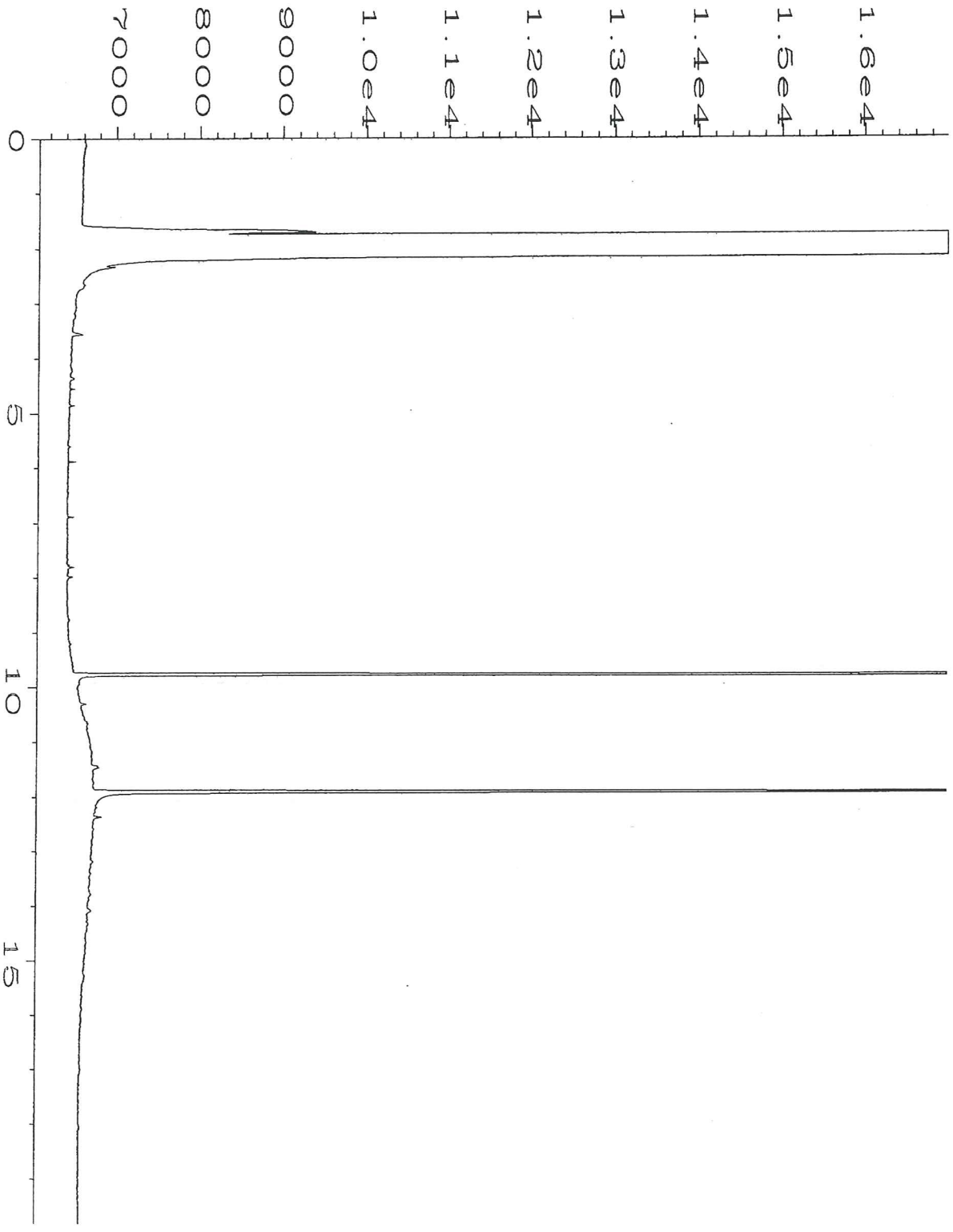
vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.



Data File Name : C:\HPCHEM\1\DATA\04-28-10\025F0601.D
Operator : ay
Instrument : GC1
Sample Name : 004289-01
Run Time Bar Code:
Acquired on : 28 Apr 10 09:09 PM
Report Created on: 06 May 10 01:50 PM

Page Number : 1
Vial Number : 25
Injection Number : 1
Sequence Line : 6
Instrument Method: TPHD.MTH
Analysis Method : TPHD.MTH



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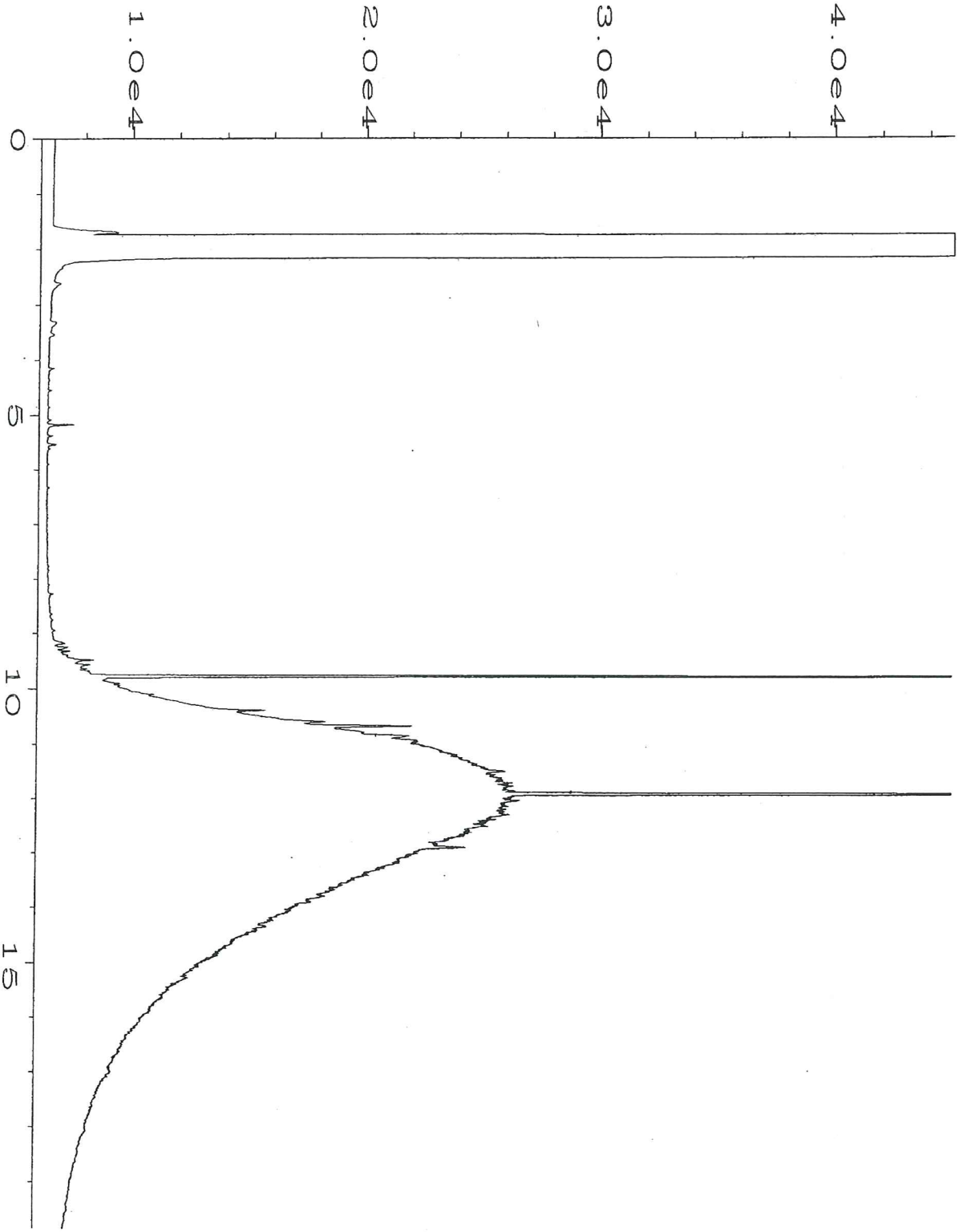
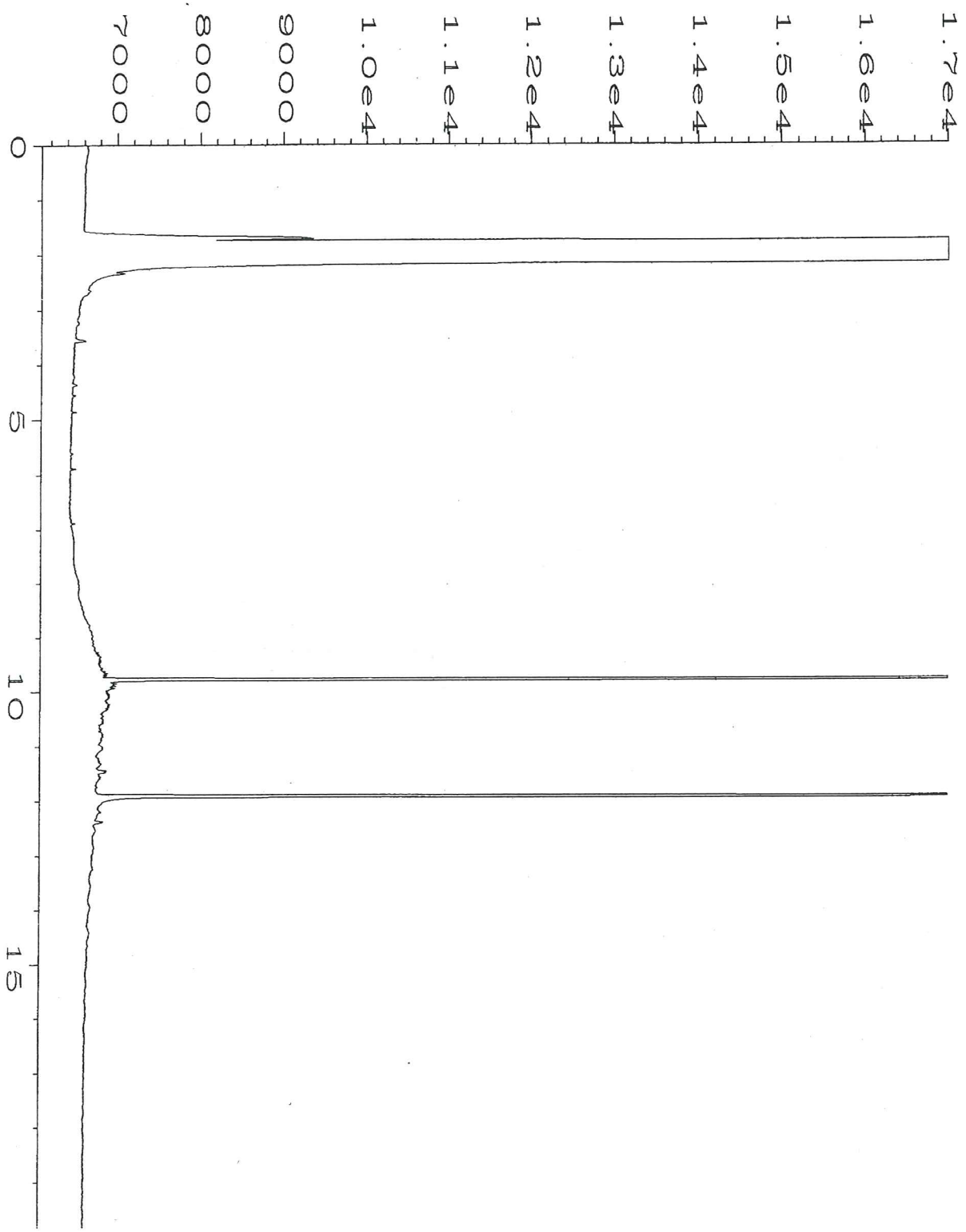
Operator : ay
Instrument : GC1
Sample Name : 004289-02
P[illegible] Time Bar Code:
[illegible]uired on : 28 Apr 10 10:28 PM
Report Created on: 06 May 10 01:50 PM

Page Number : 1
Vial Number : 26
Injection Number : 1
Sequence Line : 8
Instrument Method: TPHD.MTH
Analysis Method : TPHD.MTH

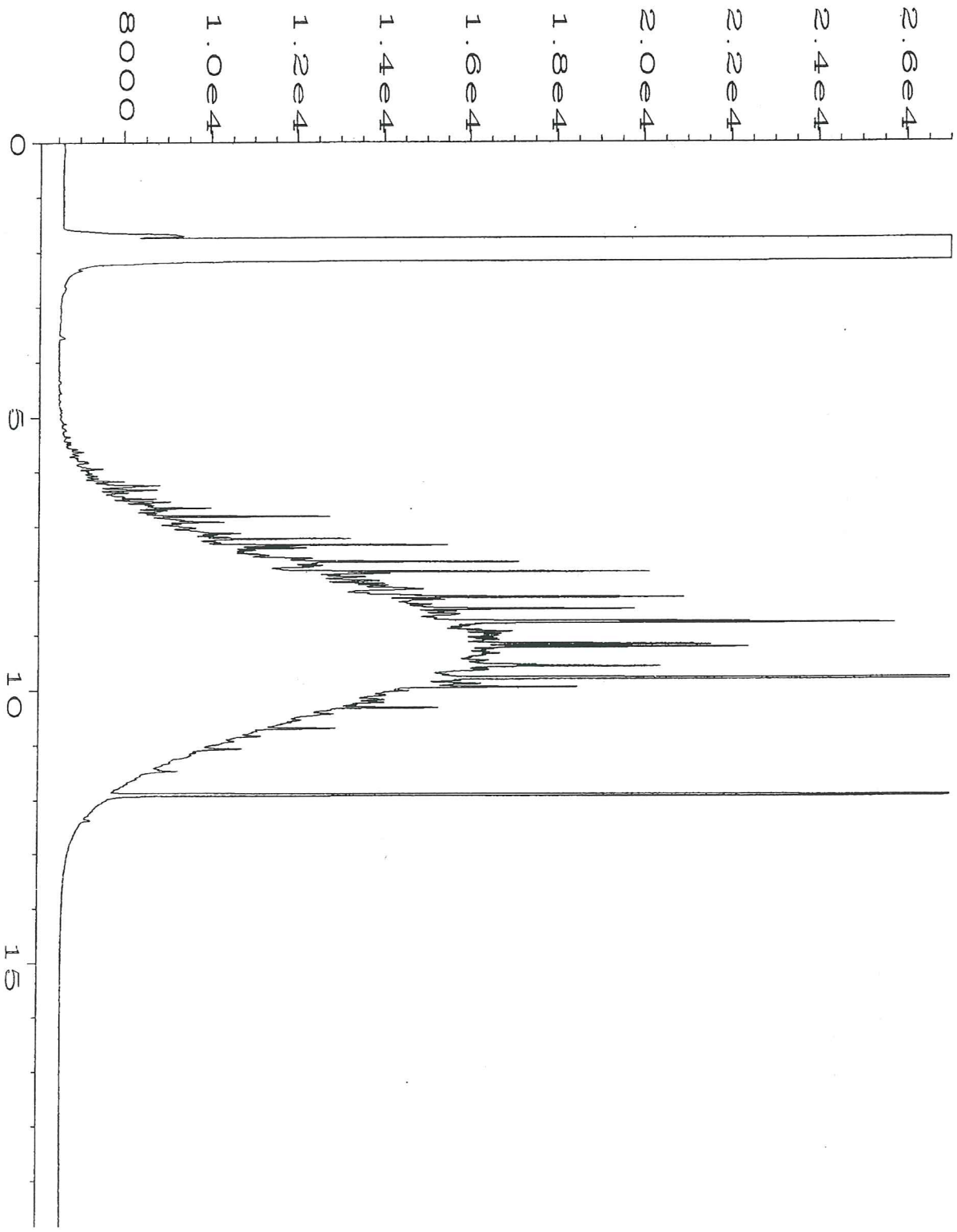


Data File Name	: C:\HPCHEM\1\DATA\04-28-10\027F0801.D		
Operator	: ay	Page Number	: 1
Instrument	: GC1	Vial Number	: 27
Sample Name	: 004289-03	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 8
Acquired on	: 28 Apr 10 10:55 PM	Instrument Method	: TPHD.MTH
Report Created on	: 06 May 10 01:50 PM	Analysis Method	: TPHD.MTH



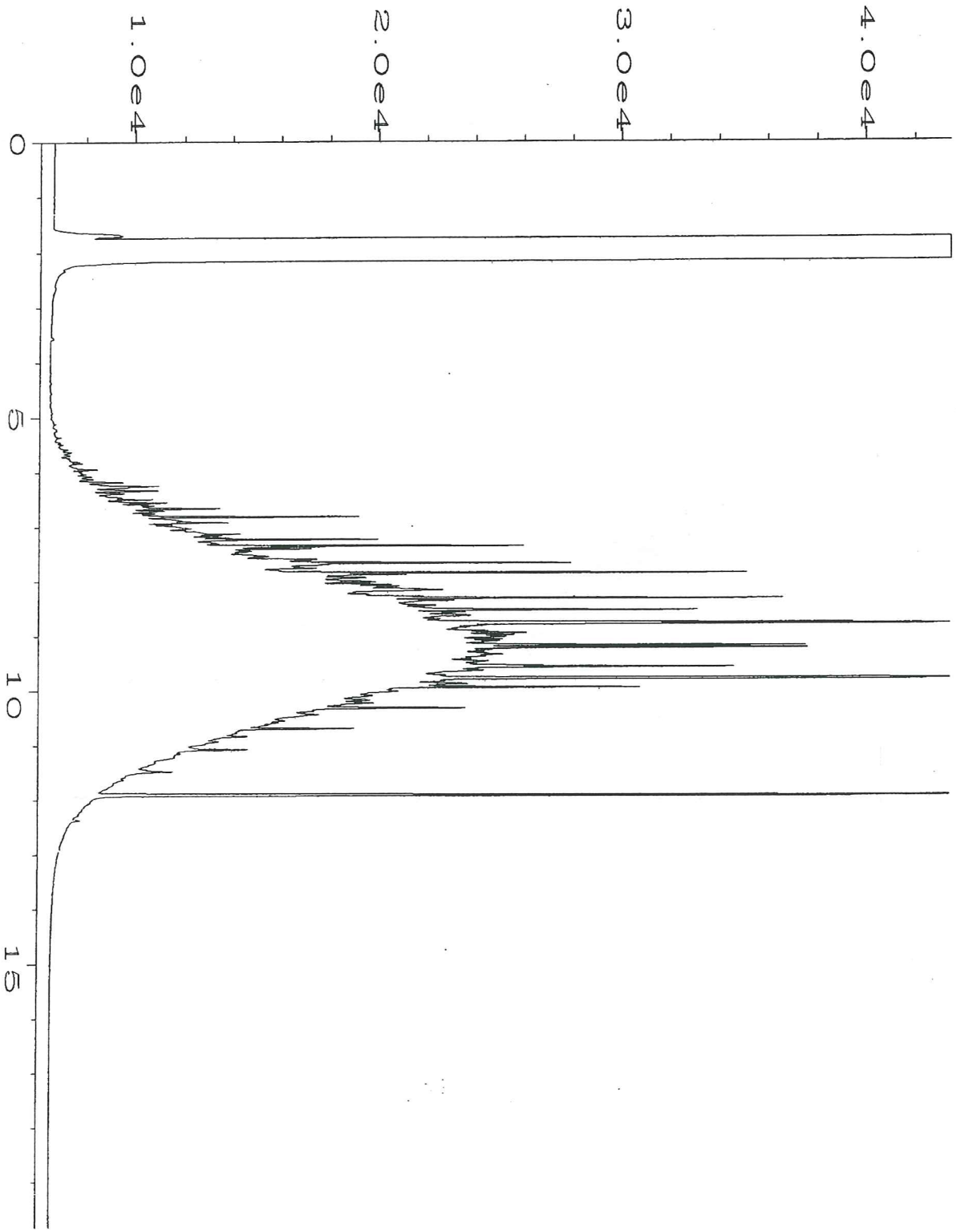
Data File Name : C:\HPCHEM\1\DATA\04-28-10\028F0801.D
Operator : ay
Instrument : GC1
Sample Name : 004289-04
P ` Time Bar Code:
. uired on : 28 Apr 10 11:21 PM
Report Created on: 06 May 10 01:50 PM

Page Number : 1
Vial Number : 28
Injection Number : 1
Sequence Line : 8
Instrument Method: TPHD.MTH
Analysis Method : TPHD.MTH



Data File Name : C:\HPCHEM\1\DATA\04-28-10\029F0801.D
Operator : ay
Instrument : GC1
Sample Name : 004289-05
Run Time Bar Code:
Acquired on : 28 Apr 10 11:48 PM
Report Created on: 06 May 10 01:50 PM

Page Number : 1
Vial Number : 29
Injection Number : 1
Sequence Line : 8
Instrument Method: TPHD.MTH
Analysis Method : TPHD.MTH



Data File Name	: C:\HPCHEM\1\DATA\04-28-10\030F0801.D		
Operator	: ay	Page Number	: 1
Instrument	: GC1	Vial Number	: 30
Sample Name	: 004289-06	Injection Number	: 1
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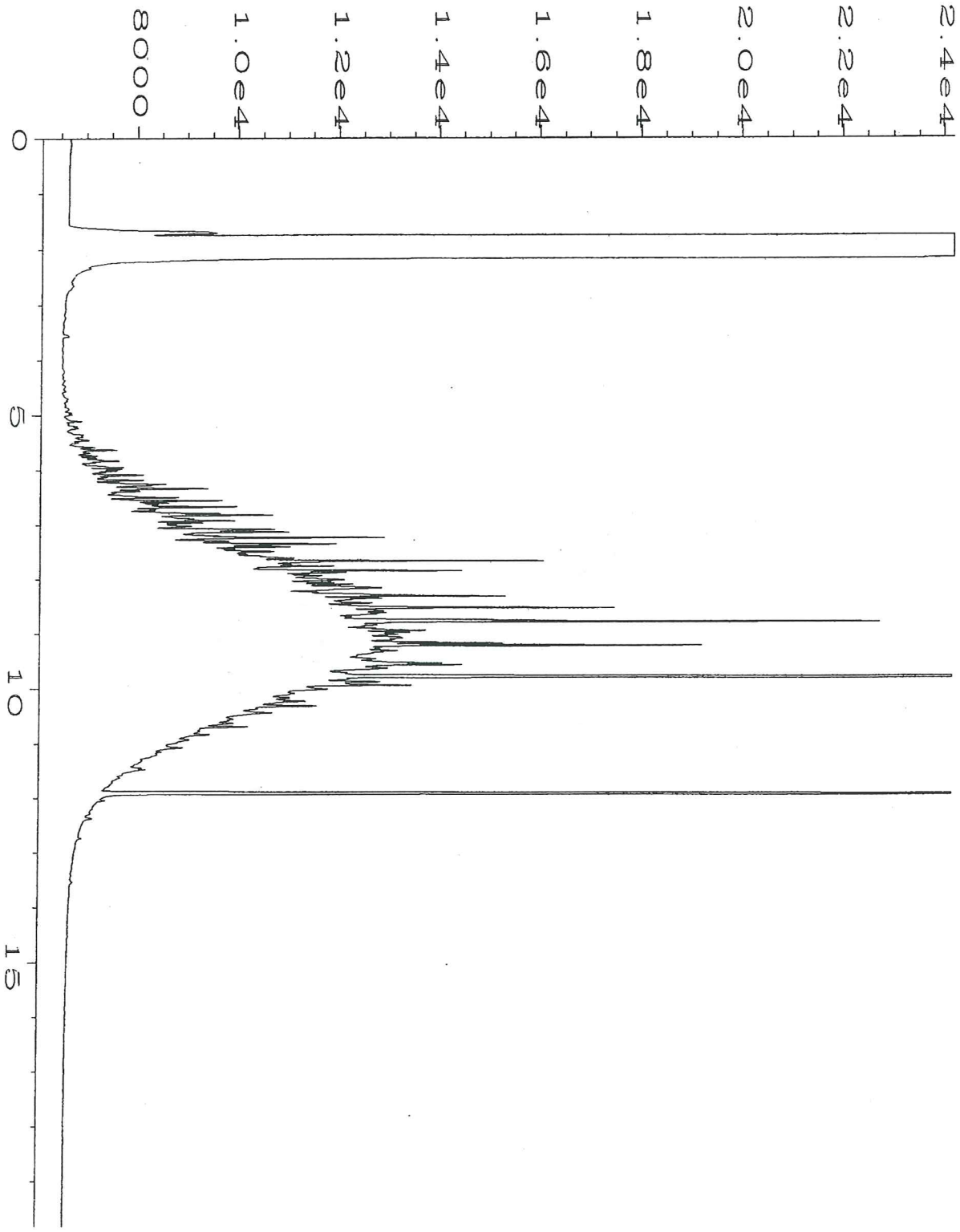
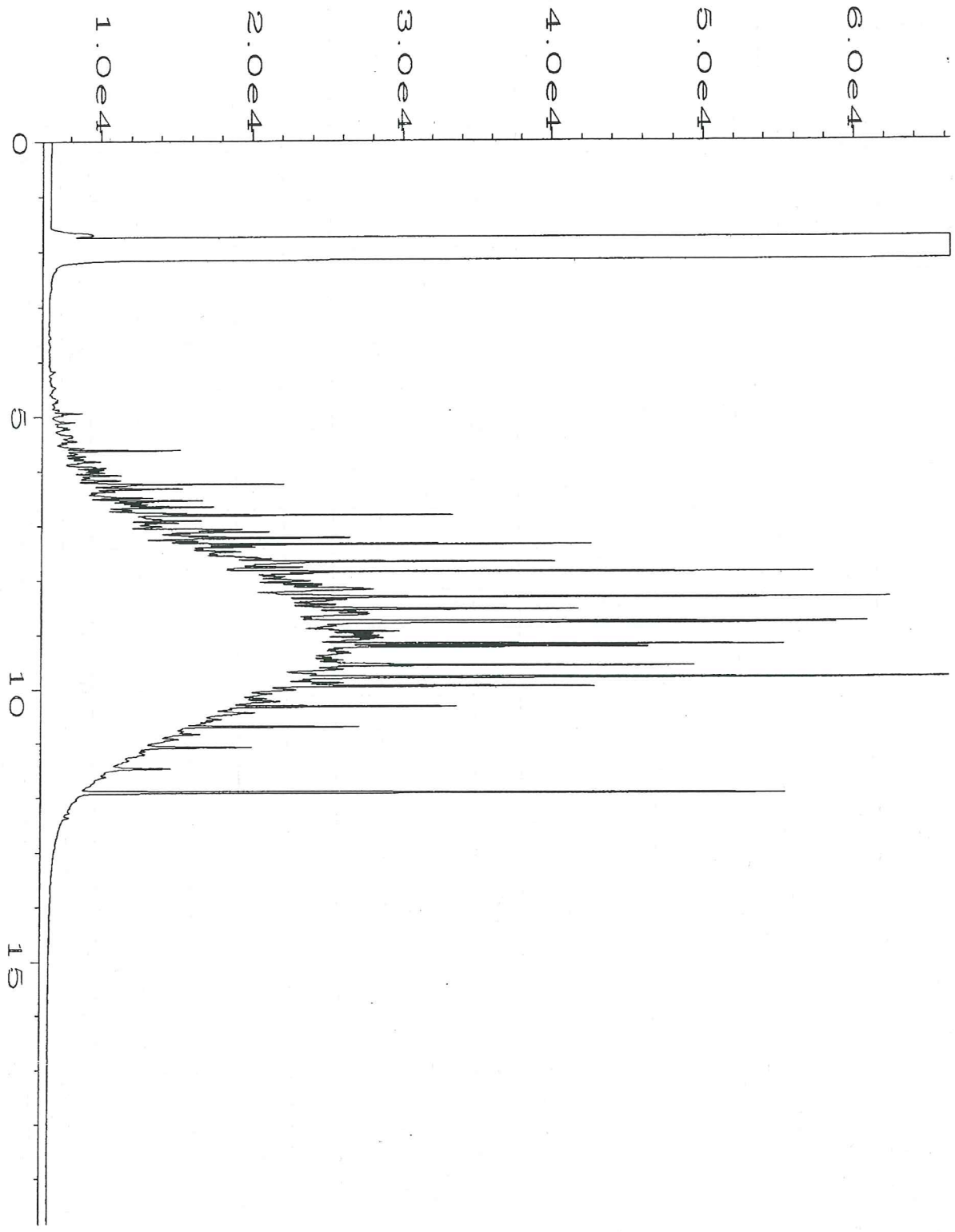
Report Created on	: 06 May 10 01:51 PM	Analysis Method	: TPHD.MTH



Data File Name	: C:\HPCHEM\1\DATA\04-28-10\031F0801.D		
Operator	: ay	Page Number	: 1
Instrument	: GC1	Vial Number	: 31
Sample Name	: 004289-07	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 8
Acquired on	: 29 Apr 10 00:40 AM	Instrument Method	: TPHD.MTH
Report Created on	: 06 May 10 01:51 PM	Analysis Method	: TPHD.MTH



Data File Name : C:\HPCHEM\1\DATA\04-28-10\032F0801.D
Operator : ay
Instrument : GC1
Sample Name : 004289-08
P Time Bar Code:
Acquired on : 29 Apr 10 01:06 AM
Report Created on: 06 May 10 01:51 PM

Page Number : 1
Vial Number : 32
Injection Number : 1
Sequence Line : 8
Instrument Method: TPHD.MTH
Analysis Method : TPHD.MTH

004289

SAMPLE CHAIN OF CUSTODY

ME 04/27/10 VSI 1 Do 3

Send Report To Donna Hewitt
Company DLH environmental Consulting
Address 2400 NW 80th st Pmb #114
City, State, ZIP Seattle, Wa 98117
Phone # 206-632-3123 Fax #

SAMPLERS (signature)

PROJECT NAME/NO.: James Oil

PO #

REMARKS: Please look @ chromatograms if other than diesel Run Gx/btex

Page # 1 of

TURNAROUND TIME
- ☒ Standard (2 Weeks)
- ☐ RUSH
- Rush charges authorized by:

SAMPLE DISPOSAL
- ☐ Dispose after 30 days
- ☐ Return samples
- ☐ Will call with instructions

Sample ID	Lab ID	Date	Time	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS						Notes
42710-01	01 A-E	4/27/10	1:41	Soil	5	X											~~Composit @ 1.5' Side wall North~~ 2'
02	02 A-E		1:49			X											Composit @ 1.5' Side wall - North
03	03 A-E		1:54			X											Composit @ 1.5' Side wall North
04	04 A-E		2:20			X											2.5'
05	05 A-E		2:54			X											7'
06	06 A-E		3:06			X											3'
Stock 1	07		3:32		1	X											
Stock 2	08		3:35		1	X											

ANALYSES REQUESTED

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

FORMS\COC\COC.DOC

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:		Donna Hewitt	DLH	4/27/10	6:07
Received by:		Yelena Aravkina	FSB, Inc.	4/27/10	19:07
Relinquished by:					
Received by:					

Samples received at 4 °C

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Charlene Morrow, M.S.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
FAX: (206) 283-5044
e-mail: fbi@isomedia.com

May 18, 2010

Donna Hewitt, Project Manager
DLH Environmental Consulting
2400 NW 80th St., 114
Seattle, WA 98117-4449

Dear Ms. Hewitt:

Included is the amended report from the testing of material submitted on April 27, 2010 from the James Oil, F&BI 004289 project. Per your request, the qualifier on the diesel detection of sample 42710-03 was further explained in the case narrative.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
DLH0504R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Charlene Morrow, M.S.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
FAX: (206) 283-5044
e-mail: fbi@isomedia.com

May 4, 2010

Donna Hewitt, Project Manager
DLH Environmental Consulting
2400 NW 80th St., 114
Seattle, WA 98117-4449

Dear Ms. Hewitt:

Included are the results from the testing of material submitted on April 27, 2010 from the James Oil, F&BI 004289 project. There are 4 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
DLH0504R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on April 27, 2010 by Friedman & Bruya, Inc. from the DLH Environmental Consulting James Oil, F&BI 004289 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	DLH Environmental Consulting
004289-01	42710-01
004289-02	42710-02
004289-03	42710-03
004289-04	42710-04
004289-05	42710-05
004289-06	42710-06
004289-07	Stock1
004289-08	Stock2

No gasoline was seen in the diesel chromatograms. Per the chain of custody, the samples were not analyzed for NWTPH-Gx/8021B.

The diesel result in sample 42710-03 is due to carryover from motor oil range material.

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/04/10
Date Received: 04/27/10
Project: James Oil, F&BI 004289
Date Extracted: 04/28/10
Date Analyzed: 04/28/10 and 04/29/10

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

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Method Blank 00-0626 MB	<50	<250	86

Date of Report: 05/04/10
Date Received: 04/27/10
Project: James Oil, F&BI 004289

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 004303-06 (Matrix Spike)

Analyte	Reporting Units	Spike Level	(Wet wt) Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	101	94	63-146	7

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	93	79-144

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 – More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc – The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

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jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc – The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr – The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

004-09

SAMPLE CH OF CUSTODY

ME 04/27/10 V21

Page # 1 of 3

Send Report To Donna Hewitt

Company DLH environmental Consulting

Address 2400 NW 80th st Pmb#114

City, State, ZIP Seattle, Wa 98117

Phone # 206-632-3123 Fax #

SAMPLERS (signature)

PROJECT NAME/NO. James Oil

PO #

REMARKS Please look @ chromatograms if other than diesel Run Gx/btex

TURNAROUND TIME
- [x] Standard (2 Weeks)
- [ ] RUSH
- Rush charges authorized by:

SAMPLE DISPOSAL
- [ ] Dispose after 30 days
- [ ] Return samples
- [ ] Will call with instructions

Sample ID	Lab ID	Date	Time	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS						Notes
42710-01	01A-E	4/27/10	1:41	Soil	5	X											~~Composit @ 1.5' Side wall North~~ 2'
02	02A-E		1:49			X											Composit @ 1.5' Side wall - North
03	03A-E		1:54			X											Composit @ 1.5' Side wall NORTH
04	04A-E		2:20			X											2.5'
05	05A-E		2:54			X											7'
06	06A-E		3:06			X											3'
Stock 1	07		3:32		1	X											
Stock 2	08		3:35		1	X											

ANALYSES REQUESTED

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Donna Hewitt	DLH	4/27/10	6:07
Received by:	Yelena Aravkina	FSB, Inc.	4/27/10	18:07
Relinquished by:				
Received by:				

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-3000
Ph. (206) 285-8282
Fax (206) 283-5044

FORMS\COC\COC.DOC

Samples received at 4 °C

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Charlene Morrow, M.S.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
FAX: (206) 283-5044
e-mail: fbi@isomedia.com

May 4, 2010

Donna Hewitt, Project Manager
DLH Environmental Consulting
2400 NW 80th St., 114
Seattle, WA 98117-4449

Dear Ms. Hewitt:

Included are the results from the testing of material submitted on April 28, 2010 from the James Oil, F&BI 004308 project. There are 6 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
DLH0504R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on April 28, 2010 by Friedman & Bruya, Inc. from the DLH Environmental Consulting James Oil, F&BI 004308 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	DLH Environmental Consulting
004308-01	42810-07
004308-02	42810-08
004308-03	42810-09
004308-04	42810-10
004308-05	42810-11
004308-06	42810-12
004308-07	42810-13
004308-08	42810-14
004308-09	42810-15
004308-10	Stock 3

All quality control requirements were acceptable.

