INNOVATIVE TECHNICAL SOLUTIONS, Inc.

ITSI

May 21, 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 (Report) has been prepared by Innovative Technical Solutions, Inc. (ITSI) on behalf of the Port of Oakland for groundwater monitoring and sampling performed on March 25, 1997 at the 801 Maritime Street site in Oakland, California. A site location map is shown on Figure 1.

The scope of work included monitoring and sampling one groundwater monitoring well, MW-1. 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).

SAMPLING OF MONITORING WELL

The groundwater monitoring and sampling was performed on March 25, 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 A.

1330 Broadway, Suite 1625, Oakland, CA 94612 (510) 286-8888 (510) 286-8889 fax

PORT OF OAKLAND

May 27, 1997

Ms. Jennifer Eberle
Hazardous Materials Specialist
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway
Alameda, CA 94502-6577

SUBJECT: **FIRST QUARTER 1997,**
GROUNDWATER MONITORING AND SAMPLING REPORT
801 MARITIME STREET
OAKLAND, CALIFORNIA 94607
STID #3780

Dear Jennifer:

The Port of Oakland herein submits a report titled "Groundwater Monitoring and Sampling Report", dated February 12, 1997 prepared on the behalf of the Port by Innovative Technical Solutions Inc. The report addresses groundwater monitoring and sampling in March 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

John Prall, R.G.
Associate Environmental Scientist

Enclosure
cc: Neil Werner

530 Water Street ■ Jack London Square ■ P.O. Box 2064 ■ Oakland, California 94604-2064
Telephone (510) 272-1100 ■ Fax (510) 272-1172 ■ TDD (510) 763-5703 ■ Cable address, PORTOFOAK, Oakland

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 stored onsite in a properly labeled drum.

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

MONITORING WELL GROUNDWATER LEVEL

Depth to water data is summarized in Table 1. The groundwater elevation was calculated using the measured depth to water and survey elevation of top of casing, and is provided in Table 1. This survey used the Port of Oakland datum, which is 3.2 feet below mean sea level. Figure 2 shows the groundwater elevation.

The groundwater gradient for the site could not be determined this quarter, as monitoring activities could not be coordinated with monitoring activities performed by Alisto Engineering Group at the nearby Berth 24 facility.

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	Analyses			
I.D.	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 shown in Figure 2. Copies of the laboratory results, chromatograms and chain-of-custody are provided in *Attachment B*

FINDINGS

Results of the March 25, 1997 groundwater monitoring and sampling of MW-1 are summarized below:

- TPHg was reported at a concentration of 180 µg/l.
- Benzene, toluene, ethylbenzene and xylenes were reported at concentrations of 21, 11, 4.0 and 17 µg/l, respectively.
- TPHd was reported at a concentration of 190 µg/l.
- TDS was reported at a concentration of 1,840 mg/l.

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	10.61	07/10/96	7.36	-	3.25	1
		12/27/96	7.55	-	3.06	
		03/25/97	7.31	-	3.30	

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.

