



PACIFIC
ENVIRONMENTAL
GROUP, INC.

FEB 10 1997

February 5, 1997
Project 360-014.2B

Mr. Dennis Buran
Glascock Street Properties
425 Market Street
Oakland, California 94607

Re: Quarterly Report - Fourth Quarter 1996
Former Dorr-Olive Site
2901 Glascock Street, Oakland, California

Dear Mr. Buran:

The following presents the results of fourth quarter 1996 monitoring for the above referenced site (Figure 1). This letter has been prepared for Glascock Street Properties by Pacific Environmental Group, Inc. (PACIFIC). This report also includes a summary of remedial activities performed at the site during third and fourth quarter 1996.

SCOPE OF WORK

All eight groundwater monitoring wells (MW-1 through MW-8; Figure 2) were gauged and sampled by PACIFIC on December 17, 1996, except for Well MW-5 which was destroyed in September 1996 to accommodate a remedial excavation. The depth-to-groundwater and groundwater analytical data are presented in Tables 1 through 3. The wells were sampled and analyzed for the presence of total extractable petroleum hydrocarbons quantified as diesel (TEPH-d), motor oil, total purgeable petroleum hydrocarbons quantified as gasoline (TPPH-g), benzene, toluene, ethylbenzene, and xylenes (BTEX compounds), and methyl tert-butyl ether (MtBE). Depth-to-groundwater, TEPH-d, and benzene concentrations for the December 1996 sampling event are shown on Figure 2. The certified analytical reports (CARs), chain-of-custody documentation, and field data sheets are presented as Attachment A.

GROUNDWATER LEVELS

Groundwater levels in site monitoring wells increased an average 1.64 feet since the last sampling event (Table 1). Groundwater flow is still generally southward toward the Oakland Estuary, consistent with previous measurements (Figure 2). Groundwater elevations were within the historic range for the site.

GROUNDWATER QUALITY

No measurable separate phase hydrocarbons were found in site monitoring wells this quarter. TEPH-d remains the primary constituent found in groundwater. Highest TEPH-d concentrations continue to be found in wells MW-1, MW-2, and MW-6, located down-gradient of the former underground storage tank area (Figure 2). TEPH-d found in samples from wells MW-2 and MW-6 was characterized as a weathered diesel, while TEPH-d found in Well MW-1 was characterized as a mixture of weathered diesel and unidentified hydrocarbons in the C9 through C24 range. The chromatograms for three other wells (MW-4, MW-7, and MW-8) contained unidentified hydrocarbons in the C9 through C24 range which did not match the diesel standard (see CARs in Attachment A).

Four wells (MW-1, MW-2, MW-3, and MW-6) were reported to have detectable concentrations of TPPH-g; however, none of the samples analyzed were reported to be gasoline (see CARs in Attachment A). Maximum benzene concentration in site wells was reported to be 3.4 micrograms per liter ($\mu\text{g/L}$) in wells MW-1 and MW-6. MtBE was detected in three wells this quarter (MW-1, MW-6, and MW-7). The maximum concentration of MtBE detected this quarter was 100 $\mu\text{g/L}$ in upgradient well MW-7.

STATUS OF REMEDIAL ACTIVITIES

Remedial activities were completed during the third and fourth quarter 1996 to remove hydrocarbon-impacted soil from 4 locations inside the warehouse and to remove hydrocarbon and PCB-impacted soil from 1 location outside. A report on the remedial excavation will be issued under separate cover. Installation of oxygen releasing compound (ORC) modules to enhance groundwater remediation is scheduled to proceed during first quarter 1997.

February 5, 1997

Page 3

A copy of this monitoring report should be forwarded to Mr. Barney Chan, Alameda County Health Care Services Agency. If you have any questions regarding the contents of this letter, please call.

Sincerely,

Pacific Environmental Group, Inc.



Andrew D. Lehane
Project Engineer
RCE 55798



- Attachments:
- Table 1 - Groundwater Elevation Data
 - Table 2 - Groundwater and Analytical Data - TPHH-g, BTEX Compounds, TEPH-d, Motor Oil, and MtBE
 - Table 3 - Groundwater Analytical Data - PCBs, Metals, and VOCs

 - Figure 1 - Site Location Map
 - Figure 2 - Groundwater Monitoring Map - Fourth Quarter 1996

 - Attachment A - Certified Analytical Report, Chain-of-Custody Documentation, and Field Data Sheets

cc: Mr. Werner Sicvol, BP Oil Company

Table 1
Groundwater Elevation Data

Former Dorr-Oliver Site
2901 Glascock Avenue
Oakland, California

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Water (feet, TOC)	Groundwater Elevation (feet, MSL)
MW-1	10/06/94	10.76	NA	NA
	01/20/95		6.67	4.09
	05/15/96		7.08	3.68
	08/28/95		8.06	2.70
	12/06/95		8.24	2.52
	01/18/96	10.76	6.35	4.41
	03/08/96		6.52	4.24
	07/02/96		8.35	2.41
	12/17/97		6.85	3.91
MW-2	10/06/94	10.62	7.17	3.45
	01/20/95		4.64	5.98
	05/15/96		5.66	4.96
	08/28/95		6.26	4.36
	12/06/95		7.30	3.32
	01/18/96	10.63	4.85	5.78
	03/08/96		4.38	6.25
	07/02/96		6.60	4.03
	12/17/96		5.10	5.53
MW-3	10/06/94	9.87	6.57	3.30
	01/20/95		4.47	5.40
	05/15/96		5.08	4.79
	08/28/95		6.18	3.69
	12/06/95		6.44	3.43
	01/18/96	9.87	4.15	5.72
	03/08/96		4.76	5.11
	07/02/96		6.45	3.42
	12/17/96		4.92	4.95
MW-4	10/06/94	10.64	7.96	2.68
	01/20/95		5.95	4.69
	05/15/96		6.28	4.36
	08/28/95		7.38	3.26
	12/06/95		7.80	2.84
	01/18/96	10.64	5.60	5.04
	03/08/96		5.93	4.71
	07/02/96		7.95	2.69
	12/17/96		6.35	4.29
MW-5	05/15/96	10.61	7.54	3.07
	08/28/95		8.44	2.17
	12/06/95		8.34	2.27
	01/18/96	10.61	7.15	3.46
	03/08/96		7.54	3.07
	07/02/96		9.45	1.16
	12/17/96		NA ^a	NA

Table 1
Groundwater Elevation Data

Former Dorr-Oliver Site
2901 Glascock Avenue
Oakland, California

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Water (feet, TOC)	Groundwater Elevation (feet, MSL)
MW-6	05/15/96	10.27	7.46	2.81
	08/28/95		8.06	2.21
	12/06/95	10.28	8.78	1.49
	01/18/96		7.85	2.43
	03/08/96		8.64	1.64
	07/02/96		11.50	-1.22
	12/17/96		9.40	0.88
MW-7	05/15/96	9.85	3.46	6.39
	08/28/95		4.49	5.36
	12/06/95		5.04	4.81
	01/18/96	9.86	3.10	6.76
	03/08/96		3.18	6.68
	07/02/96		4.40	5.46
	12/17/96		3.45	6.41
MW-8	01/18/96	10.61	7.15	3.46
	03/08/96		NA	NA
	07/02/96		10.80	-0.19
	12/17/96		8.52	2.09
MSL = Mean Sea Level				
TOC = Top Of Casing				
NA = Not Available				
a = Well MW-5 was destroyed in September 1996.				

