



PORT OF OAKLAND

ENVIRONMENTAL
PROTECTION
98 MAR -3 AM 8:30

February 26, 1998

Mr. Larry Seto
Senior Hazardous Materials Specialist
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway
Alameda, CA 94502-6577

Port of Oakland
SUBJECT: 801 MARITIME STREET
OAKLAND, CALIFORNIA
STID #3780

Dear Mr. Seto:

The Port of Oakland herein submits a report titled "Groundwater Monitoring and Sampling Report, 801 Maritime Street, Oakland, California", dated November 7, 1997 prepared on the behalf of the Port by Innovative Technical Solutions Inc. The report addresses groundwater monitoring and sampling in September 1997 of a single monitoring well located at a former underground storage tank site designated by Alameda County as 801 Maritime Street

If you have any questions regarding the report, please contact me at 272-1373.

Sincerely,

John Prall, R.G.
Associate Environmental Scientist

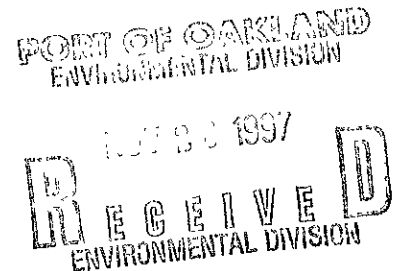
Enclosure
cc: Neil Werner



November 7, 1997

Project No. 95-113.22

Mr. John Prall
Associate Environmental Scientist
Port of Oakland
530 Water Street
Oakland, California 94607



Groundwater Monitoring and Sampling Report
801 Maritime Street
Oakland, California
(Work Order No. 202863)

Dear Mr. Prall:

This Groundwater Monitoring and Sampling Report has been prepared by Innovative Technical Solutions, Inc. (ITSI) on behalf of the Port of Oakland for monitoring well repair and resurvey work and groundwater monitoring and sampling activities performed during the period of August to September 1997 at the 801 Maritime Street site in Oakland, California. A site location map is shown on Figure 1.

The scope of work included replacing the well box for monitoring well MW-1, resurveying the wellhead for vertical elevation, and monitoring and sampling the well. The monitoring well is located in the vicinity of three former underground storage tanks previously removed from the site in February 1989; two 10,000-gallon tanks (CF-06 and CF-35), and a 20,000-gallon tank (CF-07).

WELL REPAIR AND RESURVEYING

At the request of the Port of Oakland, the wellhead for monitoring well MW-1 was adjusted flush with current grade surface and resurveyed for vertical elevation as a result of onsite redevelopment activities, including regrading and repaving in the vicinity of MW-1.

On August 27, 1997, Exploration Drilling Services cut the top of the well casing and enclosed the wellhead with a heavy-duty, traffic-rated Emco-Wheaton well box set in concrete and placed flush with the surrounding grade surface. The wellhead was capped with a 2-inch locking compression well cap and locked.

On September 30, 1997, monitoring well MW-1 was surveyed for vertical elevation and horizontal location by PLS Surveys, Inc., a California-licensed land surveyor. The vertical elevation was surveyed relative to the Port of Oakland datum, which is 3.2 feet below mean sea level¹. The horizontal location was surveyed relative to fixed site features (i.e. yard light poles). Surveying results are shown on the survey map included in Attachment A. Recent changes to site features and adjacent Petroleum Street are shown on the revised site map in Figure 2.

SAMPLING OF MONITORING WELL

The groundwater monitoring and sampling was performed on September 30, 1997. The monitoring well was initially gauged for depth to water and checked for the presence of separate phase hydrocarbons. No separate phase hydrocarbons were observed in the monitoring well. The depth to water measurement was recorded on a Monitoring Well Purge and Sample Form. A Copy of the Monitoring Well Purge and Sample Form is provided in Attachment B.

After the depth to water measurement was recorded, the monitoring well was purged using a clean disposable bailer. Approximately three casing volumes of water were removed, or until pH, conductivity, and temperature readings stabilized indicating formation water had entered the monitoring well. Field parameters were recorded on the Monitoring Well Purge and Sample Form.

A groundwater sample was collected from the monitoring well using the disposable bailer and placed into laboratory provided containers. The sample containers were properly labeled with the sample number, date and time of collection, and samplers' initials, and were placed on ice in an insulated cooler. Purge water was placed in a properly labeled drum and stored at the nearby Port of Oakland designated storage area on 7th Street.

The above field activities were performed in accordance with the site-specific Health and Safety Plan for groundwater monitoring activities at the site.

¹ The results of the new survey appear to indicate that the previous survey and subsequent groundwater elevation data may have been referenced to mean sea level (MSL) and not the Port of Oakland datum, which is 3.2 feet below MSL. Previous groundwater elevation data have been adjusted in Table 1 to reflect this change.

MONITORING WELL GROUNDWATER LEVEL

Depth to water data is summarized in Table 1, and Figure 2 shows the groundwater elevation.. The groundwater elevation was calculated using the measured depth to water and new survey elevation of top of casing (relative to the Port of Oakland datum) provided in Table 1.

The groundwater gradient for the site could not be determined. It is our understanding that the monitoring wells at the nearby Berth 24 were abandoned. Consequently, these wells can no longer be used to determine groundwater gradient.

LABORATORY ANALYSIS OF GROUNDWATER SAMPLE

The sample was sent under chain-of-custody procedures to Pace Analytical in Petaluma, California, the current Port of Oakland contract laboratory. The samples were analyzed according to the following schedule:

Monitoring Well I.D.	Analyses			
	TPHg ⁽¹⁾	BTEX ⁽²⁾	TPHd ⁽³⁾	TDS ⁽⁴⁾
MW-1	x	x	x	x

⁽¹⁾TPH as gasoline by Modified EPA Method 8015.

⁽²⁾Benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA Method 602.

⁽³⁾TPH as diesel by Modified EPA Method 8015 with silica gel cleanup procedure.

⁽⁴⁾Total dissolved solids by EPA Method 160.1.

The laboratory results for the groundwater sample are summarized in Table 2, and are shown in Figure 2. Copies of the laboratory results, chromatograms and chain-of-custody are provided in Attachment C.

FINDINGS

Results of the September 30, 1997 groundwater monitoring and sampling of MW-1 are summarized below²:

- TPHg was reported at a concentration of 190 µg/l.
- Benzene, toluene, ethylbenzene and xylenes were reported at concentrations of 35 µg/l, 17 µg/l, 5.2 µg/l and 22 µg/l, respectively.
- TPHd was reported at a concentration of 830 µg/l.
- TDS was reported at a concentration of 2,020 mg/l.

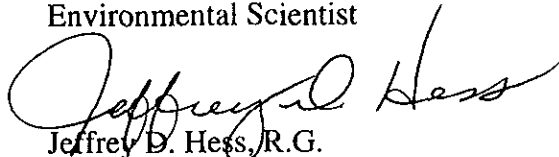
² Laboratory results represent the highest concentrations reported for either the sample or field duplicate sample.