TABLE 2

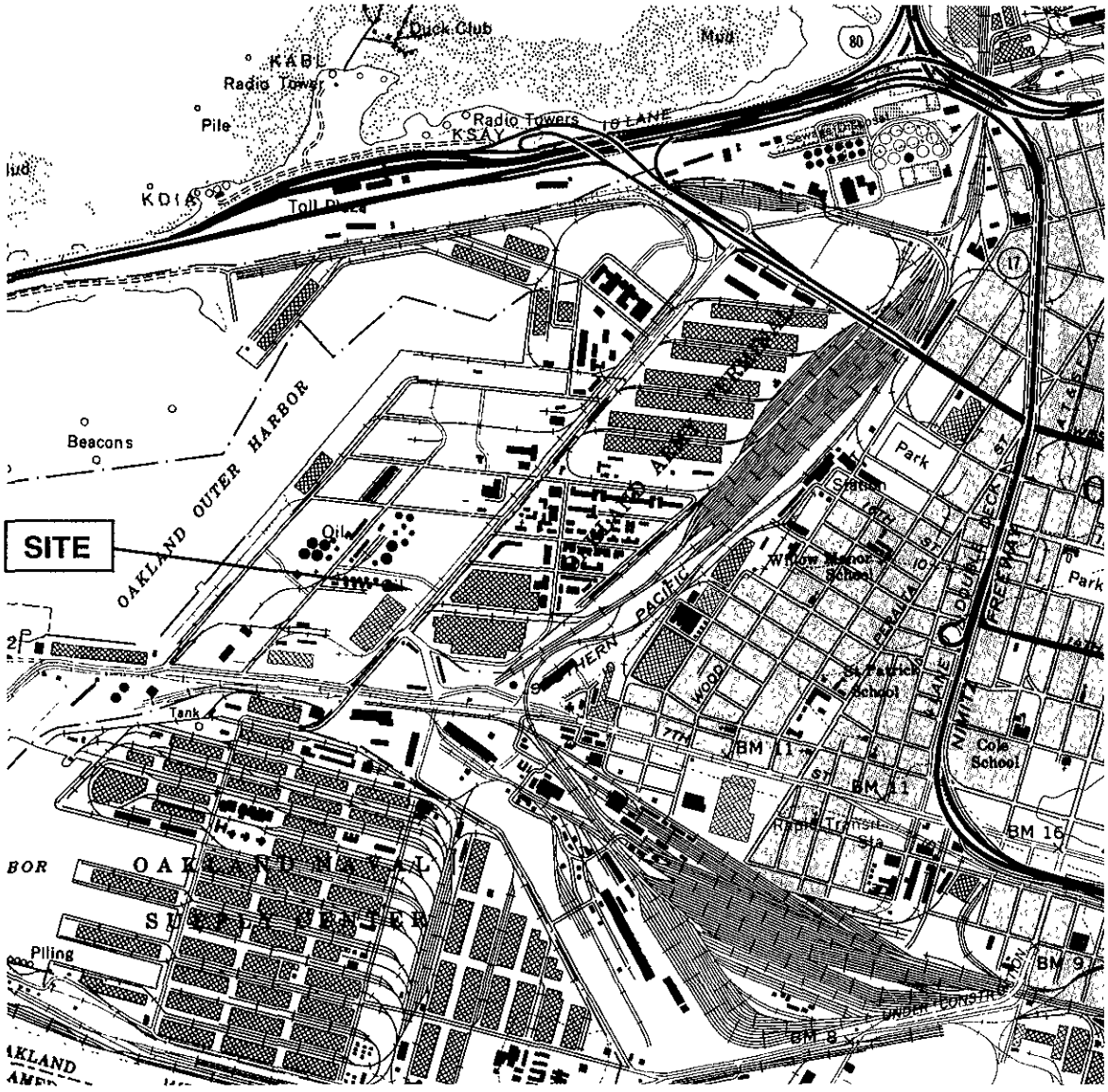
SUMMARY OF LABORATORY RESULTS
801 MARITIME STREET
OAKLAND, CALIFORNIA

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	

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.

TPHg = Total petroleum hydrocarbons (TPH) as gasoline.
TPHd = TPH as diesel.
TDS = Total Dissolved Solids