Table 2
Groundwater Analytical Data -
 TPPH-g, BTEX Compounds, TEPH-d, Motor Oil, and MtBE

Former Dorr-Oliver Site
 2901 Glascock Street
 Oakland, California

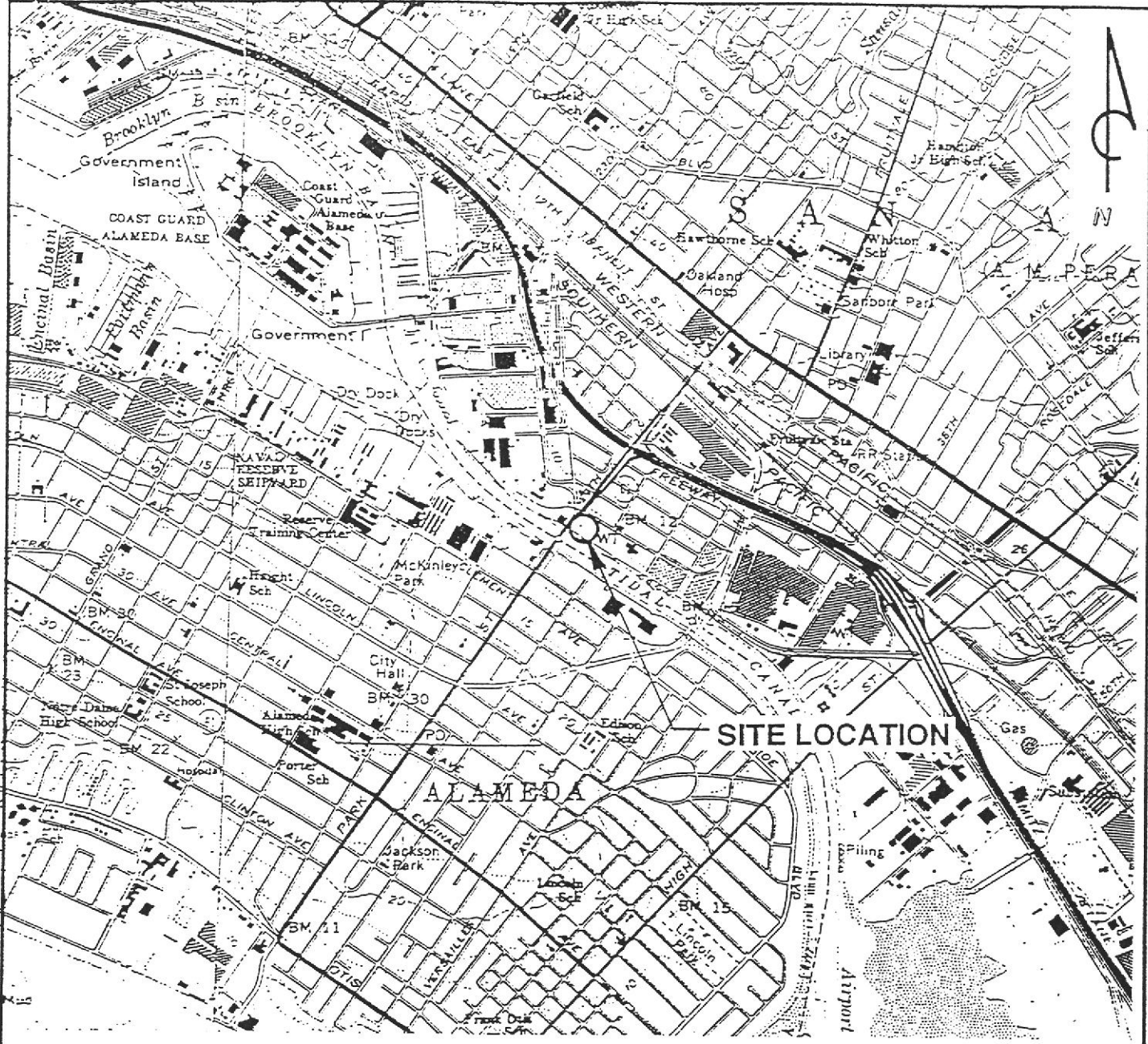
Well Number	Date Sampled	TPPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	TEPH-d (µg/L)	Motor Oil (µg/L)	MtBE (µg/L)
MW-1	10/06/94	NS	NS	NS	NS	NS	NS	NS	NS
	01/20/95	670	5.3	ND	ND	1.1	1,900	NA	NA
	05/15/95	290	7.9	ND	ND	1.4	3,400	NA	NA
	08/28/95	250	5.4	ND	ND	1.1	1,800	NA	NA
	11/29/95	NA	NA	NA	NA	NA	ND	ND	NA
	12/06/95	770	4.8	ND	ND	1.3	39,000	NA	NA
	01/18/96	NA	NA	NA	NA	NA	23,000	NA	NA
	03/08/96	360	2,600	ND	ND	1.9	16,000	NA	24
	07/02/96	5,300 a	ND	ND	ND	ND	6,600	ND	ND
12/17/96	540 b	3.4	ND	ND	0.83	2,800 c	1,600 d	60	
MW-2	10/06/94	NS	NS	NS	NS	NS	NS	NS	NS
	01/20/95	520	2.2	1.9	ND	1.3	4,000	NA	NA
	05/15/95	310	2.3	1.9	ND	1.4	5,100	NA	NA
	08/28/95	320	2.9	2.9	ND	2.6	4,100	NA	NA
	11/29/95	NS	NS	NS	NS	NS	NS	NS	NS
	12/06/95	210	2.0	2.2	ND	0.57	17,000	NA	NA
	01/18/96	NA	NA	NA	NA	NA	22,000	NA	NA
	03/08/96	310	2.4	1.9	ND	1.4	56,000	NA	ND
	07/02/96	9,300 a	ND	ND	ND	ND	19,000	ND	ND
12/17/96	140 b	1.1	2.0	ND	1.4	10,000 e	5,400 d	ND	
MW-3	10/06/94	NA	ND	ND	ND	ND	320	NA	NA
	01/20/95	86	ND	ND	ND	ND	460	NA	NA
	05/15/95	60	ND	ND	ND	ND	310	NA	NA
	08/28/95	ND	ND	ND	ND	ND	310	NA	NA
	11/29/95	NS	NS	NS	NS	NS	NS	NS	NS
	12/06/95	120	ND	ND	ND	ND	1,000	NA	NA
	01/18/96	NA	NA	NA	NA	NA	210	NA	NA
	03/08/96	67	ND	ND	ND	ND	1,000	NA	7.2
	07/02/96	230 a	ND	ND	ND	ND	640	ND	ND
12/17/96	240 f	ND	ND	ND	ND	560 e	ND	ND	
MW-4	10/06/94	NA	ND	ND	ND	ND	ND	NA	NA
	01/20/95	ND	ND	ND	ND	ND	ND	NA	NA
	05/15/95	ND	ND	ND	ND	ND	ND	NA	NA
	08/28/95	ND	ND	ND	ND	ND	ND	NA	NA
	11/29/95	NA	NA	NA	NA	NA	NA	NA	NA
	12/06/95	ND	ND	ND	ND	ND	57	NA	NA
	01/18/96	NA	NA	NA	NA	NA	ND	NA	NA
	03/08/96	ND	ND	ND	ND	ND	100	NA	ND
	07/02/96	ND	ND	ND	ND	ND	ND	ND	ND
12/17/96	ND	ND	ND	ND	ND	310 g	530 d	ND	
MW-5	05/15/95	ND	ND	ND	ND	ND	490	NA	NA
	08/28/95	ND	ND	ND	ND	ND	170	NA	NA
	11/29/95	NS	NS	NS	NS	NS	NS	NS	NS
	12/06/95	ND	ND	ND	ND	ND	250	NA	NA
	01/18/96	NA	NA	NA	NA	NA	49	NA	NA
	03/08/96	ND	ND	ND	ND	ND	210	ND	12
	07/02/96	200 a	ND	ND	ND	ND	110	ND	ND
12/17/96	NS	NS	NS	NS	NS	NS	NS	NS	