Please give us a call if you have any questions or comments.

Sincerely,



Jim Schollard
Environmental Scientist



Jeffrey D. Hess, R.G.
Project Director

Attachments

TABLE 1

**GROUNDWATER ELEVATIONS
801 MARITIME STREET
OAKLAND, CALIFORNIA**

Monitoring Well ID	Elevation of Top of Casing (feet)	Date of Monitoring	Measured Depth to Water (feet)	Product Thickness (feet)	Groundwater Elevation (feet)	Note
MW-1	13.81 (10.61)	07/10/96	7.36	-	6.45 (3.25)	1,2
		12/27/96	7.55	-	6.26 (3.06)	2
		03/25/97	7.31	-	6.50 (3.30)	2
		06/23/97	7.55	-	6.26 (3.06)	2
	13.55	09/30/97	7.46	-	6.09	3

1. Data from Table 2, Summary of Results of Groundwater Sampling, Port of Oakland Tanks CF-06, CF-07, and CF-35, 801 Maritime Street, Oakland, California, dated August 7, 1996, by Alisto Engineering Group.
2. Elevation data corrected relative to Port of Oakland datum; elevation data in parentheses referenced to mean sea level.
3. Top of casing cut and resurveyed on September 30, 1997 relative to Port of Oakland datum.

TABLE 2

**SUMMARY OF LABORATORY RESULTS
801 MARITIME STREET
OAKLAND, CALIFORNIA**

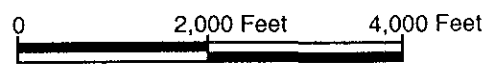
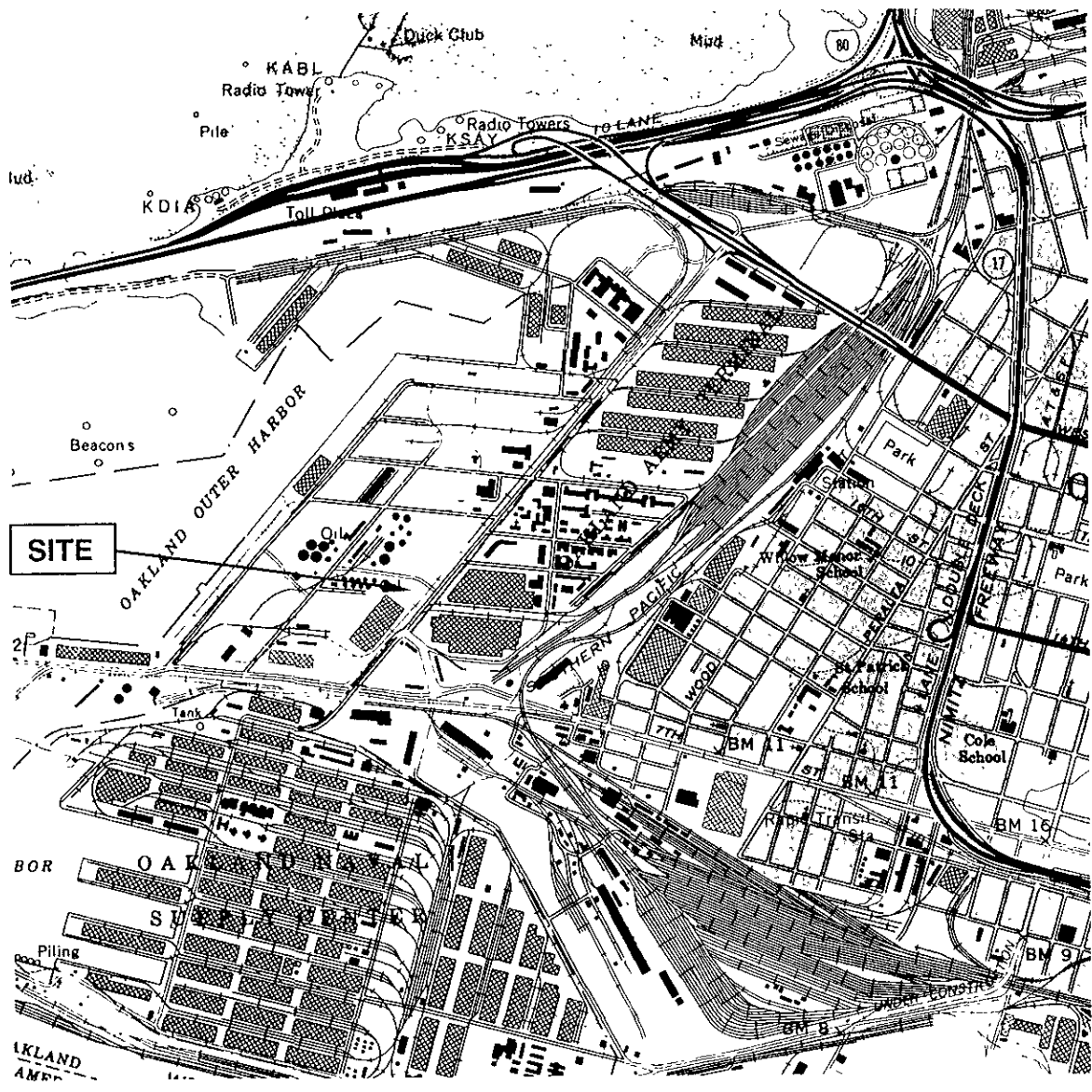
Monitoring Well ID	Date of Sampling	TPHg (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Xylenes (µg/l)	TPHd (µg/l)	TDS (mg/l)	Note
MW-1	07/10/96	180	27	14	5.4	23	7,100	-	1
	12/27/96	180	30	15	5.8	26	670	-	
	03/25/97	180	21	11	4.0	17	190	1,840	
	06/23/97	170	20	11	4.1	18	3,000	1,320	
	09/30/97	190	35	17	5.2	22	830	2,020	2

1. Data from Table 2, Summary of Results of Groundwater Sampling, Port of Oakland Tanks CF-06, CF-07, and CF-35, 801 Maritime Street, Oakland, California, dated August 7, 1996, by Alisto Engineering Group.
2. Laboratory results represent the highest concentrations reported for either the sample or field duplicate sample (QC-1).

TPHg = Total petroleum hydrocarbons (TPH) as gasoline.

TPHd = TPH as diesel.