Date of Report: 05/04/10
Date Received: 04/28/10
Project: James Oil, F&BI 004308
Date Extracted: 04/29/10
Date Analyzed: 04/29/10

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 50-150)
42810-07 004308-01	90	<250	99
42810-08 004308-02	<50	<250	99
42810-09 004308-03	4,400	<250	91
42810-10 004308-04	400	<250	88
42810-11 004308-05	750	<250	91
42810-12 004308-06	<50	<250	97
42810-13 004308-07	<50	<250	91
Stock 3 004308-10	320	590	92
Method Blank 00-0629 MB	<50	<250	88

Date of Report: 05/04/10
Date Received: 04/28/10
Project: James Oil, F&BI 004308
Date Extracted: 04/29/10
Date Analyzed: 04/29/10

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx
Sample Extracts Passed Through a Silica Gel Column Prior to Analysis
Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 50-150)
42810-14 004308-08	<50	<250	87
42810-15 004308-09	<50	<250	89
Method Blank 00-0629 MB	<50	<250	84

Date of Report: 05/04/10
Date Received: 04/28/10
Project: James Oil, F&BI 004308

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 004308-08 (Matrix Spike)

Analyte	Reporting Units	Spike Level	(Wet wt) Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	110	98	73-135	12

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	96	74-139

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/04/10
Date Received: 04/28/10
Project: James Oil, F&BI 004308

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 004308-08 (Matrix Spike) Silica Gel

Analyte	Reporting Units	Spike Level	(Wet wt) Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	99	96	73-135	3

Laboratory Code: Laboratory Control Sample Silica Gel

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	94	74-139

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 – More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc – The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j – The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc – The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr – The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

004308

SAMPLE CHAIN OF CUSTODY

ME 04/28/10 VS2/ DO3

Page # _____ of _____

Send Report To Donna Hewitt

Company DLH

Address 2400 NW 80th St PMB# 114

City, State, ZIP Seattle, WA 98117

Phone # 206-632-3123 Fax # _____

SAMPLERS (signature)

PROJECT NAME/NO.: James Oil

PO #

REMARKS: Pls look @ chromatograms. If gas/Btex indication please run for gx/btex

TURNAROUND TIME
- X Standard (2 Weeks)
- ☐ RUSH _____
- Rush charges authorized by: _____

SAMPLE DISPOSAL
- ☐ Dispose after 30 days
- ☐ Return samples
- ☐ Will call with instructions

Sample ID	Lab ID	Date	Time	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	~~418~~ Silica					✓-p-DH 4/29/10 MS Notes
42810-07	01 A-E	4/28/10	11:50	Soil	5	X											@9'
08	02 A-E		12:15			X											Composit E. side w. 2'
09	03 A-E		1:20			X											Bottom - 13'
10	04 A-E		1:22			X											9' NSW
11	05 A-E		1:27			X											9' WSW
12	06 A-E		1:39			X											9' ESW
13	07 A-E		1:48			X											9' SSW
14	08 A-E		3:44			X						X					Bot-TP 4'
15	09 A-E		3:49			X						X					East SW 3'
Stock 3	10		3:27		1	✓											

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Donna Hewitt	DLH	4/28/10	1820
Received by:	Kortland Orr	FABI	4-28-10	1820
Relinquished by:				
Received by:		Samples received at 17 °C		

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

004308

SAMPLE CHAIN OF CUSTODY

ME 04/28/10 VS2/ DO3

Page # 1 of 1

Send Report To Donna Hewitt

Company DLH

Address 2400 NW 80th St PMB# 114

City, State, ZIP Seattle, WA 98117

Phone # 206-632-3123 Fax #

SAMPLERS (signature)

PROJECT NAME/NO. James Oil

PO #

REMARKS Pls look @ Chromatograms. If gas/Btex indication please run for gx16tex

TURNAROUND TIME
- X Standard (2 Weeks)
- ☐ RUSH
- Rush charges authorized by:

SAMPLE DISPOSAL
- ☐ Dispose after 30 days
- ☐ Return samples
- ☐ Will call with instructions

Sample ID	Lab ID	Date	Time	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	~~HFS~~ Silica Gel					✓-pr-DH 4/29/10 MS Notes
42810-07	01 A-E	4/28/10	11:50	Soil	5	X											@9'
08	02 A-E		12:15			X											Composite E Side w. 2'
09	03 A-E		1:20			X											Bottom - ~13'
10	04 A-E		1:22			X											9' NSW
11	05 A-E		1:27			X											9' WSW
12	06 A-E		1:39			X											9' ESW
13	07 A-E		1:48			X											9' SSW
14	08 A-E		3:44			X						X					Bot-TP 4'
15	09 A-E		3:49			X						X					East SW 3'
Stock 3	10		3:27		1	✓											

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:		Donna Hewitt	DLH	4/28/10	1820
Received by:		Kortland Orr	FabE	4-28-10	1820
Relinquished by:					
Received by:			Samples received at 17 °C		

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

FORMS\COC\COC.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Charlene Morrow, M.S.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
FAX: (206) 283-5044
e-mail: fbi@isomedia.com

May 6, 2010

Donna Hewitt, Project Manager
DLH Environmental Consulting
2400 NW 80th St., 114
Seattle, WA 98117-4449

Dear Ms. Hewitt:

Included is the amended report from the testing of material submitted on April 28, 2010 from the James Oil, F&BI 004308 project. The sample chromatograms have been included, and the case narrative updated.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
DLH0504R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Charlene Morrow, M.S.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
FAX: (206) 283-5044
e-mail: fbi@isomedia.com

May 4, 2010

Donna Hewitt, Project Manager
DLH Environmental Consulting
2400 NW 80th St., 114
Seattle, WA 98117-4449

Dear Ms. Hewitt:

Included are the results from the testing of material submitted on April 28, 2010 from the James Oil, F&BI 004308 project. There are 6 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
DLH0504R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on April 28, 2010 by Friedman & Bruya, Inc. from the DLH Environmental Consulting James Oil, F&BI 004308 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	DLH Environmental Consulting
004308-01	42810-07
004308-02	42810-08
004308-03	42810-09
004308-04	42810-10
004308-05	42810-11
004308-06	42810-12
004308-07	42810-13
004308-08	42810-14
004308-09	42810-15
004308-10	Stock 3

No gasoline was seen in the diesel chromatograms. Per the chain of custody, the samples were not analyzed for NWTPH-Gx/8021B.

All quality control requirements were acceptable.

Date of Report: 05/04/10
Date Received: 04/28/10
Project: James Oil, F&BI 004308
Date Extracted: 04/29/10
Date Analyzed: 04/29/10

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 50-150)
42810-07 004308-01	90	<250	99
42810-08 004308-02	<50	<250	99
42810-09 004308-03	4,400	<250	91
42810-10 004308-04	400	<250	88
42810-11 004308-05	750	<250	91
42810-12 004308-06	<50	<250	97
42810-13 004308-07	<50	<250	91
Stock 3 004308-10	320	590	92
Method Blank 00-0629 MB	<50	<250	88

Date of Report: 05/04/10
Date Received: 04/28/10
Project: James Oil, F&BI 004308
Date Extracted: 04/29/10
Date Analyzed: 04/29/10

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx
Sample Extracts Passed Through a Silica Gel Column Prior to Analysis
Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 50-150)
42810-14 004308-08	<50	<250	87
42810-15 004308-09	<50	<250	89
Method Blank 00-0629 MB	<50	<250	84

Date of Report: 05/04/10
Date Received: 04/28/10
Project: James Oil, F&BI 004308

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 004308-08 (Matrix Spike)

Analyte	Reporting Units	Spike Level	(Wet wt) Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	110	98	73-135	12

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	96	74-139

Date of Report: 05/04/10
Date Received: 04/28/10
Project: James Oil, F&BI 004308

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 004308-08 (Matrix Spike) Silica Gel

Analyte	Reporting Units	Spike Level	(Wet wt) Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	99	96	73-135	3

Laboratory Code: Laboratory Control Sample Silica Gel

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	94	74-139

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 – More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc – The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j – The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

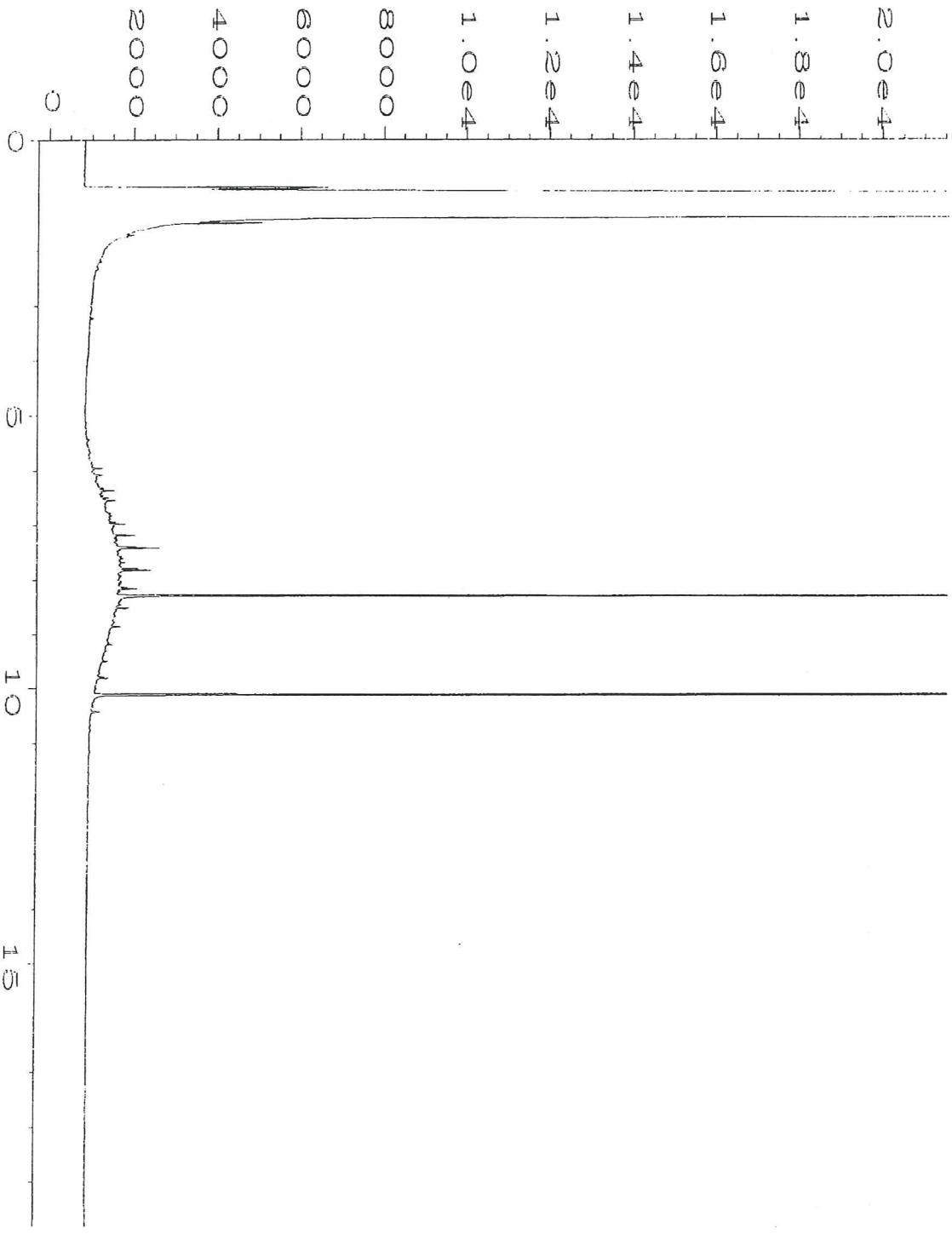
pc – The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr – The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.



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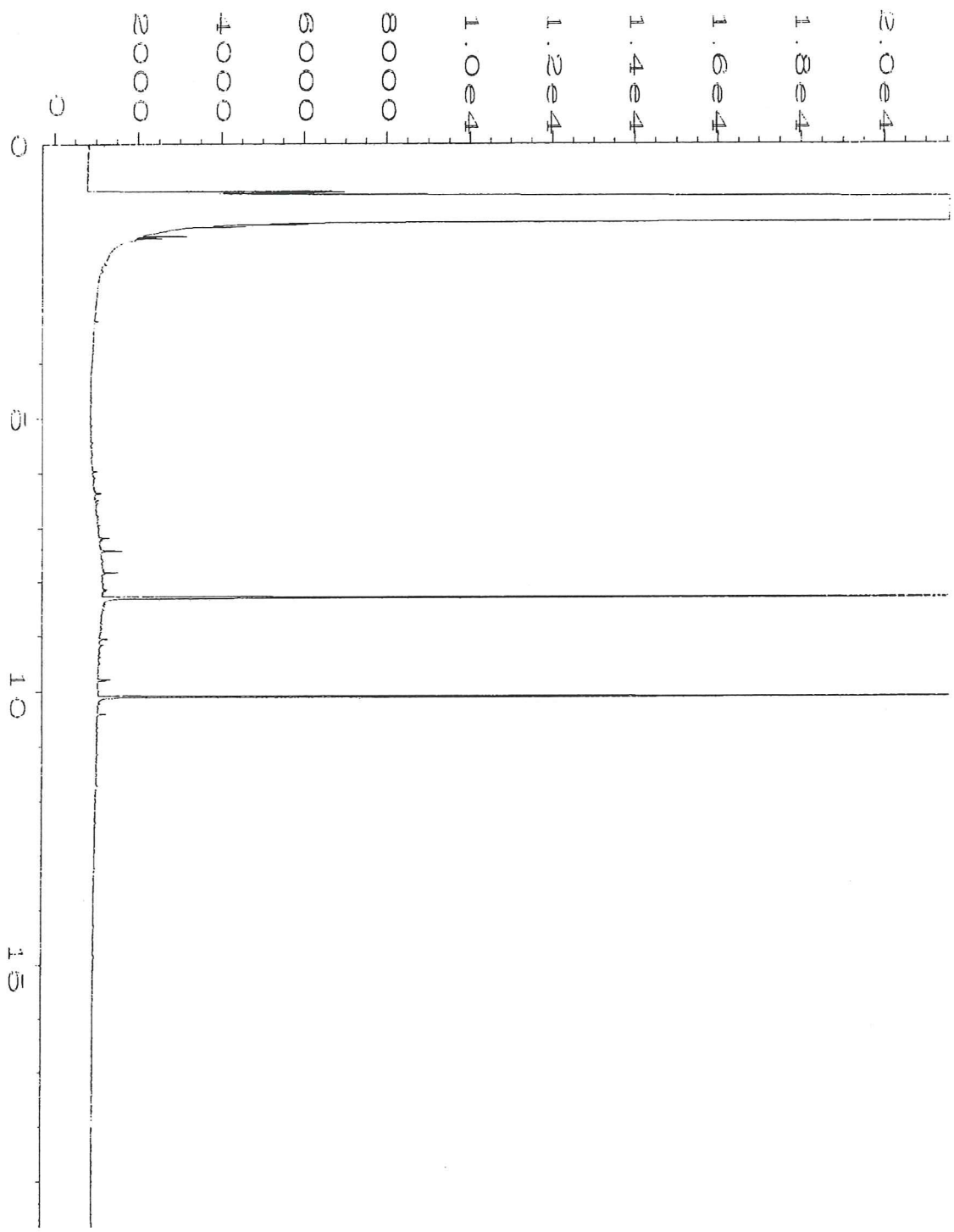
Operator	: ay	Page Number	: 1
Instrument	: GC#4	Vial Number	: 16
Sample Name	: 004308-01	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 7
Acquired on	: 29 Apr 10 03:44 PM	Instrument Method	: TPHD.MTH
Report Created on	: 30 Apr 10 03:15 PM	Analysis Method	: TPHD.MTH



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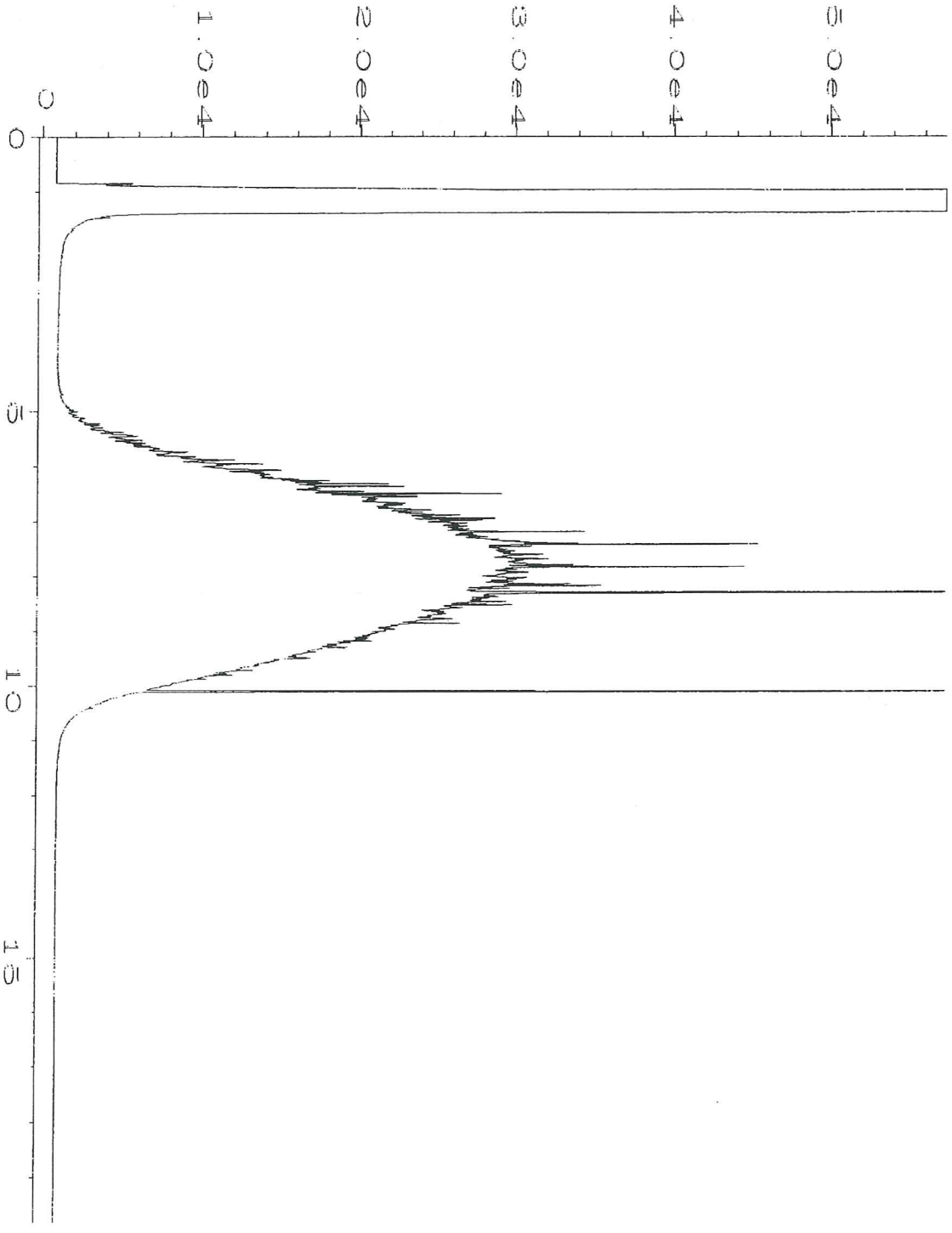
Operator : ay
Instrument : GC#4
Sample Name : 004308-02
Run Time Bar Code:
Acquired on : 29 Apr 10 04:11 PM
Report Created on: 30 Apr 10 03:16 PM

Page Number : 1
Vial Number : 17
Injection Number : 1
Sequence Line : 7
Instrument Method: TPHD.MTH
Analysis Method : TPHD.MTH



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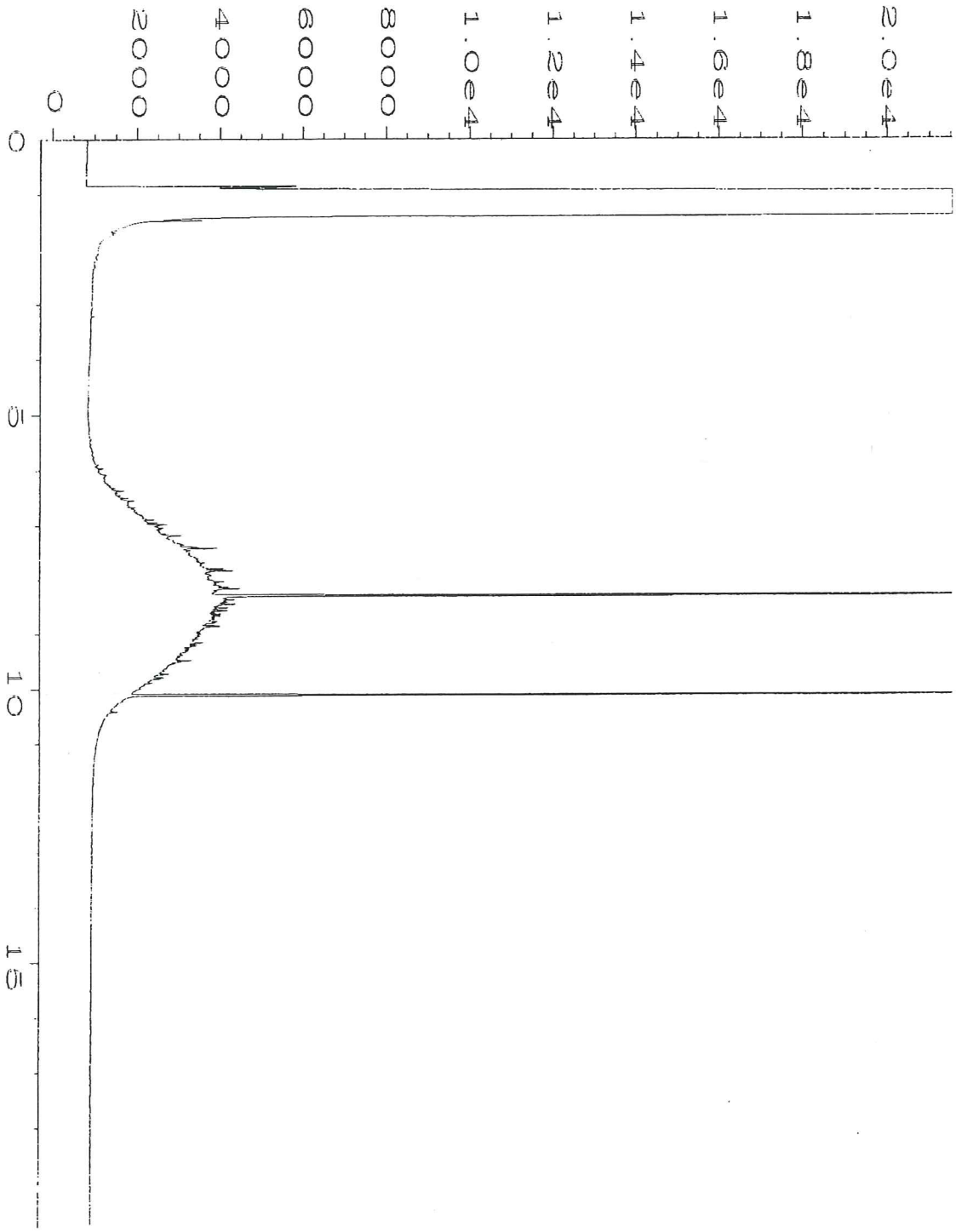
perator : ay
nstrument : GC#4
ample Name : 004308-03
un Time Bar Code:
cquired on : 29 Apr 10 04:37 PM
eport Created on: 30 Apr 10 03:16 PM

Page Number : 1
Vial Number : 18
Injection Number : 1
Sequence Line : 7
Instrument Method: TPHD.MTH
Analysis Method : TPHD.MTH



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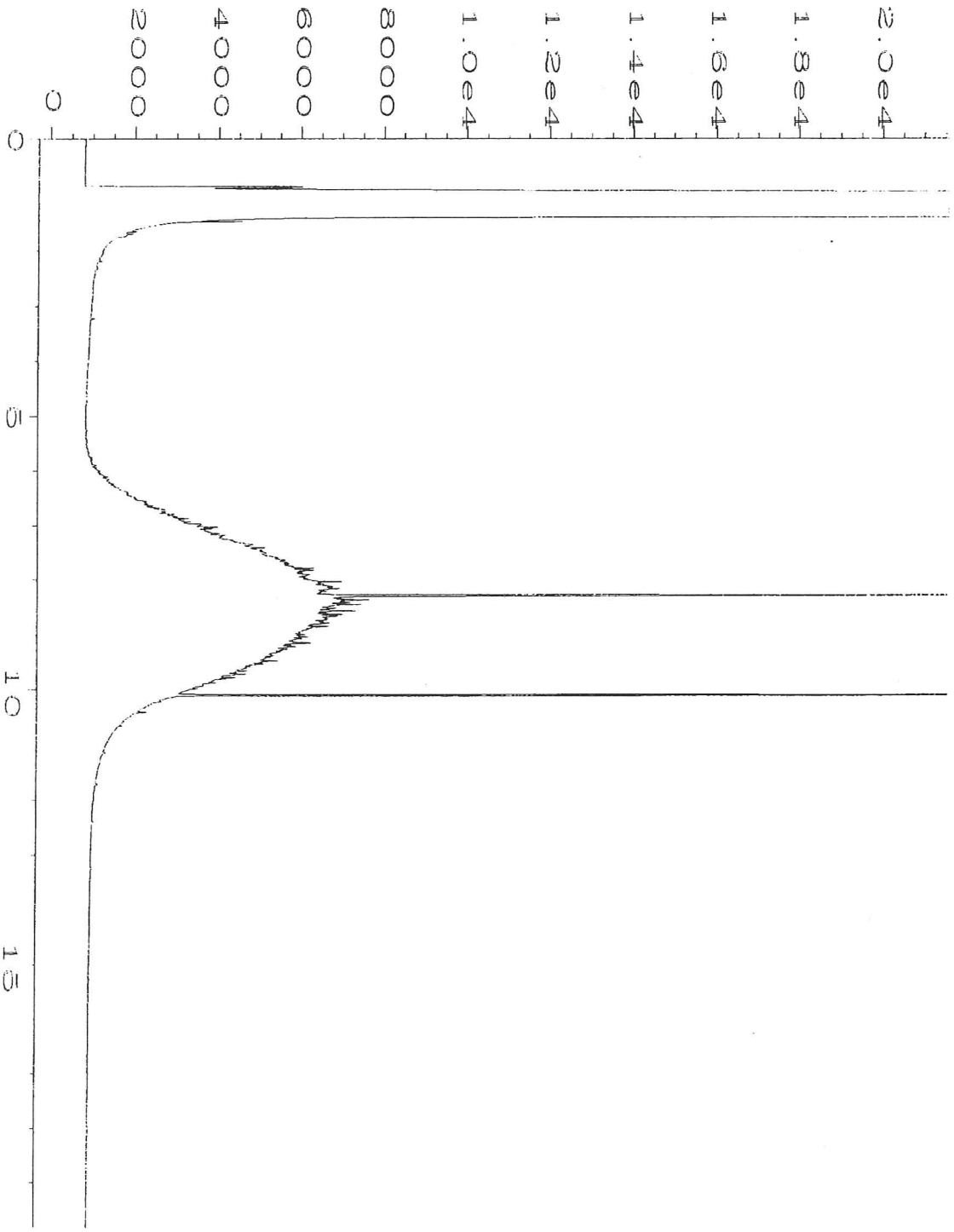
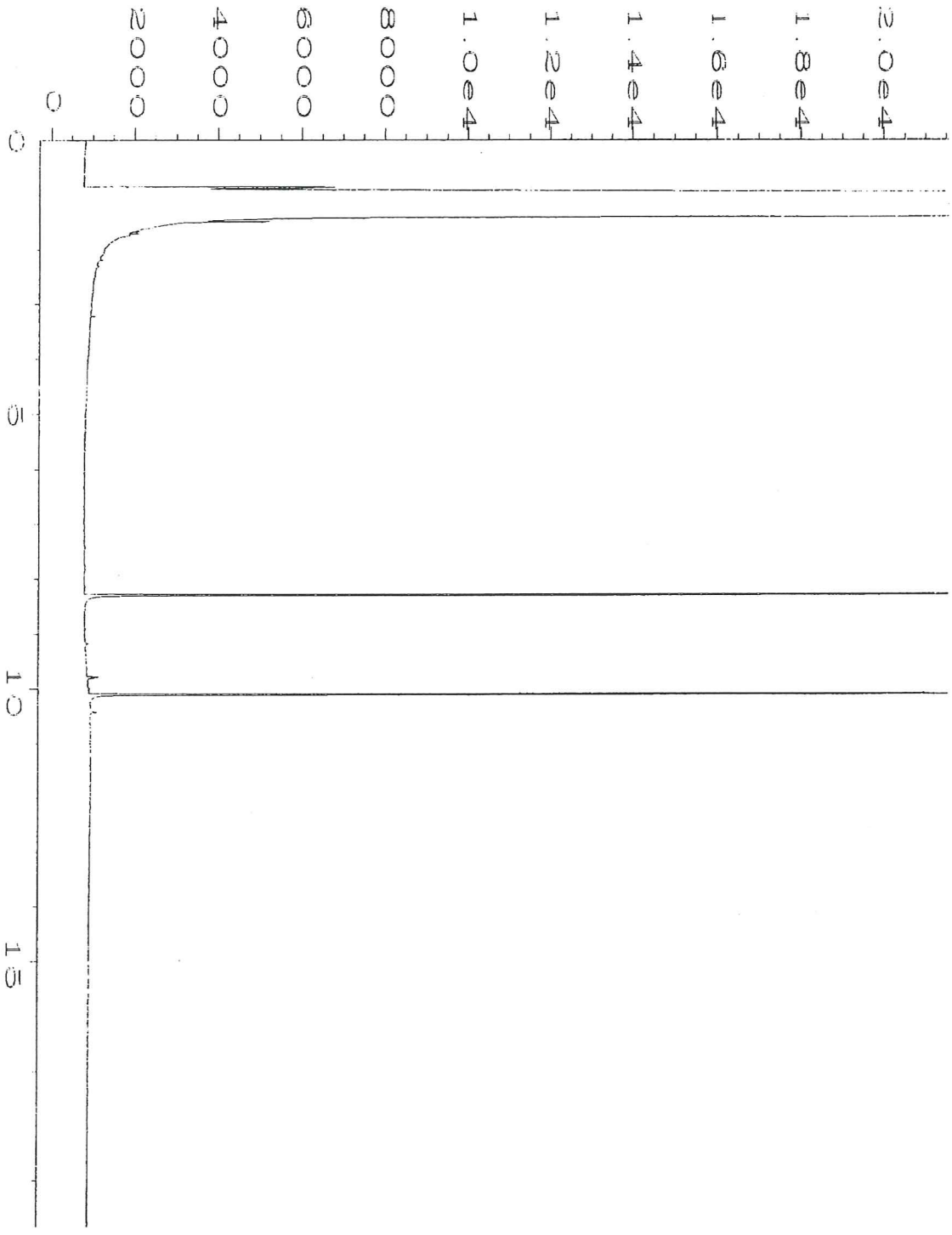
Operator	: ay	Page Number	: 1
Instrument	: GC#4	Vial Number	: 19
Sample Name	: 004308-04	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 7
Acquired on	: 29 Apr 10 05:04 PM	Instrument Method	: TPHD.MTH
Report Created on	: 30 Apr 10 03:16 PM	Analysis Method	: TPHD.MTH



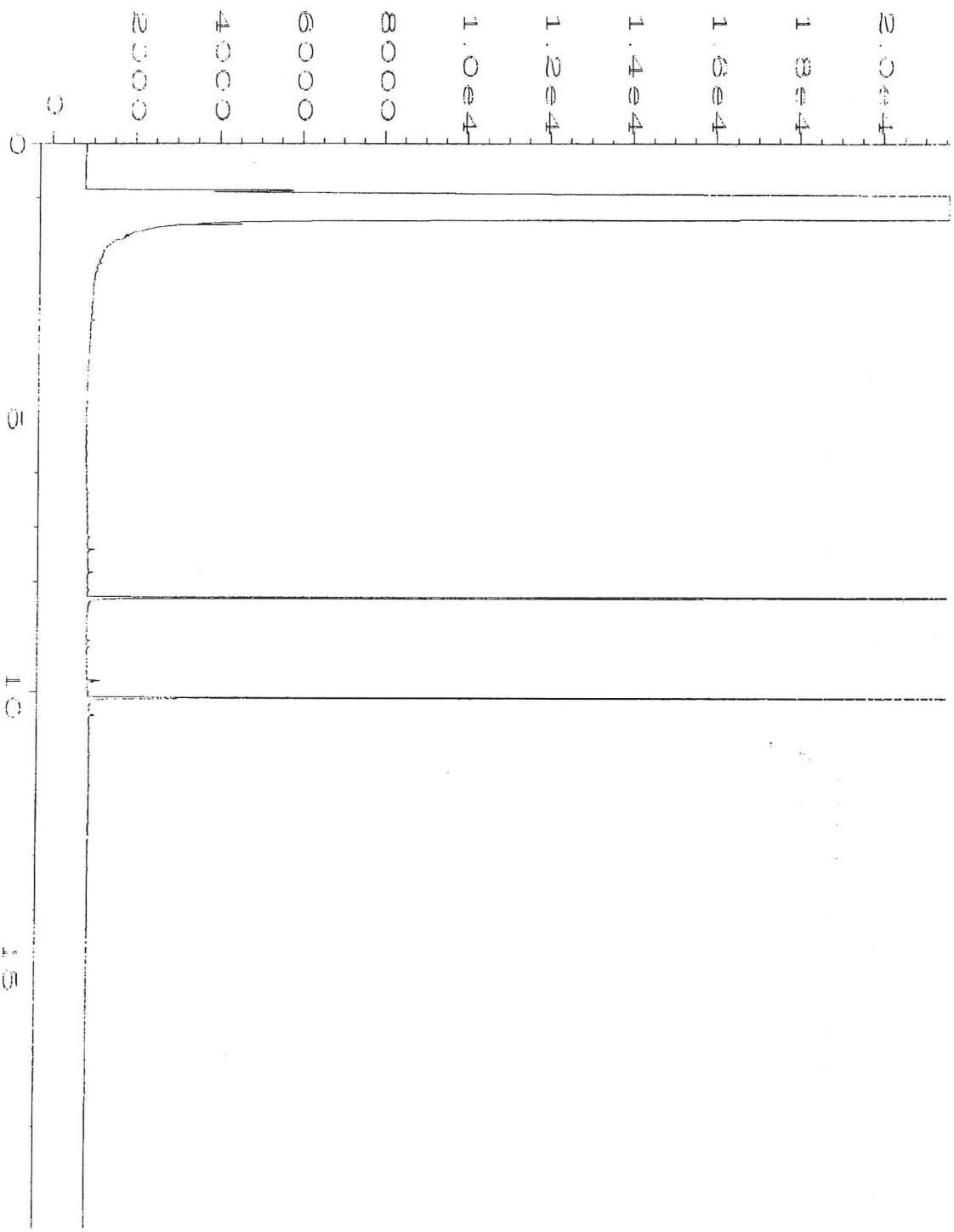
Data File Name : C:\HPCHEM\4\DATA\04-29-10\020F0701.D
Operator : ay
Instrument : GC#4
Sample Name : 004308-05
Run Time Bar Code:
Acquired on : 29 Apr 10 05:31 PM
Report Created on: 30 Apr 10 03:16 PM

Page Number : 1
Vial Number : 20
Injection Number : 1
Sequence Line : 7
Instrument Method: TPHD.MTH
Analysis Method : TPHD.MTH



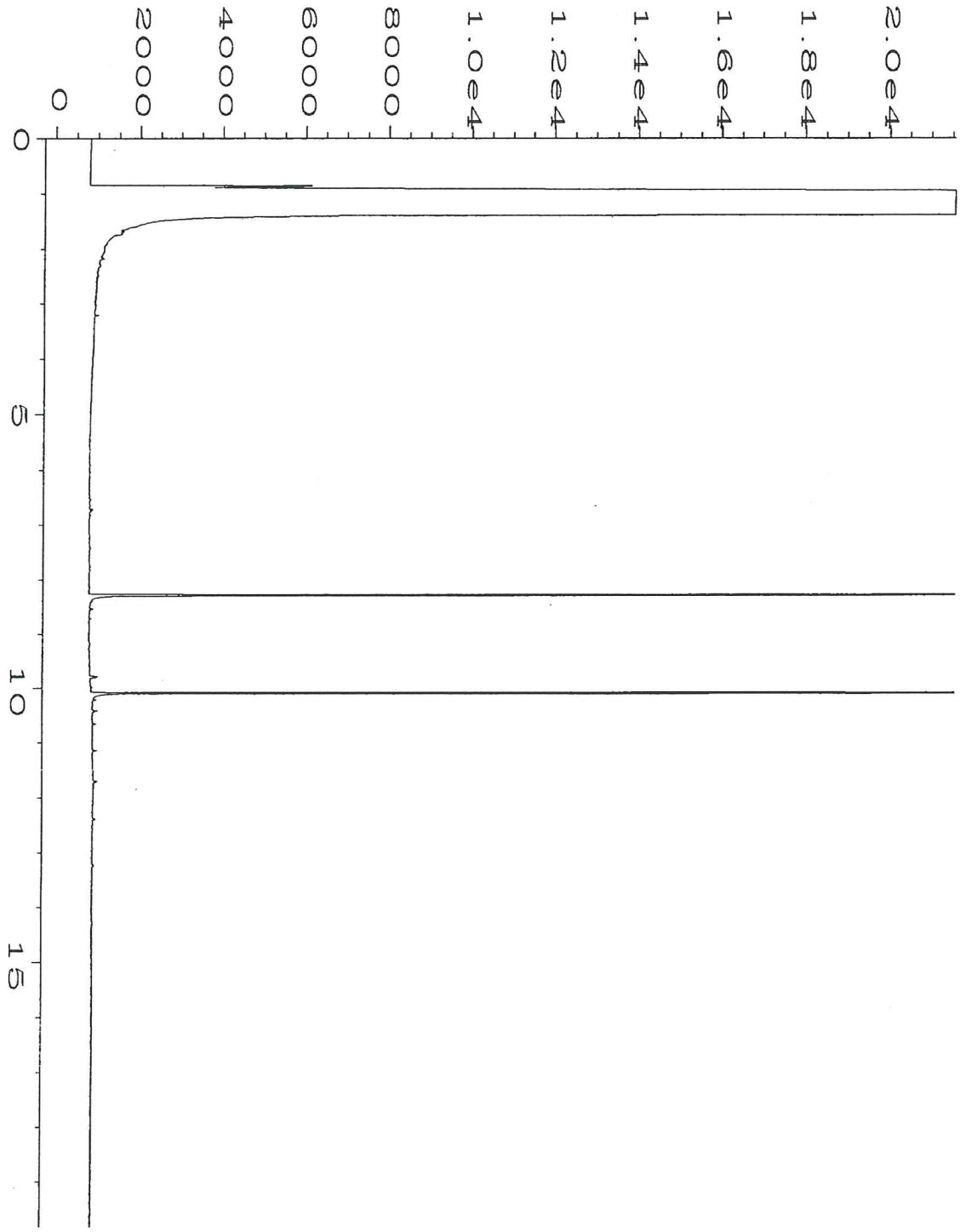
Data File Name : C:\HPCHEM\4\DATA\04-29-10\021F0901.D
Operator : ay
Instrument : GC#4
Sample Name : 004308-06
Run Time Bar Code:
Acquired on : 29 Apr 10 06:52 PM
Report Created on: 30 Apr 10 03:16 PM