Table 2
Groundwater Analytical Data -
 TPPH-g, BTEX Compounds, TEPH-d, Motor Oil, and MtBE

Former Dorr-Oliver Site
 2901 Glascock Street
 Oakland, California

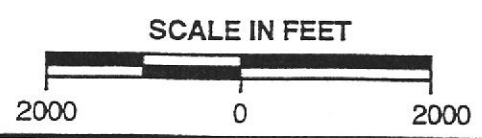
Well Number	Date Sampled	TPPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	TEPH-d (µg/L)	Motor Oil (µg/L)	MtBE (µg/L)
MW-6	05/15/95	120	5.6	0.88	ND	2.1	1,100	NA	NA
	08/28/95	140	6.1	0.77	ND	2.3	2,100	NA	NA
	11/29/95	NA	NA	NA	NA	NA	35,000	5,400	NA
	12/06/95	140	4.6	0.89	ND	1.7	38,000	NA	NA
	01/18/96	NA	NA	NA	NA	NA	59,000	NA	NA
	03/08/96	160	3.4	0.57	ND	1.9	14,000	NA	ND
	07/02/96	3,300 a	3.1	ND	ND	ND	2,300	1,300	ND
	12/17/96	150 b	3.4	0.93	ND	1.7	15,000 e	14,000 d	14
MW-7	05/15/95	110	ND	ND	ND	ND	ND	NA	NA
	08/28/95	ND	ND	ND	ND	ND	ND	NA	NA
	11/29/95	NA	NA	NA	NA	NA	NA	NA	NA
	12/06/95	62	ND	ND	ND	ND	ND	NA	NA
	01/18/96	NA	NA	NA	NA	NA	ND	NA	NA
	03/08/96	ND	ND	ND	ND	ND	ND	NA	ND
	07/02/96	ND	ND	ND	ND	ND	ND	ND	580
	12/17/96	ND	ND	ND	ND	ND	120 g	ND	100
MW-8	11/29/95	NA	NA	NA	NA	NA	NA	NA	NA
	01/18/96	NA	NA	NA	NA	NA	ND	NA	NA
	03/08/96	NS	NS	NS	NS	NS	NS	NS	NS
	07/02/96	ND	0.74	0.88	ND	0.82	ND	ND	ND
	12/17/96	ND	ND	ND	ND	ND	53 g	ND	ND


µg/L = micrograms per liter
 NS = Not Sampled
 ND = Not Detected (see CAR for detection limit)
 NA = Not Analyzed
 a = Chromatogram pattern is not gasoline, but volatile fraction of diesel quantified as gasoline.
 b = Chromatogram pattern is not gasoline, but unidentified hydrocarbons in C6 - C12 range.
 c = Chromatogram pattern is a mixture of weathered diesel and unidentified hydrocarbons in C9 - C24 range.
 d = Chromatogram pattern is not motor oil, but unidentified hydrocarbons in C16 - C36 range.
 e = Chromatogram pattern is weathered diesel in C9 - C24 range.
 f = Chromatogram pattern is not gasoline, but unidentified hydrocarbons > C10.
 g = Chromatogram pattern is not diesel, but unidentified hydrocarbons in the C9 - C24 range.