TDS = Total Dissolved Solids



Approximate Scale

FIGURE 1

SITE LOCATION

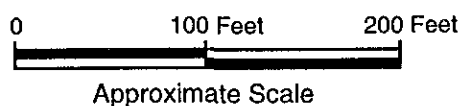
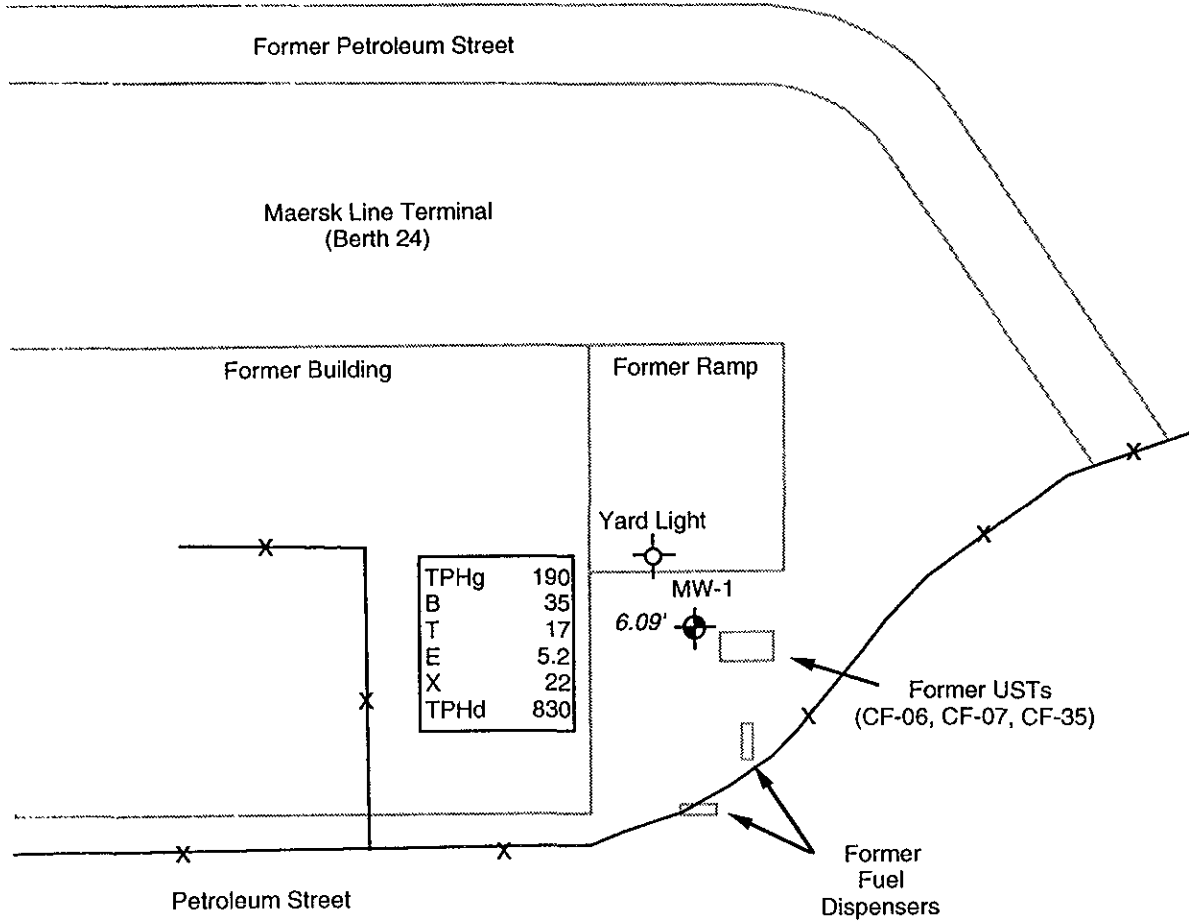
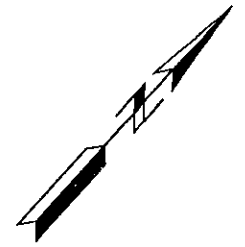
801 Maritime Street
Oakland, California



PORT OF OAKLAND

INNOVATIVE TECHNICAL SOLUTIONS, INC.

Source: Oakland West 7.5-minute U.S.G.S. Quadrangle, dated 1959, and photorevised in 1980.




- Legend**
-  Monitoring Well
 - 6.09' Groundwater elevation (in feet)
 - TPHg TPH as gasoline (in µg/L)
 - BTEX Benzene, toluene, ethylbenzene, xylenes (in µg/L)
 - TPHd TPH as diesel (in µg/L)

FIGURE 2

LABORATORY RESULTS FOR PETROLEUM HYDROCARBONS (September 30, 1997)

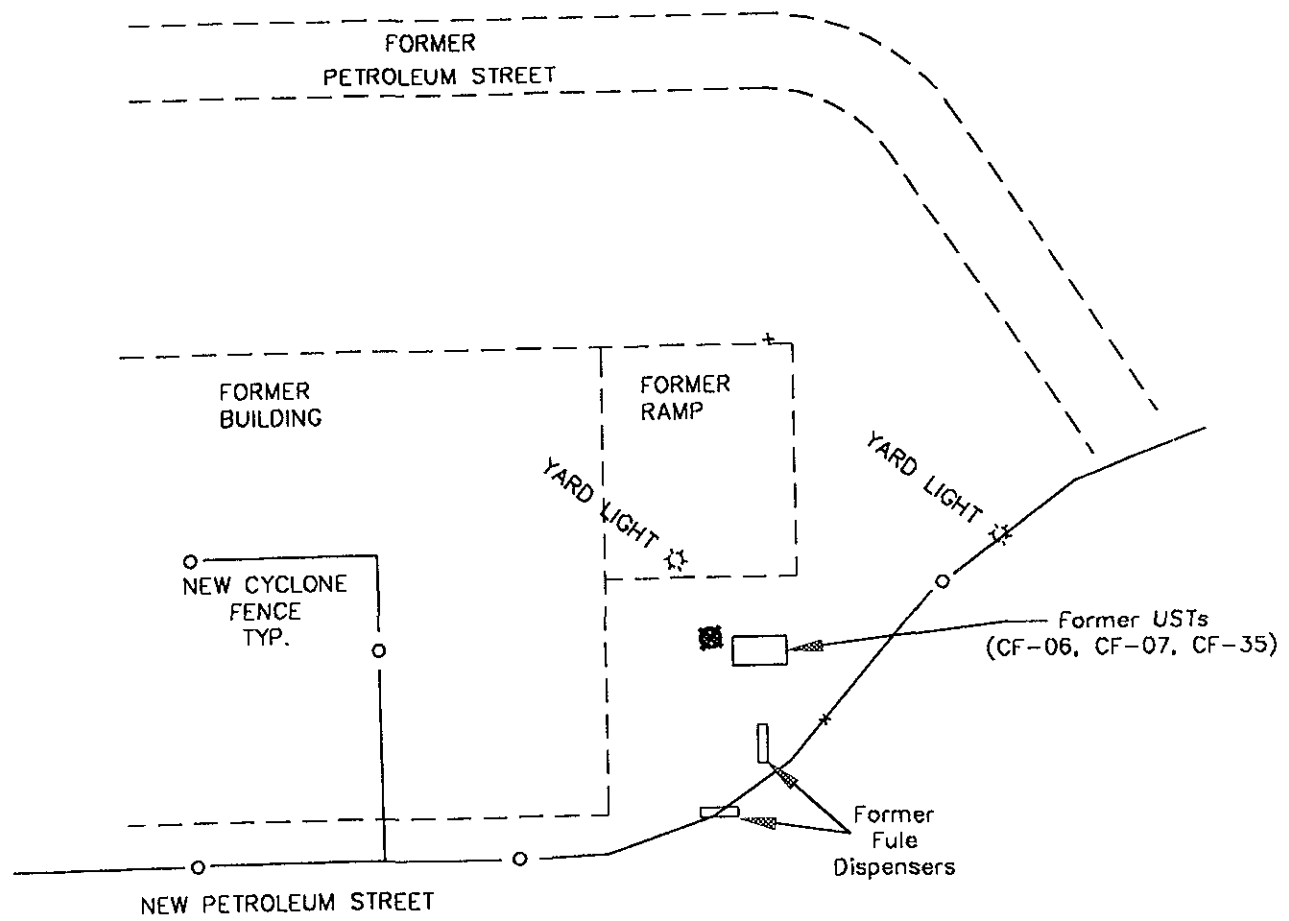
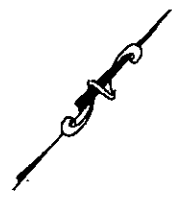
801 Maritime Street
Oakland, California