Page Number : 1
Vial Number : 21
Injection Number : 1
Sequence Line : 9
Instrument Method: TPHD.MTH
Analysis Method : TPHD.MTH



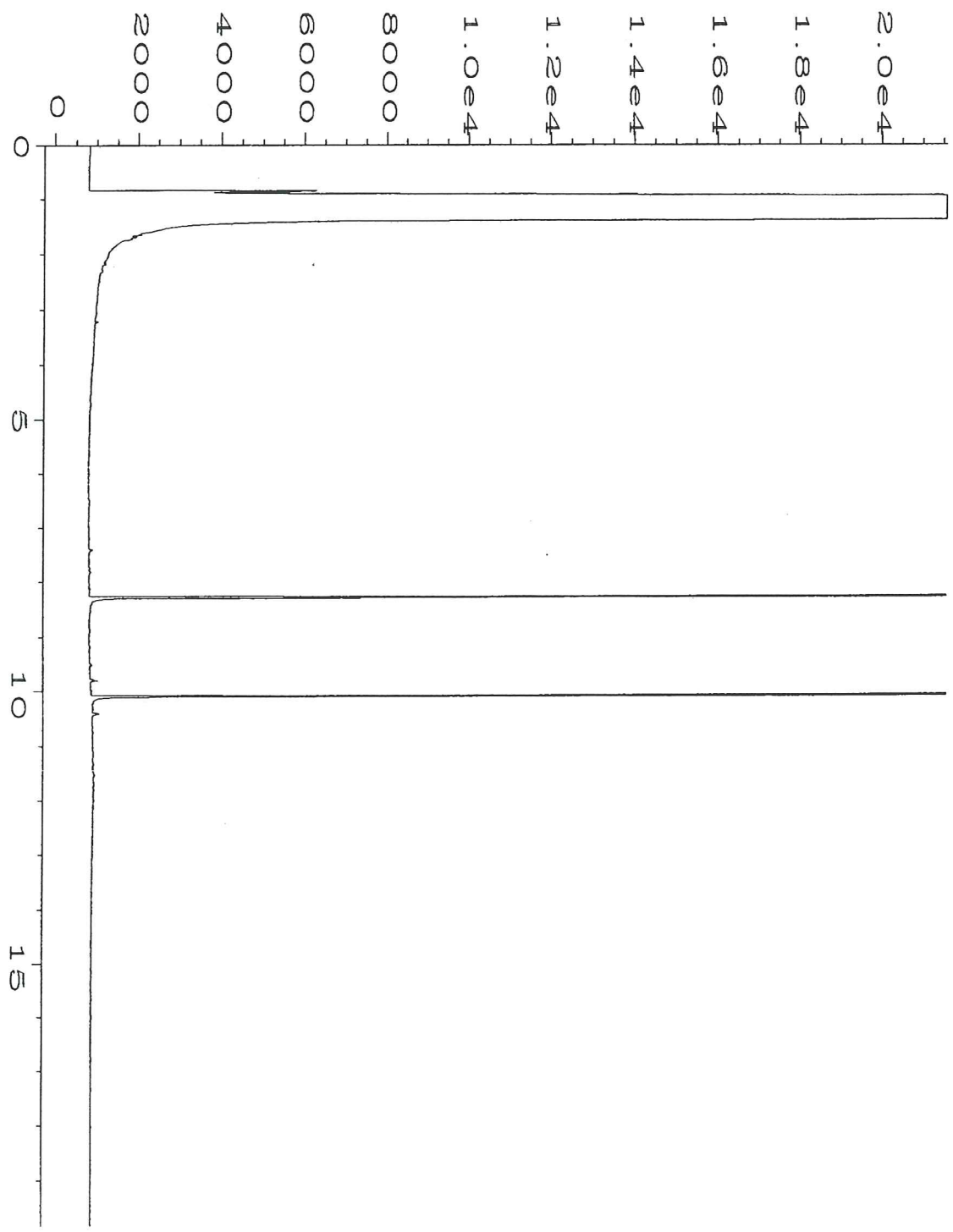
Data File Name : C:\HPCHEM\4\DATA\04-29-10\022F0901.D
Operator : ay
Instrument : GC#4
Sample Name : 004308-07
Run Time Bar Code:
Acquired on : 29 Apr 10 07:19 PM
Report Created on: 30 Apr 10 03:16 PM

Page Number : 1
Vial Number : 22
Injection Number : 1
Sequence Line : 9
Instrument Method: TPHD.MTH
Analysis Method : TPHD.MTH



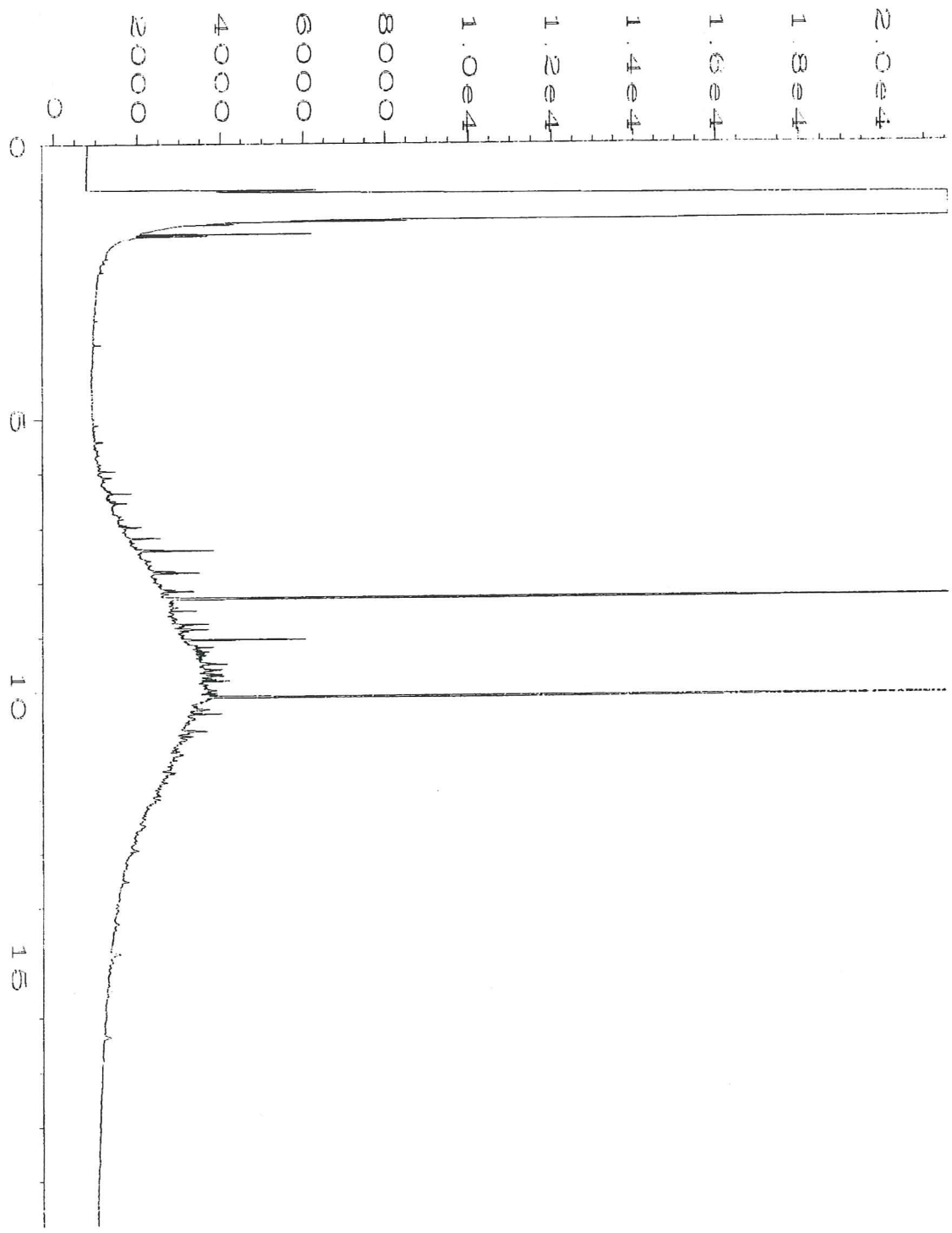
Data File Name : C:\HPCHEM\4\DATA\04-29-10\029F0901.D
Operator : ay
Instrument : GC#4
Sample Name : 004308-08 sg
Run Time Bar Code:
Acquired on : 29 Apr 10 10:27 PM
Report Created on: 06 May 10 01:30 PM

Page Number : 1
Vial Number : 29
Injection Number : 1
Sequence Line : 9
Instrument Method: TPHD.MTH
Analysis Method : TPHD.MTH



Data File Name : C:\HPCHEM\4\DATA\04-29-10\030F0901.D
Operator : ay
Instrument : GC#4
Sample Name : 004308-09 sg
Run Time Bar Code:
Acquired on : 29 Apr 10 10:53 PM
`eport Created on: 06 May 10 01:30 PM

Page Number : 1
Vial Number : 30
Injection Number : 1
Sequence Line : 9
Instrument Method: TPHD.MTH
Analysis Method : TPHD.MTH



Data File Name : C:\HPCHEM\4\DATA\04-29-10\024F0901.D
Operator : ay
Instrument : GC#4
Sample Name : 004308-10
Run Time Bar Code:
Acquired on : 29 Apr 10 08:13 PM
Report Created on: 30 Apr 10 03:17 PM

Page Number : 1
Vial Number : 24
Injection Number : 1
Sequence Line : 9
Instrument Method: TPHD.MTH
Analysis Method : TPHD.MTH

OC 308

SAMPLE CH[illegible] OF CUSTODY

ME 04/28/10 VSL 1 of 1

Send Report To Donna Hewitt

Company DLH

Address 2400 NW 80th St PMB# 114

City, State, ZIP Seattle, WA 98117

Phone # 206-632-3123 Fax #

SAMPLERS (signature)

PROJECT NAME/NO. James Oil

PO #

REMARKS
Pls look @ Chromatograms. If gas/btex indication please run for gx/btex

Page # 1 of 1

TURNAROUND TIME
- [x] Standard (2 Weeks)
- [ ] RUSH
Rush charges authorized by:

SAMPLE DISPOSAL
- [ ] Dispose after 30 days
- [ ] Return samples
- [ ] Will call with instructions

Sample ID	Lab ID	Date	Time	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	~~HFS~~ Silica					Notes
						ANALYSES REQUESTED											✓-pr DH 4/29/10 MS
42810-07	01 A-E	4/28/10	11:50	Soil	5	X											@9'
08	02 A-E		12:15			X											Composit E. side w. 2'
09	03 A-E		1:20			X											Bottom - N13'
10	04 A-E		1:22			X											9' NSW
11	05 A-E		1:27			X											9' WSW
12	06 A-E		1:39			X											9' ESW
13	07 A-E		1:48			X											9' SSW
14	08 A-E		3:44			X						X					Bot-TP 4'
15	09 A-E		3:49			X						X					East SW 3'
Stock 3	10		3:27		1	✓											

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:		Donna Hewitt	DLH	4/28/10	1820
Received by:		Kortland Orr	FBI	4-28-10	1820
Relinquished by:					
Received by:			Samples received at 17 °C		

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

FORMS\COC\COC.DOC

004308

SAMPLE CHAIN OF CUSTODY ME 04/28/10

VS2/D03

Send Report To Donna Hewitt

Company DLH

Address 2400 NW 80th St PMB#114

City, State, ZIP Seattle, WA 98117

Phone # 206-6323123 Fax #

SAMPLERS (signature) [signature]

PROJECT NAME/NO. James Oil

PO #

REMARKS
Pls look @ chromatograms. If gas/btex indication please run for gx/btex

Page # 1 of

TURNAROUND TIME
- [x] Standard (2 Weeks)
- [ ] RUSH
Rush charges authorized by:

SAMPLE DISPOSAL
- [ ] Dispose after 30 days
- [ ] Return samples
- [ ] Will call with instructions

Sample ID	Lab ID	Date	Time	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	~~HFS~~ Silica	Notes (✓ per DH 4/29/10 MS)
42810-07	01 A-E	4/28/10	11:50	Soil	5	X							@9'
08	02 A-E	↓	12:15	↓	↓	X							Composit E side w. 2'
09	03 A-E		1:20			X							Bottom ~13'
10	04 A-E		1:22			X							9' NSW
11	05 A-E		1:27			X							9' WSW
12	06 A-E		1:39			X							9' ESW
13	07 A-E		1:48			X							9' SSW
14	08 A-E		3:44			X						X	Bot TP 4'
15	09 A-E		3:49			X						X	East SW 3'
Stock 3	10		3:27		1	✓							

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: [signature]	Donna Hewitt	DLH	4/28/10	1820
Received by: [signature]	Kortland Orr	F&BI	4-28-10	1820
Relinquished by:				
Received by:		Samples received at 17 °C		

FORMS\COC\COC.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Charlene Morrow, M.S.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
FAX: (206) 283-5044
e-mail: fbi@isomedia.com

May 13, 2010

Donna Hewitt, Project Manager
DLH Environmental Consulting
2400 NW 80th St., 114
Seattle, WA 98117-4449

Dear Ms. Hewitt:

Included are the results from the testing of material submitted on April 28, 2010 from the James Oil, F&BI 004307 project. There are 4 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
DLH0513R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on April 28, 2010 by Friedman & Bruya, Inc. from the DLH Environmental Consulting James Oil, F&BI 004307 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	DLH Environmental Consulting
004307-01	DUP-042810-pgg03
004307-02	DUP-042810-pgg04
004307-03	DUP-042810-pgg05

All quality control requirements were acceptable.

Date of Report: 05/13/10
Date Received: 04/28/10
Project: James Oil, F&BI 004307
Date Extracted: 05/10/10
Date Analyzed: 05/11/10

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 50-150)
DUP-042810-pgg03 004307-01	130	310	90
DUP-042810-pgg04 004307-02	240 x	1,400	100
DUP-042810-pgg05 004307-03	500	<250	93
Method Blank 00-681 MB	<50	<250	91

Date of Report: 05/13/10
Date Received: 04/28/10
Project: James Oil, F&BI 004307

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 005060-03 (Matrix Spike)

Analyte	Reporting Units	Spike Level	(Wet wt) Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	94	96	73-135	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	96	74-139

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 – More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc – The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j – The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

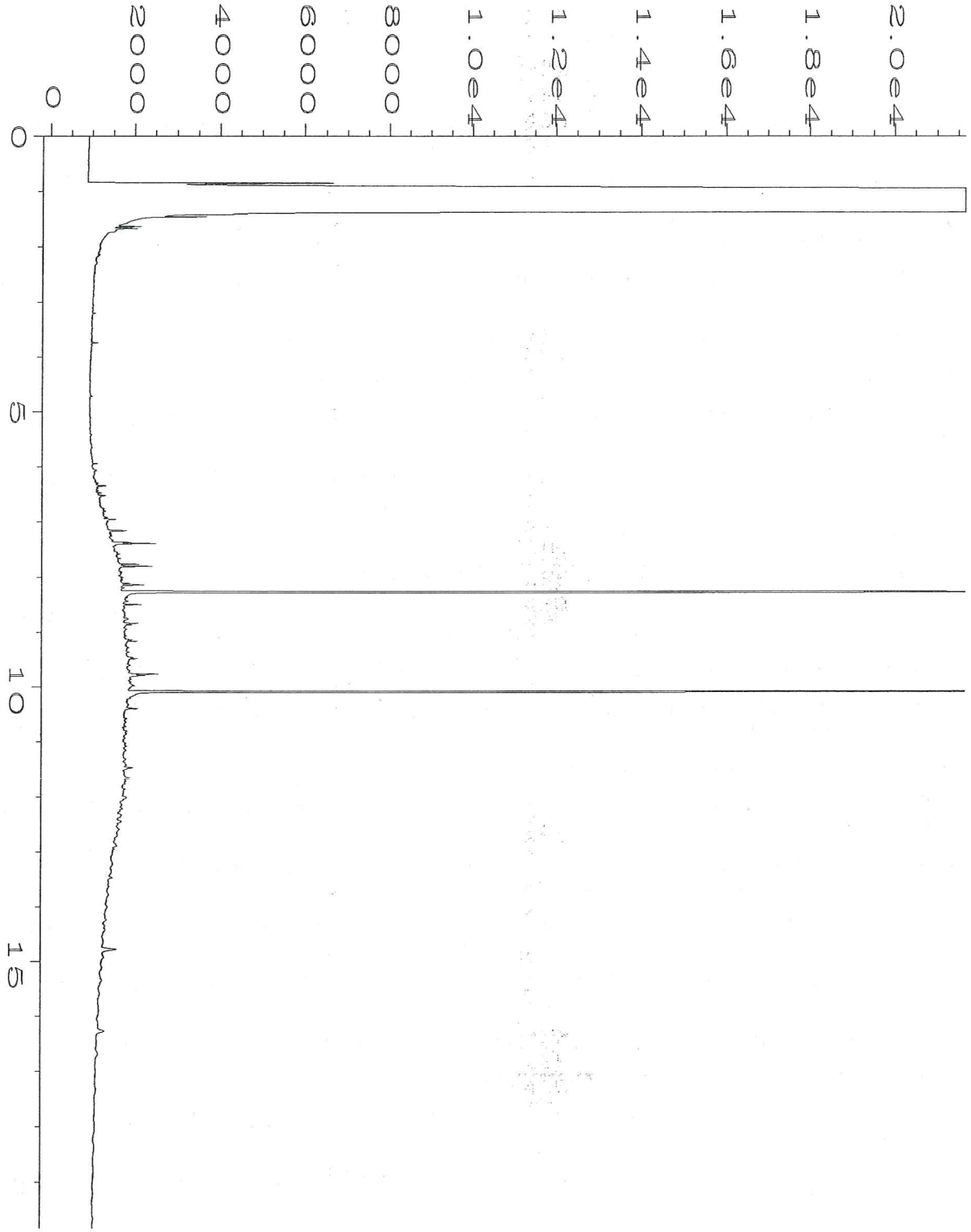
pc – The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr – The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

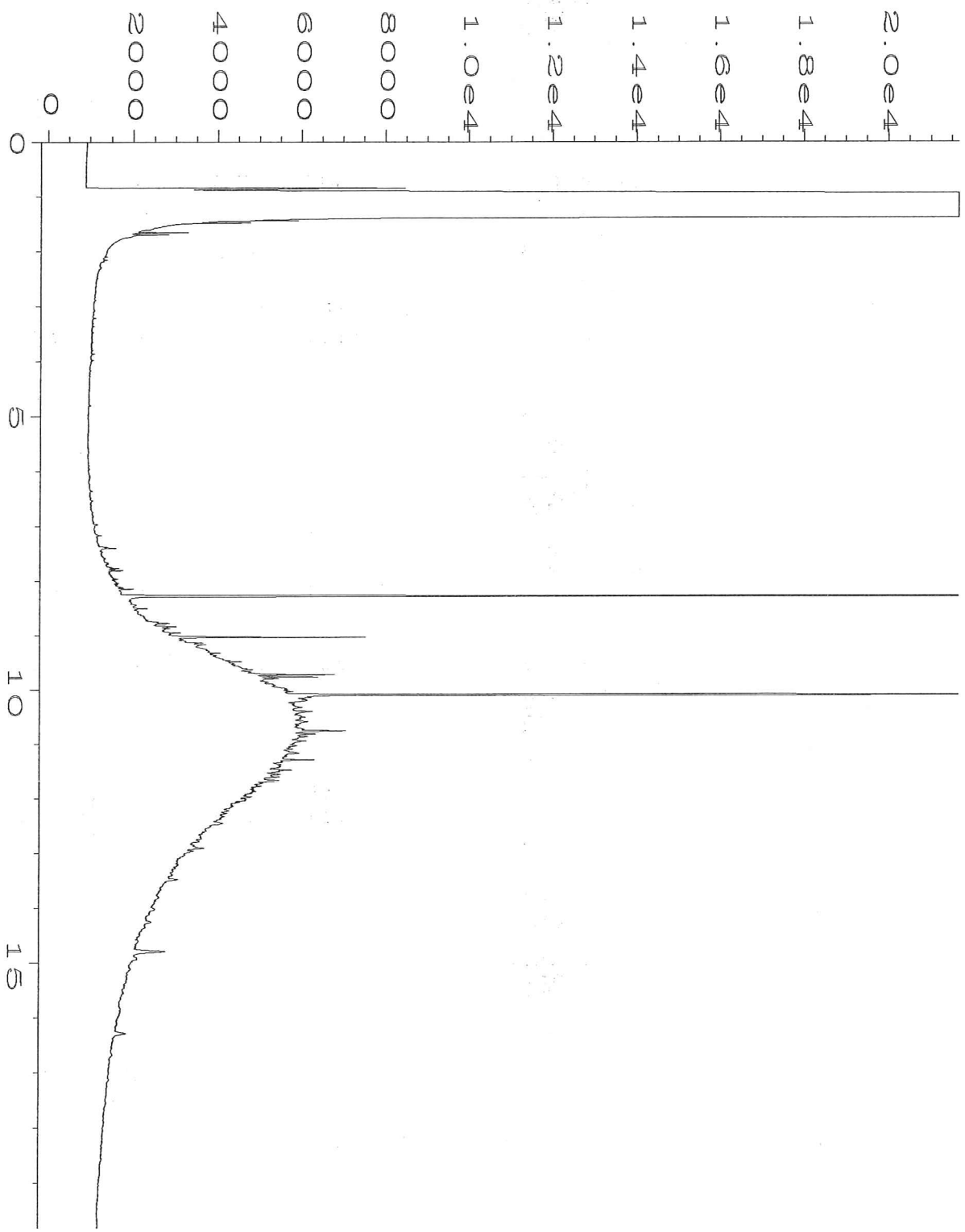
vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.



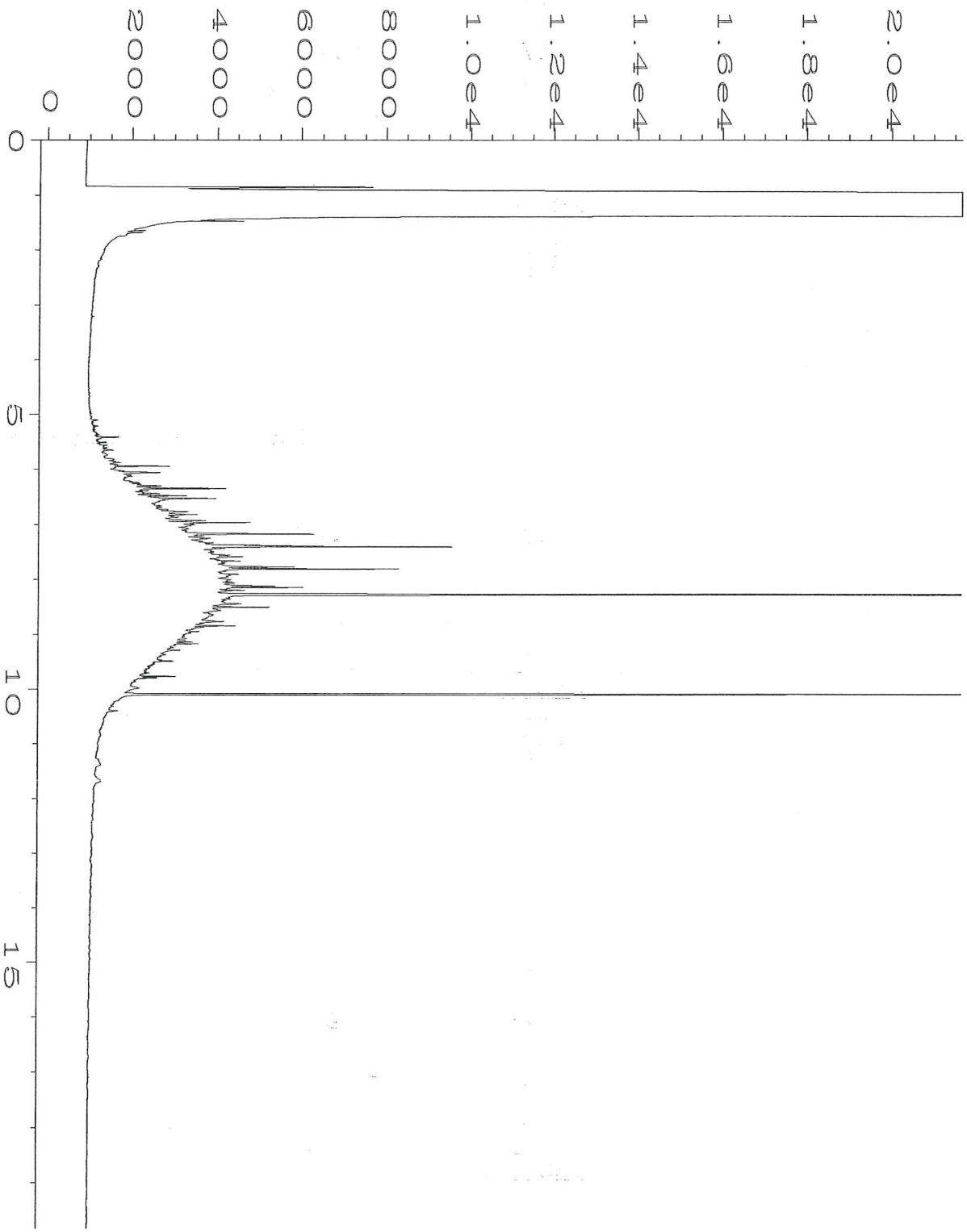
Data File Name : C:\HPCHEM\4\DATA\05-10-10\043F0901.D
Operator : kao
Instrument : GC#4
Sample Name : 004307-01
Run Time Bar Code:
Acquired on : 11 May 10 05:20 AM
Report Created on: 11 May 10 11:11 AM

Page Number : 1
Vial Number : 43
Injection Number : 1
Sequence Line : 9
Instrument Method: TPHD.MTH
Analysis Method : BAKEOUT.MTI



Data File Name : C:\HPCHEM\4\DATA\05-10-10\044F0901.D
Operator : kao
Instrument : GC#4
Sample Name : 004307-02
Run Time Bar Code:
quired on : 11 May 10 05:47 AM
port Created on: 11 May 10 11:11 AM

Page Number : 1
Vial Number : 44
Injection Number : 1
Sequence Line : 9
Instrument Method: TPHD.MTH
Analysis Method : BAKEOUT.MTH



Data File Name : C:\HPCHEM\4\DATA\05-10-10\045F0901.D
Operator : kao
Instrument : GC#4
Sample Name : 004307-03
Run Time Bar Code:
Acquired on : 11 May 10 06:13 AM
Report Created on: 11 May 10 11:11 AM

Page Number : 1
Vial Number : 45
Injection Number : 1
Sequence Line : 9
Instrument Method: TPHD.MTH
Analysis Method : BAKEOUT.MT

004307

SAMPLE CHAIN OF CUSTODY

ME 04/28/10

Page # 1 of 1 DO1

Send Report To Donna Hewitt
Company DCH
Address 2400 NW 80th St Pmb114
City, State, ZIP Seattle, WA 98117
Phone # 206-632-3123 Fax #

SAMPLERS (signature)

PROJECT NAME/NO.: James 01

PO #

REMARKS: Duplicate Samples Per –

TURNAROUND TIME
- ☐ Standard (2 Weeks)
- ☐ RUSH
- Rush charges authorized by:

SAMPLE DISPOSAL
- ☐ Dispose after 30 days
- ☐ Return samples
- ☐ Will call with instructions

Sample ID	Lab ID	Date	Time	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS						Notes
DUP-42810-P9903	01	4/28/10		Soil	1	X											Hold
04	02		4:15	Soil	1	X											X-analyzed DH 5/10/09 AG
05	03		4:19	Soil	1	X											

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Donna Hewitt	DCH	4/28/10	1820
Received by:	Kortland Orr	FBI	4-28-10	1820
Relinquished by:				
Received by:				

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-
Ph. (206) 285-8282
Fax (206) 283-5044

FORMS\C OC.DOC

Samples received at

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Charlene Morrow, M.S.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
FAX: (206) 283-5044
e-mail: fbi@isomedia.com

May 24, 2010

Donna Hewitt, Project Manager
DLH Environmental Consulting
2400 NW 80th St., 114
Seattle, WA 98117-4449

Dear Ms. Hewitt:

Included are the results from the testing of material submitted on May 18, 2010 from the James Oil, F&BI 005157 project. There are 4 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
DLH0524R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on May 18, 2010 by Friedman & Bruya, Inc. from the DLH Environmental Consulting James Oil, F&BI 005157 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	DLH Environmental Consulting
005157-01	51810-16
005157-02	51810-17
005157-03	51810-18
005157-04	51810-19
005157-05	51810-20
005157-06	51810-21
005157-07	51810-22
005157-08	51810-23
005157-09	51810-24
005157-10	51810-25
005157-11	51810-26

No gasoline was seen in the diesel chromatograms. Per the chain of custody, the samples were not analyzed for NWTPH-Gx/8021B.

All quality control requirements were acceptable.

Date of Report: 05/24/10
Date Received: 05/18/10
Project: James Oil, F&BI 005157
Date Extracted: 05/19/10
Date Analyzed: 05/19/10 and 05/20/10

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 50-150)
51810-16 005157-01	<50	<250	89
51810-17 005157-02	500	<250	91
51810-18 005157-03	<50	<250	96
51810-19 005157-04	<50	<250	92
51810-20 005157-05	<50	<250	92
51810-21 005157-06	<50	<250	92
51810-22 005157-07	96 x	400	92
51810-23 005157-08	<50	<250	92
51810-24 005157-09	190 x	470	90
51810-25 005157-10	2,700 x	5,600	93
51810-26 005157-11	<50	<250	85
Method Blank 00-0766 MB	<50	<250	89

Date of Report: 05/24/10
Date Received: 05/18/10
Project: James Oil, F&BI 005157

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 005157-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	(Wet wt) Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	100	99	63-146	1

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	99	79-144

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 – More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc – The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j – The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

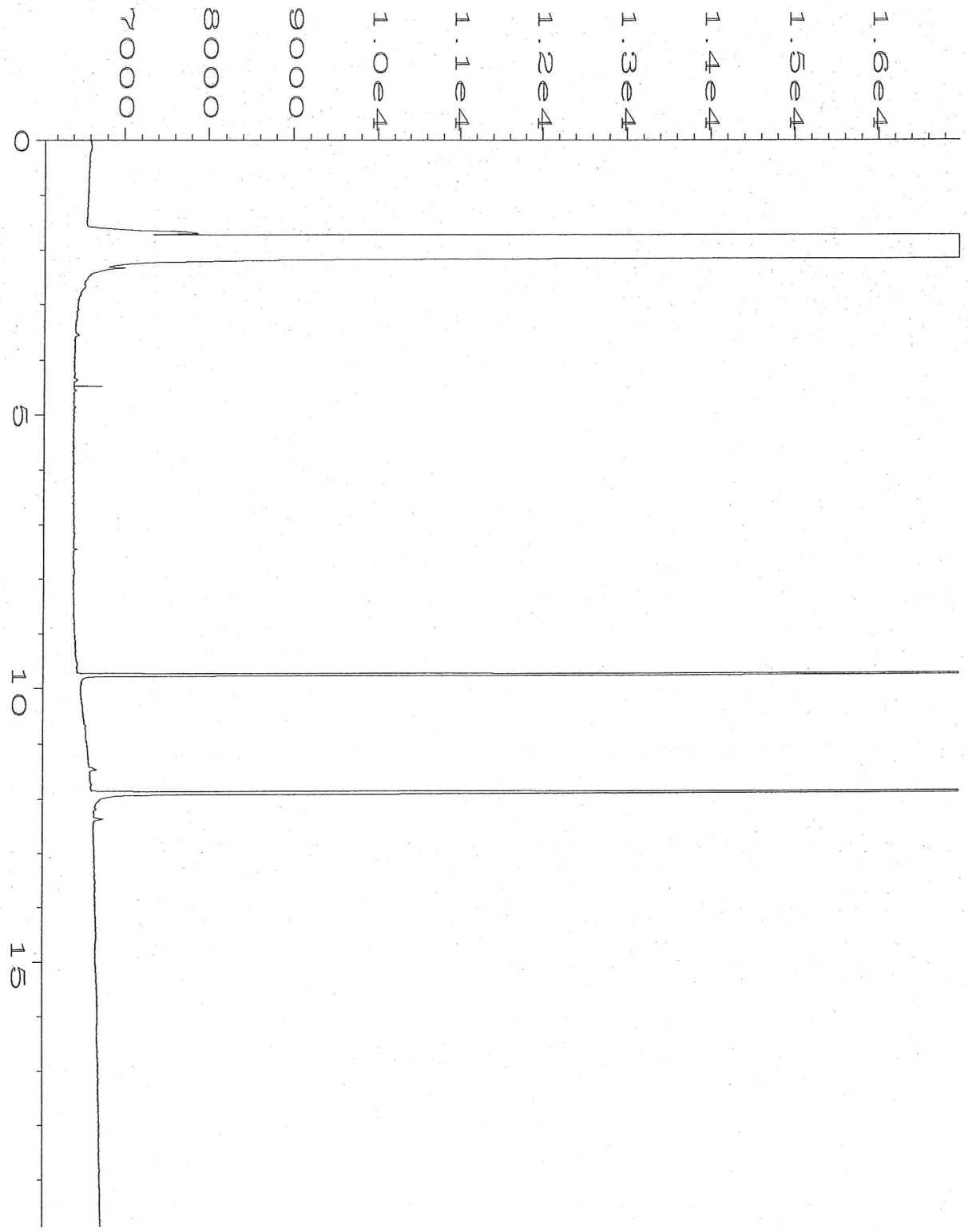
pc – The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr – The sample was received with incorrect preservation. The value reported should be considered an estimate.