95-113.22/F 1-SitLoc



0 2,000 Feet 4,000 Feet

Approximate Scale

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

FIGURE 1

SITE LOCATION

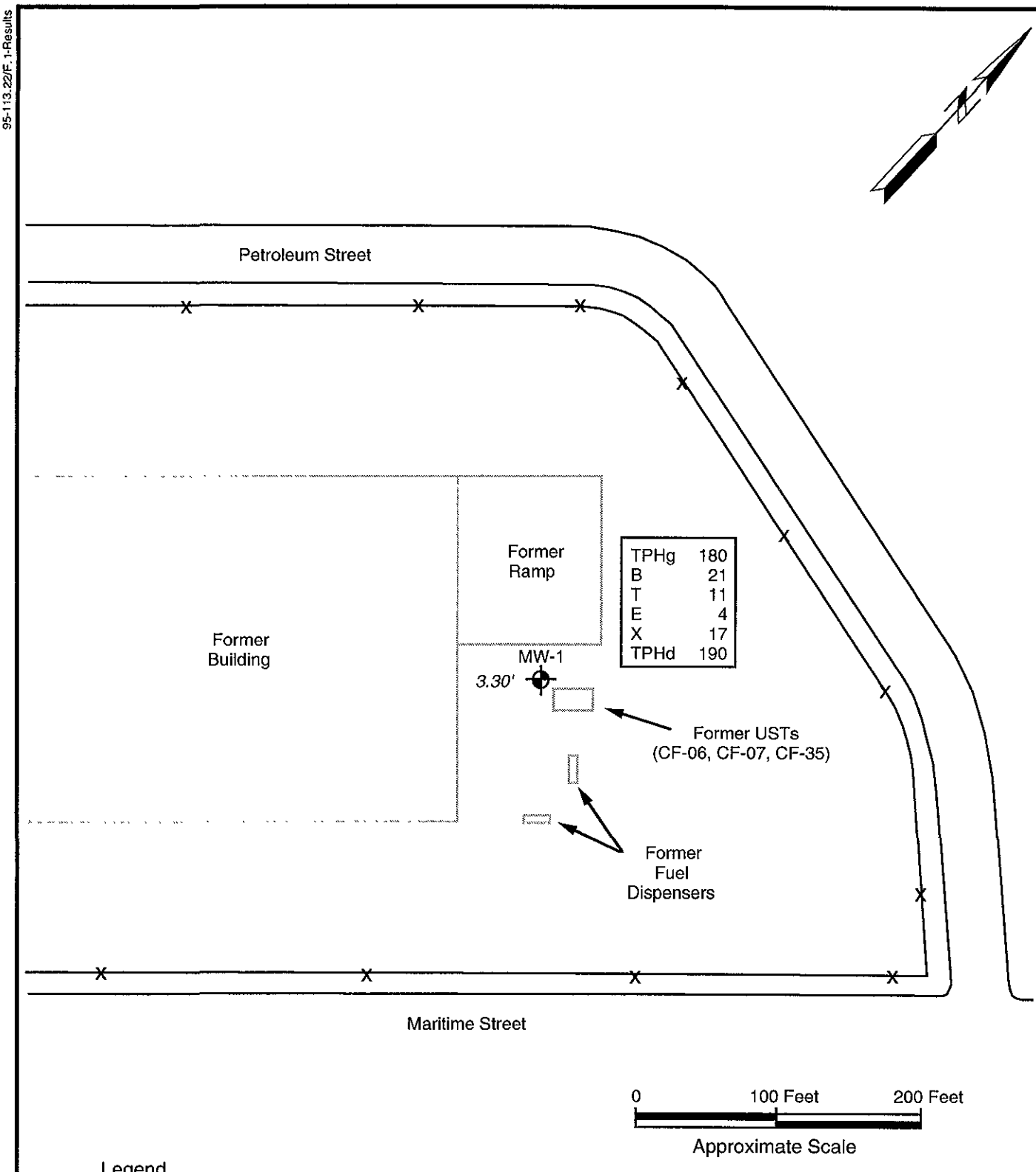
801 Maritime Street
Oakland, California

PORT OF OAKLAND

ITSI

INNOVATIVE TECHNICAL SOLUTIONS, INC.

95-113.22/F.1-Results



Legend

- Monitoring Well
- *3.3'* 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)

Source: Adapted from Figure 2, Site Plan, 801 Maritime Street, Alisto Engineering Group, August 7, 1996

FIGURE 2

LABORATORY RESULTS FOR PETROLEUM HYDROCARBONS (MARCH 25, 1997)

801 Maritime Street
Oakland, California

PORT OF OAKLAND

ITSI
INNOVATIVE TECHNICAL SOLUTIONS, INC.

ATTACHMENT A

COPY OF MONITORING WELL PURGE AND SAMPLE FORM

MONITORING WELL PURGE AND SAMPLE FORM

PROJECT NAME Port of Oakland - 801 Maritime PROJECT NO.: 95-113.22

WELL NO. MW-1 TESTED BY: J. Schollard DATE: 3/25/97

Measuring Point Description: red mark, T.O.C. Static Water Level (ft.): 7.31

Total Well Depth (ft.): 14.69 Sample Method: 2' disposable bailer

Water Level Measurement Method: Solinst OTW probe Time Sampled: 1155 + 1200 (QC-1)

Purge Method: 2" disposable bailer Sample Depth (ft.): ~7.5-14'

Time Start Purge: 1131 Field Filtering: N/A

Time End Purge: 1140 Field Preservation: Blue ice

Comments: DTB: soft (sediments present); collected QC-1 duplicate sample from MW-1 @ 1200

Well Volume Calculation (fill in before purging)	Total Depth (ft)		Depth to Water (ft)	=	Water Column (ft)	x	Multiplier for Casing Diameter (in)			=	Casing Volume (gal)
	14.69		7.31	=	7.38	x	2	4	6	=	1.18
							0.16	0.64	1.44		(3 vols = 3.54)

Time	1134	1137	1140				
Volume Purged (gals)	1.25	1.25	1.25				
Cumulative Volume Purged (gals)	1.25	2.50	3.75				
Cumulative Number of Casing Volumes	1.06	2.12	3.18				
Purge Rate (gpm)	0.4	0.4	0.4				
Temperature (F°) or (C°)	71.8	67.8	68.8				
pH	8.66	9.13	9.16				
Specific Conductivity (µmhos/cm) x000	4.56	4.38	4.71				
Dissolved Oxygen (mg/L)	N/A	→	→				
Turbidity/Color (NTU)	clear	Lt. olive gray	→				
Odor	None	→	→				
Dewatered?	No	→	→				