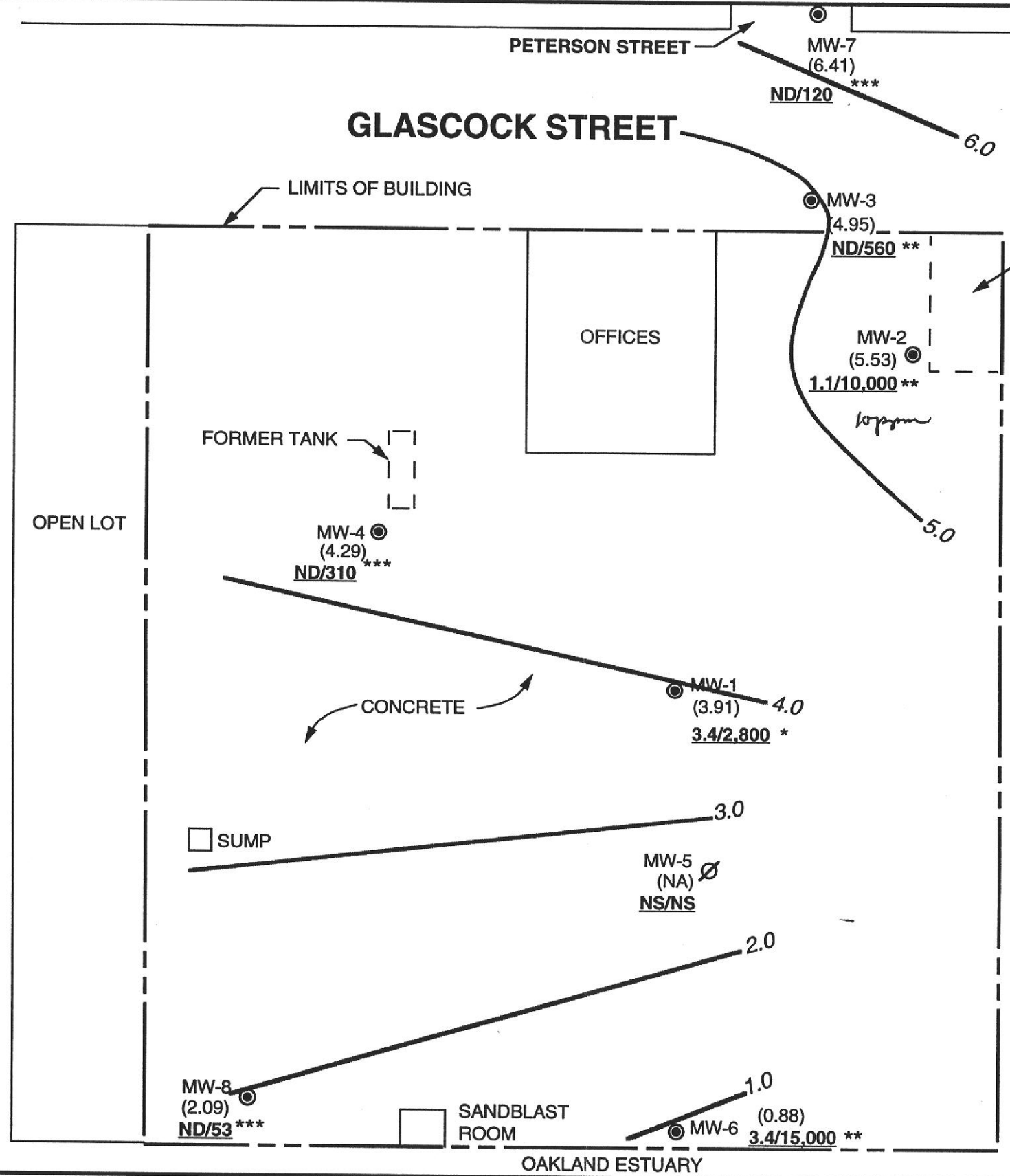


QUADRANGLE
LOCATION

REFERENCES:
 USGS 7.5 MIN. TOPOGRAPHIC MAP
 TITLED: OAKLAND EAST, CALIFORNIA
 DATED: 1959 REVISED: 1980
 TITLED: OAKLAND WEST, CALIFORNIA
 DATED: 1959 REVISED: 1980



 <p>PACIFIC ENVIRONMENTAL GROUP, INC.</p>	<p>FORMER DORR-OLIVER SITE 2901 Glascock Street Oakland, California</p>	<p>FIGURE: 1 PROJECT: 360-014.2B</p>
	<p>SITE LOCATION MAP</p>	

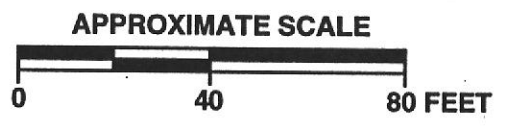


- LEGEND**
- MW-1 ● GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION
 - MW-5 ∅ DESTROYED GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION
 - (4.03) GROUNDWATER ELEVATION IN FEET - MSL, 12-17-96
 - 5.0 — GROUNDWATER ELEVATION CONTOUR IN FEET - MSL, 12-17-96
 - ND/110 BENZENE/TEPH-d CONCENTRATION IN GROUNDWATER, IN PARTS PER BILLION, 12-17-96
 - ND NOT DETECTED
 - NA NOT AVAILABLE
 - NS NOT SAMPLED
 - * NOT DIESEL; MIXTURE OF WEATHERED DIESEL AND UNIDENTIFIED HYDROCARBONS (C9-C24). (SEE CARS)
 - ** WEATHERED DIESEL. (SEE CARS)
 - *** NOT DIESEL; UNIDENTIFIED HYDROCARBONS (C9-C24) (SEE CARS)

SOURCE: Map from W.A. Craig dated 6-95



PACIFIC ENVIRONMENTAL GROUP, INC.



FORMER DORR-OLIVER SITE
2901 Glascock Street
Oakland, California

GROUNDWATER MONITORING MAP - FOURTH QUARTER 1996

FIGURE: 2
PROJECT: 360-014.2B

ATTACHMENT A

**CERTIFIED ANALYTICAL REPORTS, CHAIN-OF-CUSTODY
DOCUMENTATION, AND FIELD DATA SHEETS**



DEC 1 1997

Pacific Environmental Group	Client Proj. ID: 360-014.2A, Oakland	Sampled: 12/17/96
2025 Gateway Place, Suite 440	Sample Descript: MW1	Received: 12/17/96
San Jose, CA 95110	Matrix: LIQUID	Extracted: 12/26/96
Attention: Andrew Lehane	Analysis Method: EPA 8015 Mod	Analyzed: 12/31/96
	Lab Number: 9612B47-01	Reported: 01/06/97

QC Batch Number: GC1226960HBPEXB
 Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	50	2800
Chromatogram Pattern:		
Unidentified HC		C9-C24
Weathered Diesel		C9-C24
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	114

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210



 Tod Granicher
 Project Manager



Pacific Environmental Group	Client Proj. ID: 360-014.2A, Oakland	Sampled: 12/17/96
2025 Gateway Place, Suite 440	Sample Descript: MW1	Received: 12/17/96
San Jose, CA 95110	Matrix: LIQUID	Extracted: 12/26/96
Attention: Andrew Lehane	Analysis Method: EPA 8015 Mod	Analyzed: 12/31/96
	Lab Number: 9612B47-01	Reported: 01/06/97


QC Batch Number: GC1226960HBPEXB
Instrument ID: GCHP5A

Fuel Fingerprint : Motor Oil

Analyte	Detection Limit ug/L	Sample Results ug/L
Extractable HC as Motor Oil	500	1600
Chromatogram Pattern:		
Unidentified HC		C16-C36
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	114

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210



 Tod Granicher
 Project Manager



Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110	Client Proj. ID: 360-014.2A, Oakland Sample Descript: MW1 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9612B47-01	Sampled: 12/17/96 Received: 12/17/96 Analyzed: 12/30/96 Reported: 01/06/97
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QC Batch Number: GC123096BTEX02A
Instrument ID: GCHP2

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	540
Methyl t-Butyl Ether	2.5	60
Benzene	0.50	3.4
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	0.83
Chromatogram Pattern: Unidentified HC		C6-C12
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	91