ITSI PORT OF OAKLAND

INNOVATIVE TECHNICAL SOLUTIONS, INC.

Source Adapted from Figure 2, Site Plan, 801 Maritime Street, Alisto Engineering Group, August 7, 1996, and resurvey by PLS Surveys, September 30, 1997.

ATTACHMENT A
COPY OF SURVEY MAP FROM PLS SURVEYS, INC.



APPROXIMATE LOCATIONS



(IN FEET)
1 inch = 100 ft.

■ MONITORING WELL NO. 1
CASING EL = 13.55
VAULT EL = 13.74

BENCHMARK:
"VENT" WAS HELD WITH AN ELEVATION
OF 17.20', PORT OF OAKLAND DATUM

PLS SURVEYS, INC.
27A EMBARCADERO COVE
OAKLAND, CA. 94606
510-261-0900

ATTACHMENT B
COPY OF MONITORING WELL PURGE AND SAMPLE FORM

MONITORING WELL PURGE AND SAMPLE FORM

PROJECT NAME: 801 Maritime

PROJECT NO.: 95-113.22

WELL NO.: MW-1

TESTED BY: J. Schollard

DATE: 9/30/97

Measuring Point Description: Blackmark (N. side) T.O.C. Static Water Level (ft.): 7.46

Total Well Depth (ft.): 14.41 Sample Method: 2" disposable bailer

Water Level Measurement Method: Solinst DTV probe Time Sampled: 1055 / QC-1 @ 1100

Purge Method: 2" disposable bailer Sample Depth (ft.): > 7.46'

Time Start Purge: 1029 Field Filtering: None

Time End Purge: 1039 Field Preservation: Blue Ice

Comments: Top of casing resurveyed (9/30/97), well box replaced, soft bottom (sediment accumulation), collected QC-1 field duplicate @ 1100

Well Volume Calculation (fill in before purging)	Total Depth (ft)	Depth to Water (ft)	Water Column (ft)	Multiplier for Casing Diameter (in)	Casing Volume (gal)		
					2	4	6
	14.41	7.46	6.95	2	0.16	0.64	1.44
			x				= 1.11
							(3 vols = 3.34)

Time	1033	1036	1039				
Volume Purged (gals)	1.5	1.5	1.5				
Cumulative Volume Purged (gals)	1.5	3.0	4.5				
Cumulative Number of Casing Volumes	1.35	2.70	4.05				
Purge Rate (gpm)	0.4	0.5	0.5				
Temperature (F°) or (C°)	76.1	75.7	75.0				
pH	12.3	12.28	12.29				
Specific Conductivity (µmhos/cm) X 1000	4.77	4.75	4.76				
Dissolved Oxygen (mg/L)	NA	→	→				
Turbidity/Color (NTU)	Clear	→	→				
Odor	None	→	→				
Dewatered?	No	→	→				

CHECKED BY: J. Schollard

DATE: _____

ATTACHMENT C
COPY OF LABORATORY REPORTS, CHROMATOGRAMS AND
CHAIN-OF-CUSTODY FORM
FOR GROUNDWATER SAMPLE

Pace Analytical

Pace Analytical Services, Inc
1455 McDowell Blvd North, Suite D
Petaluma, CA 94954

Tel 707-792-1865
Fax: 707-792-0342

October 14, 1997

Mr. Jim Schollard
Innovative Technical Solutions
1330 Broadway, Suite 1625
Oakland, CA 94612

RE: Pace Project Number: 709433
Client Project ID: P/O-801 Maritime Street/202863

Dear Mr. Schollard:

Enclosed are the results of analyses for sample(s) received by the laboratory on October 1, 1997. If you have any questions concerning this report, please feel free to contact me.

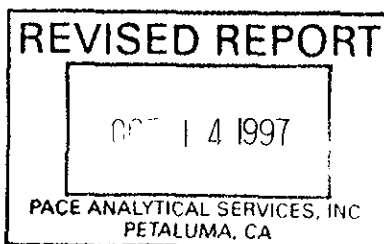
Sincerely,



Ron Chew
Project Manager

CA ELAP Certificate Number I2245

Enclosures



REPORT OF LABORATORY ANALYSIS

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Pace Analytical

Pace Analytical Services, Inc.
1455 McDowell Blvd. North, Suite D
Petaluma, CA 94954

Tel. 707-792-1865
Fax. 707-792-0342

DATE: 10/14/97
PAGE: 1

Innovative Technical Solutions
1330 Broadway, Suite 1625
Oakland, CA 94612

Pace Project Number: 709433
Client Project ID: P/O-801 Maritime Street/202863

Attn: Mr. Jim Schollard
Phone: (510)286-8888

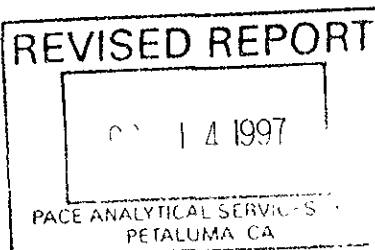
Solid results are reported on a wet weight basis

Pace Sample No: 701105058 Date Collected: 09/30/97 Matrix: Water
Client Sample ID: TRIP BLANK Date Received: 10/01/97

Parameters	Results	Units	PRL	Analyzed	Analyst	CAS#	Footnotes
------------	---------	-------	-----	----------	---------	------	-----------