Jon Schollard/ERM

CHECKED BY: _____ DATE: _____

ITSI

ATTACHMENT B

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

Pace Analytical Services, Inc
1455 McDowell Blvd North, Suite D
Petaluma, CA 94954
Tel 707-792-1865
Fax 707-792-0342

Pace Analytical

April 01, 1997

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

RE: Pace Project Number: 708002
Client Project ID: PORT OF OAKLAND/202863

Dear Mr Schollard:

Enclosed are the results of analyses for sample(s) received on March 25, 1997. If you have any questions concerning this report, please feel free to contact me.

Sincerely.

Ron Chew
Project Manager

CA ELAP Certificate Number 2059

Enclosures

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc
1455 McDowell Blvd North, Suite D
Petaluma, CA 94954
Tel 707-792-1865
Fax 707-792-0342

Pace Analytical

DATE: 04/01/97

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

Pace Project Number: 708002
Client Project ID: PORT OF OAKLAND/202863

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

Pace Sample No: 70927991 Date Collected: 03/25/97
Client Sample ID: TRIP BLANK Date Received: 03/25/97

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
GC -- Volatiles								
GAS/BTEX, Water								
Gasoline	ND	ug/L	50	03/28/97	EPA 8015M/8020M	ADS		
Benzene	ND	ug/L	0.5	03/28/97	EPA 8015M/8020M	ADS	71-43-2	
Toluene	ND	ug/L	0.5	03/28/97	EPA 8015M/8020M	ADS	108-88-3	
Ethylbenzene	ND	ug/L	0.5	03/28/97	EPA 8015M/8020M	ADS	100-41-4	
Xylene (Total)	ND	ug/L	1	03/28/97	EPA 8015M/8020M	ADS	1330-20-7	
a,a,a-Trifluorotoluene (S)	105	%		03/28/97	EPA 8015M/8020M	ADS	2164-17-2	
4-Bromofluorobenzene (S)	100	%		03/28/97	EPA 8015M/8020M	ADS	460 00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc
1455 McDowell Blvd North, Suite D
Petaluma, CA 94954
Tel. 707-792-1865
Fax 707-792-0342

Pace Analytical

Pace Project Number: 708002
Client Project ID: PORT OF OAKLAND/202863

Pace Sample No: 70928007 Date Collected: 03/25/97
Client Sample ID: MW-1 Date Received: 03/25/97

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
GC -- Volatiles								
GAS/BTEX, Water								
Gasoline	180	ug/L	50	03/28/97	EPA 8015M/8020M	ADS		
Benzene	21	ug/L	0.5	03/28/97	EPA 8015M/8020M	ADS	71-43-2	
Toluene	11	ug/L	0.5	03/28/97	EPA 8015M/8020M	ADS	108-88-3	
Ethylbenzene	4.0	ug/L	0.5	03/28/97	EPA 8015M/8020M	ADS	100-41-4	
Xylene (Total)	17	ug/L	1	03/28/97	EPA 8015M/8020M	ADS	1330-20-7	
a,a,a-Trifluorotoluene (S)	103	%		03/28/97	EPA 8015M/8020M	ADS	2164-17-2	
4-Bromofluorobenzene (S)	101	%		03/28/97	EPA 8015M/8020M	ADS	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services Inc
1455 McDowell Blvd North, Suite D
Petaluma, CA 94954
Tel 707-792-1865
Fax 707-792-0342

Pace Analytical

Pace Project Number: 708002
Client Project ID: PORT OF OAKLAND/202863

Pace Sample No: 70928015 Date Collected: 03/25/97
Client Sample ID: MW-1 Date Received: 03/25/97

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
Wet Chemistry								
Total Dissolved Solids								
Total Dissolved Solids	1840	mg/L	5	03/29/97	EPA 160.1	ALK		
GC - Semi-VOA								
TPH by 8015M w/ silica gel								
Diesel Fuel	0.19	mg/L	0.05	03/31/97	EPA 8015M w/ SG	PAA	11-84-7	1
n-Pentacosane (S)	72	%		03/31/97	EPA 8015M w/ SG	PAA	629-99-2	
Date Extracted				03/28/97				

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc
1455 McDowell Blvd. North, Suite D
Petaluma, CA 94954
Tel: 707-792-1865
Fax: 707-792-0342