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210


Tod Granicher
Project Manager



Pacific Environmental Group	Client Proj. ID: 360-014.2A, Oakland	Sampled: 12/17/96
2025 Gateway Place, Suite 440	Sample Descript: MW2	Received: 12/17/96
San Jose, CA 95110	Matrix: LIQUID	Extracted: 12/26/96
Attention: Andrew Lehane	Analysis Method: EPA 8015 Mod	Analyzed: 01/01/97
	Lab Number: 9612B47-02	Reported: 01/06/97

QC Batch Number: GC1226960HBPEXB
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	250	10000
Chromatogram Pattern: Weathered Diesel		C9-C24
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	127

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Tod

Tod Granicher
Project Manager



Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110	Client Proj. ID: 360-014.2A, Oakland Sample Descript: MW2 Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9612B47-02	Sampled: 12/17/96 Received: 12/17/96 Extracted: 12/26/96 Analyzed: 01/01/97 Reported: 01/06/97
Attention: Andrew Lehane		

QC Batch Number: GC1226960HBPEXB
Instrument ID: GCHP5A

Fuel Fingerprint : Motor Oil

Analyte	Detection Limit ug/L	Sample Results ug/L
Extractable HC as Motor Oil Chromatogram Pattern: Unidentified HC	2500	5400 C16-C36
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	127

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210


Tod Granicher
Project Manager



Pacific Environmental Group	Client Proj. ID: 360-014.2A, Oakland	Sampled: 12/17/96
2025 Gateway Place, Suite 440	Sample Descript: MW2	Received: 12/17/96
San Jose, CA 95110	Matrix: LIQUID	
Attention: Andrew Lehane	Analysis Method: 8015Mod/8020	Analyzed: 12/31/96
	Lab Number: 9612B47-02	Reported: 01/06/97


QC Batch Number: GC123196BTEX06A
 Instrument ID: GCHP6

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	140
Methyl t-Butyl Ether	2.5	N.D.
Benzene	0.50	1.1
Toluene	0.50	2.0
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	1.4
Chromatogram Pattern:		
Unidentified HC		C6-C12
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	94

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210


 Tod Granicher
 Project Manager



Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110	Client Proj. ID: 360-014.2A, Oakland Sample Descript: MW3 Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9612B47-03	Sampled: 12/17/96 Received: 12/17/96 Extracted: 12/26/96 Analyzed: 12/31/96 Reported: 01/06/97
Attention: Andrew Lehane		


QC Batch Number: GC1226960HBPEXB
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern: Weathered Diesel	50	560 C9-C24
Surrogates n-Pentacosane (C25)	Control Limits % 50 150	% Recovery 112

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210



Tod Granicher
Project Manager



Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110	Client Proj. ID: 360-014.2A, Oakland Sample Descript: MW3 Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9612B47-03	Sampled: 12/17/96 Received: 12/17/96 Extracted: 12/26/96 Analyzed: 12/31/96 Reported: 01/06/97
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QC Batch Number: GC1226960HBPEXB
Instrument ID: GCHP5A

Fuel Fingerprint : Motor Oil

Analyte	Detection Limit ug/L	Sample Results ug/L
Extractable HC as Motor Oil Chromatogram Pattern:	500	N.D.
Surrogates n-Pentacosane (C25)	Control Limits % 50 150	% Recovery 112

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210



Tod Granicher
Project Manager



Pacific Environmental Group	Client Proj. ID: 360-014.2A, Oakland	Sampled: 12/17/96
2025 Gateway Place, Suite 440	Sample Descript: MW3	Received: 12/17/96
San Jose, CA 95110	Matrix: LIQUID	
Attention: Andrew Lehane	Analysis Method: 8015Mod/8020	Analyzed: 12/30/96
	Lab Number: 9612B47-03	Reported: 01/06/97

QC Batch Number: GC123096BTEX02A
Instrument ID: GCHP2

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	240
Methyl t-Butyl Ether	2.5	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		
Unidentified HC		>C10
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	90

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

7-10

Tod Granicher
Project Manager



Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110	Client Proj. ID: 360-014.2A, Oakland Sample Descript: MW4 Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9612B47-04	Sampled: 12/17/96 Received: 12/17/96 Extracted: 12/26/96 Analyzed: 12/31/96 Reported: 01/06/97
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QC Batch Number: GC1226960HBPEXB
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern: Unidentified HC	50	310 C9-C24
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	134

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Tod

Tod Granicher
Project Manager



Pacific Environmental Group	Client Proj. ID: 360-014.2A, Oakland	Sampled: 12/17/96
2025 Gateway Place, Suite 440	Sample Descript: MW4	Received: 12/17/96
San Jose, CA 95110	Matrix: LIQUID	Extracted: 12/26/96
Attention: Andrew Lehane	Analysis Method: EPA 8015 Mod	Analyzed: 12/31/96
	Lab Number: 9612B47-04	Reported: 01/06/97

QC Batch Number: GC1226960HBPEXB
Instrument ID: GCHP5A

Fuel Fingerprint : Motor Oil

Analyte	Detection Limit ug/L	Sample Results ug/L
Extractable HC as Motor Oil	500	530
Chromatogram Pattern: Unidentified HC		C16-C36
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	134

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210



 Tod Granicher
 Project Manager



Pacific Environmental Group	Client Proj. ID: 360-014.2A, Oakland	Sampled: 12/17/96
2025 Gateway Place, Suite 440	Sample Descript: MW4	Received: 12/17/96
San Jose, CA 95110	Matrix: LIQUID	
Attention: Andrew Lehane	Analysis Method: 8015Mod/8020	Analyzed: 12/26/96
	Lab Number: 9612B47-04	Reported: 01/06/97

QC Batch Number: GC122696BTEX03A
Instrument ID: GCHP3

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	102

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210



Tod Granicher
Project Manager



Pacific Environmental Group	Client Proj. ID: 360-014.2A, Oakland	Sampled: 12/17/96
2025 Gateway Place, Suite 440	Sample Descript: MW6	Received: 12/17/96
San Jose, CA 95110	Matrix: LIQUID	Extracted: 12/30/96
Attention: Andrew Lehane	Analysis Method: EPA 8015 Mod	Analyzed: 01/01/97
	Lab Number: 9612B47-05	Reported: 01/06/97

QC Batch Number: GC1230960HBPEXZ
Instrument ID: GCHP4B

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	500	15000
Chromatogram Pattern: Weathered Diesel		C9-C24
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	354 Q

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Jose

Tod Granicher
Project Manager



Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110

Client Proj. ID: 360-014.2A, Oakland
Sample Descript: MW6
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9612B47-05

Sampled: 12/17/96
Received: 12/17/96
Extracted: 12/30/96
Analyzed: 01/01/97
Reported: 01/06/97