GC -- Volatiles

Parameters	Results	Units	PRL	Analyzed	Analyst	CAS#	Footnotes
GAS/BTEX, Water							
Gasoline	ND	ug/L	50	10/03/97	GPF		
Benzene	ND	ug/L	0.5	10/03/97	GPF	71-43-2	
Toluene	ND	ug/L	0.5	10/03/97	GPF	108-88-3	
Ethylbenzene	ND	ug/L	0.5	10/03/97	GPF	100-41-4	
Xylene (Total)	ND	ug/L	1	10/03/97	GPF	1330-20-7	
a,a,a-Trifluorotoluene (S)	96	%		10/03/97	GPF	2164-17-2	
4-Bromofluorobenzene (S)	101	%		10/03/97	GPF	460-00-4	



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Petaluma, CA 94954

Tel: 707-792-1865

Fax: 707-792-0342

DATE: 10/14/97

PAGE: 2

Pace Project Number: 709433

Client Project ID: P/O-801 Maritime Street/202863

Pace Sample No: 701105066 Date Collected: 09/30/97 Matrix: Water
Client Sample ID: MW-1 Date Received: 10/01/97

Parameters	Results	Units	PRL	Analyzed	Analyst	CAS#	Footnotes
------------	---------	-------	-----	----------	---------	------	-----------

Wet Chemistry

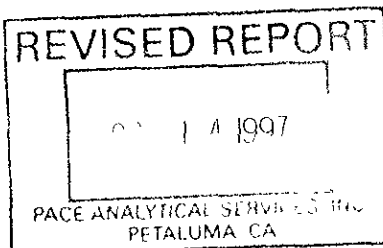
Total Dissolved Solids							
	Method: EPA 160.1						Prep Method: EPA 160.1
Total Dissolved Solids	2020	mg/L	5	10/02/97	GLG		

GC -- Volatiles

GAS/BTEX, Water	Method: EPA 8015M/8020M	Prep Method: EPA 8015M/8020M
Gasoline	180 ug/L 50	10/03/97 GPF
Benzene	34 ug/L 0.5	10/03/97 GPF 71-43-2
Toluene	17 ug/L 0.5	10/03/97 GPF 108-88-3
Ethylbenzene	5.2 ug/L 0.5	10/03/97 GPF 100-41-4
Xylene (Total)	22 ug/L 1	10/03/97 GPF 1330-20-7
a,a,a-Trifluorotoluene (S)	110 x	10/03/97 GPF 2164-17-2
4-Bromofluorobenzene (S)	109 x	10/03/97 GPF 460-00-4

GC -- Semi-VOA

TPH by 8015M w/ silica gel	Method: EPA 8015M w/ SG	Prep Method: EPA 3520
Diesel Fuel	0.83 mg/L 0.05	10/11/97 KLM 11-84-7
n-Pentacosane (S)	118 x	10/11/97 KLM 629-99-2
Date Extracted		10/06/97



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Pace Analytical

Pace Analytical Services, Inc.
1455 McDowell Blvd. North, Suite D
Petaluma, CA 94954

Tel. 707-792-1865
Fax 707-792-0342

DATE: 10/14/97

PAGE: 3

Pace Project Number: 709433

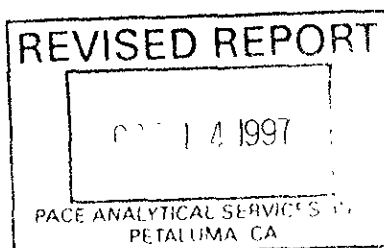
Client Project ID: P/O-801 Maritime Street/202863

Pace Sample No: 701105074 Date Collected: 09/30/97 Matrix: Water
Client Sample ID: QC-1 Date Received: 10/01/97

Parameters	Results	Units	PRL	Analyzed	Analyst	CAS#	Footnotes
------------	---------	-------	-----	----------	---------	------	-----------

GC -- Volatiles

Parameters	Results	Units	PRL	Analyzed	Analyst	CAS#	Footnotes
GAS/BTEX, Water							
Gasoline	190	ug/L	50	10/03/97	GPF		
Benzene	35	ug/L	0.5	10/03/97	GPF	71-43-2	
Toluene	17	ug/L	0.5	10/03/97	GPF	108-88-3	
Ethylbenzene	5.2	ug/L	0.5	10/03/97	GPF	100-41-4	
Xylene (Total)	22	ug/L	1	10/03/97	GPF	1330-20-7	
a,a,a-Trifluorotoluene (S)	108	x		10/03/97	GPF	2164-17-2	
4-Bromofluorobenzene (S)	107	x		10/03/97	GPF	460-00-4	



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Fax: 707-792-0342

DATE: 10/14/97

PAGE: 4

Pace Project Number: 709433

Client Project ID: P/O-801 Maritime Street/202863

PARAMETER FOOTNOTES

ND Not Detected
NC Not Calculable
PRL Pace Reporting Limit
(S) Surrogate

REVISED R.

14 1997

PACE ANALYTICAL SERVICES, INC
PETALUMA, CA

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Fax: 707-792-0342

QUALITY CONTROL DATA

DATE: 10/14/97
PAGE: 5

Innovative Technical Solutions
1330 Broadway, Suite 1625
Oakland, CA 94612

Pace Project Number: 709433
Client Project ID: P/O-801 Maritime Street/202863

Attn: Mr. Jim Schollard
Phone: (510)286-8888

QC Batch ID: 26857 QC Batch Method: EPA 8015M/8020M
Analysis Method: EPA 8015M/8020M Analysis Description: GAS/BTEX, Water
Associated Pace Samples: 701105058 701105066 701105074

METHOD BLANK: 701114688
Associated Pace Samples:

Parameter	Units	701105058	701105066	701105074	Footnotes
			Method Blank Result	PRL	
Gasoline	ug/L		ND	50	
Benzene	ug/L		ND	0.5	
Toluene	ug/L		ND	0.5	
Ethylbenzene	ug/L		ND	0.5	
Xylene (Total)	ug/L		ND	1	
a,a,a-Trifluorotoluene (S)	x		106		
4-Bromofluorobenzene (S)	x		112		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 701100273 701100281

Parameter	Units	701100273		701100281		Matrix Spike		Matrix Sp. Dup.		Spike Dup	
		701098501	Conc.	Spike	Result	% Rec	Result	% Rec	RPD	Footnotes	
Benzene	ug/L	0.1095	100	97.48	97.4	96.01	95.9	2			
Toluene	ug/L	0	100	94.00	94.0	92.34	92.3	2			
Ethylbenzene	ug/L	0.2643	100	90.67	90.4	88.98	88.7	2			
Xylene (Total)	ug/L	0.4653	300	280.9	93.5	275.3	91.6	2			
a,a,a-Trifluorotoluene (S)					88		92				
4-Bromofluorobenzene (S)					95		98				