Pace Analytical

Pace Project Number: 708002
Client Project ID: PORT OF OAKLAND/202863

Pace Sample No: 70928080 Date Collected: 03/25/97
Client Sample ID: QC-1 Date Received: 03/25/97

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
GC -- Volatiles								
GAS/BTEX, Water								
Gasoline	180	ug/L	50	03/28/97	EPA 8015M/8020M	ADS		
Benzene	21	ug/L	0.5	03/28/97	EPA 8015M/8020M	ADS	71-43-2	
Toluene	11	ug/L	0.5	03/28/97	EPA 8015M/8020M	ADS	108-88-3	
Ethylbenzene	3.9	ug/L	0.5	03/28/97	EPA 8015M/8020M	ADS	100-41-4	
Xylene (Total)	17	ug/L	1	03/28/97	EPA 8015M/8020M	ADS	1330-20-7	
a,a,a-Trifluorotoluene (S)	104	%		03/28/97	EPA 8015M/8020M	ADS	2164-17-2	
4-Bromofluorobenzene (S)	101	%		03/28/97	EPA 8015M/8020M	ADS	460 00-4	
GC -- Semi-VOA								
TPH by 8015M w/ silica gel								
Diesel Fuel	0.13	mg/L	0.05	03/31/97	EPA 8015M w/ SG	PAA	11-84-7	1
n-Pentacosane (S)	52	%		03/31/97	EPA 8015M w/ SG	PAA	629-99-2	
Date Extracted				03/28/97				

REPORT OF LABORATORY ANALYSIS

Pace Project Number: 708002
Client Project ID: PORT OF OAKLAND/202863

PARAMETER FOOTNOTES

ND	Not Detected
NC	Not Calculable
PRL	Pace Reporting Limit
(S)	Surrogate
[1]	Hydrocarbons present do not match profile of laboratory standard.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc
1455 McDowell Blvd North, Suite D
Petaluma, CA 94954
Tel: 707-792-1865
Fax: 707-792-0342

Pace Analytical

QUALITY CONTROL DATA

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

Pace Project Number: 708002
Client Project ID: PORT OF OAKLAND/202863

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

QC Batch ID: 22657
QC Batch Method: EPA 8015M/8020M
Analysis Method: EPA 8015M/8020M
Analysis Description: GAS/BTEX, Water
Associated Pace Samples: 70927991 70928007 70928080

METHOD BLANK: 70930284
Associated Pace Samples:
70927991 70928007 70928080

Parameter	Units	Method Blank Result	PRL	Footnotes
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)	%	96		
4-Bromofluorobenzene (S)	%	91		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 70930292 70930300

Parameter	Units	70925250	Spike Conc.	Matrix Spike Result	Spike % Rec	Matrix Sp. Dup. Result	Spike Dup % Rec	RPD	Footnotes
Benzene	ug/L	0	100	94.28	94.3	98.52	98.5	4	
Toluene	ug/L	0.1447	100	97.46	97.3	99.38	99.2	2	
Ethylbenzene	ug/L	0	100	96.34	96.3	97.40	97.4	1	
Xylene (Total)	ug/L	0.4707	300	295.6	98.4	300.0	99.8	1	
a,a,a-Trifluorotoluene (S)					105		107		
4-Bromofluorobenzene (S)					110		111		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc
1455 McDowell Blvd North, Suite D
Petaluma, CA 94954
Tel 707-792 1865
Fax 707-792 0342

Pace Analytical

QUALITY CONTROL DATA

Pace Project Number: 708002
Client Project ID: PORT OF OAKLAND/262863

LABORATORY CONTROL SAMPLE & LCSD: 70930318 70930326

Parameter	Units	Spike Conc.	LCS Result	Spike % Rec	LCSD Result	Spike Dup % Rec	RPD	Footnotes
Benzene	ug/L	100	94.65	94.7	97.51	97.5	3	
Toluene	ug/L	100	97.20	97.2	99.59	99.6	2	
Ethylbenzene	ug/L	100	95.68	95.7	97.71	97.7	2	
Xylene (Total)	ug/L	300	293.9	98.0	301.3	100	2	
a,a,a-Trifluorotoluene (S)				103		105		
4-Bromofluorobenzene (S)				105		108		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc
1455 McDowell Blvd North, Suite D
Petaluma, CA 94954
Tel 707-792 1865
Fax 707-792 0342

Pace Analytical

QUALITY CONTROL DATA

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

Pace Project Number: 708002
Client Project ID: PORT OF OAKLAND/202863

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

QC Batch ID: 22663
QC Batch Method: EPA 3520
Analysis Method: EPA 8015M w/ SG
Analysis Description: TPH by 8015M w/ silica gel
Associated Pace Samples: 70928015 70928080