Attention: Andrew Lehane

QC Batch Number: GC1230960HBPEXZ
Instrument ID: GCHP4B

Fuel Fingerprint : Motor Oil

Analyte	Detection Limit ug/L	Sample Results ug/L
Extractable HC as Motor Oil	5000	14000
Chromatogram Pattern: Unidentified HC		C16-C36
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	354 Q

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210


Tod Granicher
Project Manager



Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110	Client Proj. ID: 360-014.2A, Oakland Sample Descript: MW6 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9612B47-05	Sampled: 12/17/96 Received: 12/17/96 Analyzed: 01/03/97 Reported: 01/06/97
Attention: Andrew Lehane		

QC Batch Number: GC010397BTEX21A
Instrument ID: GCHP21

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	150
Methyl t-Butyl Ether	2.5	14
Benzene	0.50	3.4
Toluene	0.50	0.93
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	1.7
Chromatogram Pattern: Unidentified HC		C6-C12
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	100

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Jose

Tod Granicher
Project Manager



Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110	Client Proj. ID: 360-014.2A, Oakland Sample Descript: MW7 Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9612B47-06	Sampled: 12/17/96 Received: 12/17/96 Extracted: 12/30/96 Analyzed: 01/01/97 Reported: 01/06/97
--	---	--


QC Batch Number: GC1230960HBPEXZ
Instrument ID: GCHP4B

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern: Unidentified HC	50	120
		C9-C24
Surrogates n-Pentacosane (C25)	Control Limits % 50 150	% Recovery 122

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210



Tod Granicher
Project Manager



Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110	Client Proj. ID: 360-014.2A, Oakland Sample Descript: MW7 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9612B47-06	Sampled: 12/17/96 Received: 12/17/96 Analyzed: 12/26/96 Reported: 01/06/97
Attention: Andrew Lehane		

QC Batch Number: GC122696BTEX03A
Instrument ID: GCHP3

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	100
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		N.D.
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	106

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210



Tod Granicher
Project Manager



Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110

Client Proj. ID: 360-014.2A, Oakland
Sample Descript: MW8
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9612B47-07

Sampled: 12/17/96
Received: 12/17/96
Extracted: 12/30/96
Analyzed: 12/31/96
Reported: 01/06/97

Attention: Andrew Lehane


QC Batch Number: GC1230960HBPEXZ
Instrument ID: GCHP4B

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	50	53
Chromatogram Pattern: Unidentified HC		C9-C24
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	116

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210



Tod Granicher
Project Manager



Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110	Client Proj. ID: 360-014.2A, Oakland Sample Descript: MW8 Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9612B47-07	Sampled: 12/17/96 Received: 12/17/96 Extracted: 12/30/96 Analyzed: 12/31/96 Reported: 01/06/97
Attention: Andrew Lehane		

QC Batch Number: GC1230960HBPEXZ
Instrument ID: GCHP4B

Fuel Fingerprint : Motor Oil

Analyte	Detection Limit ug/L	Sample Results ug/L
Extractable HC as Motor Oil Chromatogram Pattern:	500	N.D.
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	116

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210



Tod Granicher
Project Manager



Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110	Client Proj. ID: 360-014.2A, Oakland Sample Descript: MW8 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9612B47-07	Sampled: 12/17/96 Received: 12/17/96 Analyzed: 12/26/96 Reported: 01/06/97
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QC Batch Number: GC122696BTEX03A
Instrument ID: GCHP3

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	103

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210



Tod Granicher
Project Manager



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Pacific Environmental Group	Client Proj. ID: 360-014.2A, Oakland	Received: 12/17/96
2025 Gateway Place, Suite 440		
San Jose, CA 95110	Lab Proj. ID: 9612B47	Reported: 01/06/97
Attention: Andrew Lehane		

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 30 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

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Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Andrew Lehane

Client Project ID: 360-014.2A, Oakland
Matrix: Liquid

Work Order #: 9612B47 -01-07

Reported: Jan 3, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC122696BTEX03A	GC122696BTEX03A	GC122696BTEX03A	GC122696BTEX03A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	G. Fish	G. Fish	G. Fish	G. Fish
MS/MSD #:	961292705	961292705	961292705	961292705
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	12/26/96	12/26/96	12/26/96	12/26/96
Analyzed Date:	12/26/96	12/26/96	12/26/96	12/26/96
Instrument I.D.#:	GCHP3	GCHP3	GCHP3	GCHP3
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L

Result:	10	10	10	31
MS % Recovery:	100	100	100	103

Dup. Result:	9.9	9.8	10	31
MSD % Recov.:	99	98	100	103

RPD:	1.0	2.0	0.0	0.0
RPD Limit:	0-25	0-25	0-25	0-25

LCS #:	BLK122696	BLK122696	BLK122696	BLK122696
Prepared Date:	12/26/96	12/26/96	12/26/96	12/26/96
Analyzed Date:	12/26/96	12/26/96	12/26/96	12/26/96
Instrument I.D.#:	GCHP3	GCHP3	GCHP3	GCHP3
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
LCS Result:	10	10	11	32
LCS % Recov.:	100	100	110	107

MS/MSD	60-140	60-140	60-140	60-140
LCS	70-130	70-130	70-130	70-130
Control Limits				

Please Note:

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

SEQUOIA ANALYTICAL

Tod Granicher
Project Manager

** MS=Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

9612B47.PPP <1>



Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Andrew Lehane

Client Project ID: 360-014.2A, Oakland
Matrix: Liquid

Work Order #: 9612B47-01-07

Reported: Jan 3, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC123096BTEX02A	GC123096BTEX02A	GC123096BTEX02A	GC123096BTEX02A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	G. Fish	G. Fish	G. Fish	G. Fish
MS/MSD #:	9612A4303	9612A4303	9612A4303	9612A4303
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	12/30/96	12/30/96	12/30/96	12/30/96
Analyzed Date:	12/30/96	12/30/96	12/30/96	12/30/96
Instrument I.D.#:	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	8.7	8.8	9.1	30
MS % Recovery:	87	88	91	100
Dup. Result:	9.0	9.1	9.3	30
MSD % Recov.:	90	91	93	100
RPD:	3.4	3.4	2.2	0.0
RPD Limit:	0-25	0-25	0-25	0-25

LCS #:	BLK123096	BLK123096	BLK123096	BLK123096
Prepared Date:	12/30/96	12/30/96	12/30/96	12/30/96
Analyzed Date:	12/30/96	12/30/96	12/30/96	12/30/96
Instrument I.D.#:	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
LCS Result:	8.4	8.6	9.1	30
LCS % Recov.:	84	86	91	100

MS/MSD	60-140	60-140	60-140	60-140
LCS	70-130	70-130	70-130	70-130
Control Limits				