REVISED REPORT

OCT 14 1997

PACE ANALYTICAL SERVICES, INC.
PETALUMA, CA

REPORT OF LABORATORY ANALYSIS

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Pace Analytical

Pace Analytical Services, Inc.
1455 McDowell Blvd North, Suite D
Petaluma, CA 94954

Tel 707-792-1865

Fax: 707-792-0342

QUALITY CONTROL DATA

DATE: 10/14/97

PAGE: 6

Pace Project Number: 709433

Client Project ID: P/O-801 Maritime Street/202863

LABORATORY CONTROL SAMPLE: 701100299

Parameter	Units	Spike Conc.	LCS Result	Spike % Rec	Footnotes
Benzene	ug/L	100	99.05	99.1	
Toluene	ug/L	100	94.47	94.5	
Ethylbenzene	ug/L	100	92.39	92.4	
Xylene (Total)	ug/L	300	285.4	95.1	
a,a,a-Trifluorotoluene (S)				90	
4-Bromofluorobenzene (S)				98	

REVISED REPORT

10/14/1997

PACE ANALYTICAL SERVICES, INC

REPORT OF LABORATORY ANALYSIS

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Pace Analytical

Pace Analytical Services, Inc
1455 McDowell Blvd. North, Suite D
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Tel: 707-792-1865
Fax: 707-792-0342

QUALITY CONTROL DATA

DATE: 10/14/97
PAGE: 7

Innovative Technical Solutions
1330 Broadway, Suite 1625
Oakland, CA 94612

Pace Project Number: 709433
Client Project ID: P/O-801 Maritime Street/202863

Attn: Mr. Jim Schollard
Phone: (510)286-8888

QC Batch ID: 26961
Analysis Method: EPA 160.1
Associated Pace Samples: 701105066

QC Batch Method: EPA 160.1
Analysis Description: Total Dissolved Solids

METHOD BLANK: 701105793
Associated Pace Samples: 701105066

Parameter	Units	Method Blank Result	PRL	Footnotes
Total Dissolved Solids	mg/L	ND	5	

SAMPLE DUPLICATE: 701105801

Parameter	Units	701105066	Dup. Result	RPD	Footnotes
Total Dissolved Solids	mg/L	2020	2020	0	

REVISED REPORT

OCT 14 1997

PACE ANALYTICAL SERVICES INC
PETALUMA, CA

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Petaluma, CA 94954

Tel: 707-792-1865

Fax: 707-792-0342

QUALITY CONTROL DATA

DATE: 10/14/97

PAGE: 8

Innovative Technical Solutions
1330 Broadway, Suite 1625
Oakland, CA 94612

Pace Project Number: 709433

Client Project ID: P/O-801 Maritime Street/202863

Attn: Mr. Jim Schollard
Phone: (510)286-8888

QC Batch ID: 27091

QC Batch Method: EPA 3520

Analysis Method: EPA 8015M w/ SG

Analysis Description: TPH by 8015M w/ silica gel

Associated Pace Samples: 701105066

METHOD BLANK: 701111551

Associated Pace Samples:

701105066

Parameter	Units	Method Blank Result	PRL	Footnotes
Diesel Fuel	mg/L	ND	0.05	
n-Pentacosane (S)	%	97		

LABORATORY CONTROL SAMPLE & LCS: 701111569

701111577

Parameter	Units	Spike Conc.	LCS Result	Spike % Rec	LCS Result	Spike Dup % Rec	RPD	Footnotes
Diesel Fuel	mg/L	1.0	0.6870	68.7	0.6514	65.1	5	
n-Pentacosane (S)				91		93		

REVISED REPORT

11/14/1997

PACE ANALYTICAL SERVICES, INC
PETALUMA, CA

REPORT OF LABORATORY ANALYSIS

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Pace Analytical

Pace Analytical Services, Inc
1455 McDowell Blvd. North, Suite D
Petaluma, CA 94954

Tel: 707-792-1865
Fax: 707-792-0342

DATE: 10/14/97

PAGE: 9

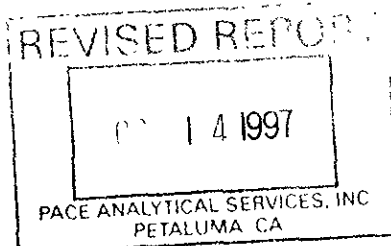
Pace Project Number: 709433

Client Project ID: P/O-801 Maritime Street/202863

QUALITY CONTROL DATA PARAMETER FOOTNOTES

Consistent with EPA guidelines unrounded concentrations are displayed and have been used to calculate % Rec and RPD values.

ND	Not Detected
NC	Not Calculable
PRL	Pace Reporting Limit
RPD	Relative Percent Difference
(S)	Surrogate



REPORT OF LABORATORY ANALYSIS

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Data File: /chem/70gce02.i/101197.b/fidr0003.d