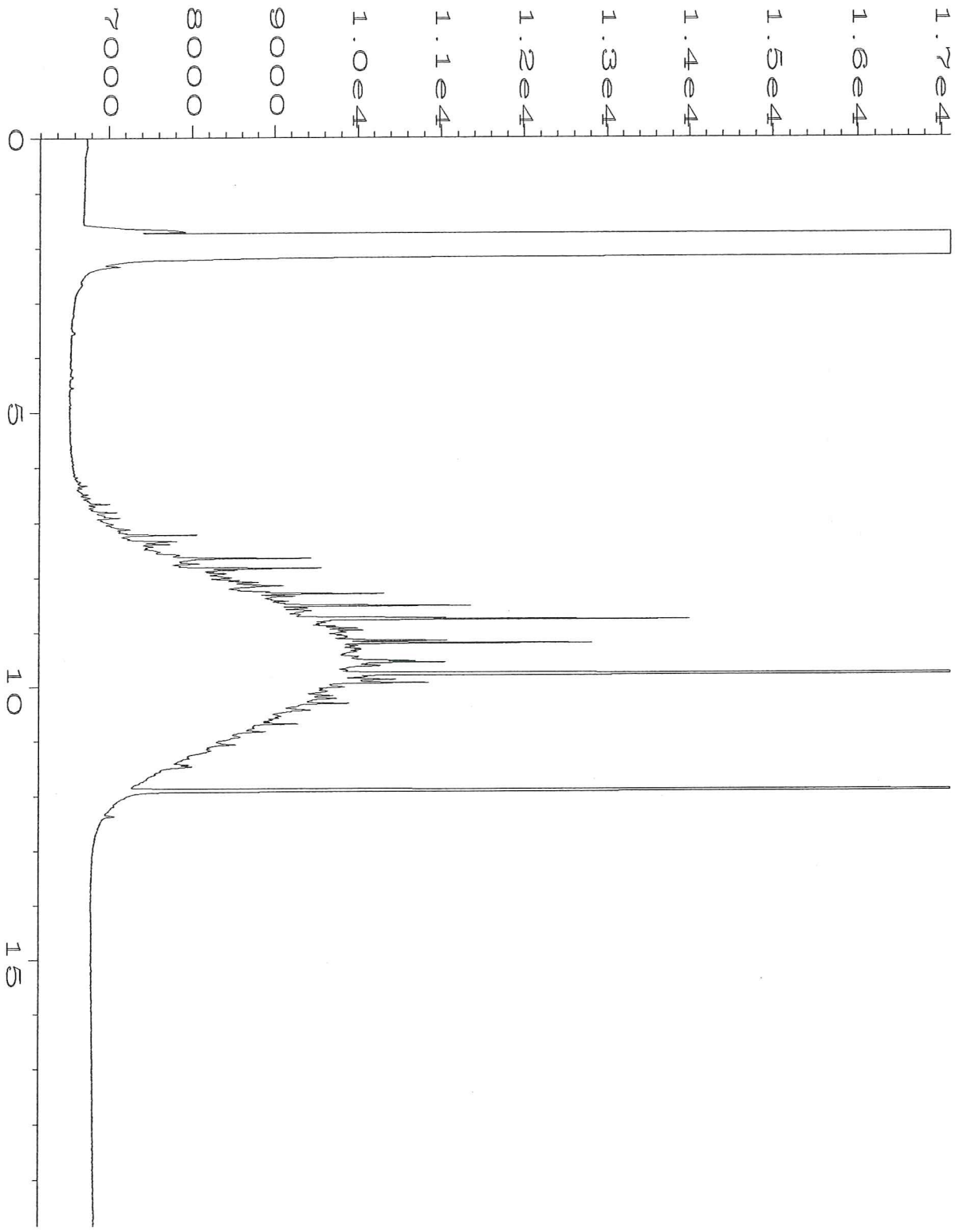
ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

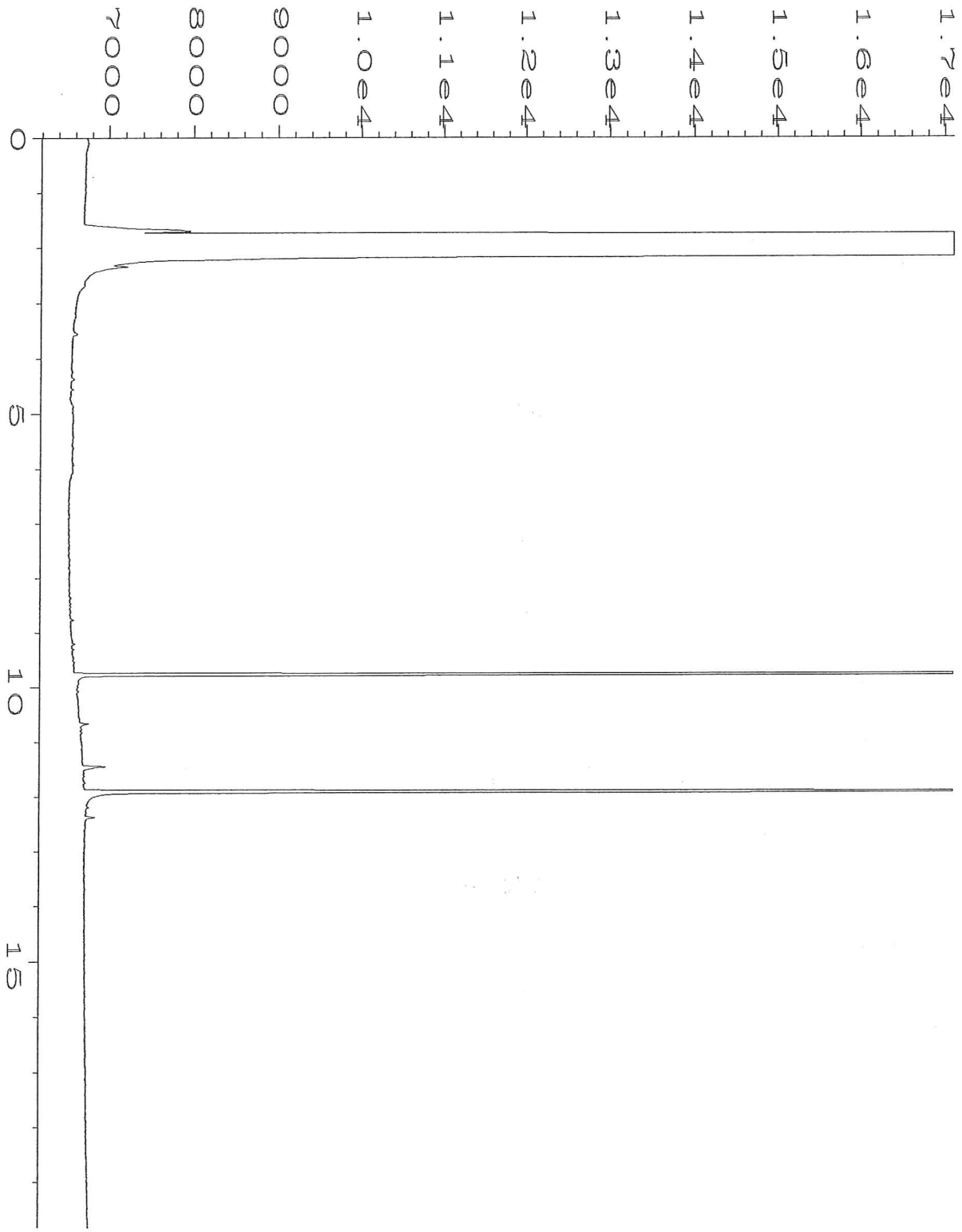


Data File Name	: C:\HPCHEM\1\DATA\05-19-10\014F0301.D		
Operator	: KAO	Page Number	: 1
Instrument	: GC1	Vial Number	: 14
Sample Name	: 005157-01	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 3
Acquired on	: 19 May 10 01:27 PM	Instrument Method	: TPHD.MTH
Report Created on:	20 May 10 11:18 AM	Analysis Method	: TPHD.MTH



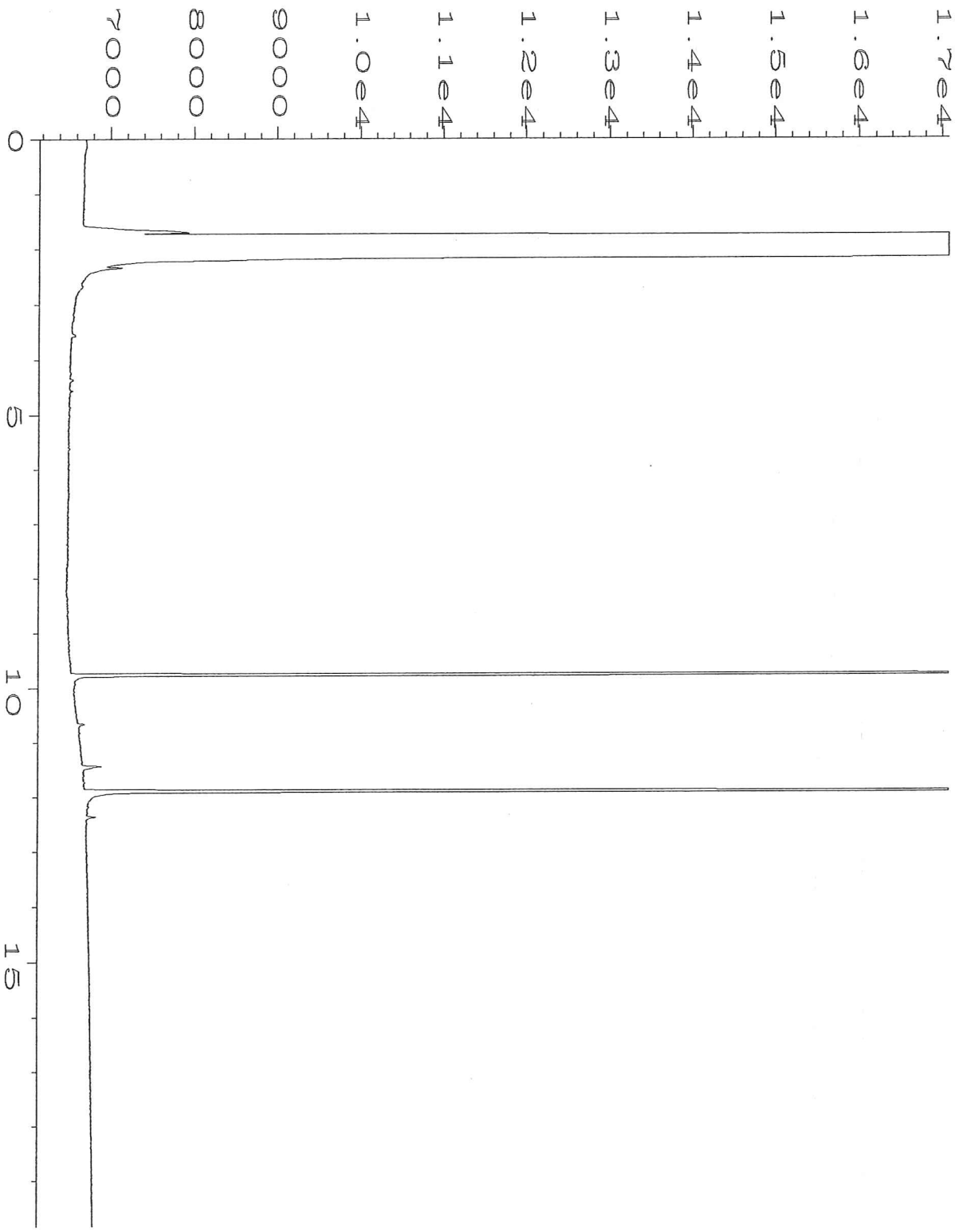
Data File Name : C:\HPCHEM\1\DATA\05-19-10\017F0501.D
Operator : KAO
Instrument : GC1
Sample Name : 005157-02
Run Time Bar Code:
Acquired on : 19 May 10 03:40 PM
Report Created on: 20 May 10 11:20 AM

Page Number : 1
Vial Number : 17
Injection Number : 1
Sequence Line : 5
Instrument Method: TPHD.MTH
Analysis Method : TPHD.MTH



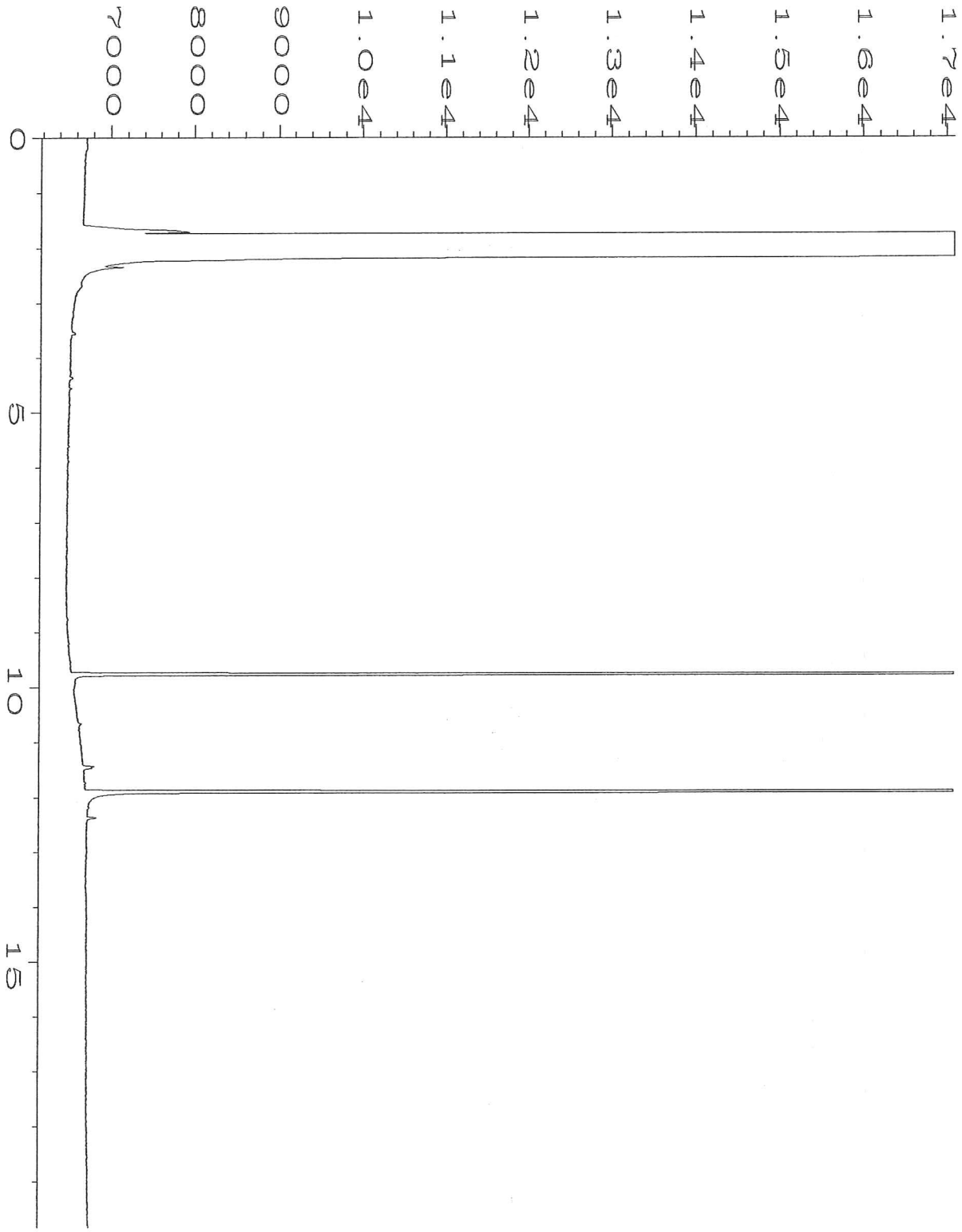
Data File Name : C:\HPCHEM\1\DATA\05-19-10\018F0501.D
Operator : KAO
Instrument : GC1
Sample Name : 005157-03
Run Time Bar Code:
Acquired on : 19 May 10 04:06 PM
Report Created on: 20 May 10 11:20 AM

Page Number : 1
Vial Number : 18
Injection Number : 1
Sequence Line : 5
Instrument Method: TPHD.MTH
Analysis Method : TPHD.MTH



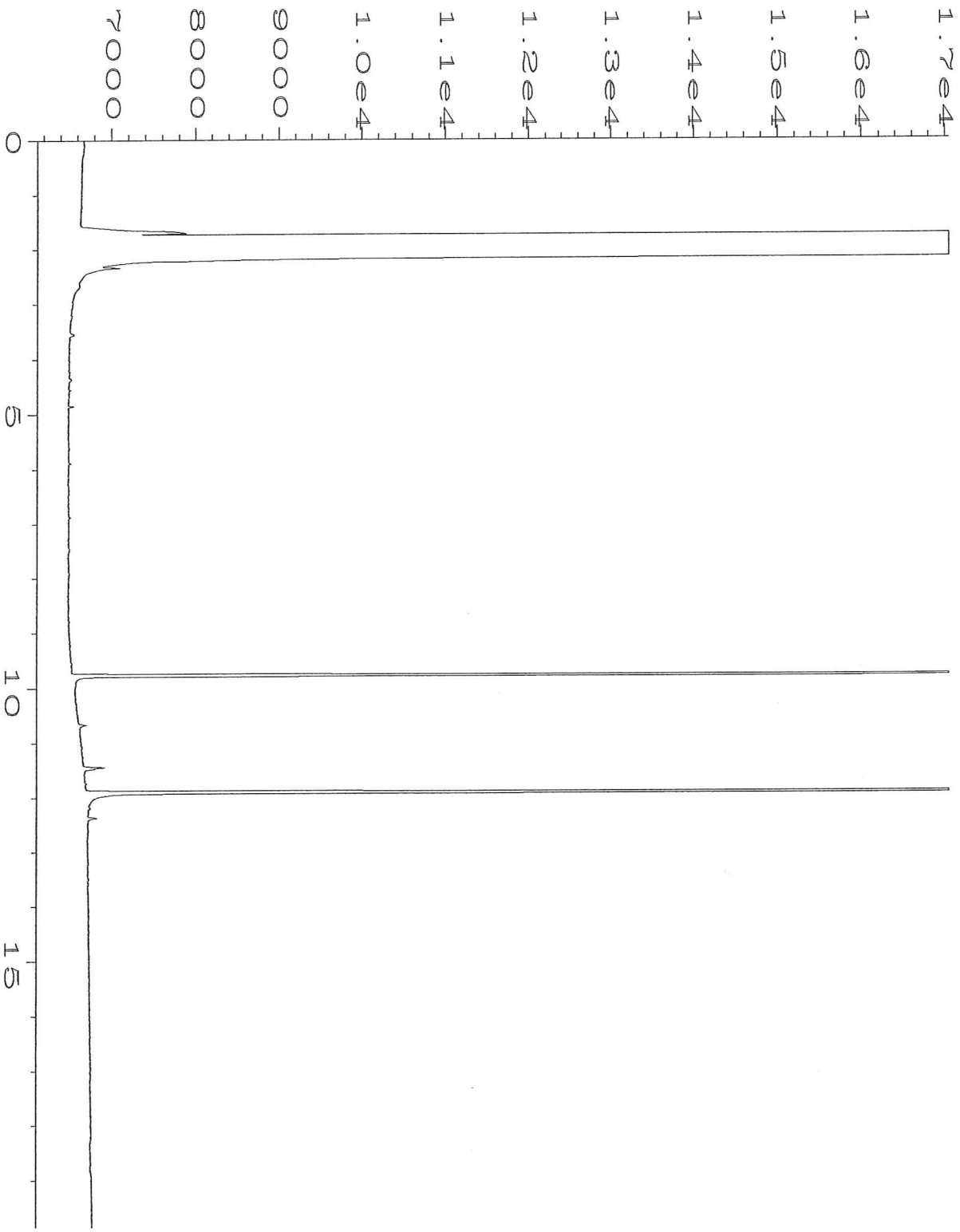
Data File Name : C:\HPCHEM\1\DATA\05-19-10\019F0501.D
Operator : KAO
Instrument : GC1
Sample Name : 005157-04
Time Bar Code:
Acquired on : 19 May 10 04:33 PM
Report Created on: 20 May 10 11:20 AM

Page Number : 1
Vial Number : 19
Injection Number : 1
Sequence Line : 5
Instrument Method: TPHD.MTH
Analysis Method : TPHD.MTH



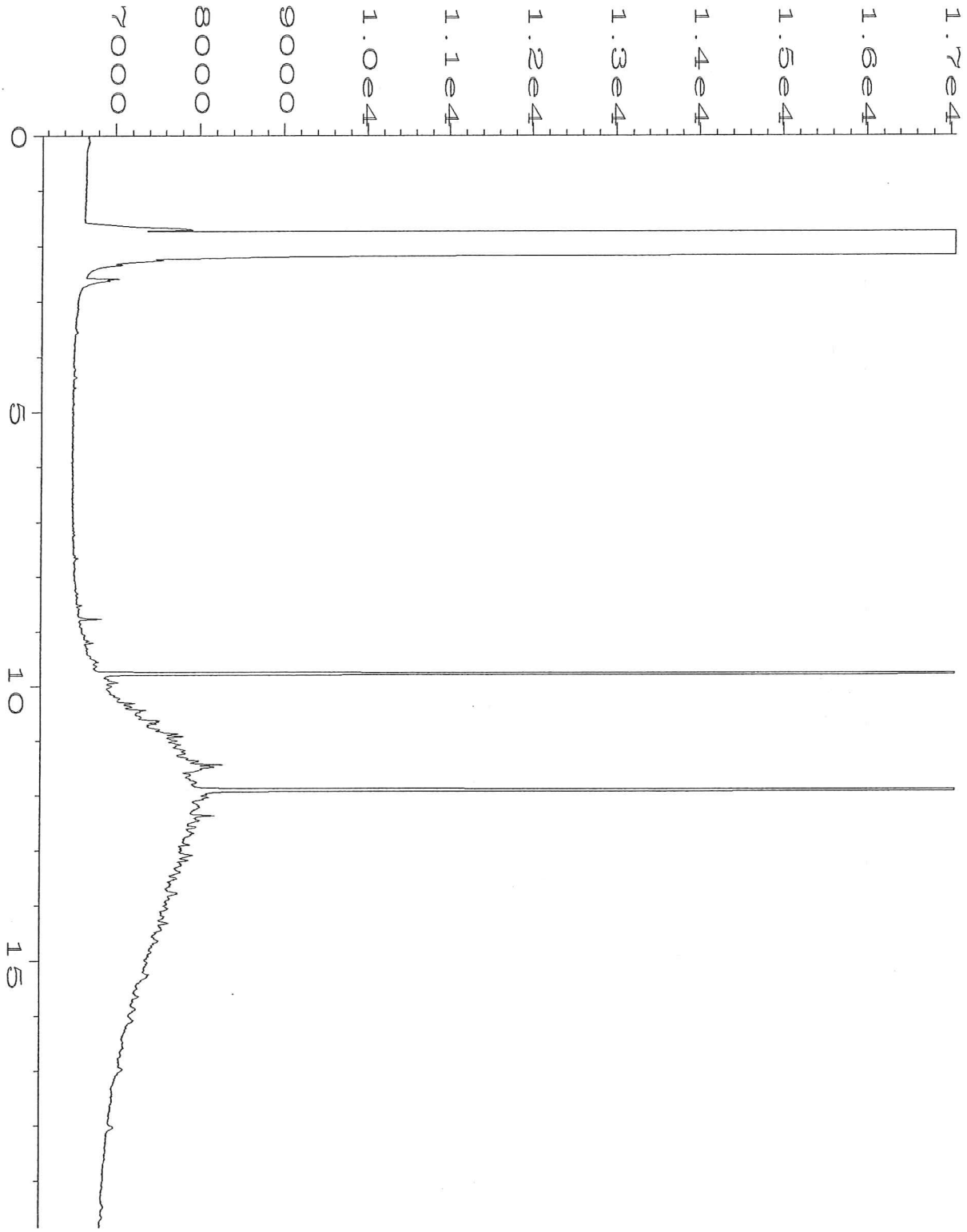
Data File Name : C:\HPCHEM\1\DATA\05-19-10\020F0501.D

Operator	: KAO	Page Number	: 1
Instrument	: GC1	Vial Number	: 20
Sample Name	: 005157-05	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 5
Acquired on	: 19 May 10 04:59 PM	Instrument Method	: TPHD.MTH
Report Created on	: 20 May 10 11:20 AM	Analysis Method	: TPHD.MTH



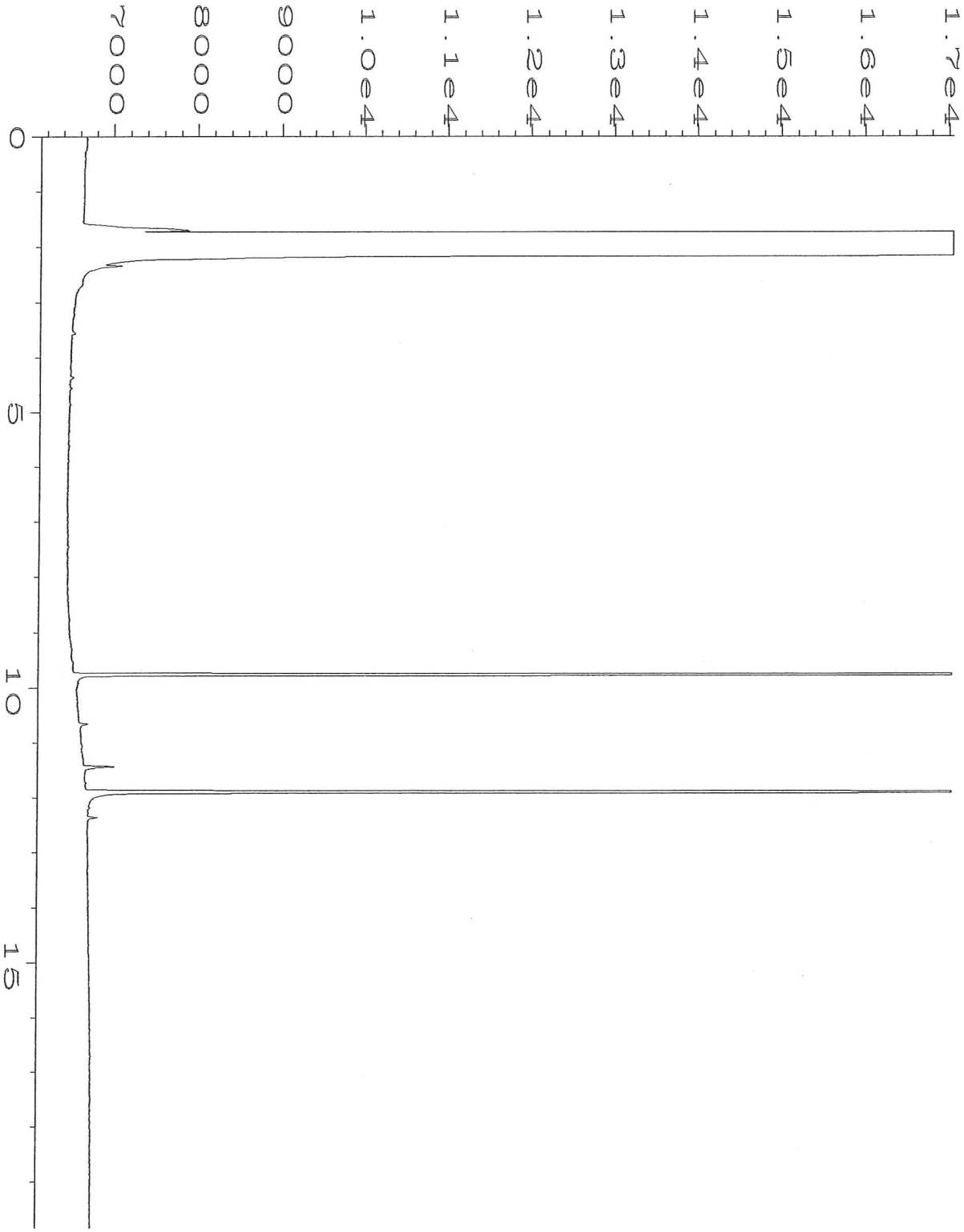
Data File Name : C:\HPCHEM\1\DATA\05-19-10\021F0501.D
Operator : KAO
Instrument : GC1
Sample Name : 005157-06
Time Bar Code:
Acquired on : 19 May 10 05:26 PM
Report Created on: 20 May 10 11:20 AM

Page Number : 1
Vial Number : 21
Injection Number : 1
Sequence Line : 5
Instrument Method: TPHD.MTH
Analysis Method : TPHD.MTH



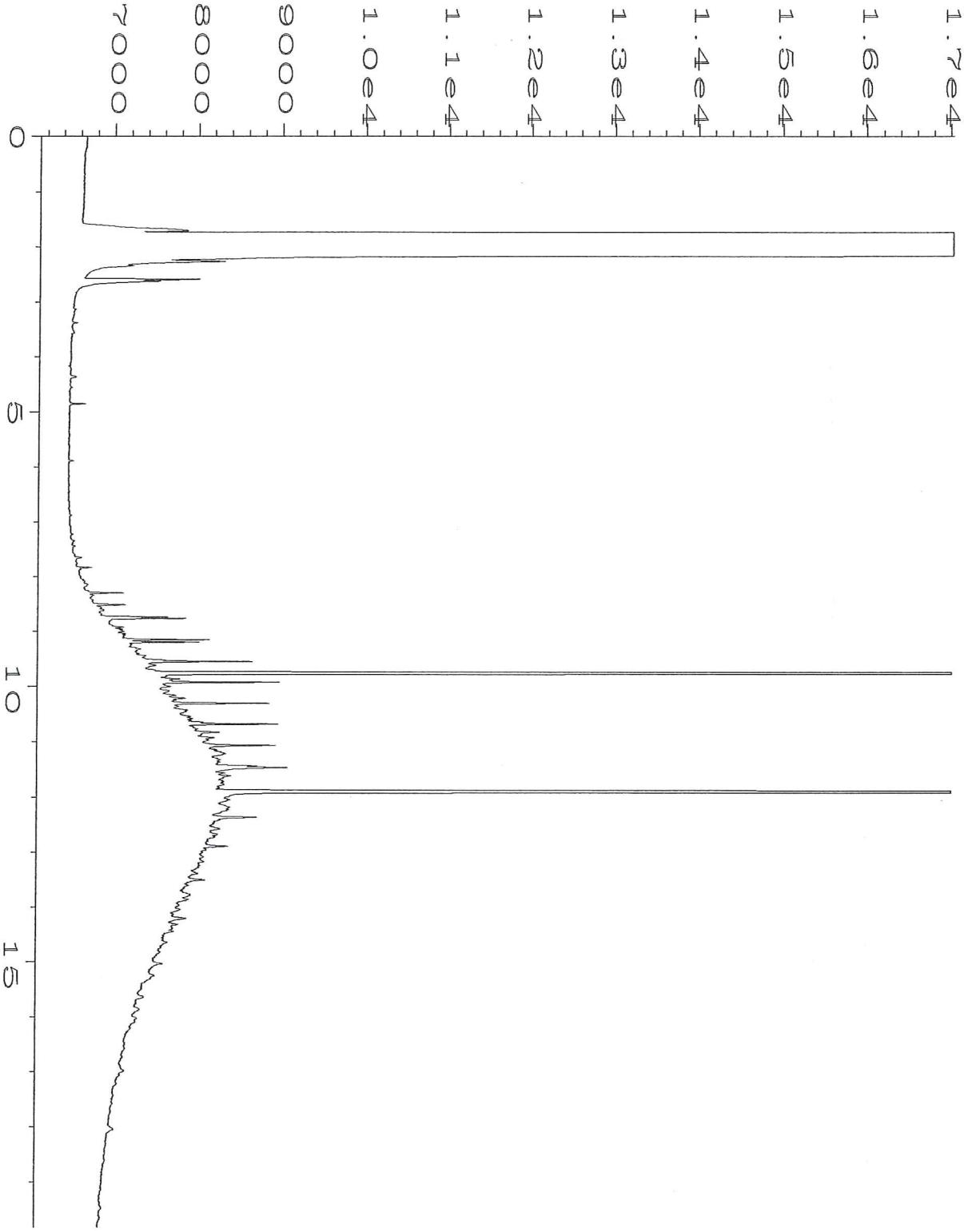
Data File Name : C:\HPCHEM\1\DATA\05-19-10\022F0501.D
Operator : KAO
Instrument : GC1
Sample Name : 005157-07
Run Time Bar Code:
Acquired on : 19 May 10 05:52 PM
Report Created on: 20 May 10 11:21 AM

Page Number : 1
Vial Number : 22
Injection Number : 1
Sequence Line : 5
Instrument Method: TPHD.MTH
Analysis Method : TPHD.MTH



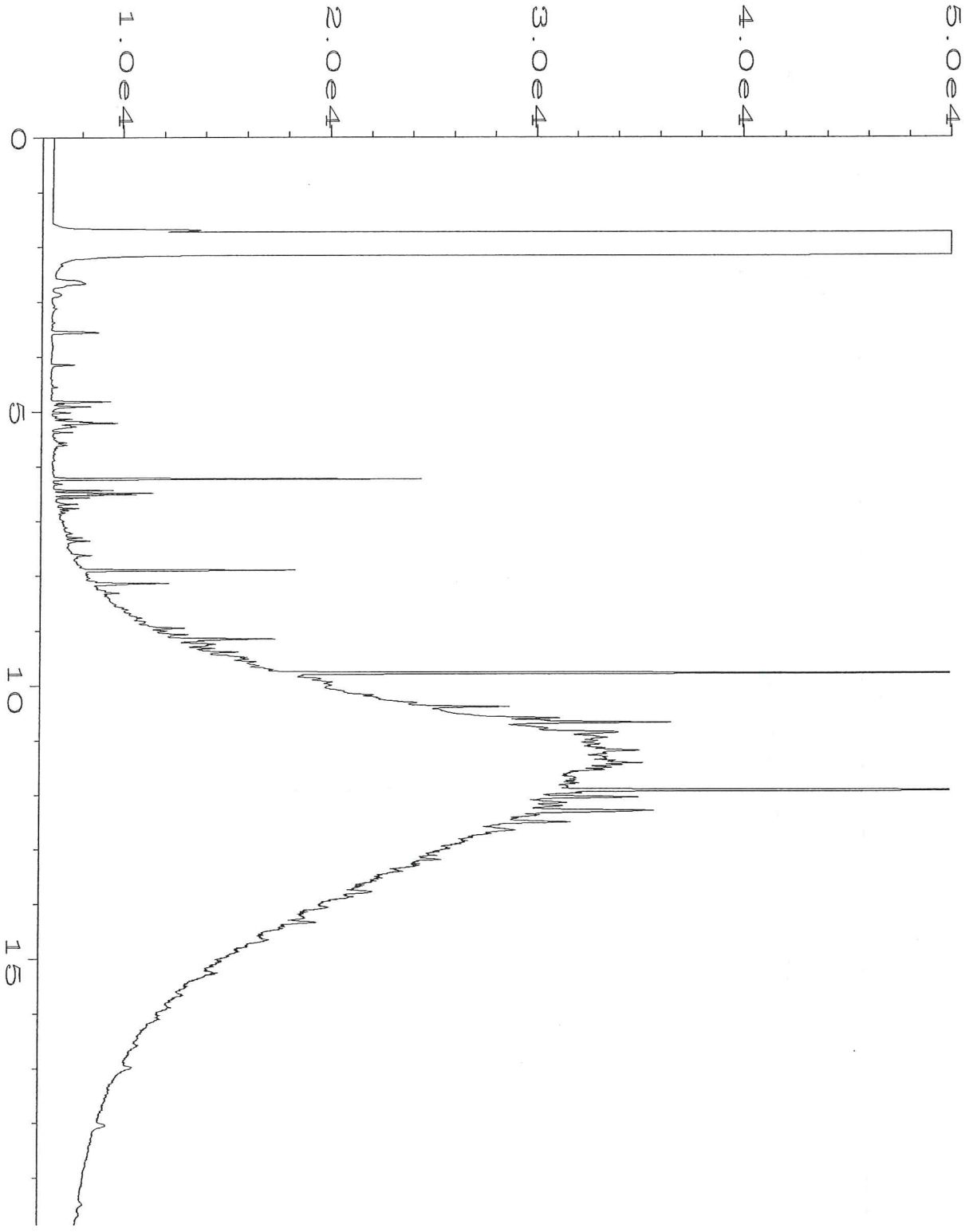
Data File Name : C:\HPCHEM\1\DATA\05-19-10\023F0501.D
Operator : KAO
Instrument : GC1
Sample Name : 005157-08
P n Time Bar Code:
uired on : 19 May 10 06:19 PM
Report Created on: 20 May 10 11:21 AM

Page Number : 1
Vial Number : 23
Injection Number : 1
Sequence Line : 5
Instrument Method: TPHD.MTH
Analysis Method : TPHD.MTH