Please Note:

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

SEQUOIA ANALYTICAL


Tod Granicher
Project Manager

** MS=Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

9612B47.PPP <2>



Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Andrew Lehane

Client Project ID: 360-014.2A, Oakland
Matrix: Liquid

Work Order #: 9612B47-01-07

Reported: Jan 3, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC123196BTEX06A	GC123196BTEX06A	GC123196BTEX06A	GC123196BTEX06A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	A. Porter	A. Porter	A. Porter	A. Porter
MS/MSD #:	9612C1903	9612C1903	9612C1903	9612C1903
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	12/31/96	12/31/96	12/31/96	12/31/96
Analyzed Date:	12/31/96	12/31/96	12/31/96	12/31/96
Instrument I.D.#:	GCHP6	GCHP6	GCHP6	GCHP6
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	11	11	11	32
MS % Recovery:	110	110	110	107
Dup. Result:	10	10	10	30
MSD % Recov.:	100	100	100	100
RPD:	9.5	9.5	9.5	6.5
RPD Limit:	0-25	0-25	0-25	0-25

LCS #:	BLK123196	BLK123196	BLK123196	BLK123196
Prepared Date:	12/31/96	12/31/96	12/31/96	12/31/96
Analyzed Date:	12/31/96	12/31/96	12/31/96	12/31/96
Instrument I.D.#:	GCHP6	GCHP6	GCHP6	GCHP6
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
LCS Result:	10	10	10	30
LCS % Recov.:	100	100	100	100

MS/MSD	60-140	60-140	60-140	60-140
LCS	70-130	70-130	70-130	70-130
Control Limits				

Please Note:

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

SEQUOIA ANALYTICAL

Tue
Tod Granicher
Project Manager



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Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Andrew Lehane

Client Project ID: 360-014.2A, Oakland
Matrix: Liquid

Work Order #: 9612B47-01-07

Reported: Jan 3, 1997

QUALITY CONTROL DATA REPORT

Analyte: Diesel

QC Batch#: GC1226960HBPEXB

Analy. Method: EPA 8015M

Prep. Method: EPA 3510

Analyst: B. Sullivan

MS/MSD #: 9612A4604

Sample Conc.: N.D.

Prepared Date: 12/26/96

Analyzed Date: 12/31/96

Instrument I.D.#: GCHP5

Conc. Spiked: 1000 µg/L

Result: 1200

MS % Recovery: 120

Dup. Result: 1200

MSD % Recov.: 120

RPD: 0.0

RPD Limit: 0-50

LCS #: BLK122696

Prepared Date: 12/26/96

Analyzed Date: 12/31/96

Instrument I.D.#: GCHP5

Conc. Spiked: 1000 µg/L

LCS Result: 1100

LCS % Recov.: 110

MS/MSD 50-150

LCS 60-140

Control Limits

Please Note:

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

SEQUOIA ANALYTICAL

Tod
Tod Granicher
Project Manager

** MS= Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

9612B47.PPP <4>



Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Andrew Lehane

Client Project ID: 360-014.2A, Oakland
Matrix: Liquid

Work Order #: 9612B47-01-07

Reported: Jan 3, 1997

QUALITY CONTROL DATA REPORT

Analyte: Diesel

QC Batch#: GC1230960HBPEXZ

Analy. Method: EPA 8015M

Prep. Method: EPA 3520

Analyst: J. Minkel

MS/MSD #: 9612B4707

Sample Conc.: 53

Prepared Date: 12/30/96

Analyzed Date: 12/31/96

Instrument I.D.#: GCHP4

Conc. Spiked: 1000 µg/L

Result: 710

MS % Recovery: 66

Dup. Result: 780

MSD % Recov.: 73

RPD: 9.4

RPD Limit: 0-50

LCS #: BLK123096

Prepared Date: 12/30/96

Analyzed Date: 12/31/96

Instrument I.D.#: GCHP5

Conc. Spiked: 1000 µg/L

LCS Result: 970

LCS % Recov.: 97

MS/MSD 50-150

LCS 60-140

Control Limits

Please Note:

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

SEQUOIA ANALYTICAL

Joe
Tod Granicher
Project Manager



Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Andrew Lehane

Client Project ID: 360-014.2A, Oakland
Matrix: Liquid

Work Order #: 9612B47-01-07

Reported: Jan 6, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC010397BTEX21A	GC010397BTEX21A	GC010397BTEX21A	GC010397BTEX21A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	G. Fish	G. Fish	G. Fish	G. Fish
MS/MSD #:	970100901	970100901	970100901	970100901
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	1/3/97	1/3/97	1/3/97	1/3/97
Analyzed Date:	1/3/97	1/3/97	1/3/97	1/3/97
Instrument I.D.#:	GCHP21	GCHP21	GCHP21	GCHP21
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	9.9	9.8	10	30
MS % Recovery:	99	98	100	100
Dup. Result:	10	10	10	31
MSD % Recov.:	100	100	100	103
RPD:	1.0	2.0	0.0	3.3
RPD Limit:	0-25	0-25	0-25	0-25

LCS #:	BLK010397	BLK010397	BLK010397	BLK010397
Prepared Date:	1/3/97	1/3/97	1/3/97	1/3/97
Analyzed Date:	1/3/97	1/3/97	1/3/97	1/3/97
Instrument I.D.#:	GCHP21	GCHP21	GCHP21	GCHP21
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
LCS Result:	9.3	9.0	9.2	28
LCS % Recov.:	93	90	92	93

MS/MSD	60-140	60-140	60-140	60-140
LCS	70-130	70-130	70-130	70-130
Control Limits				

Please Note:

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

SEQUOIA ANALYTICAL

Tod
Tod Granicher
Project Manager

** MS=Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

9612B47.PPP <6>

SEQUOIA ANALYTICAL SAMPLE RECEIPT LOG

CLIENT NAME: Peg
 REC. BY (PRINT) _____

WORKORDER: 9602847
 DATE OF LOG-IN: 12/19/96

CIRCLE THE APPROPRIATE RESPONSE

1. Custody Seal(s)	Present / <u>Absent</u> Intact / Broken*	LAB SAMPLE #	DASH #	CLIENT IDENTIFICATION	CONTAINER DESCRIPTION	SAMPLE MATRIX	DATE SAMP.	REMARKS: CONDITION (ETC.)
2. Custody Seal #:	Put in Remarks Section	1	AB	MW 1	AMB (2)	L	2/17/96	<div style="border: 1px solid black; border-radius: 50%; padding: 10px; display: inline-block;"> Project Big sheet </div>
3. Chain-of-Custody	<u>Present</u> / Absent*	1	ODE	1	VOA (3)			
4. Traffic Reports or Packing List:	Present / <u>Absent</u>	2	SAME	MW 2	SAME			
5. Airbill:	Airbill / Sticker Present / <u>Absent</u>	3		3				
6. Airbill #:	_____	4		4				
7. Sample Tags:	<u>Present</u> / Absent	5		6				
Sample Tags #s:	<u>Listed</u> / Not Listed on Chain-of-Custody	6		7				
8. Sample Condition:	<u>Intact</u> / Broken* / Leaking*			8				
9. Does information on custody reports, traffic reports and sample tags agree?	<u>Yes</u> / No*	SR 12-18-96						
10. Proper Preservatives used:	<u>Yes</u> / No*							
11. Date Rec. at Lab:	<u>12-18-96</u>							
12. Time Rec. at Lab:	<u>1403</u>							
13. Temp Rec. at Lab:	<u>10°C</u>							

*If Circled, contact Project Manager and attach record of resolution.