Page 1

Date : 11-OCT-1997 15:31

Client ID: SBLKD1

Instrument: 70gce02.1

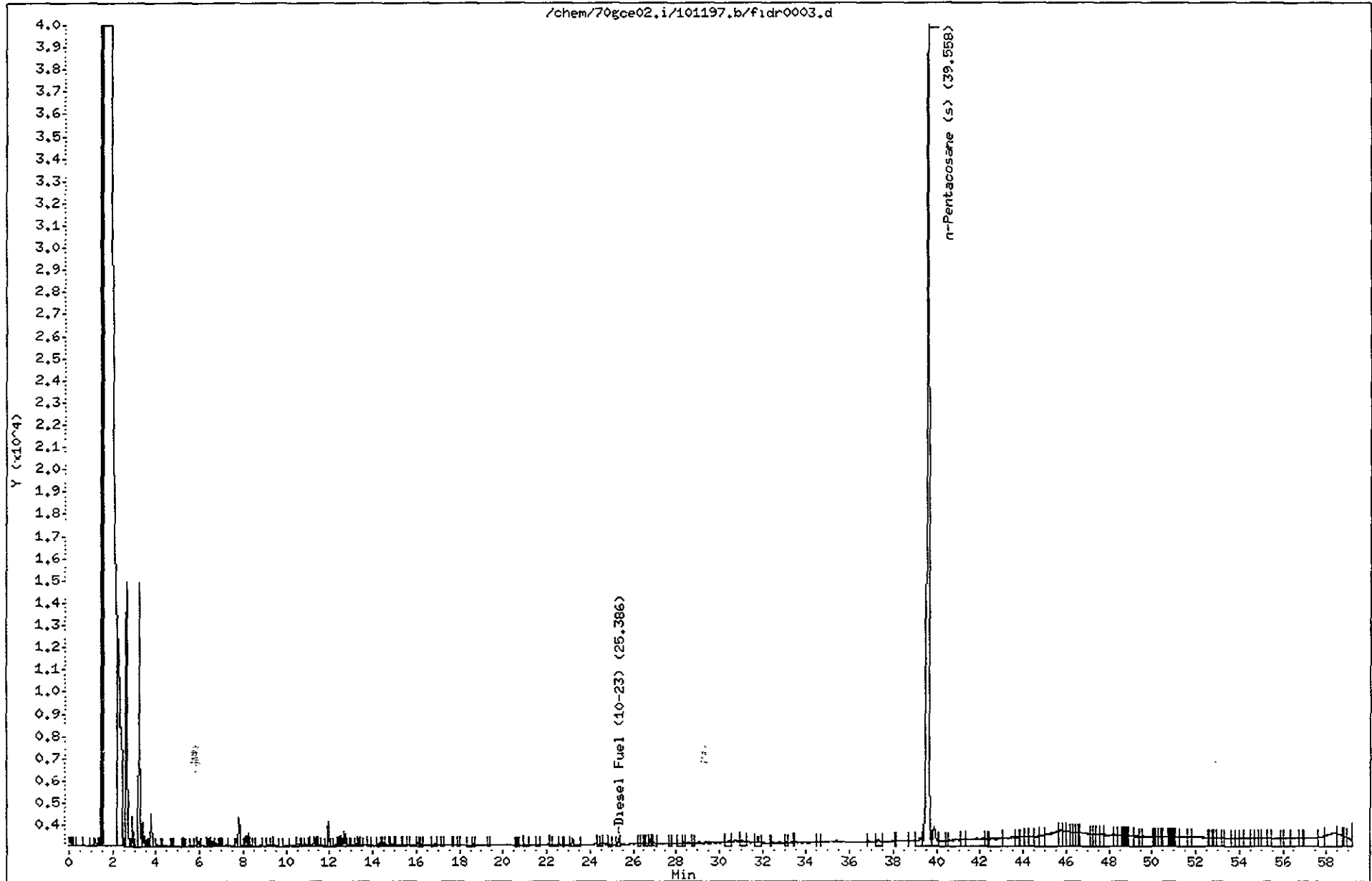
Sample Info: NA

Volume Injected (uL): 1.0

Operator: KLM

Column phase: J&W DB-1

Column diameter: 0.53



Data File: /chem/70gce02.i/101197.b/fidr0006.d

Page 1

Date : 11-OCT-1997 18:52

Client ID: MW-1

Instrument: 70gce02.i

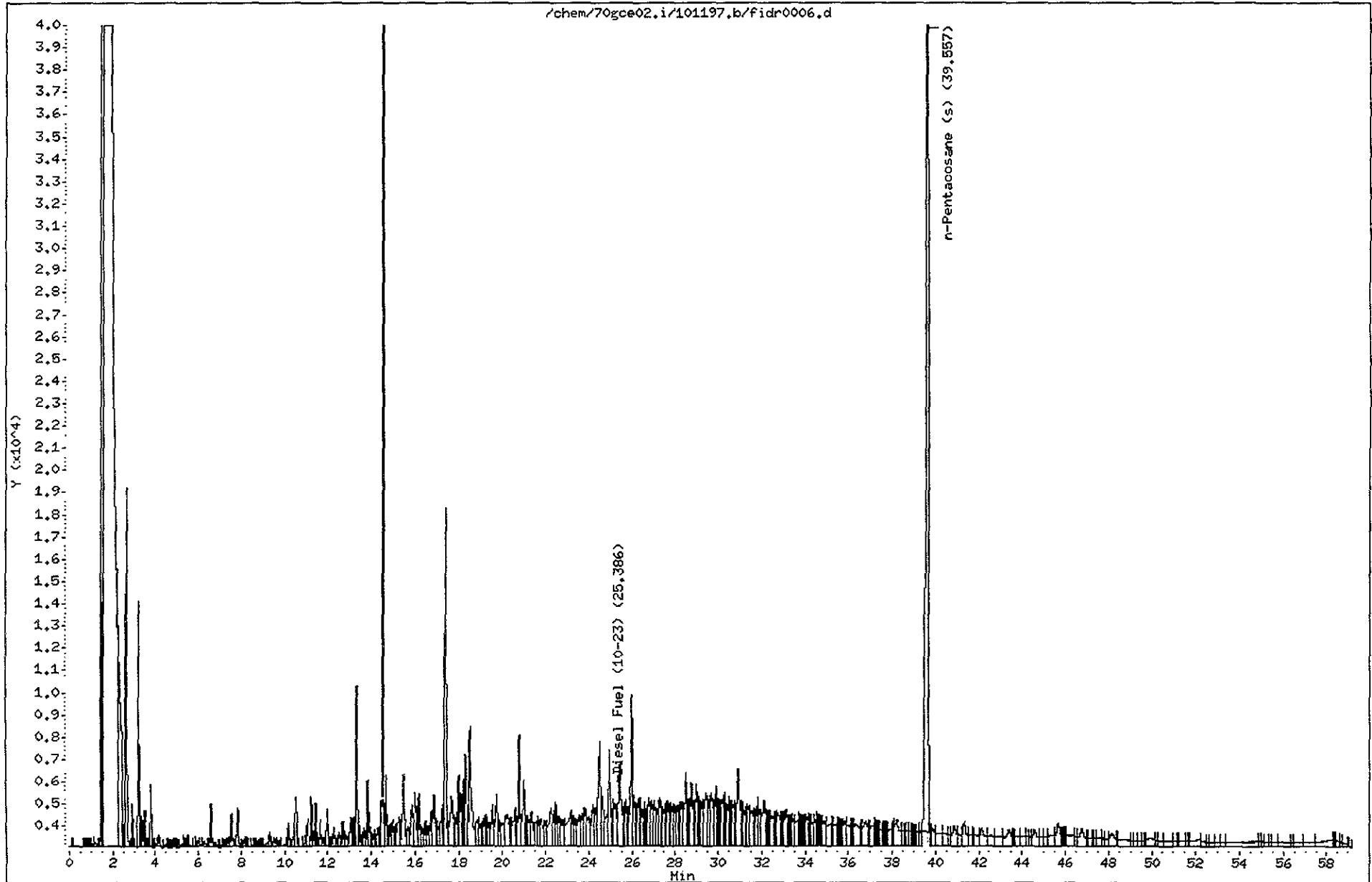
Sample Info: *TPH Ext need Chromatogram and Silica Gel Cleanup.*