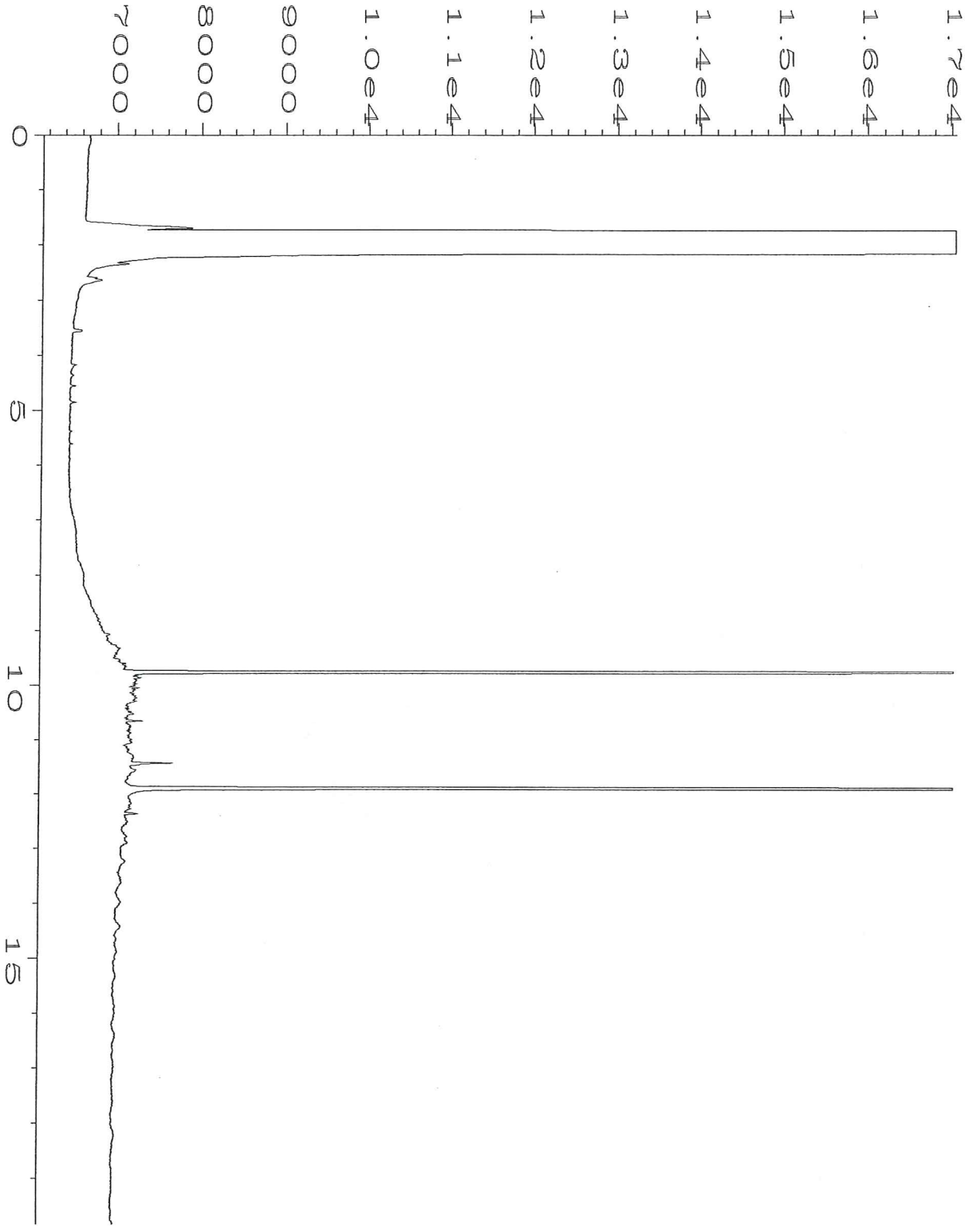
Data File Name : C:\HPCHEM\1\DATA\05-19-10\024F0501.D

Operator	: KAO	Page Number	: 1
Instrument	: GC1	Vial Number	: 24
Sample Name	: 005157-09	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 5
Acquired on	: 19 May 10 06:45 PM	Instrument Method	: TPHD.MTH
Report Created on	: 20 May 10 11:21 AM	Analysis Method	: TPHD.MTH



Data File Name : C:\HPCHEM\1\DATA\05-19-10\025F0501.D
Operator : KAO
Instrument : GC1
Sample Name : 005157-10
Run Time Bar Code:
Acquired on : 19 May 10 07:12 PM
Report Created on: 20 May 10 11:21 AM

Page Number : 1
Vial Number : 25
Injection Number : 1
Sequence Line : 5
Instrument Method: TPHD.MTH
Analysis Method : TPHD.MTH



Data File Name : C:\HPCHEM\1\DATA\05-19-10\026F0501.D
Operator : KAO
Instrument : GC1
Sample Name : 005157-11
Run Time Bar Code:
Acquired on : 19 May 10 07:39 PM
Report Created on: 20 May 10 11:21 AM

Page Number : 1
Vial Number : 26
Injection Number : 1
Sequence Line : 5
Instrument Method: TPHD.MTH
Analysis Method : TPHD.MTH

005 -7

SAMPLE CH OF CUSTODY

ME 05/18/10

2 B03

Send Report To Donna Hewitt

Company D-H Environmental Consulting

Address 2400 NW 80th St PMB #114

City, State, ZIP Seattle, WA, 98117

Phone # 206-632-3123 ~~Fax #~~ e-mail dlhenvironmental@aol.com

SAMPLERS (signature)

PROJECT NAME/NO. James Oil

PO #

REMARKS Please Provide Chromatograms and note if gas/btex present

Page # ____ of ____

TURNAROUND TIME

☒ Standard (2 Weeks)

☐ ~~RUSH~~ ~~24 HR~~

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days

☒ Return samples

☐ Will call with instructions

Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED: TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS						Notes
51810 - 16	01	5/18/10		Soil	1	X											
17	02					X											
18	03					X											
19	04		12:48			X											
20	05		1:13			X											
21	06		1:33			X											
22	07		2:04			X											
23	08		2:12			X											
24	09		2:50			X											
25	10		2:51			X											

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:		Donna Hewitt	DLH	5/18/10	
~~Received by:~~		Michael Erdahl	FBRI	1	
Relinquished by:					
Received by:			Samples received at ____ °C		

FORMS\COC\COC.DOC

005157

SAMPLE CHAIN OF CUSTODY ME 05/18/10

 B03

Send Report To Donna Hewitt

Company DLH Environmental Consulting

Address 2400 NW 80th St PMB #114

City, State, ZIP Seattle, WA, 98117

Phone # 206-632-3123 ~~Fax #~~ e-mail dlhenvironmental@Aol.com

SAMPLERS (signature) [signature]

PROJECT NAME/NO. James Oil

PO #

REMARKS Please provide chromatograms and note if gasoline present

TURNAROUND TIME
- ☒ Standard (2 Weeks)
- ☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL
- ☐ Dispose after 30 days
- ☒ Return samples
- ☐ Will call with instructions

Sample ID	Lab ID	Date	Time	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS						Notes
51810 - 26	11	5/18/10	2:55	Soil	1	X											

(ANALYSES REQUESTED: TPH-Diesel through the unlabeled columns)

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	[signature]	Donna Hewitt	DLH	5/18/10	
Received by:	[signature]	Michael Erdahl	FGBn	5/18/10	
Relinquished by:					
Received by:			Samples received at 21 °C		

FORMS\COC\COC

APPENDIX C

SOIL DISPOSAL DATA

Delivery Ticket Request: 8045979645

CEMEX Soil Remediation
Everett, WA 98213

1876048156

Location: 1876
Customer: 3148668 JAMES OIL COMPANY INC
EVERETT WA 98213
Order:
903 W FIRST ST CLE ELUM
TO EVERETT SOILS
Job# :
P.O. : PACIFIC PRIDE
Product: 1192508
CLASS 3 SOIL DUMPED BY TON

Qty: 37.35 06/18/2010

	LB	MTon	TON
G	113,940	51.68	56.97
T	39,240	17.80	19.62
N	74,700	33.88	37.35

* Predetermined Tare

Today Loads: 1.00
Today Qty: 37.35

FUEL SURCHARGE APPLIES

Carrier:
Vehicle: 2251255 KS171T,K&S MCCANN
Received: [signature]
IN
OUT 1.18 pm

[illegible]

Original

SEE REVERSE SIDE FOR PRODUCT LABEL INFORMATION

You are viewing ticket #1 of 4 ticket(s) on-line.
If you require further delivery information, please contact your CEMEX representative.

Delivery Ticket Request: 8045979647

~ Total impacted soil
1066.97 TONS

CEMEX Soil Remediation
Everett, WA 98213

1876048157

Location: 1876
Customer: 3148668 JAMES OIL COMPANY INC
Order: EVERETT WA 98213
903 W FIRST ST CLE ELUM
TO EVERETT SOILS
Job# :
P.O. : PACIFIC PRIDE
Product: 1192508
CLASS 3 SOIL DUMPED BY TON
113800

Qty: 36.68 05/18/2010

	LB	MTon	TON
G	113,800	51.62	56.90
T	40,440	18.34	20.22
N	73,360	33.28	36.68

* Manual Weight

Today Loads: 2.00
Today Qty: 74.03

FUEL SURCHARGE APPLIES

Carrier:
Vehicle: 2251182 KS369T,K&S MCCANN
Received:
IN 2:40 pm
OUT 3:03 pm

[illegible]

Original SEE REVERSE SIDE FOR PRODUCT LABEL INFORMATION

You are viewing ticket #2 of 4 ticket(s) on-line.
If you require further delivery information, please contact your CEMEX representative.

Delivery Ticket Request: 8045979651

CEMEX Soil Remediation
Everett, WA 98213

1876048159

Location: 1876
Customer: 3148668 JAMES OIL COMPANY INC
Order: EVERETT WA 98213
903 W FIRST ST CLE ELUM .
TO EVERETT SOILS
Job# :
P.O. : PACIFIC PRIDE
Product: 1192508
CLASS 3 SOIL DUMPED BY TON

Qty: 42.95 05/18/2010

	LB	MTon	TON
G	125,480	56.92	62.74
T	39,580	17.95	19.79
N	85,900	38.96	42.95

* Predetermined Tare

Today Loads: 3.00
Today Qty: 116.98

FUEL SURCHARGE APPLIES

Carrier:
Vehicle: 2251181 KS236T,K&S MCCANN
Received:
IN
OUT 4:12 pm

[illegible]

Original SEE REVERSE SIDE FOR PRODUCT LABEL INFORMATION

You are viewing ticket #3 of 4 ticket(s) on-line.
If you require further delivery information, please contact your CEMEX representative.

Delivery Ticket Request: 8045979653

CEMEX **Soil Remediation**
Everett, WA 98213

1876048160

Location: 1876
Customer: 3148668 JAMES OIL COMPANY INC
Order: EVERETT WA 98213
903 W FIRST ST CLE ELUM
TO EVERETT SOILS
Job#:
P.O.: PACIFIC PRIDE
Product 1192508
CLASS 8 SOIL DUMPED BY TON

Qty: 39.08 **05/19/2010**

	LB	MTon	TON
G	119,200	54.07	59.60
T	41,040	18.62	20.52
N	78,160	35.45	39.08

* Predetermined Tare

Today Loads: 4.00
Today Qty: 156.06

FUEL SURCHARGE APPLIES

Carrier:
Vehicle: 2251294 KS215T K&S MCCANN
Received: [signature]

IN
OUT 4.42 pm

[illegible]

Original SEE REVERSE SIDE FOR PRODUCT LABEL INFORMATION

You are viewing ticket #4 of 4 ticket(s) on-line.
If you require further delivery information, please contact your CEMEX representative.

Delivery Ticket Request: 8045995525

CEMEX **Soil Remediation**
Everett, WA 98213

1876048162

Location: 1876
Customer: 3148668 JAMES OIL COMPANY INC
Order: EVERETT WA 98213
903 W FIRST ST CLE ELUM
TO EVERETT SOILS
Job# :
P.O. : PACIFIC PRIDE
Product: 1192508
CLASS 3 SOIL DUMPED BY TON:
AFTER HOURS DUMP 05.18.20

Qty: 30.12 **05/19/2010**

	LB	MTon	TON
G	100,900	45.77	50.45
T	40,660	18.44	20.33
N	60,240	27.32	30.12

* Manual Weight

Today Loads:	2.00
Today Qty:	57.83

FUEL SURCHARGE APPLIES

Carrier:
Vehicle: 2251253 KS207T K&S MCCANN

Received: After Hours Dump 5/18/2010 IN 7:47 am
OUT

Original SEE REVERSE SIDE FOR PRODUCT LABEL INFORMATION

You are viewing ticket #1 of 1 ticket(s) on-line.
If you require further delivery information, please contact your CEMEX representative.

Delivery Ticket Request: 8045752488

CEMEX Soil Remediation
Everett, WA 98213

1876047967

Location: 1876
Customer: 3148668 JAMES OIL COMPANY INC
Order: EVERETT WA 98213
100 NORTH OAKS AVE CLE EL
TO EVERETT SOILS
Job# :
P.O. : PAC FIC PRIDE
Product: 1192508
SERV,CLASS 3 SOIL DUMPED BY TON

Qty: 36.89 04/28/2010

	LB	MTon	TON
G	114,700	52.03	57.35
I	40,920	18.56	20.46
N	73,780	33.47	36.89

* Predetermined Tare

Today Loads: 1.00
Today Qty: 36.89

FUEL SURCHARGE APPLIES

Carrier:
Vehicle: 2251182 KS369T,K&S MCCANN
Received: [signature] IN OUT 7.11 am

[illegible fine print]

Original SEE REVERSE SIDE FOR PRODUCT LABEL INFORMATION

You are viewing ticket #1 of 5 ticket(s) on-line.
If you require further delivery information, please contact your CEMEX representative.

Delivery Ticket Request: 8045752491

CEMEX Soil Remediation
Everett, WA 98213

1876047968

Location: 1876
Customer: 3148668 JAMES OIL COMPANY INC
Order: EVERETT WA 98213
100 NORTH OAKS AVE CLE EL
TO EVERETT SOILS
Job# :
P.O. : PAC FIC PRIDE
Product: 1192508
SERV,CLASS 3 SOIL DUMPED BY TON

Qty: 30.63 04/28/2010

	LB	MTon	TON
G	100,500	45.59	50.25
T	39,240	17.80	19.62
N	61,260	27.79	30.63

* Predetermined Tare

Today Loads: 2.00
Today Qty: 67.52

FUEL SURCHARGE APPLIES

Carrier:
Vehicle: 2251256 KS171T,K&S MCCANN
Received: [signature] IN OUT 7.14 am

[illegible fine print]

Original SEE REVERSE SIDE FOR PRODUCT LABEL INFORMATION

You are viewing ticket #2 of 5 ticket(s) on-line.
If you require further delivery information, please contact your CEMEX representative.

Delivery Ticket Request: 8045752500

CEMEX **Soil Remediation**
Everett, WA 98213

1876047970

Location: 1876
Customer: 3148668 JAMES OIL COMPANY INC
Order: EVERETT WA 98213
100 NORTH OAKS AVE CLE EL
TO EVERETT SOILS
Job# :
P.O. : PAC FIC PRIDE
Product 1192506
SERV,CLASS 3 SOIL DUMPED BY TON
STEVE FORD 35

Qty: 26.83 **04/28/2010**

	LB	MTon	TON
G	92,100	41.78	46.05
T	38,440	17.44	19.22
N	53,660	24.34	26.83

* Manual Weight

Today Loads:	3.00
Today Qty:	94.35

FUEL SURCHARGE APPLIES

Carrier:
Vehicle: 2034263 1876-1.EVERETT SOIL GENERIC
Received: Steve Ford

IN 7:13 am
OUT 7:29 am

Original SEE REVERSE SIDE FOR PRODUCT LABEL INFORMATION

You are viewing ticket #3 of 5 ticket(s) on-line.
If you require further delivery information, please contact your CEMEX representative.

Delivery Ticket Request: 8045752721

CEMEX Soil Remediation
Everett, WA 98213

1876047974

Location: 1876
Customer: 3148668 JAMES OIL COMPANY INC
Order: EVERETT WA 98213
100 NORTH OAKS AVE CLE EL
TO EVERETT SOILS
Job# :
P.O. : PAC FIC PRIDE
Product: 1192508
SERV,CLASS 3 SOIL DUMPED BY TON

Qty: 33.34 04/28/2010

	LB	MTon	TON
G	107,600	48.81	53.80
T	40,920	18.56	20.46
N	66,680	30.25	33.34

* Predetermined Tare

Today Loads: 4.00
Today Qty: 127.69

FUEL SURCHARGE APPLIES

Carrier:
Vehicle: 2251182 K5569T,K&S MCCANN
Received:
IN
OUT 1.16 pm

[illegible]

Original SEE REVERSE SIDE FOR PRODUCT LABEL INFORMATION

You are viewing ticket #4 of 5 ticket(s) on-line.
If you require further delivery information, please contact your CEMEX representative.

Delivery Ticket Request: 8045752725

CEMEX Soil Remediation
Everett, WA 98213

1876047975

Location: 1876
Customer: 3148668 JAMES OIL COMPANY INC
Order: EVERETT WA 98213
100 NORTH OAKS AVE CLE EL
TO EVERETT SOILS
Job# :
P.O. : PAC FIC PRIDE
Product: 1192508
SERV,CLASS 3 SOIL DUMPED BY TON

Qty: 27.68 04/28/2010

	LB	MTon	TON
G	94,600	42.91	47.30
T	39,240	17.80	19.62
N	55 360	25 11	27.68

* Predetermined Tare

Today Loads: 5.00
Today Qty: 155 37

FUEL SURCHARGE APPLIES

Carrier:
Vehicle: 2251255 K8171T,K&S MCCANN
Received:
IN
OUT 1.38 pm

[illegible]

Original SEE REVERSE SIDE FOR PRODUCT LABEL INFORMATION

You are viewing ticket #5 of 5 ticket(s) on-line.

If you require further delivery information, please contact your CEMEX representative.

Delivery Ticket Request: 8045768203

CEMEX Soil Remediation
Everett, WA 98213

1876047977

Location: 1876
Customer: 3148668 JAMES OIL COMPANY INC
Order: EVERETT WA 98213
100 NORTH OAKS AVE CLE EL
TO EVERETT SOILS
Job# :
P.O. : PAC FIC PRIDE
Product: 1192508
SERV.CLASS 3 SOIL DUMPED BY TON

Qty: 15.76 04/29/2010

	LB	MTon	TON
G	59,280	26.89	29.64
T	27,760	12.59	13.88
N	31,520	14.30	15.76

* Manual Weight

Today Loads: 1.00
Today Qty: 15.76

FUEL SURCHARGE APPLIES

Carrier:
Vehicle: 2251182 KS369T,K&S MCCANN
Received: [signature] IN 6:32 am OUT 7.13 am

[illegible]

Original SEE REVERSE SIDE FOR PRODUCT LABEL INFORMATION

You are viewing ticket #1 of 3 ticket(s) on-line.
If you require further delivery information, please contact your CEMEX representative.

Delivery Ticket Request: 8045768206

CEMEX Soil Remediation
Everett, WA 98213

1876047978

Location: 1876
Customer: 3148568 JAMES OIL COMPANY INC
Order: EVERETT WA 98213
100 NORTH OAKS AVE CLE EL
TO EVERETT SOILS
Job# :
P.O. : PAC FIC PRIDE
Product: 1192506
SERV,CLASS 3 SOIL DUMPED BY TON

Qty: 31.78 04/29/2010

	LB	MTon	TON
G	103,140	46.78	51.57
T	39,580	17.95	19.79
N	63,560	28.83	31.78

* Manual Weight

Today Loads: 2.00
Today Qty: 47.54

FUEL SURCHARGE APPLIES

Carrier:
Vehicle: 2251181 KS235T,K&S MCCANN
Received: [signature]
IN
OUT 7.15 am

[illegible]

Original SEE REVERSE SIDE FOR PRODUCT LABEL INFORMATION

You are viewing ticket #2 of 3 ticket(s) on-line.
If you require further delivery information, please contact your CEMEX representative.

Delivery Ticket Request: 8045768218

CEMEX Soil Remediation
Everett, WA 98213

1876047980

Location: 1876
Customer: 3148568 JAMES OIL COMPANY INC
Order: EVERETT WA 98213
100 NORTH OAKS AVE CLE EL
TO EVERETT SOILS
Job# :
P.O. : PAC FIC PRIDE
Product: 1192506
SERV,CLASS 3 SOIL DUMPED BY TON
STEVE FORD 35

Qty: 32.06 04/29/2010

	LB	MTon	TON
G	102,560	46.52	51.28
T	38,440	17.44	19.22
N	64,120	29.08	32.06

* Manual Weight

Today Loads: 3.00
Today Qty: 79.60

FUEL SURCHARGE APPLIES

Carrier:
Vehicle: 2034263 1876-1,EVERETT SOIL GENERIC
Received: Jay De Rosa
IN 7.13 am
OUT 10.46 am

[illegible]

Original SEE REVERSE SIDE FOR PRODUCT LABEL INFORMATION

You are viewing ticket #3 of 3 ticket(s) on-line.
If you require further delivery information, please contact your CEMEX representative.

APPENDIX D

CONCRETE AND DRUM DISPOSAL DATA

clean concrete

Stampede Sand and Gravel, LLC
PO BOX 1691
Woodinville, WA 98072
20-8889073
Phone 509-656-3160

Stampede Sand and Gravel — Site ID: Y1

Load: 1 — RePrint of Ticket: 6659

Account:	HARD1	Hardline Construction (HARD1)
Vehicle:	HARD1	HARDLINE CONSTRUCTION (Edited)
From	CC	Clean Concrete
Material:	15009	Clean Concrete
Job:	JAMES OIL	
PO#:		

Date May 17,10 14:19 JS

Gross	107,580 lb	53.79 tn K
Tare	68,880 lb	34.44 tn K
NET	38,700 lb	19.35 tn

Rate	$ 5.00/TN
Minimum Charge	$ 20.00
MAIN ST CLE ELUM	

Material	$ 96.75
Env Fee (0.00/tn)	$ 0.00
Env Fee (0.00 ea)	$ 0.00
Sales Tax (8.0%)	$ 7.74
GRAND TOTAL	$ 104.49

Due on Account
Received By: _____

KITTITAS COUNTY SOLID WASTE
925 INDUSTRIAL WAY
ELLENSBURG, WA 98926
(509)962-7542

Concrete footing disposal

R E C E I P T

Bill Acct:000666
HARDLINE CONSTRUCTION, LLC
Haul Acct:000666
HARDLINE CONSTRUCTION, LLC

SITE:RY Ryegrass Landfill
DATE:05/11/10 TICKET#:3000978
TIME IN:12:14 ID IN:MLP
TIME OUT:12:14 ID OUT:MLP
TRUCK:HAR01
PO:

	LBS	TONS
GROSS:	00	0.00
TARE:	00	0.00
NET:	00	0.00

VOL: 6.00

MATERIAL:CDL - Ryegrass
RATE: $7.00/cy

TIP FEE:	42.00
SPEC FEE:	0.00
TAX FEE:	1.51
TOTAL FEE:	**$43.51**

SHANE
NOTE:Job-James Oil

********** REPRINTED TICKET **********

INDUSTRIAL CONTAINER SERVICES

EMPTY CONTAINER
Receiving Record

45345

DATE: 5-14-10

☐ **ICS-CA, LLC**
1051 Union St., Montebello, CA 90640
Phone: 323-724-8507

ICS-CO, LLC (Denver)
640 Baseline, Brighton, CO 80601
Phone: 303-659-5095

☐ **ICS-CO, LLC (SLC)**
2021 N. Redwood Rd., S.L.C., Utah 84116
Phone: 801-322-3529

☐ **ICS-WA, LLC**
7152 1st Avenue South, Seattle, WA 98108
Phone: 206-763-2345

Customer: James Oil

Received From:

Address:

City: Enumclaw, WA

Carrier: **Freight Bill No.:**

Driver:
Customer No.:
Ref. Doc.:
Inv./CM#:

55 GAL. CLOSED TOP	
UN>.9	10 .8 / 0
17	59
Deheader	Misc
5	

55 GAL. OPEN TOP	
UN HB	OT HB
OT LL	OT LB

OTHER	
CT	30 GAL. OT
MISC.	SM. SIZES

POLY	
CT	OT

IBC	
275	330

PARTS	
LIDS	RINGS

SCRAP		
CT	OT	POLY
2 / 1000	15 - $10.00	1 - $10.00

Rejects/Returns

Total Drums
99

EMPTY CONTAINER CERTIFICATION

I hereby certify that these containers are "Empty" as required in the California's Title 26, Div 22 Section 66261.7 and 40 CFR 261.7 hazardous material regulations, and that they have been properly prepared for transportation under the regulations of the U.S. Department of Transportation, 49CFR 173.29 ("SEE REVERSE").

Date: 5-14-10 **Customer's Signature:**
Without your signature, we cannot accept your drums.

Please Note: Although our driver has counted and described your containers, these containers will be rechecked at our plant. We will notify you of any changes.

Remarks:

Date: 5-14-10 **Driver's Signature:**

Inbound		
Trailer	Leave Customer	Arrive Plant
40		

Outbound		
Trailer	Leave Plant	Arrive Customer
40		

CUSTOMER

APPENDIX E

PREVIOUS REPORT
WHITE SHIELD, INC. 8/22/2008

Soil Boring and Sampling Report

Pacific Pride Fueling Station

903 1ST Street West

Cle Elum, Washington 98922

August 22, 2008

Submitted To:

Renee Hill Trustee for
Estate of Wayne A. Hill
P. O. Box 368
Cle Elum, WA 98922

Prepared By:

White Shield, Inc.
1520 140th Ave. NE, Suite 100
Bellevue, WA 98005
425-641-7800 office
425-641-7734 fax
Email: wsib@whiteshield.com
http: www.whiteshield.com

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APPENDICES

1.0 INTRODUCTION

White Shield, Inc. (WSI) has prepared this report for Renee Hill, the Trustee for the Estate of Wayne A Hill, to document activities that occurred during the drilling and sampling of five soil borings located at the Pacific Pride fueling facility located at 903 1st Street West, Cle Elum, Washington (Figure 1). The Estate leases a portion of the property to James Oil Company for use as a commercial fueling facility. The purpose of the investigation was to determine if the soil and groundwater have been impacted by petroleum hydrocarbons from spills and releases at the site.

2.0 SITE LOCATION AND BACKGROUND

According to the Kittitas County Assessor's Office, the site is approximately 3.39-acres in size, located at 903 1st Street West in Cle Elum, Kittitas County, Washington (Figure 1) and is owned by the Estate of Wayne A Hill. The Assessor's Office parcel number for the site is 263835. This address is described as being in the Northeast ¼, Southwest ¼, Section 27, Township 20 North, Range 15 east. The parcel is bordered on the south by the I-90 westbound access road, to the east by a Chevron fueling station, the Cle Elum City Cemetery to the north and a logging company equipment storage yard to the west.

James Oil Company currently leases approximately ½ acre of the parcel in the center of the parcel for the Pacific Pride commercial fueling facility. The leased portion of the site contains three fuel-dispensing islands with two associated satellite fuel nozzles under a canopy and two aboveground fuel storage tanks (Figure 2) (Photograph 1 in Appendix A). The tanks are divided tanks and contain unleaded gasoline, "road" diesel and "off-road" diesel fuel. According to the Assessor's office, the site has been a commercial fueling station for over 20 years. The original station was in the eastern portion of the parcel but was moved to the central portion of the parcel in 1999 when Mr. James leased the property. According to Ms Renee Hill, the original underground storage tanks at the "old " station were decommissioned and given a "No Further Action" determination from the Washington State Department of Ecology.

On November 5, 2007, White Shield met with Ms Hill at the site to discuss her concerns regarding the potential for spills and leaks she had observed to contaminate the soil and/or groundwater beneath the site. At the time of the visit, White Shield observed several areas of stained soil adjacent to the concrete fueling pad as well as areas of staining and cracking on the concrete pad (Photographs 2 through 6 in Appendix A).

Based on the visual observations made on November 5, 2007, White Shield made the following conclusion:

- The potential for soil and groundwater contamination was high and the best way to determine if there is a problem would be to drill borings and sample both the soil and groundwater.

On April 22, 2008, White Shield received authorization to drill and sample six borings at the site near the current fueling facility pending the Estate reaching an agreement with Mr. James regarding site access.

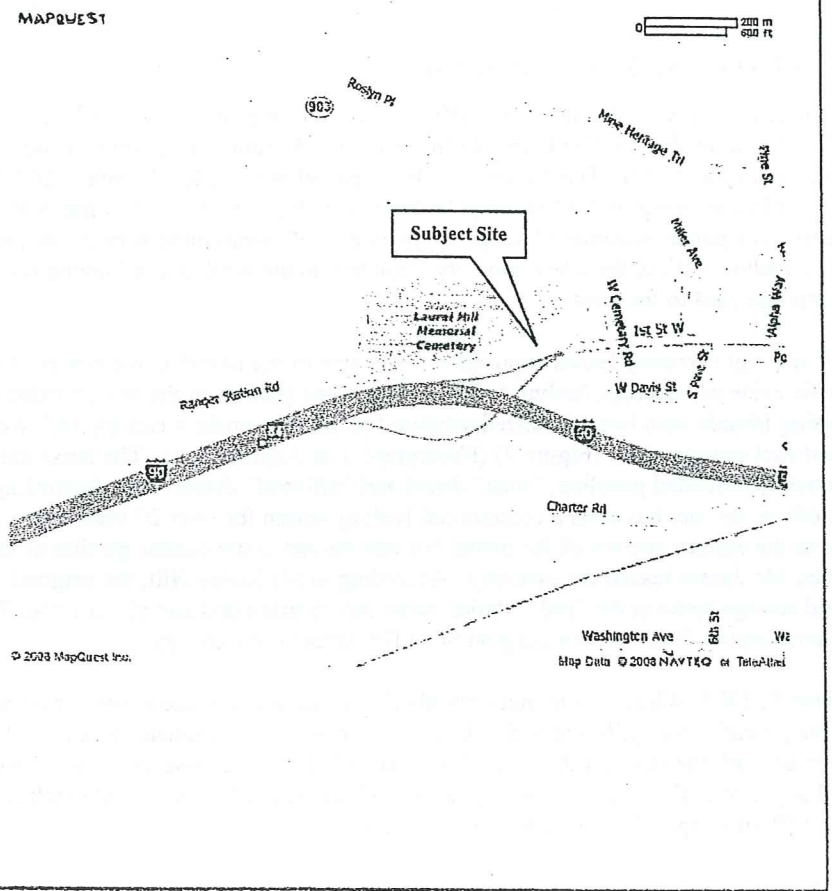
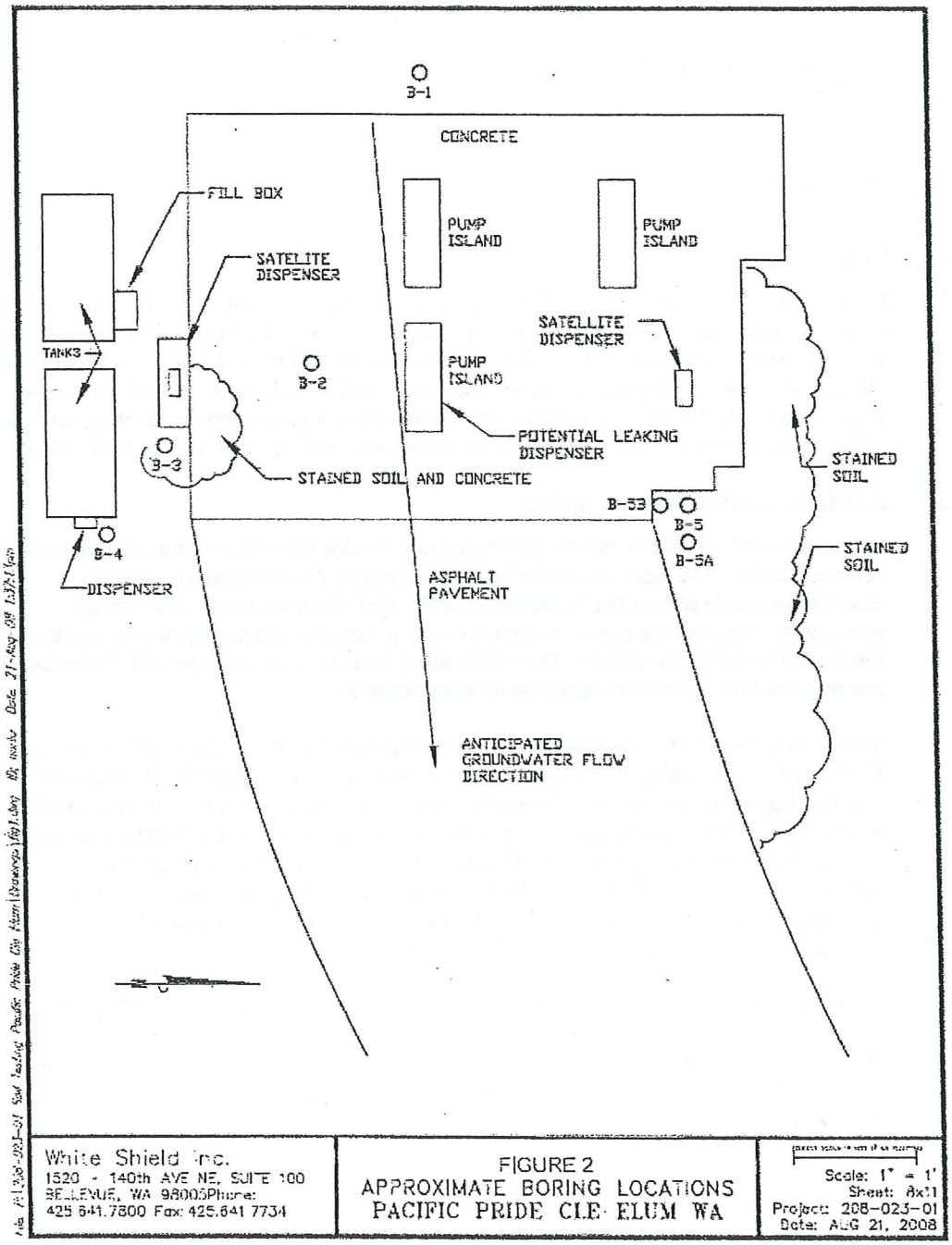


Figure 1

Site Location Map

Pacific Pride
Cle Elum,
Washington


B-1
CONCRETE
FILL BOX
PUMP ISLAND
PUMP ISLAND
SATELITE DISPENSER
SATELLITE DISPENSER
TANK3
B-2
PUMP ISLAND
POTENTIAL LEAKING DISPENSER
B-3
STAINED SOIL AND CONCRETE
STAINED SOIL
B-5B
B-5
B-5A
B-4
DISPENSER
ASPHALT PAVEMENT
STAINED SOIL
ANTICIPATED GROUNDWATER FLOW DIRECTION
White Shield Inc.
1520 - 140th AVE NE, SUITE 100
BELLEVUE, WA 98005Phone:
425 641.7800 Fax: 425.641 7734
FIGURE 2
APPROXIMATE BORING LOCATIONS
PACIFIC PRIDE CLE ELUM WA
Scale: 1" = 1'
Sheet: 8x11
Project: 208-023-01
Date: AUG 21, 2008

On June 26th and 27th, 2008, White Shield oversaw the drilling and sampling of five boreholes. The number of borings was reduced from six to five because only five borings could be completed in the two days that the access agreement allowed for drilling. The borings were not advanced to groundwater below 20 feet because according to Mr. James, the Access Agreement did not permit drilling more than 20 feet bgs.

3.0 METHODOLOGY

3.1 Utility Location

Prior to any site activity White Shield notified the "one-call" public utility notification service of the planned activities. This free service notifies all of the public and private utility companies in the area as well as Kittitas County and the City of Cle Elum of the planned activities so they can mark the locations of their utilities in the public right-of-ways. White Shield also contracted with Utilities Plus, a private utility locating service, to locate the private utilities on the site and attempt to locate the fuel distribution piping.

3.2 Soil Bore Drilling and Sampling

On June 26 and 27th, 2008, White Shield oversaw the drilling and sampling of five bore holes at the site. The locations of the boreholes (Figure 2) were based on visual observations made during the November 5, 2007 visit, the anticipated direction of groundwater flow (to the south), and the location of utilities and piping (water, electric, sewer, fuel distribution piping). They were also placed in areas anticipated to have the potential for the highest concentration of contaminants.

The drilling was conducted by using a hollow-stem auger drill rig operated by Cascade Drilling of Woodinville, Washington at the locations shown in Figure 2 (Photographs 7 and 8 in Appendix A). Because boring B-2 was located adjacent to the fuel distribution piping beneath the concrete pad, the first four feet of the boring was advanced using a vacuum truck operated by Cascade Drilling to remove the soil (Photograph 9 in Appendix A). Once a depth below the fuel distribution piping was reached, the hollow stem auger completed the boring. All White Shield borings were advanced to a maximum depth of 20 feet below ground surface (bgs).

During site activities, Mr. Jeff James was present to observe the drilling and sampling. In addition, Mr. James contracted with Kennedy Jenks Consultants to have a representative on site to observe the drilling and to collect select split samples of the soils White Shield collected for chemical analysis. The representative from Kennedy Jenks Consultants was Mr. Dean Malte.

Because the White Shield sample from borehole B-5 at 2.5 feet bgs contained TPH-Dx greater than the MTCA Method A cleanup level, Mr. James decided to excavate a second hole approximately one foot away to the south and collect a sample at 2.5 feet bgs (Figure 2). Mr. James also decided to collect samples from a third location, B-5B, approximately one foot west of Boring B-5 (Figure 2) at both the surface and at 2.5 feet

bgs (Photographs 10 and 11 in Appendix A). In addition, White Shield also collected a sample of the composited soils removed from Mr. James excavation (Sample B-5-Pile).

3.2.1 Soil Sampling Methods

During drilling, the soils were sampled every 2½ feet using a two-inch diameter split-spoon sampler driven ahead of the auger (Photograph 12 in Appendix A). The samples were field screened using an organic vapor analyzer with a flame ionization detector to estimate the concentration of organic vapors, as well as visual, and olfactory observations. Based on the field screening, a minimum of two samples were collected from each borehole for chemical analysis.