METHOD BLANK: 70930623
Associated Pace Samples:

		70928015	70928080 Method Blank		
Parameter	Units		Result	PRL	Footnotes
Diesel Fuel	mg/L		ND	0.05	
n-Pentacosane (S)	%		61		

LABORATORY CONTROL SAMPLE & LCSD: 70930631 70930649

		Spike	LCS	Spike	LCSD	Spike Dup		
Parameter	Units	Conc.	Result	% Rec	Result	% Rec	RPD	Footnotes
Diesel Fuel	mg/L	1.0	0.3521	35.2	0.3063	30.6	14	
n-Pentacosane (S)				57		51		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc
1455 McDowell Blvd North, Suite D
Petaluma, CA 94954
Tel 707-792-1865
Fax 707-792-0342

Pace Analytical

QUALITY CONTROL DATA

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

Pace Project Number. 708002
Client Project ID: PORT OF OAKLAND/202863

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

QC Batch ID: 22690
Analysis Method: EPA 160.1
QC Batch Method: EPA 160.1
Analysis Description: Total Dissolved Solids
Associated Pace Samples: 70928015

METHOD BLANK: 70931811
Associated Pace Samples:
70928015

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

SAMPLE DUPLICATE: 70931829

Parameter	Units	70928015	Dup. Result	RPD	Footnotes
Total Dissolved Solids	mg/L	1840	1910	4	

REPORT OF LABORATORY ANALYSIS

Pace Project Number: 708002
Client Project ID: PORT OF OAKLAND/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

INNOVATIVE TECHNICAL SOLUTIONS, Inc.

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

108002

PROJECT NAME: Port of Oakland - 801 Maritime Dr.
PROJECT NUMBER: 95-113.22
SITE LOCATION: 801 Maritime Dr., Oakland CA

CHAIN OF CUSTODY

DATE 3/25/97
PAGE 1 of 1

SAMPLE I.D	SAMPLE DEPTH	DATE	TIME	NUMBER OF CONTAINERS	TYPE OF CONTAINERS	SAMPLE MATRIX	ANALYSIS: TPH as Gas/BTEX - 8015/8020	TPH as Diesel - 8015	TPH as Diesel - 8015 (w/ Silica Gel Cleanup)	TEPH - 8015	TEPH-8015 m (w/ Silica Gel Cleanup)	TRPH - 418.1	Oil and Grease - 5520	Purgeable Halocarbons - 601/8010	VOCs - 624/8240	SVOCs - 625/8270	LUFT Metals (Cd, Cr, Ni, Pb, Zn)	CAM 17 Metals	TDS
Trip Blank	—	3/25/97	—	2	VOAs	W	X												
MW-1	—		1155	3	VOAs	W	X												
↓	—	↓	↓	2	1LA	W			X										
↓	—	↓	↓	1	250ml Plast.	W													X
QC-1	—	↓	—	3	VOAs	W	X												
↓	—	↓	—	2	1LA	W			X										
TOTAL NUMBER OF CONTAINERS				13	TOTAL TESTS		3		2										1

Not used (JS) 3/25/97

PACE Analytical
Petaluma, CA
Work Order #
202863

SPECIAL INSTRUCTIONS/COMMENTS
70927991
70928007
70928015
↓
70928080
↓

COOLER CUSTODY SEALS INTACT ☐ NOT INTACT ☐ N/A
COOLER TEMPERATURE 4 °C

SAMPLED BY: Jim Schollard
SIGNATURE: Jim Schollard

SPECIAL INSTRUCTIONS/COMMENTS: Please send chromatograms w/ TPH analytical results

RELINQUISHED BY: Jim Schollard — Printed Name / Signature
ITSI — Company
3/25/97 @ 14:28 — Date and Time

RECEIVED BY: Vito Lucky — Printed Name / Signature
Pace — Company
3/25/97 1402 — Date and Time

RELINQUISHED BY: — Printed Name / Signature
Pace — Company
3/25/ 17:30 — Date and Time

RECEIVED BY: GAIL HERRMANN — Printed Name / Signature
PASI — Company
3/25 17:30 — Date and Time