Volume Injected (uL): 1.0

Operator: KLM

Column phase: J&W DB-1

Column diameter: 0.53



Data File: /chem/70gce02.1/101197.b/fidr0002.d

Page 1

Date : 11-OCT-1997 14:24

Client ID: SSTD2500

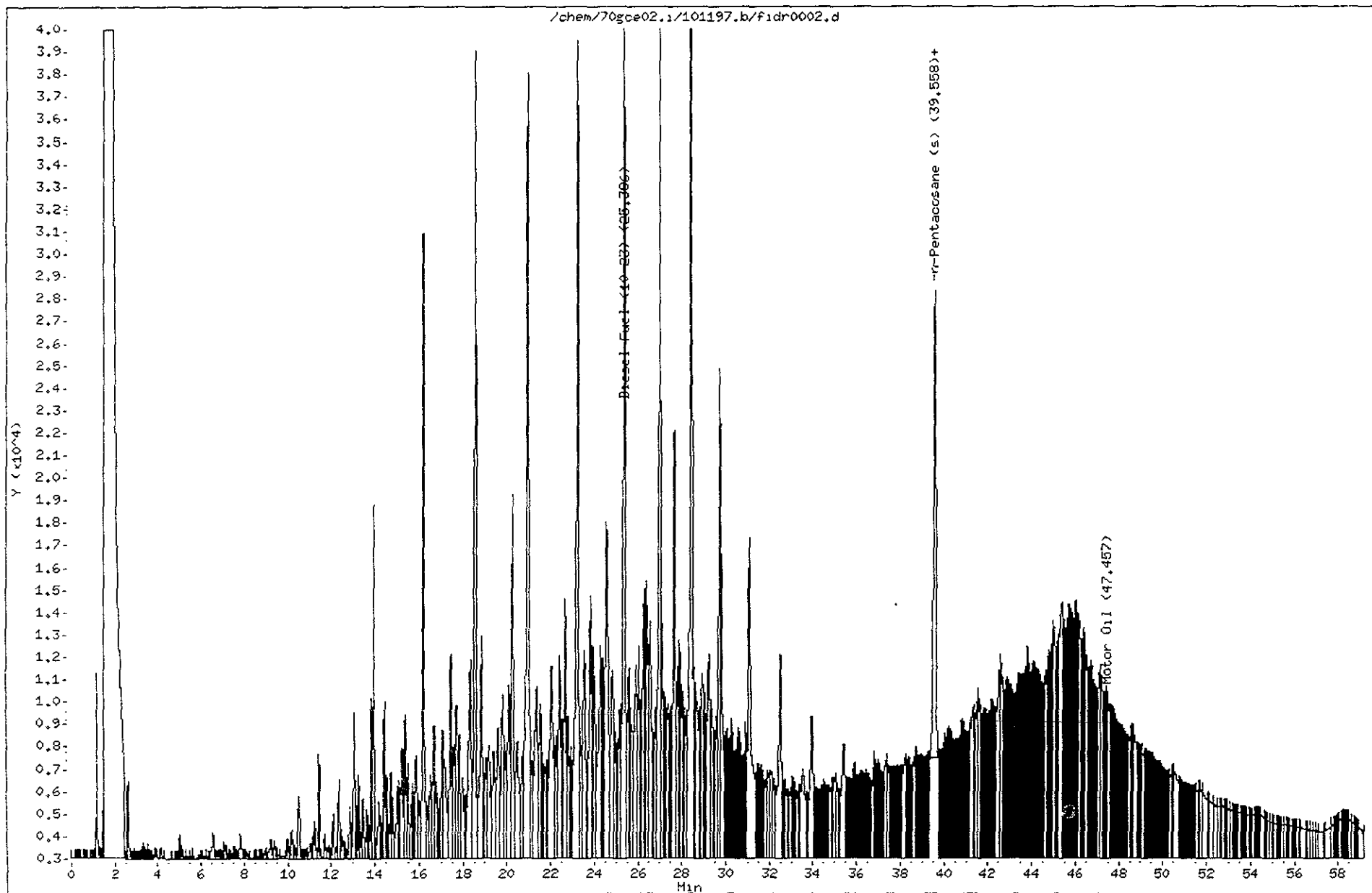
Instrument: 70gce02.1

Sample Info: Calibration standard

Operator: KLM

Column phase: J&W DB-1

Column diameter: 0.53





2855 Mitchell Drive, Suite 118
Walnut Creek, California 94598
(510) 256-8898 (Tel), (510) 256-8998 (Fax)

COOLER CUSTODY SEALS INTACT NOT INTACT NA

COOLER TEMPERATURE 6 °C
Green

709433

PROJECT NAME: P/O-801 Maritime

DATE 7/20/97

PROJECT NUMBER: 95-113-22

PAGE 1 of 1

SITE LOCATION: Maersk Shipping, 801 Maritime Dr.

CHAIN OF CUSTODY

SAMPLE ID	SAMPLE DEPTH	DATE	TIME	NUMBER OF CONTAINERS	TYPE OF CONTAINERS	SAMPLE MATRIX	ANALYSIS										SPECIAL INSTRUCTIONS/NOTES/COMMENTS	TOTAL NUMBER OF ANALYSES			
							TPH as Gas/BTEX - 8015/8020	TPH as Diesel - 8015 <i>w/ Subtotal Cleanup</i>	TEPH - 8015	TRPH - 418.1	Oil and Grease - 5520 D&F	LUFT Metals (Cd, Cr, Ni, Pb, Zn)	CAM 17 Metals	VOCs - 8240	SVOCs - 8270	TDS 160.1			TDS 160.1		
Trip Blank		7/30/97	0900	2	VOA	W	X												70110 5058	1	
MW-1			1055	3	VOA		X												70110 5066	1	
				2	IRA		X													1	
				1	250ml Plast.									X						1	
QC-1				3	VOA		X												70110 5074	1	
Not Used SS 9/30/97																				1	
TOTAL NUMBER OF CONTAINERS				11	TOTAL TESTS				3												5

SAMPLED BY: Jim Schollard
SIGNATURE: *[Signature]*

SPECIAL INSTRUCTIONS/COMMENTS: Standard TAT, please provide chromatograms

RELINQUISHED BY: Jim Schollard
Printed Name: Jim Schollard
Signature: *[Signature]*
Company: ITSI
Date and Time: 10/1/97 @ 0831

RELINQUISHED BY: Michael Ramos
Printed Name: Michael Ramos
Signature: *[Signature]*
Company: Pace
Date and Time: 10/1/97 10:00

RELINQUISHED BY: _____
Printed Name: _____
Signature: _____
Company: _____
Date and Time: _____

RECEIVED BY: Mike Ramos
Printed Name: Mike Ramos
Signature: *[Signature]*
Company: Pace
Date and Time: _____

RECEIVED BY: E.W. Olson
Printed Name: E.W. Olson
Signature: *[Signature]*
Company: ITSI
Date and Time: 10/1/97 1000

RECEIVED BY: _____
Printed Name: _____
Signature: _____
Company: _____
Date and Time: _____

SEND RESULTS TO: Jim Schollard @ ITSI #1625, 1330 Broadway Ave, Oakland, CA 94612