At each sample location within the borings, samples were collected using EPA Method 5035 for volatile samples. For this method a disposable "EasyDraw Syringe®" was used to collect approximately 5 grams of soil for transfer into a pre-weighed 40-milliliter (ml) sample vial. One 125 ml sample jar was also collected at each location for analysis of moisture content and diesel Range Organics (DRO). Each sample was labeled with the borehole number, the sample depth, and the date and time the sample was collected. The samples were then placed in a cooler with ice for delivery to an onsite mobile laboratory operated by Libby Environmental Chemistry of Olympia, Washington for analysis.

All samples were analyzed for gasoline range organics (GRO) including benzene, toluene, ethylbenzene and xylenes (BTEX) and/or for diesel range organics (DRO). The samples for GRO and BTEX were analyzed by Method NWTPH-Gx and EPA Method 8021B, respectively. Samples for DRO were analyzed by Method NWTPH-Dx.

A geologist licensed in the State of Washington was present at the drill rig for the purposes of logging samples, monitoring drilling operations, recording soil and groundwater data, preparing boring logs and collecting soil samples.

The geologist maintained a field log and/or drilling logs during field activities. The field log was maintained on weather-resistant log forms. All data generated during the investigation and any comments or other notes were entered directly into the field log or on drilling logs.

The lithologic log recorded by the geologist during the advancement of each of the boreholes was based on visual inspection of the soil samples supplemented by comments and observations of the driller. The boring logs are presented in Appendix B. Materials were classified using the Unified Soil Classification System and described according to the American Society for Testing and Materials D2488-69, "Description of Soils (Visual Manual Procedure)".

The following information was logged for each boring:

- Boring identification number;
- Name of Driller;
- Name of Geologist;
- Method of Drilling;

- Sampling method, depth, time, and date;
- Organic Vapor Analyzer (OVA) readings (where taken);
- Borehole location;
- Detailed soil descriptions using the Unified Soil Classification System, including soil moisture/saturation condition;
- Depth at which each distinct stratum was encountered (where discernable);
- Depth at which groundwater was first encountered while drilling;
- Depth of static water level (where discernable);
- Depth of the completed soil borings;
- Date started and finished
- Project number; and
- Record of Sample interval.

3.2.2 Decontamination Methods

Before drilling, all drill pipe was steam cleaned to remove potential contaminants. All non-disposable sampling tools were cleaned using an Alcolnox® soap solution and rinsed with de-ionized water after each sample was taken.

3.3 Quality Control

Samples were collected according to industry protocols for the collection, documentation, and handling of samples. Descriptions of soils and sampling depths were carefully logged in the field, and the drillers and geologist confirmed sample depth as each sample was collected. Boring location maps were completed prior to leaving the site to document sampling locations.

Soil samples were placed into pre-cleaned laboratory provided sample containers. The sealed containers were then placed in "Zip-Loc" bags to protect the labels and to prevent potential contamination of the ice chests. Upon sampling, all samples were placed immediately into ice chests containing ice.

All sample labels were checked for accuracy and compared with the Chain-of-Custody documentation, to provide sample documentation QC. Samples were transported and submitted under standard Chain-of-Custody protocols, and were kept refrigerated until delivery to the project laboratory (Libby Environmental Chemistry Laboratory). The laboratory provided standard QA/QC, which included: surrogate recoveries for each sample, method blank results, duplicate analyses, matrix or blank spiked analyses, and duplicate spiked analyses.

3.4 Investigation Derived Waste

Investigation derived waste for this project consisted of excess soil removed from the borings, and rinsate from decontamination. These wastes were separated and placed into fifty five-gallon drums. The drums were stored on site in a locked building not part of the leased property until laboratory results were received from the laboratory. Once the results were received, White Shield, Inc. will arrange for disposal.

4.0 RESULTS AND CONCLUSIONS

The following sections of this report present the results and conclusions from the sampling of soil borehole drillings at Pacific Pride Fueling Station Property located at 903 1st Street West in Cle Elum, Washington. Field activities were completed at the subject site on June 26th and 27th 2008. These activities consisted of:

- Drilling, five soil boreholes at the site (Figure 2),
- Collecting soil samples from the boreholes.
- Collecting split samples from additional samples collected by Kennedy Jenks at Boring locations B-5A and B-5B.

4.1 Site Geologic and Hydrogeologic Conditions

The site is at an elevation of approximately 2000 feet. The topography slopes gently to the south and southeast toward the Yakima River approximately three eighths of a mile to the south and southeast. Based on the topography, it is anticipated that the groundwater flow direction is to south and southeast toward the river. The soils encountered in the borings typically consisted of sandy gravel and cobbles with some silt. Groundwater was not encountered in the borings, although the soil was very damp to wet at approximately 17 to 20 feet bgs (Appendix B).

4.2 Soil and Groundwater Sampling

4.2.1 Soil Sample Results

Ten soil samples were collected from the borings drilled with the auger. Four additional samples were collected as split samples from samples collected by Kennedy Jenks in the vicinity of Boring B-5. Table 1 shows the results of the analyses. The complete laboratory data sheets are attached in Appendix C. TPH-G, benzene and toluene were not detected in any of the samples analyzed. Total xylenes were detected in sample B-5-2.5 at a level of 0.49 mg/kg, well below the State of Washington Model Toxics Control Act (MTCA) Method A cleanup standard of 9 mg/kg (Table 1).

TPH-Dx compounds were detected below the MTCA cleanup standard of 2,000 mg/kg in samples B-3-15 (197 mg/kg), B-5-15 (947 mg/kg) and S-5B-PILE (854 mg/kg) (Table 1). The TPH-DX compounds in samples B-5-2.5 and B-5B-SUR were detected above the MTCA Method A cleanup standard at 11,900 mg/kg and 5,680 mg/kg respectively. Sample B-5B-SUR was a sample of soil collected from the surface at the location of Boring B-5B dug by Mr. James with a posthole digger and a hand auger. This hole and an additional hole B-5A were dug by Mr. James because he did not have a split sample from the White Shield borehole B-5 at 2.5 feet bgs.

Table 1 – Soil Analysis Results

Sample Number	Soil Sample Location	Date Analyzed	Sample Depth	NW TPH-Gx	Volatile Aromatic Hydrocarbons				NWTPH-Dx	
				Gasoline (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylene (mg/kg)	Diesel (mg/kg)	Oil (mg/kg)
B-1-2	Bore Hole B-1	6/27/2008	2'	ND	ND	ND	ND	ND	ND	ND
B-1-17.5	Bore Hole B-1	6/27/2008	17.5'	ND	ND	ND	ND	ND	ND	ND
B-2-5	Bore Hole B-2	6/27/2008	5'	ND	ND	ND	ND	ND	ND	ND
B-2-20	Bore Hole B-2	6/27/2008	20'	ND	ND	ND	ND	ND	ND	ND
B-3-2	Bore Hole B-3	6/27/2008	2'	ND	ND	ND	ND	ND	ND	ND
B-3-15	Bore Hole B-3	6/27/2008	15'	ND	ND	ND	ND	ND	197	ND
B-4-7.5	Bore Hole B-4	6/27/2008	7.5'	ND	ND	ND	ND	ND	ND	ND
B-4-17.5	Bore Hole B-4	6/27/2008	17.5'	ND	ND	ND	ND	ND	ND	ND
B-5-2.5	Bore Hole B-5	6/27/2008	2.5'	ND	ND	ND	ND	0.49	11900*	ND
B-5-15	Bore Hole B-5	6/27/2008	15'	ND	ND	ND	ND	ND	947	ND
B-5A-2.5**	Bore Hole B-5A	6/27/2008	2.5'	ND	ND	ND	ND	ND	ND	ND
B-5B-SUR**	Bore Hole B-5B	6/30/2008	Surface	ND	ND	ND	ND	ND	5680*	ND
S-5B-2.5**	Bore Hole B-5B	6/30/2008	2.5'	NA	NA	NA	NA	NA	ND	ND
S-5B-Pile**	Bore Hole B-5B	6/30/2008	Pile	NA	NA	NA	NA	NA	854	ND
MTCA Method A Cleanup Standards				30	0.03	7	6	9	2000	Heavy Oil 2000/Mineral Oil 4000
Practical Quantitation Limit				10	0.02	0.1	0.05	0.15	25	40

* Note: Product appears to be weathered Diesel.
** Samples are split samples from holes dug and sampled by Mr. Jeff James
ND: Indicates not detected
NA: Indicates not analyzed

The soils in the vicinity of borehole B-5 at 2.5 feet bgs were varied in composition. In Boring B-5 at 2.5 feet bgs, the soil was a brown sandy gravel with wood fragments. In excavation B-5A the soil at 2.5 feet bgs was a brown sandy gravel without the wood fragments. In excavation B-5B, the soil at the surface was a dark gray sandy gravel with a strong diesel odor. This changed to a reddish brown coarse sand with brick fragments at 2.5 feet bgs. The variation in the soils in this area is to be expected since it was reported that the area was filled with wood and construction debris when the site was constructed.

4.3 Conclusions

A minimum of two discrete soil samples were collected from each soil boring at the Pacific Pride Fueling Station in Cle Elum, Washington. With the exception of the area near Boring B-5, the results of the soil samples did not reveal the presence of gasoline or diesel range organics above the MTCA Method A cleanup levels.

The sample results from Boring B-5 and the nearby-excavated holes revealed that diesel contamination above the MTCA Method A cleanup levels is present to at least 2.5 feet bgs. The sample collected from borehole B-5 at 15 feet revealed the presence of diesel range organics but below the MTCA cleanup levels. Because samples collected by Mr. James and split by White Shield did not detect DRO at 2.5 feet bgs but did detect DRO at the surface, and because the soil material at each sample location was varied in composition, White Shield concludes that the contamination most likely is heterogeneously distributed in the soils.

Groundwater was not encountered and therefore not sampled in any of the borings drilled at the site. However, because the soil was very damp to wet at approximately 17 to 20 feet bgs, groundwater is anticipated to be located above 25 to 30 feet bgs.

5.0 RECOMMENDATIONS

Based on the conclusions, White Shield makes the following recommendations:

- **Notify the Washington State Department of Ecology of the Sample Results**
  Because at least one of the soil samples at boring B-5 contained levels of diesel range organics above the MTCA Method A Cleanup Levels, the Washington State Department of Ecology needs to be notified of the findings within 90 days per WAC 173-340-300 (2)(a). Submittal of this report to Ecology's Central Regional Office will satisfy the notification requirements.

- **Clean Up the Contaminated Soil in the Vicinity of Boring B-5**
  White Shield recommends that the soil in the vicinity of Boring B-5 that is above the MTCA Cleanup Levels be excavated and disposed of. It is not anticipated that the volume of soils to be removed would be very large. Upon excavation the remaining soils on the sidewalls and base of the excavation should be re-sampled and analyzed for diesel range and gasoline range organics.

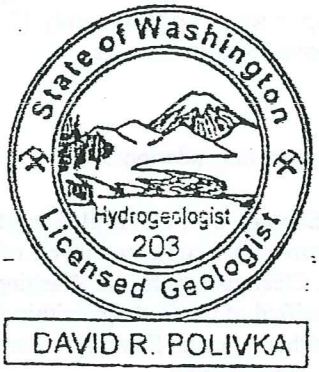
- **Obtain Groundwater Samples at the Site.**
  Because groundwater samples could not be obtained and the soils near the base of Borings B-5 and B-3 were wet and contained Diesel Range Organics, it is recommended that additional borings be installed to sample groundwater. At least three borings should be drilled in order to determine groundwater flow direction and gradient. One well should be in the anticipated up gradient direction and two borings in the down gradient direction.

6.0 LIMITATIONS

In performing our professional services, WSI uses a degree of care ordinarily exercised under similar circumstances by members of our profession. No warranty, expressed or implied, is made or intended. Our conclusions and recommendations, developed from our field and laboratory investigation reported herein, are based upon this firm's understanding of the project and are in concurrence with generally accepted practice. Should questions arise from this report please contact White Shield Inc. at 425-641-7800 or 503-547-0100.

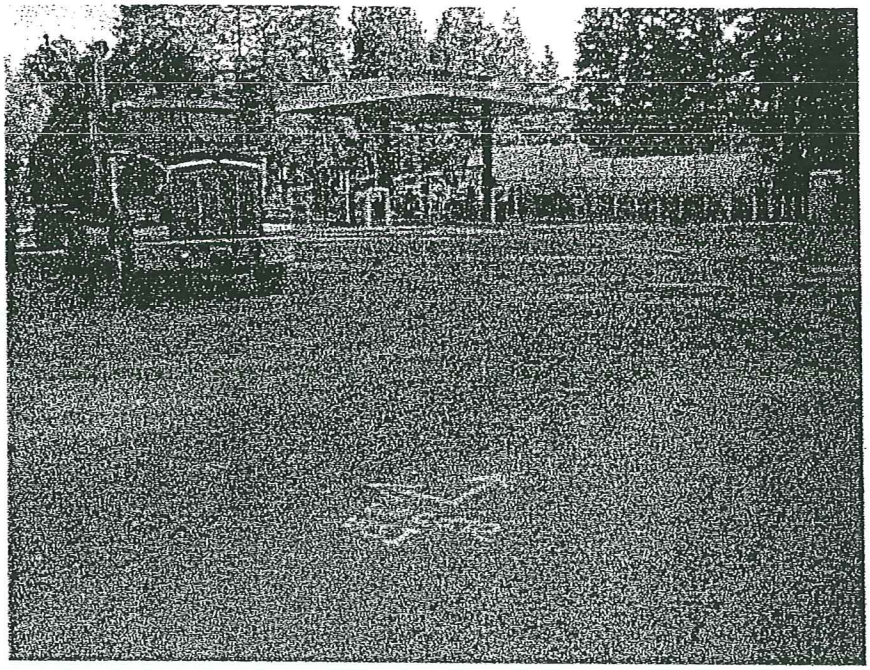
David R. Polivka P.G./ P.HG.
Environmental Services Manager

Stuart Fricke
Principal-in-Charge

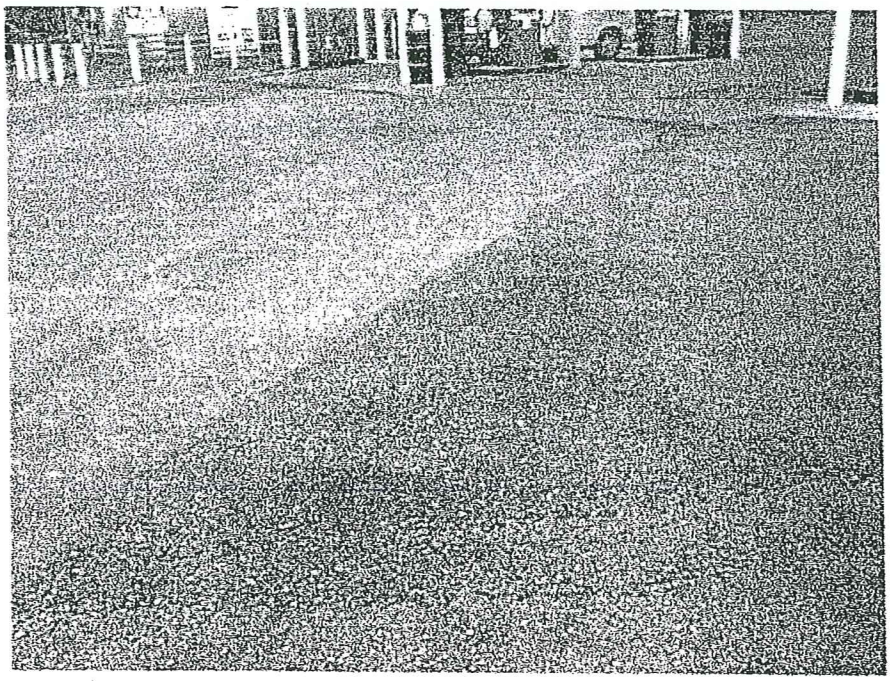


APPENDIX A

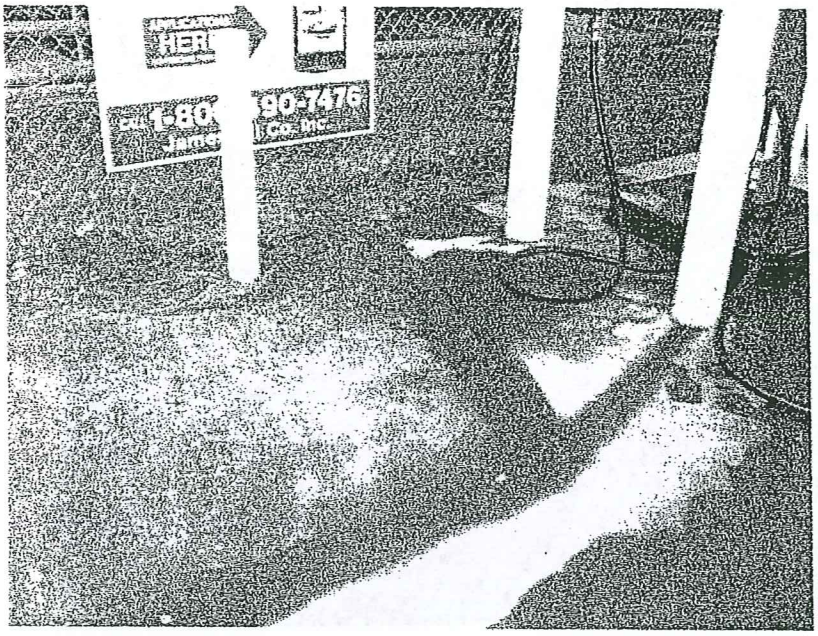
Photographs



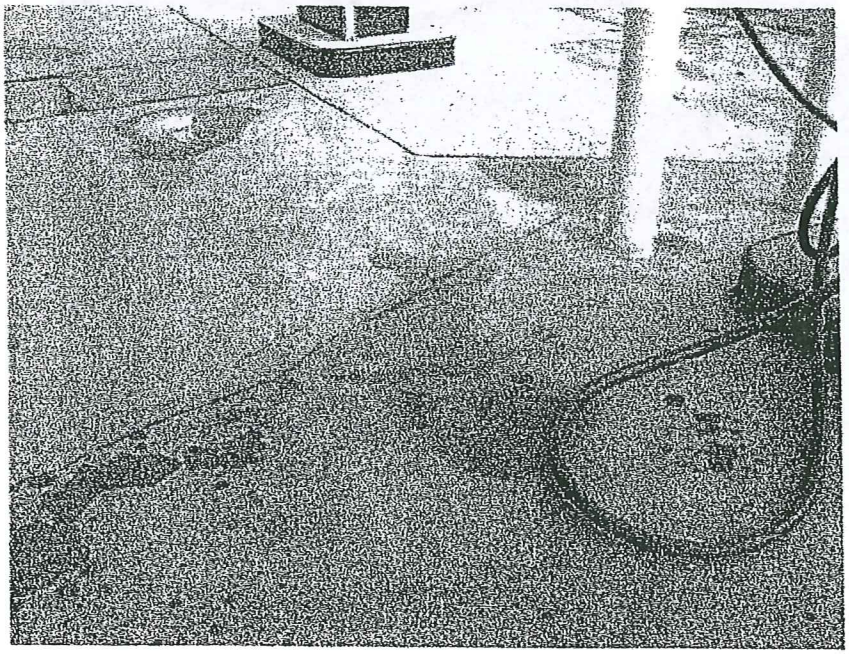
Photograph 1 – Cle Elum Pacific Pride Site Overview Looking Southwest



Photograph 2 – Staining in Soil Southeast of Fueling Pad, November 5, 2007
(South of Boring Location B-5)

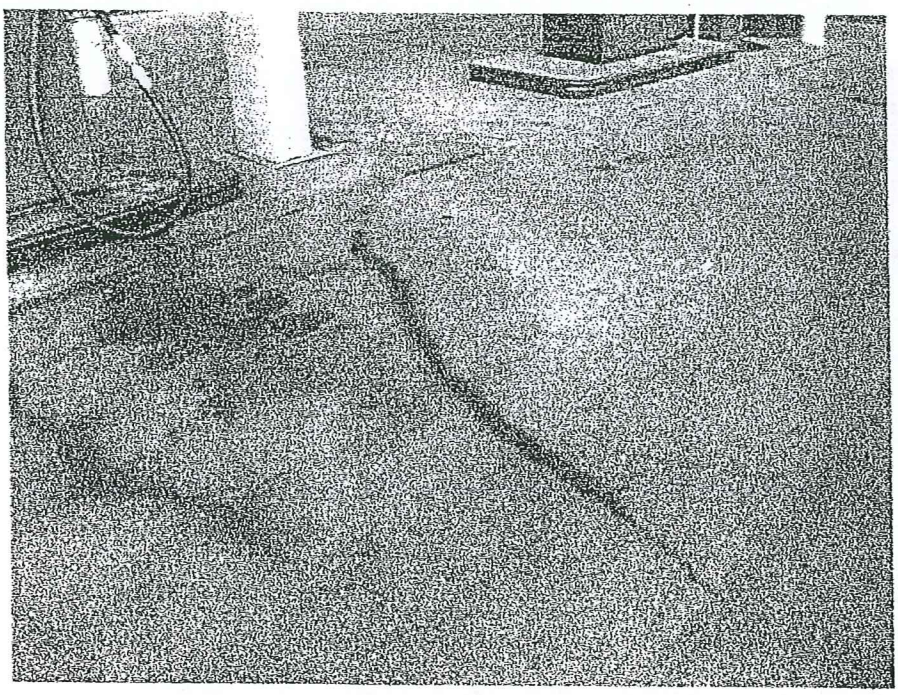


Photograph 3 – Staining and Spillage on Soil and Concrete, November 5, 2007 (Near Boring Location B-3)

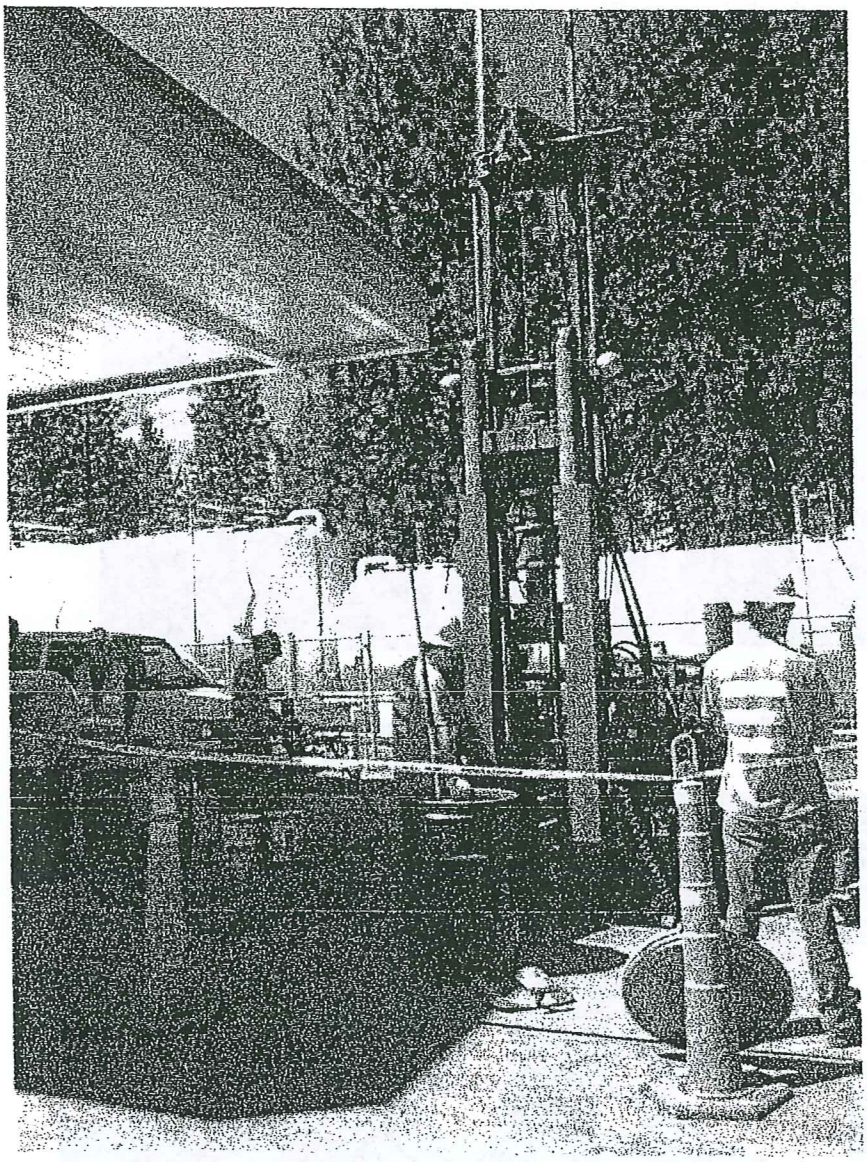


Photograph 4 – Staining and Cracking in Concrete November 5, 2007 (West side of Pump Islands Near Boring Location B-2)

Photograph 5 – Staining in Soil, November 5, 2007 (Boring location B-5)

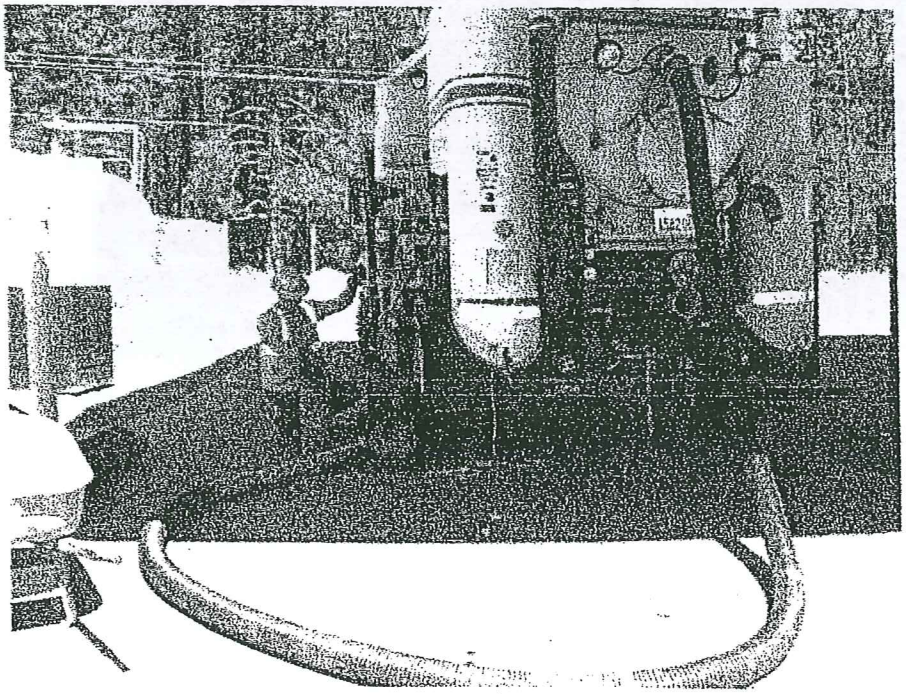


Photograph 6 – Staining and Cracking in Concrete, November 5, 2007 on East Side of the Pump Islands



Photograph 7 – Hollow Stem Auger Drilling at Boring B - 1

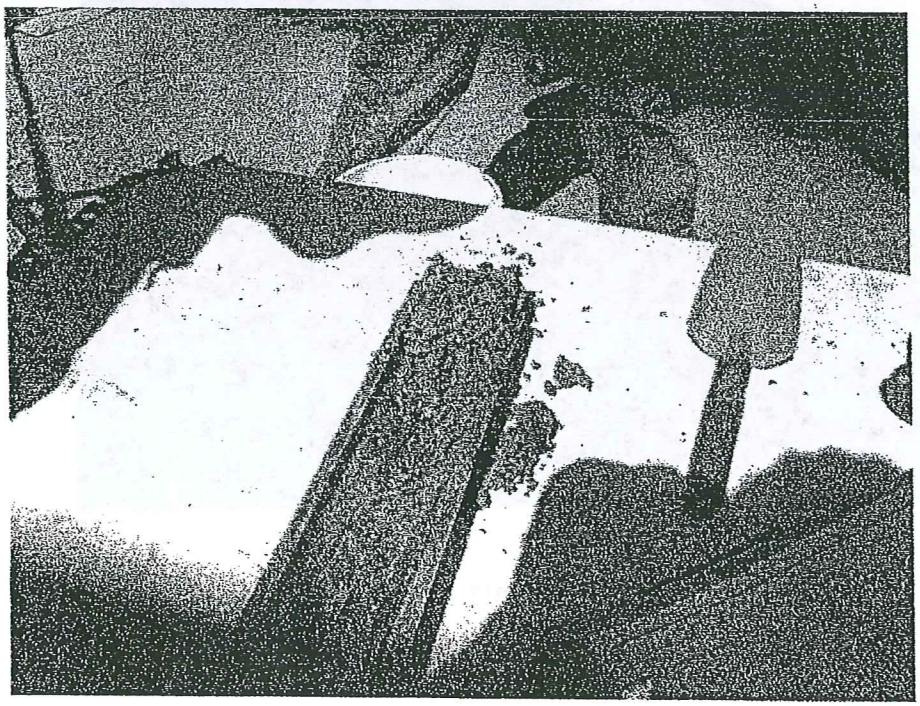
Photograph 8 – Hollow stem Auger Drilling at Boring B-1



Photograph 9 – Vacuum Truck Drilling at Boring B-2

Photograph 10 – Mr. James excavating Borehole B-5A

Photograph 11 – Mr. James excavating Borehole B-5B



Photograph 12 – Split Spoon Sampler with Soil from Boring B-1

APPENDIX A

Boring Logs

LOG OF BOREHOLE

Project No.:208-023-01
Project: Cle Elum Pacific Pride
Location: Cle Elum, WA
Drilling Method: Auger
Sampling Method: 2" Split Spoon

Client: Renee Hill

Driller: Cascade Drilling

Bolehole No.: B-1
Date: 6/26/2008
Logged By: DRP
Reference Elevation:Ground Surface
Groundwater Level: NA

DEPTH (ft)	TIME	SAMPLE	SAMPLE No.	Blow Count (blows per 1/2 foot)	Graphic Log/	GEOLOGICAL DESCRIPTION AND CLASSIFICATION	ODOR	OVA (ppm)
	1047					Asphalt Driveway		
						Brown Sandy Silt (moist-dry), some gravel, some black		
		X	B-1-2	10/20/30		rock fragments	none	0
	1058					3" Brown fine and sandy gravel - gravelly sand		
5		X		50 for 6"		Brown sandy gravel (dry) (some fine silt)	none	0
		X		50 for 6"		Same	none	0
10		X		50 for 6"		Same		
		X		50 for 6"		Brown sandy gravel (some silt) (moist)	none	0
15		X		50 for 4"		Brown sandy gravel (some fine silt) (moist)	none	0
	1120							
		X	B-1-17.5	50 for 6"		Brown sand - coarse, sandy gravel, (some silt) (wet)		
	1139					Kennedy Jenks Environmental Consulting Splits Sample B-1-17.5		
20		X		50 for 6"		Boring Terminated at 20.5' and backfilled with Bentonite		
25								

LOG OF BOREHOLE

Project No.:208-023-01
Project: Cle Elum Pacific Pride
Location: Cle Elum, WA
Drilling Method: Auger
Sampling Method: 2" Split Spoon

Client: Renee Hill

Driller: Cascade Drilling

Bolehole No.: B-2
Date: 6/27/2008
Logged By: DRP
Reference Elevation:Ground Surface
Groundwater Level: NA

DEPTH (ft)	TIME	SAMPLE	SAMPLE No.	Blow Count (blows per 1/2 foot)	Graphic Log/	GEOLOGICAL DESCRIPTION AND CLASSIFICATION	ODOR	OVA (ppm)
						5" Concrete		
						3/8 Minus gravel		
						Peagravel		
					3'	Boulder removed by Cascade Drilling Vacuum truck	none	0
5						Brown sandy gravel (some fine silt) (moist)		
	1448	X	B-2-5	25/50 for 6"			none	0
		X		50 for 6"		Same	none	0
10								
		X		50 for 6"		Same	none	0
	1526							
		X		50 for 6"		Refusal at 12', Drill pulls out, goes back down.	none	0
						Brown sandy gravel (some silt), (Gravel to 2")		
15								
		X		50 for 6"		Brown sandy gravel (some silt) (moist)	none	0
		X		50 for 6"		Brown sandy gravel (some silt) (moist - dry)		
	1634							
20								
		X	B-2-20	50 for 6"		Brown sandy gravel (slightly more silt)		
	1644							
						Boring Terminated at 21' and backfilled with Bentonite		
25								

LOG OF BOREHOLE

Project No.:208-023-01
Project: Cle Elum Pacific Pride
Location: Cle Elum, WA
Drilling Method: Auger
Sampling Method: 2" Split Spoon

Client: Renee Hill

Driller: Cascade Drilling

Bolehole No.: B-3
Date: 6/27/2008
Logged By: DRP
Reference Elevation:Ground Surface
Groundwater Level: NA

DEPTH (ft)	TIME	SAMPLE	SAMPLE No.	Blow Count (blows per 1/2 foot)	Graphic Log/	GEOLOGICAL DESCRIPTION AND CLASSIFICATION	ODOR	OVA (ppm)
						1" Minus Gravel and fine Sand		
	1143	X	B-3-2	10/10/50 for 6"		Brown clayey silt (moist), (some roots)	none	0
5		X		30/50 for 6"		Brown sandy gravel	none	0
		X		50 for 6"		Brown coarse sandy gravel,some (quartz gravel and some silt)	none	0
10		X		50 for 6"		1" Recovery (moist to wet)		
		X		50 for 6"		Brown coarse sandy gravel (some silt) (wet)	none	0
15	1210	X	B-3-15	50 for 5"		Less silt (wet)	none	0.6
		X		50 for 5"			none	0.4
20	1219	X	B-2-20	No Recovery		Boring Terminated at 21 feet and backfilled with bentonite		
25								

LOG OF BOREHOLE

Project No.:208-023-01
Project: Cle Elum Pacific Pride
Location: Cle Elum, WA
Drilling Method: Auger
Sampling Method: 2" Split Spoon

Client: Renee Hill

Driller: Cascade Drilling

Bolehole No.: B-4
Date: 6/26/2008
Logged By: DRP
Reference Elevation:Ground Surface
Groundwater Level: NA

DEPTH (ft)	TIME	SAMPLE	SAMPLE No.	Blow Count (blows per 1/2 foot)	Graphic Log/	GEOLOGICAL DESCRIPTION AND CLASSIFICATION	ODOR	OVA (ppm)
						Brown sandy gravel (gravel to 2" size)		
	845	X		20/50 for 6"		Much gravel and cobbles	none	0
5	855	X		70 for 6"			none	0
	905	X	B-4-7.5	50 for 6"			none	0
10	915	X		50 for 6"		Red brown sandy gravel (gravel to 2" to 4") (dry)	none	0
	923	X		50 for 5"		Brown coarse sandy gravel (moist)	none	0
15		X		50 for 6"		Brown coarse sandy gravel, (wet to moist) (gravel to 2" diameter).	none	0
	941	X	B-4-17.5	50 for 6"			none	0.2
20	1002	X		50 for 6"		Brown coarse sandy gravel (moist)	none	0
						Boring Terminated at 21.5' and backfilled with bentonite		
25								

LOG OF BOREHOLE

Project No.:208-023-01
Project: Cle Elum Pacific Pride
Location: Cle Elum, WA
Drilling Method: Auger
Sampling Method: 2" Split Spoon

Client: Renee Hill

Driller: Cascade Drilling

Bolehole No.: B-5
Date: 6/27/2008
Logged By: DRP
Reference Elevation:Ground Surface
Groundwater Level: NA

DEPTH (ft)	TIME	SAMPLE	SAMPLE No.	Blow Count (blows per 1/2 foot)	Graphic Log/	GEOLOGICAL DESCRIPTION AND CLASSIFICATION	ODOR	OVA (ppm)
						3/8 Minus gravel with sand (dry)		
	1011	X	B-5-2.5	3/2/1		Brown sandy gravel with wood fragments	slight	0
5		X		17/20/22		Brown sandy gravel (gravel to 2" diameter) (dry)	slight	0
		⊠		50 for 6"		Brown sandy gravel (moist)	none	0
10		⊠		50 for 6"		Brown coarse sandy gravel (wet)	none	0
		⊠		50 for 6"			none	0
15	1030	⊠	B-5-15	50 for 3"		Brown sandy gravel (some gray silt layers) (cobbles to 2" diameter)	slight	4
		⊠		50 for 6"		Brown sandy gravel (some brown silt) (wet) Driller says no water in hole	none	0
20	1045	⊠		50 for 6"		Brown coarse sandy gravel (gravel to 2" diameter) (Wet) No water in hole		
						Boring terminated at 21' and backfilled with bentonite		
25								

APPENDIX A

Laboratory Data Sheets

Libby Environmental, Inc.