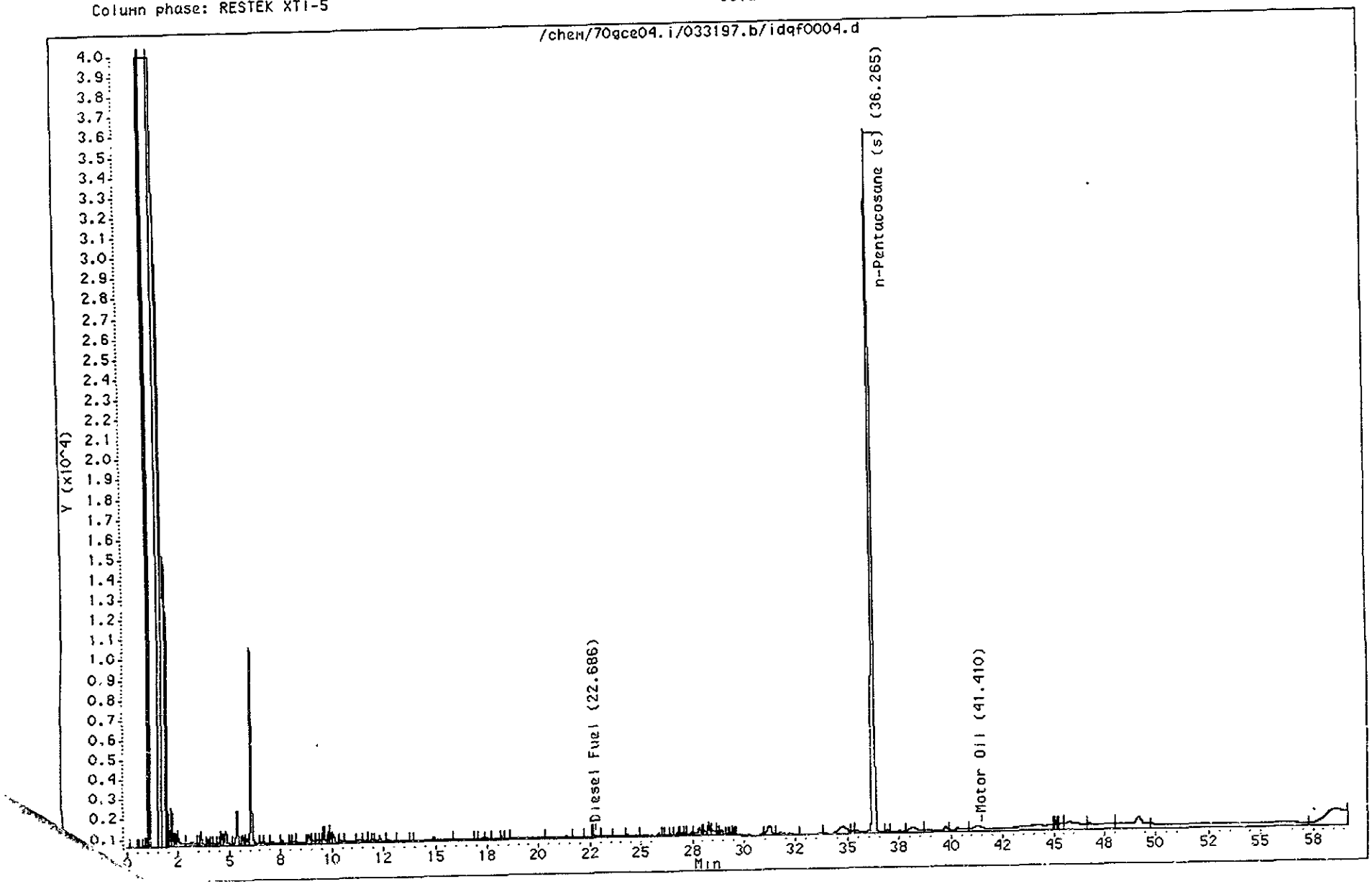
RELINQUISHED BY — Printed Name / Signature
Company — Date and Time