4139 Libby Road N.E., Olympia, WA 98506-2518

July 2, 2008

Dave Polivka
Whiteshield, Inc.
1520 140TH Avenue NE
Bellevue, WA 98005

Dear Mr. Polivka:

Please find enclosed the analytical data report for the Cle Elum Pacific Pride Project located in Cle Elum, Washington. Mobile Lab Services were conducted on June 27, 2008. Soil samples were analyzed for BTEX by EPA Method 8021B, Gasoline by NWTPH-Gx, and Diesel & Oil by NWTPH-Dx/Dx Extended.

The results of the analyses are summarized in the attached tables. Applicable detection limits and QA/QC data are included. An invoice for this analytical work is also enclosed. All soil samples are reported on a dry weight basis.

Libby Environmental, Inc. appreciates the opportunity to have provided analytical services for this project. If you have any further questions about the data report, please give me a call. It was a pleasure working with you on this project, and we are looking forward to the next opportunity to work together.

Sincerely,

Sherry L. Chilcutt
President
Libby Environmental, Inc.

Phone (360) 352-2110 · Fax (360) 352-4154 · libbyenv@aol.com

LIBBY ENVIRONMENTAL CHEMISTRY LABORATORY

CLE ELUM PACIFIC PRIDE PROJECT
Cle Elum. Washington
Whiteshield Environmental. Inc.
Client Project #208-023-01

Analyses of Gasoline (NWTPH-Gx) & BTEX (EPA Method 8021B) in Soil

Sample Number	Date Analyzed	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Gasoline (mg/kg)	Surrogate Recovery (%)
Method Blank	6/27/08	nd	nd	nd	nd	nd	117
LCS	6/27/08	97%	117%				113
B-4-7.5	6/27/08	nd	nd	nd	nd	nd	74
B-4-17.5	6/27/08	nd	nd	nd	nd	nd	75
B-4-17.5 Dup	6/27/08	nd	nd	nd	nd	nd	80
B-1-2	6/27/08	nd	nd	nd	nd	nd	84
B-1-17.5	6/27/08	nd	nd	nd	nd	nd	80
B-5-2.5	6/27/08	nd	nd	nd	0.49	nd	67
B-5-15	6/27/08	nd	nd	nd	nd	nd	81
B-3-2	6/27/08	nd	nd	nd	nd	nd	130
B-3-15	6/27/08	nd	nd	nd	nd	nd	73
B-2-5	6/27/08	nd	nd	nd	nd	nd	82
B-2-20	6/27/08	nd	nd	nd	nd	nd	78
B-5A-2.5	6/27/08	nd	nd	nd	nd	nd	73
B-5B-SUR	6/27/08	nd	nd	nd	nd	nd	74
B-4-17.5 MS	6/27/08	115%	132%				123
Practical Quantitation Limit		0.02	0.10	0.05	0.15	10	

"nd" Indicates not detected at the listed detection limits.
"int" Indicates that interference prevents determination.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE (Trifluorotoluene): 65% TO 135%

ANALYSES PERFORMED BY: Sherry Chilcutt

LIBBY ENVIRONMENTAL CHEMISTRY LABORATORY

CLE ELUM PACIFIC PRIDE PROJECT
Cle Elum, Washington
Whiteshield Environmental, Inc.
Client Project #208-023-01

Analyses of Diesel & Oil (NWTPH-Dx/Dx Extended) in Soil

Sample Number	Date Analyzed	Surrogate Recovery (%)	Diesel (mg/kg)	Mineral Oil (mg/kg)	Oil (mg/kg)
Method Blank	6/27/2008	89	nd	nd	nd
B-4-7.5	6/27/2008	99	nd	nd	nd
B-4-17.5	6/27/2008	92	nd	nd	nd
B-1-2	6/27/2008	92	nd	nd	nd
B-1-2 Dup	6/27/2008	103	nd	nd	nd
B-1-17.5	6/27/2008	98	nd	nd	nd
B-5-2.5	6/27/2008	int	11900 *	nd	nd
B-5-15	6/27/2008	int	947 *	nd	nd
B-3-2	6/27/2008	135	nd	nd	nd
B-3-15	6/27/2008	126	197 *	nd	nd
B-2-5	6/27/2008	107	nd	nd	nd
B-2-20	6/27/2008	100	nd	nd	nd
B-5A-2.5	6/27/2008	91	nd	nd	nd
Practical Quantitation Limit			25	40	40

* Product appears to be weathered Diesel.
"nd" Indicates not detected at the listed detection limits.
"int" Indicates that interference prevents determination.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE (2-F Biphenyl): 65% TO 135%

ANALYSES PERFORMED BY: Sherry Chilcutt

LIBBY ENVIRONMENTAL CHEMISTRY LABORATORY

CLE ELUM PACIFIC PRIDE PROJECT
Cle Elum, Washington
Whiteshield Environmental, Inc.
Client Project #208-023-01

Analyses of Diesel & Oil (NWTPH-Dx/Dx Extended) in Soil

Sample Number	Date Analyzed	Surrogate Recovery (%)	Diesel (mg/kg)	Mineral Oil (mg/kg)	Oil (mg/kg)
Method Blank	6/30/2008	93	nd	nd	nd
B-5B-SUR	6/30/2008	int	5680 *	nd	nd
B-5B-SUR Dup	6/30/2008	int	6810 E *	nd	nd
S-5B-2.5	6/30/2008	83	nd	nd	nd
S-SB-Pile	6/30/2008	int	854 *	nd	nd
Practical Quantitation Limit			25	40	40

* Product appears to be weathered Diesel.
"nd" Indicates not detected at the listed detection limits.
"int" Indicates that interference prevents determination.

E Concentration is above linear calibration range and is an estimate
ACCEPTABLE RECOVERY LIMITS FOR SURROGATE (2-F Biphenyl): 65% TO 135%

ANALYSES PERFORMED BY: Sherry Chilcutt

APPENDIX F

PREVIOUS GROUNDWATER REPORT WHITE SHIELD, INC. 11/30/2009

Soil Boring and Groundwater Sampling Report

Former Pacific Pride Fueling Station

903 1ST Street West

Cle Elum, Washington 98922

November 30, 2009

Submitted To:

Renee Hill Trustee for
Estate of Wayne A. Hill
P. O. Box 368
Cle Elum, WA 98922

White Shield Project # 208-023-03

Prepared By:

White Shield, Inc.
23412 68th Avenue
Kent, Washington 98032
253-867-6070 office
253-867-6075 fax
Email: wsib@whiteshield.com
http: www.whiteshield.com

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LIST OF FIGURES

APPENDICES

1.0 INTRODUCTION

White Shield, Inc. (WSI) has prepared this report for Renee Hill, the Trustee for the Estate of Wayne A. Hill, to document activities that occurred during the attempted drilling of four borings and the sampling of groundwater from those borings at the former Pacific Pride fueling facility located at 903 1st Street West, Cle Elum, Washington (Figure 1). The Estate formerly leased a portion of the property to James Oil Company for use as a commercial fueling facility. The purpose of the investigation was to determine if the groundwater beneath the site has been impacted by petroleum hydrocarbons from spills and releases at the site. A previous investigation by White Shield in June 2008 revealed the presence of petroleum hydrocarbons in the soil above the State of Washington Model Toxics Control Act (MTCA) Method A cleanup levels in a portion of the site.

2.0 SITE LOCATION AND BACKGROUND

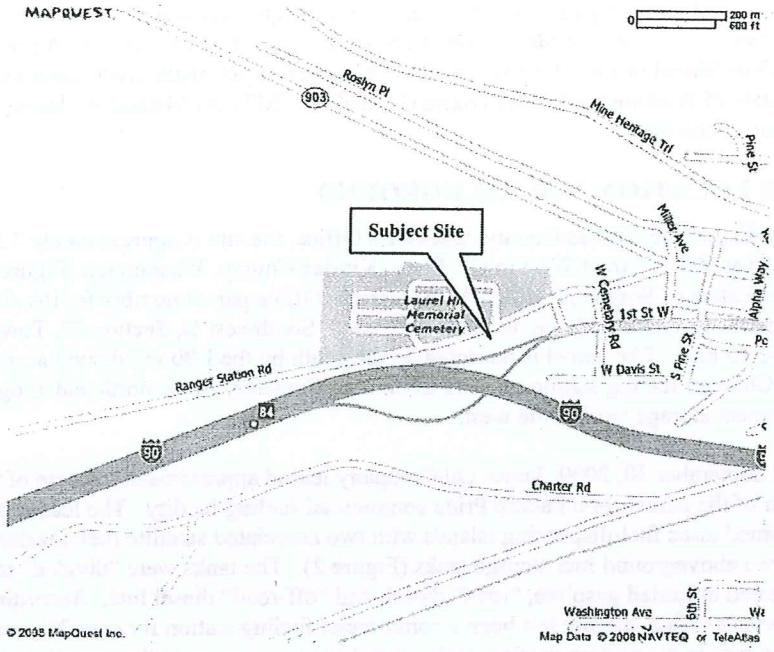
According to the Kittitas County Assessor's Office, the site is approximately 3.39-acres in size, located at 903 1st Street West in Cle Elum, Kittitas County, Washington (Figure 1) and is owned by the Estate of Wayne A. Hill. The Assessor's Office parcel number for the site is 263835. This address is described as being in the Northeast ¼, Southwest ¼, Section 27, Township 20 North, Range 15 East. The parcel is bordered on the south by the I-90 westbound access road, to the east by a Chevron fueling station, the Cle Elum City Cemetery to the north and a logging company equipment storage yard to the west.

Until September 30, 2009, James Oil Company leased approximately ½ acre of the parcel in the center of the parcel for a Pacific Pride commercial fueling facility. The leased portion of the site contained three fuel-dispensing islands with two associated satellite fuel nozzles under a canopy and two aboveground fuel storage tanks (Figure 2). The tanks were "divided" tanks and contained unleaded gasoline, "road" diesel, and "off-road" diesel fuel. According to the Assessor's office, the site has been a commercial fueling station for over 20 years. The original station was in the eastern portion of the parcel but was moved to the central portion of the parcel in 1999 when Mr. James leased the property. According to Ms. Renee Hill, the original underground storage tanks at the "old" station were decommissioned and given a "No Further Action" determination from the Washington State Department of Ecology.

On November 5, 2007, White Shield met with Ms. Hill at the site to discuss her concerns regarding the potential for spills and leaks she had observed to contaminate the soil and/or groundwater beneath the site. At the time of the visit, White Shield observed several areas of stained soil adjacent to the concrete fueling pad as well as areas of staining and cracking on the concrete pad.

Based on the visual observations made on November 5, 2007, White Shield made the following conclusion:

- The potential for soil and groundwater contamination was high and the best way to determine if there is a problem would be to drill borings and sample both the soil and groundwater.



WHITE SHIELD, INC.
SURVEYING ENVIRONMENTAL SERVICES

23412 68TH AVE S,
KENT, WA.
98032
Phone: 253-867-6070
Fax:253-867-6075

Figure 1

Site Location Map

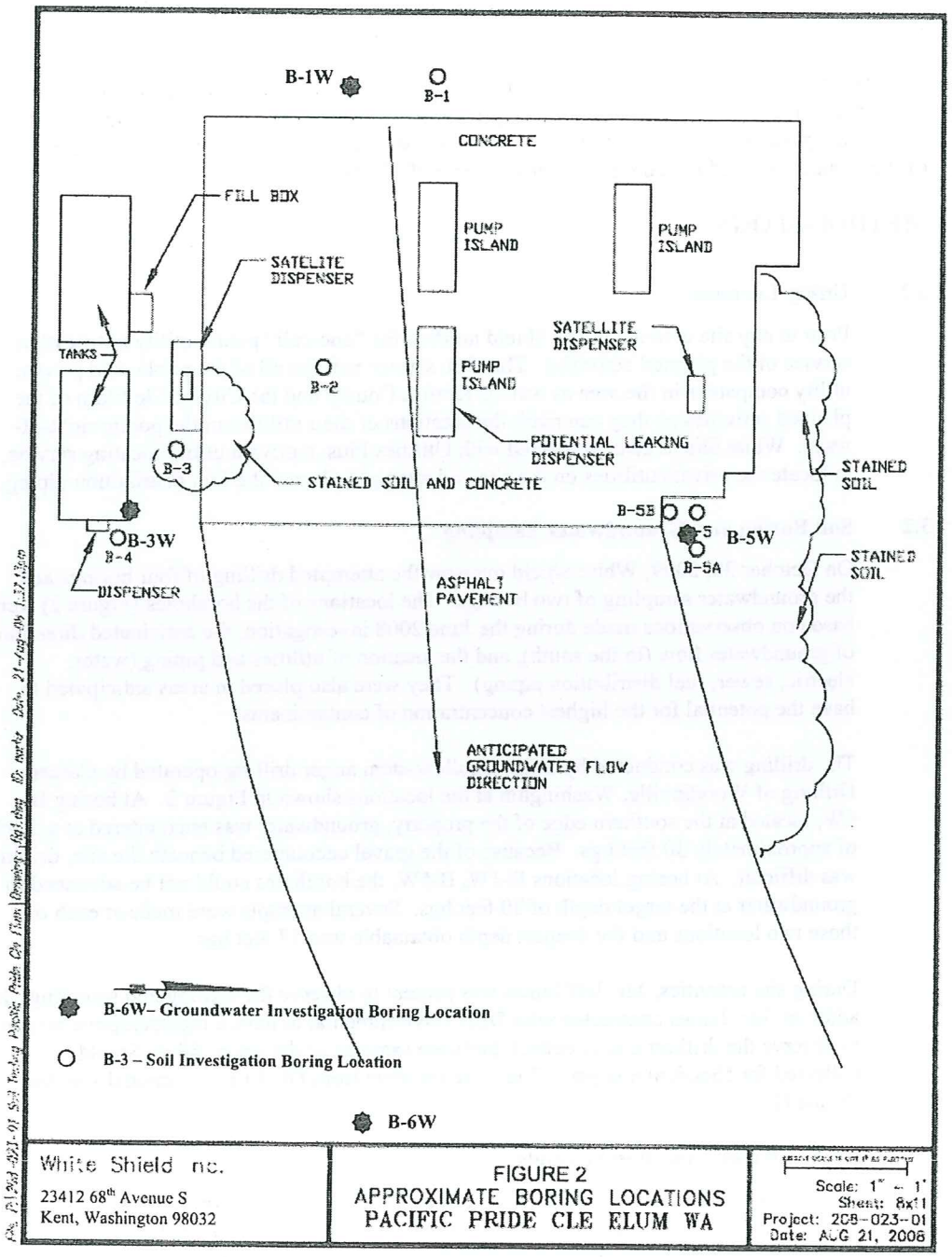
Pacific Pride
Cle Elum, Washington

JOB No.

DATE

SHEET

OF


B-1W
B-1
CONCRETE
FILL BOX
PUMP ISLAND
PUMP ISLAND
SATELITE DISPENSER
SATELLITE DISPENSER
TANKS
B-2
PUMP ISLAND
POTENTIAL LEAKING DISPENSER
B-3
STAINED SOIL AND CONCRETE
STAINED SOIL
B-5B
B-5W
B-5A
B-3W
B-4
DISPENSER
ASPHALT PAVEMENT
STAINED SOIL
ANTICIPATED GROUNDWATER FLOW DIRECTION
B-6W– Groundwater Investigation Boring Location
B-3 – Soil Investigation Boring Location
B-6W
White Shield inc.
23412 68th Avenue S
Kent, Washington 98032
FIGURE 2
APPROXIMATE BORING LOCATIONS
PACIFIC PRIDE CLE ELUM WA
Scale: 1" = 1'
Sheet: 8x11
Project: 208-023-01
Date: AUG 21, 2008

On June 26 and 27, 2008, White Shield oversaw the drilling and sampling of five boreholes. The borings were not advanced to groundwater below 20 feet because according to Mr. James, the Access Agreement did not permit drilling more than 20 feet bgs.

On October 28, 2008, White Shield submitted a proposal to drill four additional borings at the site to the depth of groundwater and sample the groundwater beneath the site. For various reasons related to legal actions being taken by the Estate and Mr. James, the soil boring and the sampling of the groundwater did not take place until October 29, 2009.

3.0 METHODOLOGY

3.1 Utility Location

Prior to any site activity White Shield notified the "one-call" public utility notification service of the planned activities. This free service notifies all of the public and private utility companies in the area as well as Kittitas County and the City of Cle Elum of the planned activities so they can mark the locations of their utilities in the public right-of-ways. White Shield also contracted with Utilities Plus, a private utility locating service, to locate the private utilities on the site and attempt to locate the fuel distribution piping.

3.2 Soil Boring and Groundwater Sampling

On October 29, 2009, White Shield oversaw the attempted drilling of four borings and the groundwater sampling of two borings. The locations of the boreholes (Figure 2) were based on observations made during the June 2008 investigation, the anticipated direction of groundwater flow (to the south), and the location of utilities and piping (water, electric, sewer, fuel distribution piping). They were also placed in areas anticipated to have the potential for the highest concentration of contaminants.

The drilling was conducted by using a hollow-stem auger drill rig operated by Cascade Drilling of Woodinville, Washington at the locations shown in Figure 2. At boring B-6W, located at the southern edge of the property, groundwater was encountered at a depth of approximately 30 feet bgs. Because of the gravel encountered beneath the site, drilling was difficult. At boring locations B-1W, B-5W, the boreholes could not be advanced to groundwater at the target depth of 30 feet bgs. Several attempts were made at each of those two locations and the deepest depth obtainable was 17 feet bgs.

During site activities, Mr. Jeff James was present to observe the drilling and sampling. In addition, Mr. James contracted with DLH Environmental to have a representative on site to observe the drilling and to collect duplicate samples of the water White Shield collected for chemical analysis. The representative from DLH Environmental was Ms Donna Hewitt.

3.2.1 Water Sampling Methods

At borings B-6 W and B-1W, the soils were sampled for lithologic description every 2½ feet using a two-inch diameter split-spoon sampler driven ahead of the auger. The soil at borings B-3W and B-5W were not sampled because the nature

of the soils was consistent across the site and because the borings were adjacent to previous soil borings where soils had been sampled for chemical analysis.

At each location where groundwater was encountered, a temporary PVC well was constructed within the auger and the auger pulled up slightly to reveal the well screen. The well was constructed of 2-inch diameter PVC 0.010-inch slot screen and solid riser pipe. To assist with the filtering of suspended solids within the temporary well sand was placed around the outside of the screen. In an attempt to remove silt, the influence of drilling, and yield a representative sample of the groundwater, each well was initially purged using a disposable bailer. This was followed by purging using a peristaltic pump and tubing lowered down the well casing. The water in boring B-6W appeared to clear during purging; however, the water in boring B-3W did not. This may be a result of a differing amount of finer grained soils at that location. Based on the analytical results discussed below, the suspended sediment in the water from the well did not have an effect on the representativeness sample.

After purging, the groundwater from each of the two borings was sampled by filling clean laboratory provided bottles using the peristaltic pump and polyethylene tubing that was dedicated to each boring. The sample bottles consisted of one 1-liter amber bottle and two 40-milliliter vials for each sample.

Each sample was labeled with the borehole number and the date and the time, the sample was collected. After sampling, the samples were placed in a cooler with ice for delivery to the analytical laboratory (Libby Environmental Chemistry of Olympia, Washington) for analysis. At boring B-6W a second set of sample bottles were collected as a "blind" duplicate sample and labeled B-2W.

All samples were analyzed for gasoline range organics (GRO) including Benzene, Toluene, Ethylbenzene And Xylenes (BTEX) and/or for diesel range organics (DRO). The samples for GRO and BTEX were analyzed by Method NWTPH-Gx and EPA Method 8021B, respectively. Samples for DRO were analyzed by Method NWTPH-Dx.

A geologist licensed in the State of Washington was present at the drill rig for the purposes of logging samples, monitoring drilling operations, recording soil and groundwater data, preparing boring logs, and collecting water samples. The geologist maintained a field log and/or drilling logs during field activities.

The lithologic log recorded by the geologist during the advancement of each of the boreholes was based on visual inspection of the soil samples supplemented by comments and observations of the driller.

3.2.2 Decontamination Methods

Prior to drilling, all drill pipe was steam cleaned to remove potential contaminants. All non-disposable sampling tools were cleaned using an Alcolnox® soap solution and rinsed with de-ionized water.

3.3 Quality Control

Samples were collected according to industry protocols for the collection, documentation, and handling of samples. In the field:

- Each boring was purged in an attempt to remove silt, the influence of drilling, and yield a representative sample of the groundwater
- Samples were collected using dedicated tubing to prevent potential cross-contamination.
- Samples were placed into pre-cleaned laboratory provided sample containers.
- A "blind" duplicate sample was collected to check laboratory precision. Boring location maps were completed prior to leaving the site to document sampling locations.
- Samples were placed immediately into ice chests containing ice.

All sample labels were checked for accuracy and compared with the Chain-of-Custody documentation to provide sample documentation QC. Samples were transported and submitted under standard Chain-of-Custody protocols, and were kept refrigerated until delivery to the project laboratory (Libby Environmental Chemistry Laboratory). The laboratory provided standard QA/QC, which included: surrogate recoveries for each sample, method blank results, duplicate analyses, matrix or blank spiked analyses, and duplicate spiked analyses.

3.4 Investigation Derived Waste

Investigation derived waste for this project consisted of excess soil removed from the borings, purge water from purging the borings, and rinsate from decontamination. These wastes were separated and placed into fifty-five gallon drums. The drums were stored on site until laboratory results were received from the laboratory. Once the results were received, White Shield, Inc. arranged for disposal.

4.0 RESULTS AND CONCLUSIONS

The following sections of this report present the results and conclusions from the sampling of groundwater from two borings at the former Pacific Pride Fueling Station Property located at 903 1st Street West in Cle Elum, Washington. Field activities were completed at the subject site on October 29, 2009. These activities consisted of:

- Attempting to drill, four boreholes to groundwater at the site (Figure 2),
- Collecting water samples from two of the boreholes.

4.1 Site Geologic and Hydrogeologic Conditions

The site is at an elevation of approximately 2000 feet. The topography slopes gently to the south and southeast toward the Yakima River approximately three eighths of a mile to the south and southeast. Based on the topography, it is anticipated that the groundwater flow direction is to south and southeast toward the river. The soils encountered in the borings typically consisted of sandy gravel and cobbles with some silt. Because of the gravel and cobbles, and the difficult drilling two borings could be advanced to

groundwater (borings B-3W and B-6W). Groundwater was measured at 29.31 feet bgs in boring B-6W and at 27.40 feet bgs in boring B-3W.

4.2 Soil and Groundwater Sampling

4.2.1 Groundwater Sample Results

Three groundwater samples were collected from the borings drilled with the auger. One sample was a "blind" duplicate at boring B-6W. One sample was collected from near the southern most portion of the property in what was anticipated to be in a direction down-gradient from the former activities at the site. The second sample was collected near a former satellite fueling station and the aboveground fuel storage tanks (Figure 2). Table 1 shows the results of the analyses. The complete laboratory data sheets are attached in Appendix A. Petroleum hydrocarbons were not detected in any of the samples analyzed.

Table 1 – Groundwater Analysis Results

Sample Number	Soil Sample Location	Date Analyzed	Sample Depth	NW TPH-Gx	Volatile Aromatic Hydrocarbons				NWTPH-Dx
				Gasoline (ug/l)	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Xylene (ug/l)	Diesel (ug/l)
B-6W	Borehole B-6W	11/02/2009	30'	ND	ND	ND	ND	ND	ND
B-2W	Borehole B-6W	11/02/2009	30'	ND	ND	ND	ND	ND	ND
B-3W	Borehole B-3W	11/02/2009	30'	ND	ND	ND	ND	ND	ND
MTCA Method A Cleanup Standards				800/1000*	5	1,000	700	1,000	500
Practical Quantitation Limit				100	1	2	1	3	200

Sample B-2W is a blind duplicate of Sample B-6W
ND: Indicates not detected
For TPH Gasoline, 800 ug/l is the cleanup standard if benzene is present; 1000 ug/l is the standard if benzene is not present

5.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the results of this investigation, White Shield concludes that groundwater beneath the former Pacific Pride Fueling Station in Cle Elum, Washington occurs at a depth of approximately 30 feet bgs with an apparent flow direction to the south. Groundwater samples collected from two locations where contamination was most likely to be found at the site (down-gradient of the activities at the site and near the former aboveground fuel storage tanks) did not reveal the presence of gasoline or diesel range organics in the groundwater beneath the site.

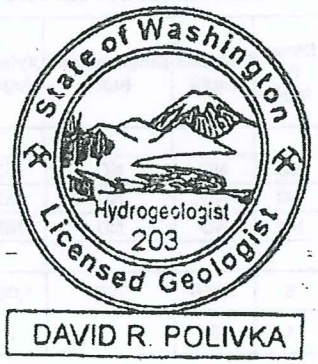
Based on the sample results, it is White Shield's opinion that unless additional information is discovered indicating potential groundwater contamination, no further action is needed regarding groundwater at the site.

6.0 LIMITATIONS

In performing our professional services, WSI uses a degree of care ordinarily exercised under similar circumstances by members of our profession. No warranty, expressed or implied, is made or intended. Our conclusions and recommendations, developed from our field and laboratory investigation reported herein, are based upon this firm's understanding of the project and are in concurrence with generally accepted practice. Should questions arise from this report please contact White Shield Inc. at 253-867-6070 or 503-547-0100.

David R. Polivka P.G./ P.HG.
Environmental Services Manager

Stuart Fricke
Principal-in-Charge



APPENDIX A

Laboratory Data Sheets

Libby Environmental, Inc.

4139 Libby Road N.E., Olympia, WA 98506-2518

November 5, 2009

Dave Polivka
White Shield, Inc.
23412 68th Avenue South
Kent, WA 98032

Dear Mr. Polivka:

Please find enclosed the analytical data report for the Pacific Pride Project located in Cle Elum, Washington. Water samples were analyzed for Gasoline by NWTPH-Gx and BTEX by EPA Method 8260B and Diesel by NWTPH-Dx on November 2, 2009.

The results of the analyses are summarized in the attached tables. Applicable detection limits and QA/QC data are included. An invoice for this analytical work is included.

Libby Environmental, Inc. appreciates the opportunity to have provided analytical services for this project. If you have any further questions about the data report, please give me a call. It was a pleasure working with you on this project, and we are looking forward to the next opportunity to work together.

Sincerely,

Sherry L. Chilcutt
President
Libby Environmental, Inc.

Phone (360) 352-2110 Fax (360) 352-4154 • libbyenv@aol.com

LIBBY ENVIRONMENTAL CHEMISTRY LABORATORY

PACIFIC PRIDE PROJECT
Cle Elum, WA
Whiteshield
Client Project #208-023-02
Libby Project No.L091031-1

Analyses of Gasoline (NWTPH-Gx) & BTEX (EPA Method 8021B) in Water

Sample Number	Date Analyzed	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Xylenes (ug/l)	Gasoline (ug/l)	Surrogate Recovery (%)
Method Blank	11/2/09	nd	nd	nd	nd	nd	105
LCS	11/2/09	98%	102%				109
B-6W	11/2/09	nd	nd	nd	nd	nd	108
B-2W	11/2/09	nd	nd	nd	nd	nd	109
B-3W	11/2/09	nd	nd	nd	nd	nd	117
Trip Blank	11/2/09	nd	nd	nd	nd	nd	125
Trip Blank dup	11/2/09	nd	nd	nd	nd	nd	112
MS	11/2/09	98%	102%				107
Practical Quantitation Limit		1	2	1	3	100	

"nd" Indicates not detected at the listed detection limits.
"int" Indicates that interference prevents determination.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE (Trifluorotoluene): 65% TO 135%

ANALYSES PERFORMED BY: Deanna M. Donovan

LIBBY ENVIRONMENTAL CHEMISTRY LABORATORY

PACIFIC PRIDE PROJECT
Cle Elum, Washington
White Shield Inc.
Client Project #208-023-02
Libby Project No.L091031-1

Analyses of Diesel (NWTPH-Dx) in Water

Sample Number	Date Analyzed	Surrogate Recovery (%)	Diesel (ug/l)
Method Blank	11/2/2009	102	nd
B-6W	11/2/2009	100	nd
B-2W	11/2/2009	97	nd
B-3W	11/2/2009	101	nd
Trip Blank	11/2/2009	106	nd
B-6W Dup.	11/2/2009	95	nd
Practical Quantitation Limit			200

"nd" Indicates not detected at the listed detection limits.
"int" Indicates that interference prevents determination.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE (2-F Biphenyl): 65% TO 135%

ANALYSES PERFORMED BY: Athanasius Shaw

Libby Environmental, Inc.

Chain of Custody Record

4139 Libby Road NE
Olympia, WA 98506
Ph: 360-352-2110
Fax: 360-352-4154

Date: 10-29-09 Page: 1 of 1

Client: [illegible]

Project Manager: [illegible]

Address:

Project Name: [illegible]

Phone: Fax:

Location: [illegible]

Client Project # 208-023-02

Collector: [illegible] Date of Collection: 10-29-09

	Sample Number	Depth	Time	Sample Type	Container Type	VOA 8021B	VOA 8021B BTEX Only	VOA 8260	SEMI VOL 8270	NWTPH-HCID	NWTPH-Gx (BTEX)	NWTPH-Dx	NWTPH-Dx Ext.	PAH 8270	PCB's 8082	MTCA 5 Metals			Field Note/# Containers
1	[illegible]		12:25P	[illegible]	[illegible]						X	X							
2	[illegible]		1:30P	[illegible]	[illegible]						X	X							
3	[illegible]		3:15P	[illegible]	[illegible]						X	X							
4	Trip Blank			[illegible]	[illegible]						X	X							
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			
13																			
14																			
15																			
16																			
17																			
18																			

Relinquished by:	Date / Time	Received by	Date / Time
[illegible signature]	10/31/09 1025	[illegible signature]	10/31/09 1025
[illegible signature]	10/31/09 1345	[illegible signature]	10/31/09 1155

Sample Receipt:	
Good Condition?	
Cold?	
Seals Intact?	
Total Number of Containers	

Remarks: Std.

TAT 24HR 48HR 5-Day

Distribution White - Lab, Yellow - File, Pink - Originator

APPENDIX G

PACIFIC GROUNDWATER GROUP SAMPLING, ANALYSIS AND SUPPLEMENTAL DATA 2010

Subj: **FW: James Oil results**
Date: 5/26/2010 2:16:17 P.M. Pacific Daylight Time
From: janet@PGWG.COM
To: Dlhenvironmental@aol.com, jamesoil.jeff@skynetbb.com
CC: inger@PGWG.COM

Hi, Donna.

Please find attached our analytical results for the most recent cleanup at James Oil. According to Inger, sample PGG-07 is the split sample for your sample 51810-25. I understand that the sample is primarily hard-packed gravel, roadbase. So, it makes sense that sample variability is high because only the fines can be collected as sample and, further, only fines are analyzed by the lab. It is likely a nonissue because the PGG result illustrates that the roadbase material does not exceed, even if it was considered "soil" and therefore subject to the cleanup level. On other sites, my Ecology site managers have stated that soil cleanup levels do not apply to roadbase.

The reason we called Mike Erdahl was to find out if 51810-25 would benefit from silica gel cleanup to remove biogenic hydrocarbons. Based on a visual look, he thinks not. So, I am wondering how to handle your one exceedance. You could consider referring to our sample and state the following logic:

1. the material is roadbase, so MTCA soil cleanup levels may not apply
2. the material is compacted gravel, so any analysis of it is biased low because only fines could be sampled or analyzed
3. the second sample of the same material does not exceed the cleanup level indicating the exceeding concentration is not confirmed

The above logic is probably sufficient to address the analytical result. We could, though, do more such as:

1. do silica gel cleanup and reanalyze
2. analyze another aliquot of the sample to re-confirm

Your thoughts? I know your conceptual model is that this sample was collected outside of James Oil's fueling, traffic, and parking areas, but I was wondering how you intend to address this exceedance in your report.

I look forward to hearing from you.

Kind regards,
Janet Knox LG | Principal Environmental Geochemist | Pacific Groundwater Group | (206) 329-0141 | www.pgwg.com

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Charlene Morrow, M.S.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
FAX: (206) 283-5044
e-mail: fbi@isomedia.com

May 24, 2010

Janet Knox, Project Manger
Pacific Groundwater Group
2377 Eastlake Ave East
Seattle, WA 98102

Dear Ms. Knox:

Included are the results from the testing of material submitted on May 20, 2010 from the James Oil, F&BI 005188 project. There are 4 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
PGG0524R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on May 20, 2010 by Friedman & Bruya, Inc. from the Pacific Groundwater Group James Oil, F&BI 005188 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Pacific Groundwater Group
005188-01	051810-PGG06
005188-02	051810-PGG07
005188-03	051810-PGG08

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/24/10
Date Received: 05/20/10
Project: James Oil, F&BI 005188
Date Extracted: 05/21/10
Date Analyzed: 05/21/10

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 50-150)
051810-PGG07 005188-02	130 x	380	97
Method Blank 00-0788 MB2	<50	<250	91

Date of Report: 05/24/10
Date Received: 05/20/10
Project: James Oil, F&BI 005188

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 005186-03 (Matrix Spike)

Analyte	Reporting Units	Spike Level	(Wet wt) Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	96	105	63-146	9

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	95	79-144

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 – More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc – The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j – The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

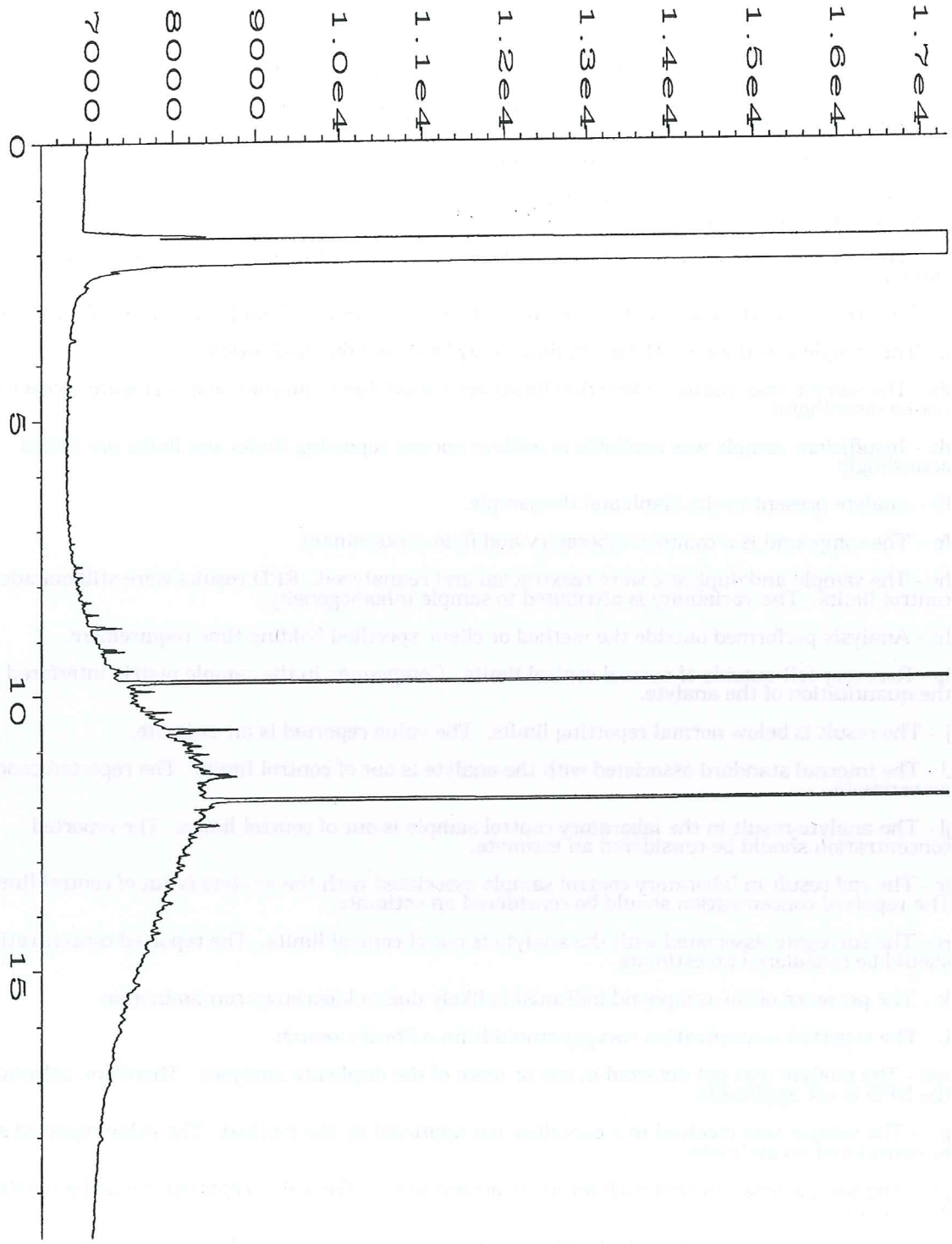
pc – The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr – The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.



Data File Name : C:\HPCHEM\1\DATA\05-21-10\008F0201.D
Operator : KAO
Instrument : GC1
Sample Name : 005188-02
Run Time Bar Code:
Acquired on : 21 May 10 01:15 PM
Report Created on: 24 May 10 12:44 PM

Page Number : 1
Vial Number : 8
Injection Number : 1
Sequence Line : 2
Instrument Method: TPHD.MTH
Analysis Method : SIMDNEW.MTH

005188

SAMPLE CHAIN OF CUSTODY ME 05/20/10

VS1/B01

Page # _____ of _____

Send Report To

Company Pacific Groundwater Group

Address 2377 Eastlake Ave E

City, State, ZIP Seattle, WA 98102

Phone # 206 329 0141 Fax # 206 329 6968

SAMPLERS (signature) Inger Jackson

PROJECT NAME/NO. James Cir

PO #

REMARKS Please hold NWTPH-G/8021B analysis unless gas is seen in diesel chromatograms

TURNAROUND TIME
- ☐ Standard (2 Weeks)
- ☐ RUSH
- Rush charges authorized by: _____

SAMPLE DISPOSAL
- ☐ Dispose after 30 days
- ☐ Return samples
- ☐ Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	TPH-Diesel Ext.	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS						Notes
~~PGG06~~ 051810-PGG06	01 A-E	5/18/10	1500	Soil	5	X	hold										V. dense, gravelly soil - difficult to collect SD
~~PGG07~~ 051810-PGG07	02	5/18/10	1525	Soil	1	X											Too coarse/dense to collect SD/SS
~~PGG08~~ 051810-PGG08	03 A-E	5/18/10	1515	Soil	5	X	hold										
												Samples received at 4 °C					

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

FORMS\...\COC.DOC

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:		Inger Jackson	PGG	5/20/10	1643
Received by:		Kortland Orr	FedEx	5-20-10	1643
Relinquished by:					
Received by:			Rec'd @ 4°C		

DRAFT

Date of Report: 05/25/10
Date Received: 05/20/10
Project: James Oil, F&BI 005188
Date Extracted: 05/25/10
Date Analyzed: 05/25/10

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 50-150)
051810-PGG06 005188-01	<50	<250	92
051810-PGG08 005188-03	<50	<250	87
Method Blank 00-0798 MB2	<50	<250	92

Subj: **James Oil - PGG related figure/lab reports.**
Date: 6/7/2010 4:03:34 P.M. Pacific Daylight Time
From: inger@PGWG.COM
To: Dlhenvironmental@aol.com
CC: janet@PGWG.COM, jamesoil.jeff@skynetbb.com

Hi Donna –

Janet asked me to email you an internal figure we've generated, brief descriptions of sample locations (I think this is a repeat of information you already have), and copies of our analytical results (which I believe you also already have). Regardless, here it is in one package.

The following bullets summarize analytical results of the soil samples collected by PGG at the James Oil site. All samples were "splits" with DLH samples with the exception of sample 42810-PGG01. Analytical results are attached. A draft site figure that presents the approximate sample locations is also attached.

Donna – for my reference I've included DLH sample locations (from a figure you provided earlier on plus observations on May 18, 2010) – but I think I may be missing one floor sample location from the south-east corner. On the figure "Phase 1 Excavation" is the excavation in April; Phase 2 is the excavation in May 2010.

Sample 42810-PGG01

- Soil sample collected near the south canopy piling at a depth of about 3 feet BEFORE further soil was excavated in this area. This sample represents soil that was observed to "flow" out of the side of the partial excavation at the end of April 27, 2010 site work. Further soil was excavated from this area on April 28, 2010 and May 18, 2010.

Sample 42810-PGG02 (split with DLH)

- Sample collected from the south canopy piling excavation after the limits of excavation in this area had been reached on April 28, 2010. Specifically, soil sample collected near the bottom of the east sidewall of the excavation in this area. Further excavation did not occur in this area after the sample was collected on April 28, 2010; however, the excavation was deepened and re-sampled on May 18, 2010.

Sample 42810-PGG03 (split with DLH)

- Soil sample collected near the "B5 area" where stained soil had been observed and documented in earlier White Shield reports. Specifically, this soil sample was collected from the floor of the excavation in the unpaved area south-east of the former concrete slab. Further excavation did not occur in this area after the sample was collected on April 28, 2010.

Sample 42810-PGG04 (split with DLH)

- Soil sample collected near the "B5 area" where stained soil had been observed and documented in earlier White Shield reports. Specifically, this soil sample was collected from the south sidewall of the excavation in the unpaved area south-east of the former concrete slab. Further excavation did not occur in this area after the sample was collected on April 28, 2010; however additional excavation and re-sampling in this area occurred on May 18, 2010.

Sample 42810-PGG05 (split with DLH)

- Soil sample collected near the south-western area of the former concrete pad in an area where the former concrete pad met the asphalt driveway. Stained soil was visible when concrete and asphalt were removed from this area so additional soil was removed. The soil sample was collected from the floor of the excavation. Further excavation did not occur in this area after the sample was collected on April 28, 2010.

Sample 051810-PGG06 (split with DLH)

- Soil sample collected from the north-east sidewall following re-excavation in the vicinity of DLH#3 on May 18, 2010. Specifically, the soil sample was collected from soil underlying the asphalt.

Sample 051810-PGG07 (split with DLH)

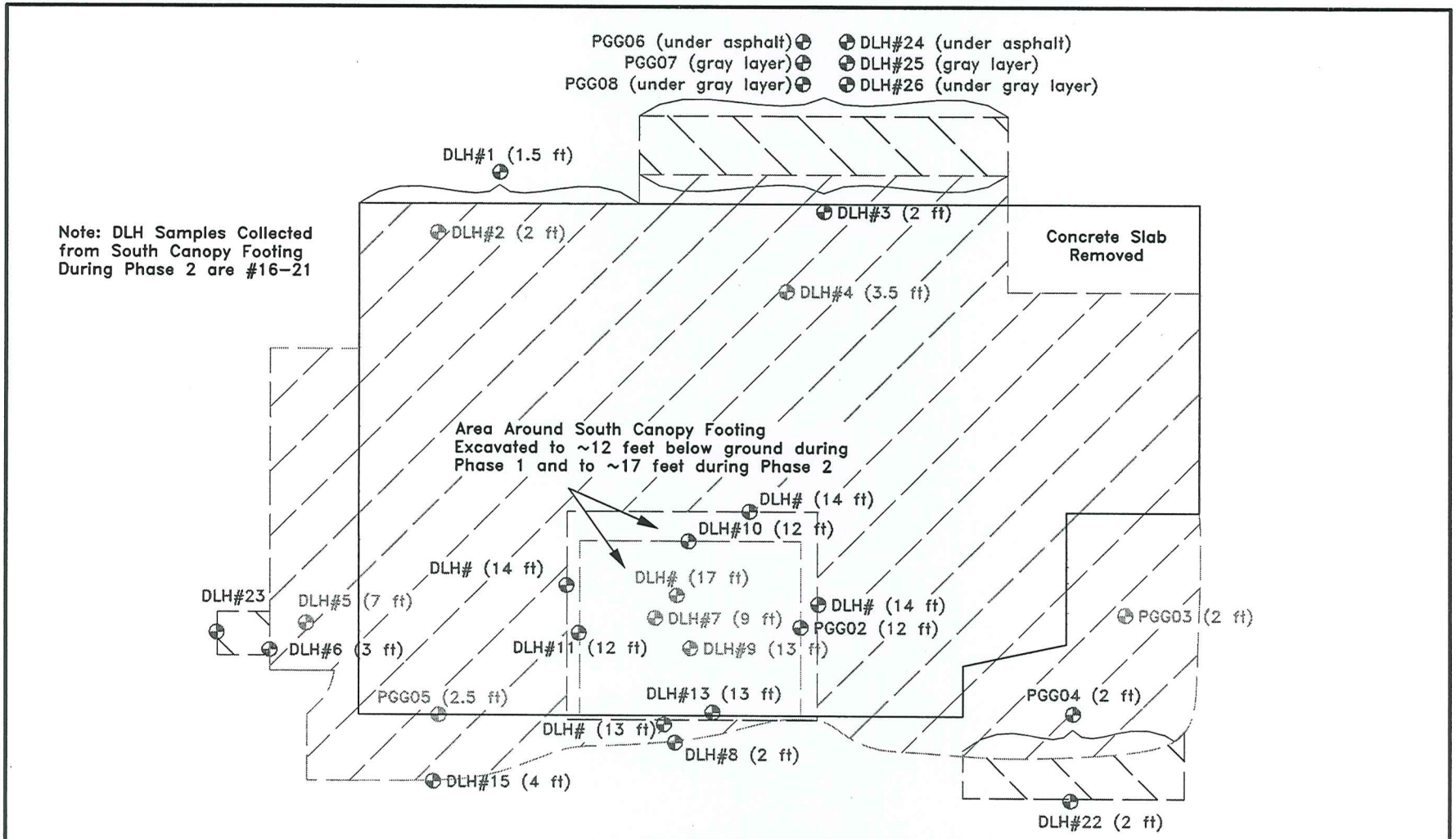
- Soil sample collected from the north-east sidewall following re-excavation in the vicinity of DLH#3 on May 18, 2010. Specifically, the soil sample was collected from the gray layer.

Sample 051810-PGG08 (split with DLH)

- Soil sample collected from the north-east sidewall following re-excavation in the vicinity of DLH#3 on May 18, 2010. Specifically, the soil sample was collected beneath the gray layer.

Inger

Inger Jackson | Hydrogeologist | Pacific Groundwater Group | (206) 329-0141



LEGEND

- Former Concrete Slab (Removed Phase 1)
- Approximate Limits of Phase 1 Excavation (various depths)
- Approximate Limits of Phase 2 Excavation (various depths)
- DLH#6 — Approximate Location Sidewall Soil Sample (DLH = Donna Hewitt sample, PGG = PGG sample)
- PGG05 — Approximate Location Floor Soil Sample (DLH = Donna Hewitt sample, PGG = PGG sample)

0 5 10
Scale in Feet

DRAFT FIGURE 1
James Oil Pacific Pride Site Map and Sample Locations, Cle Elum WA

JK1001, James Oil Pacific Pride

PgG

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Charlene Morrow, M.S.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
FAX: (206) 283-5044
e-mail: fbi@isomedia.com

May 24, 2010

Janet Knox, Project Manger
Pacific Groundwater Group
2377 Eastlake Ave East
Seattle, WA 98102

Dear Ms. Knox:

Included are the results from the testing of material submitted on May 20, 2010 from the James Oil, F&BI 005188 project. There are 4 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
PGG0524R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on May 20, 2010 by Friedman & Bruya, Inc. from the Pacific Groundwater Group James Oil, F&BI 005188 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Pacific Groundwater Group
005188-01	051810-PGG06
005188-02	051810-PGG07
005188-03	051810-PGG08

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/24/10
Date Received: 05/20/10
Project: James Oil, F&BI 005188
Date Extracted: 05/21/10
Date Analyzed: 05/21/10

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 50-150)
051810-PGG07 005188-02	130 x	380	97
Method Blank 00-0788 MB2	<50	<250	91

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/24/10
Date Received: 05/20/10
Project: James Oil, F&BI 005188

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 005186-03 (Matrix Spike)

Analyte	Reporting Units	Spike Level	(Wet wt) Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	96	105	63-146	9

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	95	79-144

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 – More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc – The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j – The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

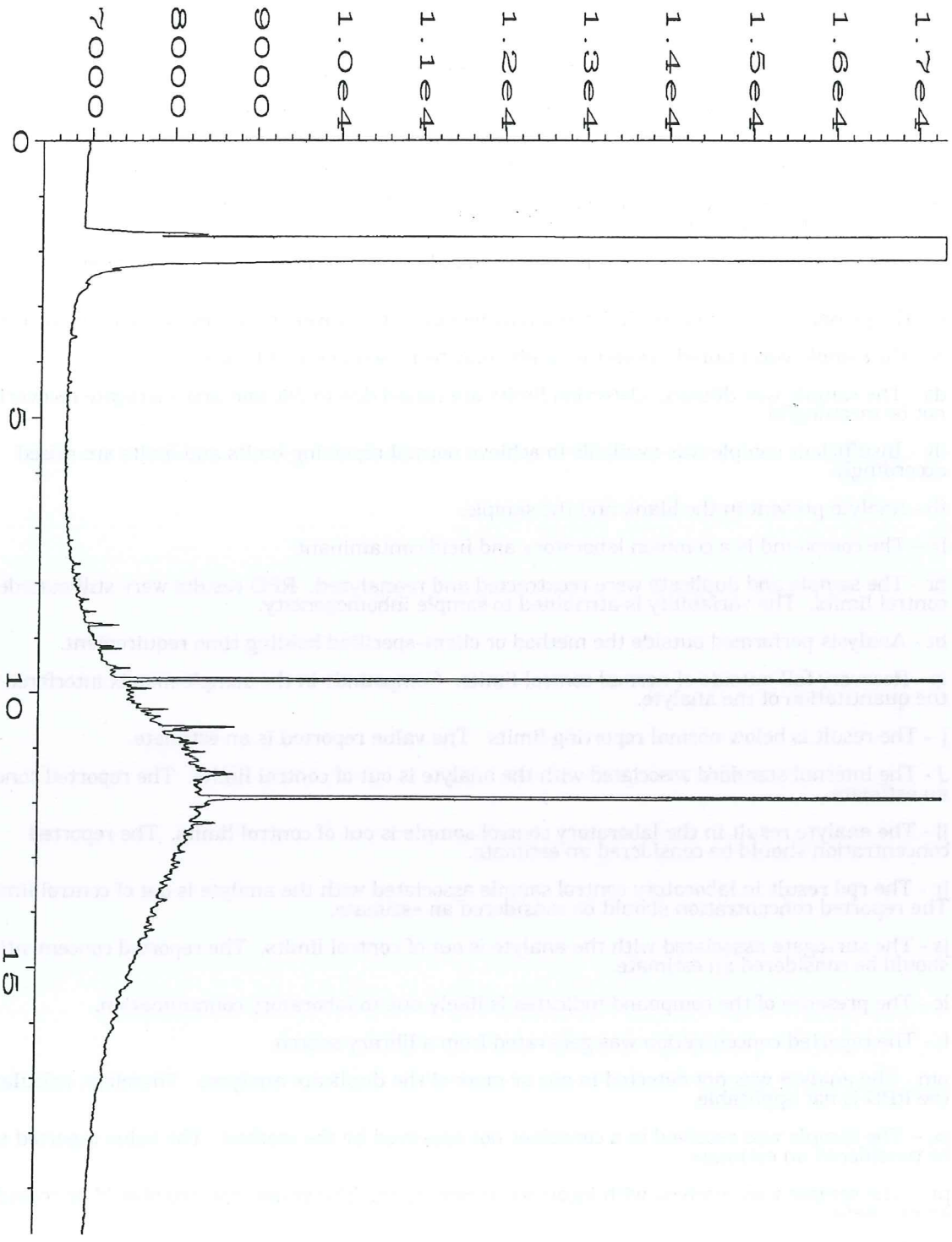
pc – The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr – The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.



Data File Name : C:\HPCHEM\1\DATA\05-21-10\008F0201.D
Operator : KAO
Instrument : GC1
Sample Name : 005188-02
Run Time Bar Code:
Acquired on : 21 May 10 01:15 PM
Report Created on: 24 May 10 12:44 PM

Page Number : 1
Vial Number : 8
Injection Number : 1
Sequence Line : 2
Instrument Method: TPHD.MTH
Analysis Method : SIMDNEW.MTH

005188

SAMPLE CHAIN OF CUSTODY ME 05/20/10

VSI/ B01

Page # _____ of _____

Send Report To

Company Pacific Groundwater Group

Address 2377 Eastlake Ave E

City, State, ZIP Seattle, WA 98102

Phone # 206 329 0141 Fax # 206 329 0968

SAMPLERS (signature) Inger Jackson

PROJECT NAME/NO. James Cir

PO #

REMARKS Please hold NWTPH-G / 8021B analysis unless gas is seen in diesel chromatograms

TURNAROUND TIME
- ☐ Standard (2 Weeks)
- ☐ RUSH
- Rush charges authorized by: _____

SAMPLE DISPOSAL
- ☐ Dispose after 30 days
- ☐ Return samples
- ☐ Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	TPH-Diesel Ext.	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS						Notes
~~PG606~~ 051810-PG606	01 A-E	5/18/10	1500	Soil	5	X	hold										V. dense, gravelly soil - difficult to collect soil
~~PG607~~ 051810-PG607	02	5/18/10	1525	Soil	1	X											Too coarse/dense to collect sample.
~~PG608~~ 051810-PG608	03 A-E	5/18/10	1515	Soil	5	X	hold										
																	Samples received at 4 °C

ANALYSES REQUESTED

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

FORMS\COC\COC.DOC

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Inger Jackson	Inger Jackson	PGG	5/20/10	1643
Received by:	Kortland Orr	Kortland Orr	FBI	5-20-10	1643
Relinquished by:					
Received by:					

Rec'd @ 4°C

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Charlene Morrow, M.S.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
FAX: (206) 283-5044
e-mail: fbi@isomedia.com

May 26, 2010

Janet Knox, Project Manger
Pacific Groundwater Group
2377 Eastlake Ave East
Seattle, WA 98102

Dear Ms. Knox:

Included are the additional results from the testing of material submitted on May 20, 2010 from the James Oil, F&BI 005188 project. There are 4 pages included in this report.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
c: Inger Jackson
PGG0526R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on May 20, 2010 by Friedman & Bruya, Inc. from the Pacific Groundwater Group James Oil, F&BI 005188 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Pacific Groundwater Group
005188-01	051810-PGG06
005188-02	051810-PGG07
005188-03	051810-PGG08

All quality control requirements were acceptable.

Date of Report: 05/26/10
Date Received: 05/20/10
Project: James Oil, F&BI 005188
Date Extracted: 05/25/10
Date Analyzed: 05/25/10

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 50-150)
051810-PGG06 005188-01	<50	<250	92
051810-PGG08 005188-03	<50	<250	87
Method Blank 00-0798 MB2	<50	<250	92

Date of Report: 05/26/10
Date Received: 05/20/10
Project: James Oil, F&BI 005188

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 005194-04 (Matrix Spike)

Analyte	Reporting Units	Spike Level	(Wet wt) Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	97	98	73-135	1

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	98	74-139

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 – More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc – The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j – The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc – The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr – The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

005188

SAMPLE CHAIN OF CUSTODY ME 05/20/10

VSI/ B01

Page # _____ of _____

Send Report To

Company Pacific Groundwater Group

Address 2377 Eastlake Ave E

City, State, ZIP Seattle, WA 98102

Phone # 206 329 0141 Fax # 206 329 6968

SAMPLERS (signature) [signature]

PROJECT NAME/NO. James Oil

PO #

REMARKS Please hold NWTPH-G / 8021B analysis unless gas is seen in diesel chromatograms

TURNAROUND TIME
- ☐ Standard (2 Weeks)
- ☐ RUSH _____

Rush charges authorized by: _____

SAMPLE DISPOSAL
- ☐ Dispose after 30 days
- ☐ Return samples
- ☐ Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED: TPH-Diesel Ext.	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS						Notes
~~PGG06~~ 051810-PGG06	01 A-E	5/18/10	1500	Soil	5	X	~~hold~~										V. dense, gravelly soil - difficult to collect SO
~~PGG07~~ 051810-PGG07	02	5/18/10	1505	Soil	1	X											Too coarse/dense to collect SG35
~~PGG08~~ 051810-PGG08	03 A-E	5/18/10	1515	Soil	5	X	~~hold~~										

analyze per EPA 5/25/10 MA

Samples received at 4 °C

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	[signature]	Inger Jackson	PGG	5/20/10	1643
Received by:	[signature]	Kortland Orr	F&BI	5-20-10	1643
Relinquished by:					
Received by:					

Rec'd @ 4°C

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

FORMS\COC\COC.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Charlene Morrow, M.S.
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3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
FAX: (206) 283-5044
e-mail: fbi@isomedia.com

May 7, 2010

Janet Knox, Project Manger
Pacific Groundwater Group
2377 Eastlake Ave East
Seattle, WA 98102

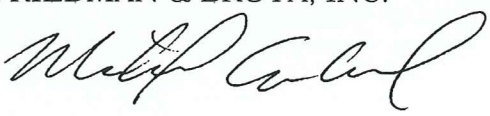
Dear Ms. Knox:

Included are the results from the testing of material submitted on April 29, 2010 from the James Oil JK1001.02, F&BI 004318 project. There are 6 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
PGG0507R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on April 29, 2010 by Friedman & Bruya, Inc. from the Pacific Groundwater Group James Oil JK1001.02, F&BI 004318 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Pacific Groundwater Group
004318-01	42810-PGG01
004318-02	42810-PGG02
004318-03	42810-PGG03
004318-04	42810-PGG04
004318-05	42810-PGG05

All quality control requirements were acceptable.

Date of Report: 05/07/10
Date Received: 04/29/10
Project: James Oil JK1001.02, F&BI 004318
Date Extracted: 04/30/10
Date Analyzed: 05/03/10

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 50-150)
42810-PGG01 004318-01	4,000	900	98
42810-PGG02 004318-02	<50	<250	95
42810-PGG05 004318-05	<50	<250	95
Method Blank 00-0627 MB2	<50	<250	97

Date of Report: 05/07/10
Date Received: 04/29/10
Project: James Oil JK1001.02, F&BI 004318
Date Extracted: 04/30/10
Date Analyzed: 05/03/10

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx
Sample Extracts Passed Through a Silica Gel Column Prior to Analysis
Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 50-150)
42810-PGG03 004318-03	540	1,400	86
42810-PGG04 004318-04	380 x	2,200	89
Method Blank 00-0627 MB2	<50	<250	102

Date of Report: 05/07/10
Date Received: 04/29/10
Project: James Oil JK1001.02, F&BI 004318

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 004274-06 (Matrix Spike)

Analyte	Reporting Units	Spike Level	(Wet wt) Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	96	92	63-146	4

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	96	79-144

Date of Report: 05/07/10
Date Received: 04/29/10
Project: James Oil JK1001.02, F&BI 004318

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 004274-06 (Matrix Spike) Silica Gel

Analyte	Reporting Units	Spike Level	(Wet wt) Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	98	99	73-135	1

Laboratory Code: Laboratory Control Sample Silica Gel

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	95	74-139

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 – More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc – The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

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jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

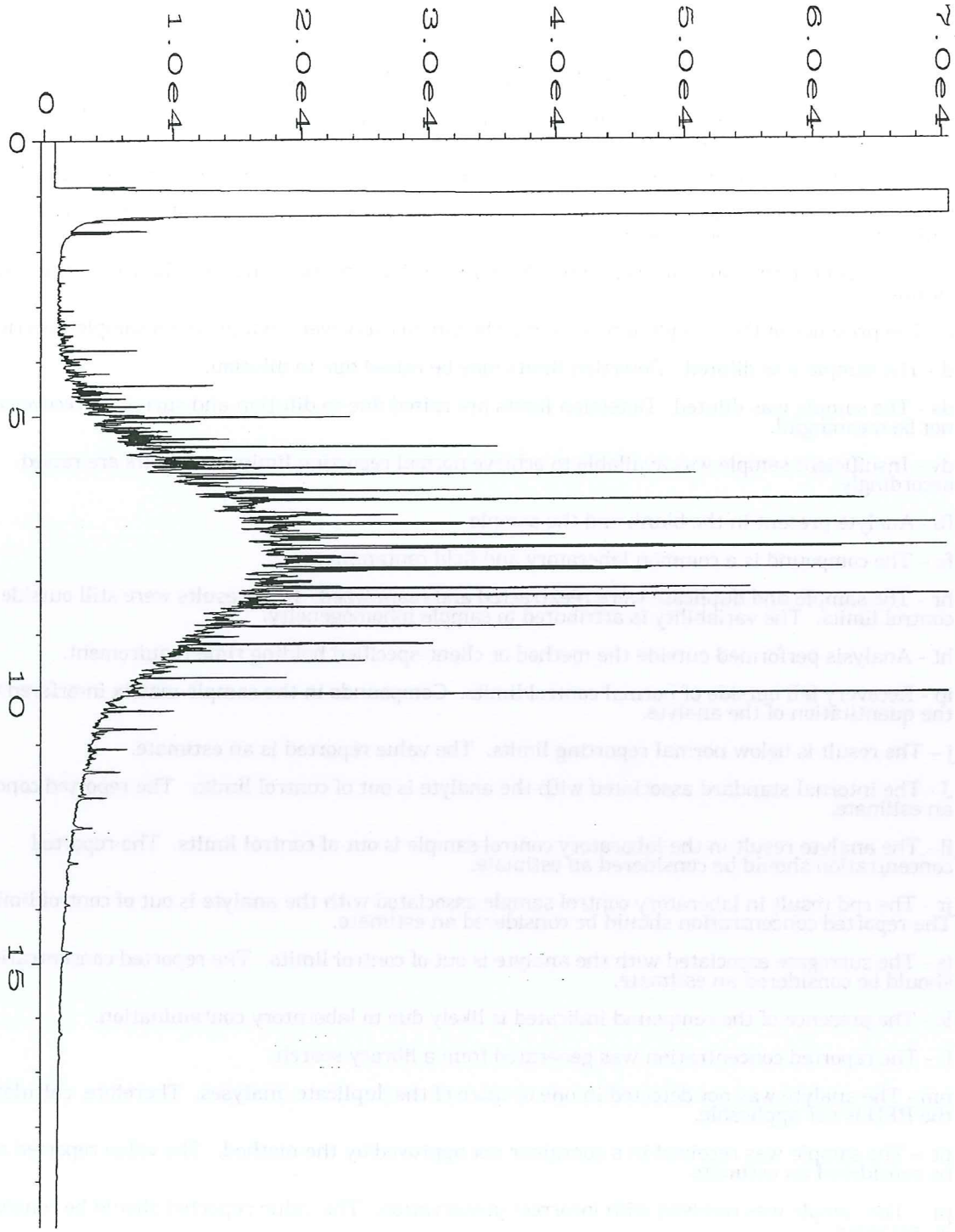
pc – The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr – The sample was received with incorrect preservation. The value reported should be considered an estimate.

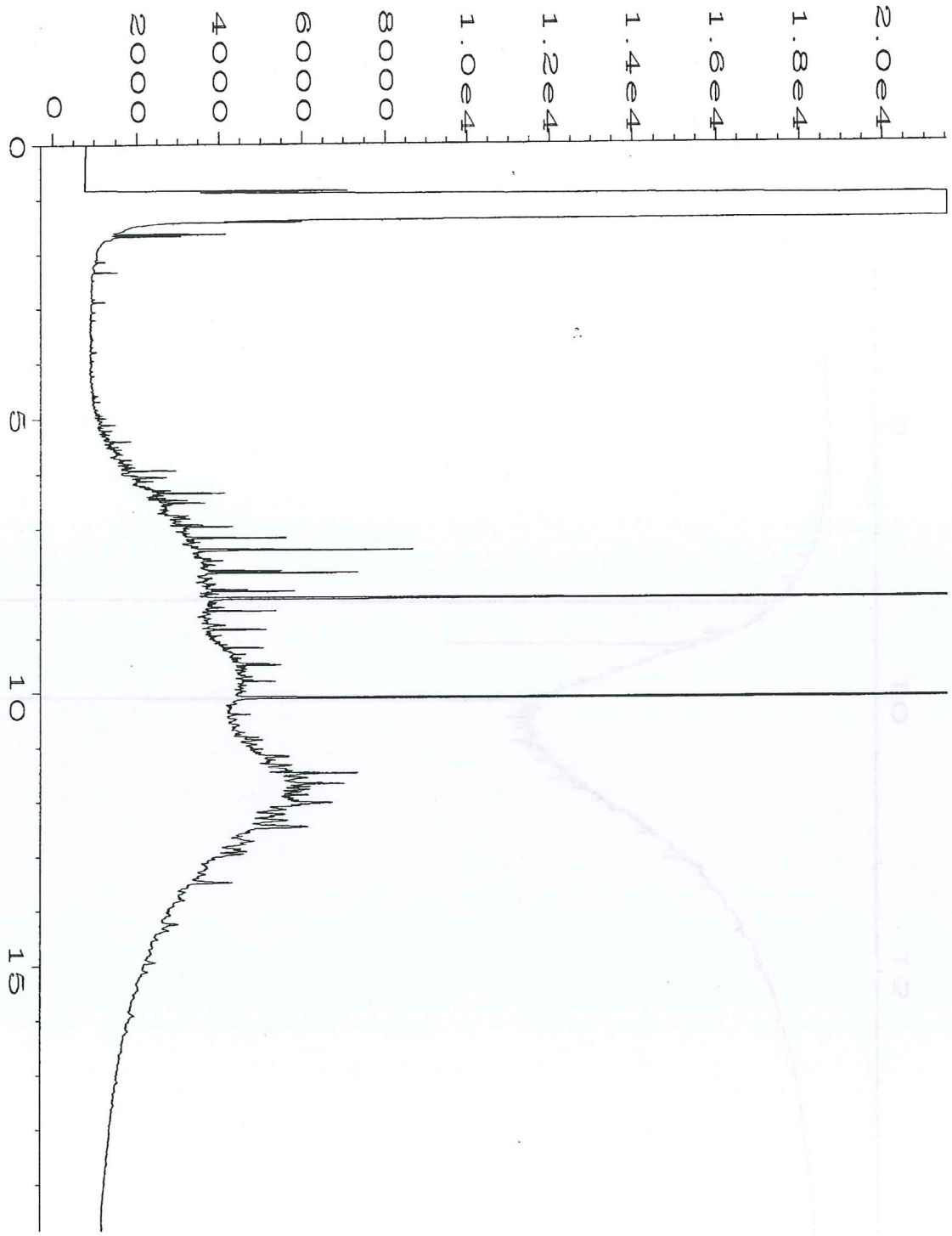
ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

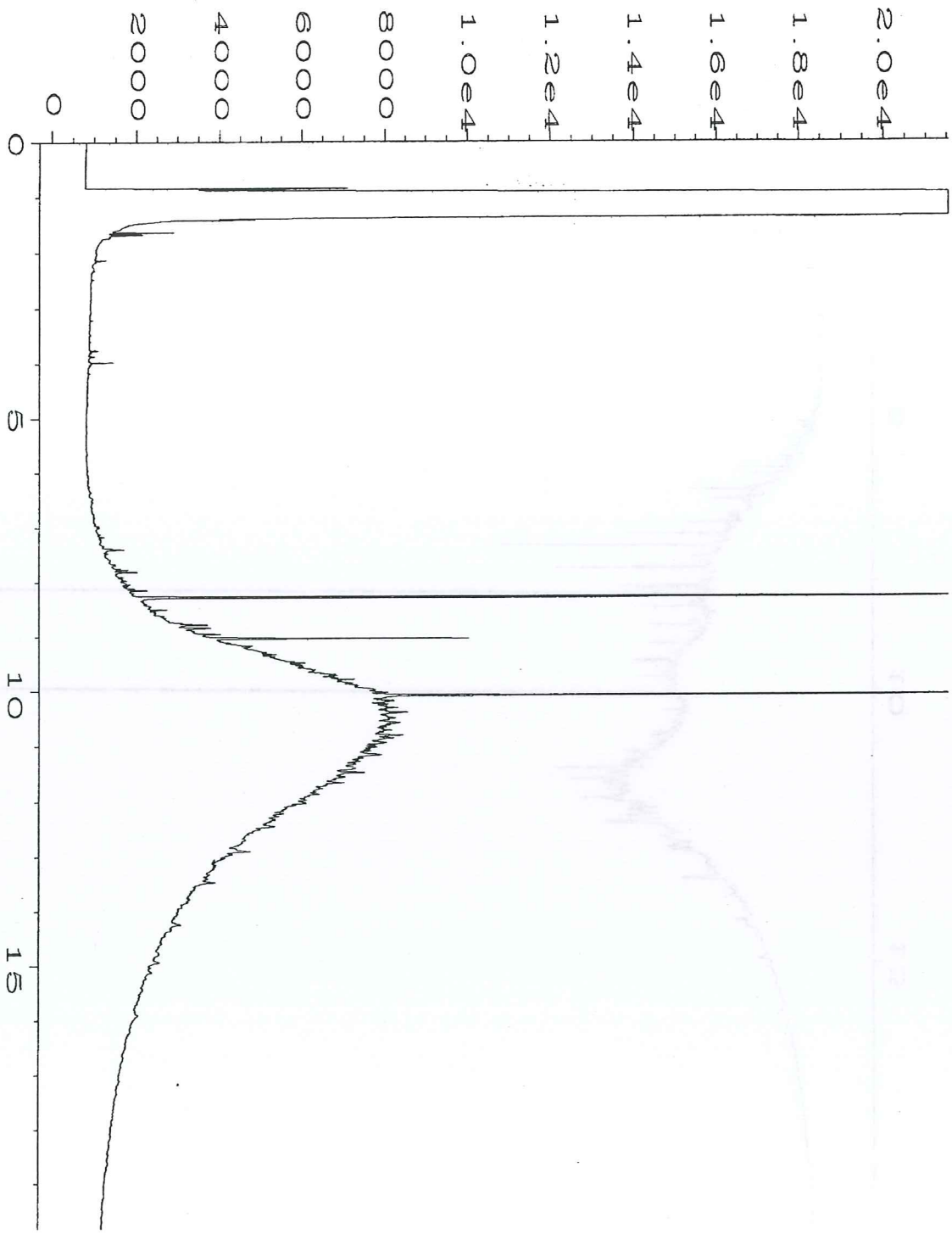


Data File Name	: C:\HPCHEM\4\DATA\05-03-10\026F0501.D		
Operator	: ay	Page Number	: 1
Instrument	: GC#4	Vial Number	: 26
Sample Name	: 004318-01	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 5
Acquired on	: 03 May 10 08:14 PM	Instrument Method	: TPHD.MTH
Report Created on	: 04 May 10 01:25 PM	Analysis Method	: TPHD.MTH



Data File Name : C:\HPCHEM\4\DATA\05-03-10\029F0501.D
Operator : ay
Instrument : GC#4
Sample Name : 004318-03 sg
Run Time Bar Code:
Acquired on : 03 May 10 09:34 PM
Report Created on: 04 May 10 01:25 PM

Page Number : 1
Vial Number : 29
Injection Number : 1
Sequence Line : 5
Instrument Method: TPHD.MTH
Analysis Method : TPHD.MTH



Data File Name : C:\HPCHEM\4\DATA\05-03-10\030F0501.D
Operator : ay
Instrument : GC#4
Sample Name : 004318-04 sg
Run Time Bar Code:
Acquired on : 03 May 10 10:01 PM
Report Created on: 04 May 10 01:25 PM

Page Number : 1
Vial Number : 30
Injection Number : 1
Sequence Line : 5
Instrument Method: TPHD.MTH
Analysis Method : TPHD.MTH

004318

SAMPLE CHAIN OF CUSTODY

ME 04/29/10 VS2/ D01

Send Report To Janet Knox

Company Pacific Groundwater Group

Address 2377 Eastlake Ave E

City, State, ZIP Seattle, WA 98102

Phone # 329 0141 Fax # 329 6968

SAMPLERS (signature)

PROJECT NAME/NO. James Oil JK1001.02

PO # JK1001.02

REMARKS ~~Hold analysis until contacted by PGG~~ (I. Jackson or J. Knox) analyze per IJT 4/30/10 MG

Page # _____ of _____

TURNAROUND TIME
- [x] Standard (2 Weeks)
- [ ] RUSH _____
- Rush charges authorized by: _____

SAMPLE DISPOSAL
- [ ] Dispose after 30 days
- [ ] Return samples
- [ ] Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED: TPH-Diesel*	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Silica Gel						Notes
42810-PGG01	01 A-E	4/28/10	1040	Soil	5	X	X	X										* Diesel-extended
42810-PGG02	02 A-E	4/28/10	1315	Soil	5	X	X	X										√ per IJ 4/30/10 MG
42810-PGG03	03 A-E	4/28/10	1550	Soil	5	X	X	X				√						
42810-PGG04	04 A-E	4/28/10	1610	Soil	5	X	X	X				√						
42810-PGG05	05 A-E	4/28/10	1630	Soil	5	X	X	X										* hold gasoline unless seen in diesel chroms per IJ MG.

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:		Inger Jackson	PGG	4/29/10	1358
Received by:		E. Sandquist	FS1B1	"	"
Relinquished by:					
Received by:			Samples received at 3 °C		

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

FORMS\COC\COC.DOC