RECEIVED BY — Printed Name / Signature
Company — Date and Time

SEND RESULTS TO: Jim Schollard, 1330 Broadway, Suite 1625, Oakland CA 94612

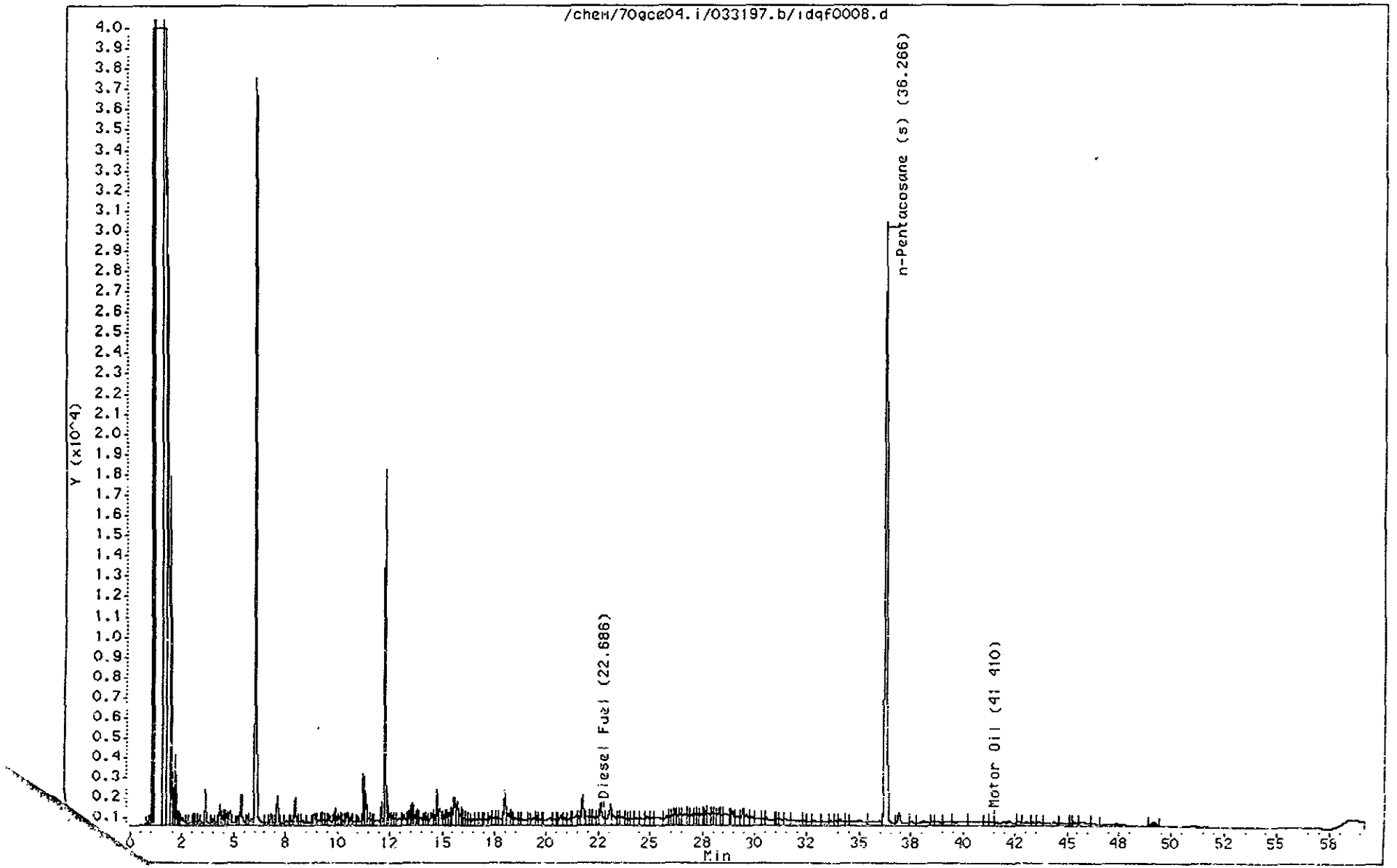
Data File: /chem/70gce04.i/033197.b/idqf0004.d
Date : 31-MAR-1997 16:10
Client ID: BLK01
Lab Sample ID. 70930623
Volume Injected (uL): 1.0
Column phase: RESTEK XTI-5

Instrument: 70gce04.i
Misc Info: 70930623,,1,22663,1,3:,BLANK,,,dmof.sub,dmar.sub,
Operator: PAA
Column diameter: 0.53



Data File: /chem/70gce04.i/033197.b/idqf0008.d
Date : 31-MAR-1997 20:37
Client ID: QC-1
Lab Sample ID: 70928080
Volume Injected (uL): 1.0
Column phase: RESTEK XTI-5

Instrument: 70gce04.i
Misc Info: 70928080,,,22663,1,0,,SMPL,,,dmof.sub,dmor.sub,
Operator: PAR
Column diameter: 0.53



Data File: /chem/70gce04.i/033197.b/idqf0007.d
Date : 31-MAR-1997 19:30
Client ID: MW-1
Lab Sample ID: 70928015
Volume Injected (uL): 1.0
Column phase: RESTEK XTI-5

Instrument: 70gce04.i
Misc Info: 70928015,,,22663,1,0,,SMPL,,,dmof.sub,dmor.sub,
Operator: PAA
Column diameter: 0.53