Chain of Custody

Pacific Environmental Group, Inc.
2025 Gateway Place #440, San Jose CA 95110
Phone 408 441 7790 Fax 408 441 7539

PROJECT No. 300 014 2A

Facility No. FORMER Dorr Oliver site

Facility Address: 201 Glasgow St. Oakland CA

Billing Reference Number: 33171

CLIENT engineer: DENNIS BURAN

PACIFIC Point of Contact: ANDREW LEHANE

Sampler:

Laboratory Name: SEDOIA

Sample I.D.	Cont. No.	Container Size (ml)	Sample Preserv.	Matrix	Type	Sampling Date	Sampling Time	MTBC		Oil and Grease (5520)	Total Dislvd. Metals	VOC (EPA 624/8240)	SVOC (EPA 627/8270)	HVOC (EPA 601/8010)
								BTEX/ VPHgas (8015/8020)	TPH (8015)					
Mw1	5	40/16	HCL/PAW	w	G	12-17-96	12:10	X	X					
Mw2							12:35							
Mw3							10:43							
Mw4							11:05							
Mw6							11:45							
Mw7							10:20							
Mw8							11:25							

91612847


TPH motor oil
FUEL FINGERPRINT
AS motor oil
by EPA 8015

Condition of Sample:

Temperature Received:

Mail original Analytical Report to:

Turnaround Time:

Relinquished by: 	Date: <u>12-17-96</u>	Time: <u>11:30</u>
Relinquished by: <u>Shane Te...</u>	Date: <u>12-18-96</u>	Time: <u>11:20</u>
Relinquished by: <u>Shane Te...</u>	Date: <u>12/18/96</u>	Time:
Relinquished by:	Date:	Time:

Received by: <u>Shane Te...</u>	Date: <u>12-17-96</u>	Time: <u>14:30</u>
Received by: <u>Shane Te...</u>	Date: <u>12-18-96</u>	Time: <u>11:20</u>
Received by:	Date:	Time:
Received by laboratory: <u>SR...</u>	Date: <u>12/17/96</u>	Time:

Pacific Environmental Group

2025 Gateway Place #440
San Jose, CA 95110

620 Contra Costa Blvd. #209
Pleasant Hill, CA 94523

25725 Jeronimo Rd. #576C
Mission Viejo, CA 92622

4020 148th Ave NE #B
Redmond, WA 98052

- Priority Rush (1 day)
- Rush (2 days)
- Expedited (5 days)
- Standard (10 days)
- As Contracted

DEC 18 2003

FIELD REPORT

DEPTH TO WATER/SEPARATE-PHASE HYDROCARBON SURVEY

PROJECT No.: 360042A LOCATION: 2001 Gladys St DATE: 12-17-96
 CLIENT/STATION NO.: FORMER OLIVER SITE FIELD TECHNICIAN: RE DAY OF WEEK: TUE

PROBE TYPE/ID No. _____
 Oil/Water IF/ _____
 H₂O level indicator _____
 Other: _____

Dw Order	Well ID	Time	Surface Seal	Lid Secure	Gasket	Lock	Expanding Cap	Total Depth (feet)	First Depth to Water (feet) TOB/TOC	Second Depth to Water (feet) (TOB)TOC	SEPARATE-PHASE HYDROCARBONS (SPH)									
											SPH Depth (feet) TOB/TOC	SPH Thickness (feet)	Fresh	Weathered	Gas	Oil	VISCOSITY			Liquid Removed (gallons)
											COLOR				SPH	H ₂ O				
	Mw1	9:40	-	-	-	-		1980	6.85 6.85	7.06 7.06										
	Mw2	9:37	-	-	-	-		1975	5.10 5.10	5.43 5.43										
	Mw3	9:38	-	-	-	-		1980	4.92 4.92	5.28 5.28										
	Mw4	9:54	-	-	-	-		1920	6.35 6.35	6.72 6.72										
	Mw5							Destroyed												
	Mw6	9:45	-	-	-	-		1950	9.40 9.40	10.91 10.91										
	Mw7	9:27	-	-	-	-		1775	3.45 3.45	3.86 3.86										
	Mw8	9:50	-	-	-	-		1770	8.52 8.52	9.08 9.08										

Comments: _____

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 3600192A LOCATION: 29013/4004 st WELL ID #: MW-1

CLIENT/STATION No.: FORMER DORRIVER SITE FIELD TECHNICIAN: DEBORA POIZ

WELL INFORMATION			CASING		GAL/ LINEAR FT.		SAMPLE TYPE	
Depth to Liquid:	_____ TOB	_____ TOC	<input checked="" type="checkbox"/>	2	_____	0.17	<input checked="" type="checkbox"/>	Groundwater
Depth to water:	_____ TOB	_____ TOC	<input type="checkbox"/>	3	_____	0.38	<input type="checkbox"/>	Duplicate
Total depth:	_____ TOB	_____ TOC	<input type="checkbox"/>	4	_____	0.66	<input type="checkbox"/>	Extraction well
Date:	_____ Time (2400):		<input type="checkbox"/>	4.5	_____	0.83	<input type="checkbox"/>	Trip blank
Probe Type and I.D. #	<input type="checkbox"/> Oil/Water interface	_____	<input type="checkbox"/>	5	_____	1.02	<input type="checkbox"/>	Field blank
	<input type="checkbox"/> Electronic indicator	_____	<input type="checkbox"/>	6	_____	1.5	<input type="checkbox"/>	Equipment blank
	<input type="checkbox"/> Other;	_____	<input type="checkbox"/>	8	_____	2.6	<input type="checkbox"/>	Other;

TD 1980 - DTW 685 = 12.95 Gal/Linear Foot .17 = 2.20 x Number of Casings 3 = Calculated = Purge 660

DATE PURGED: 12-17-96 START: 11:55 END (2400 hr): _____ PURGED BY: DE
 DATE SAMPLED: 12-17-96 START: 12:10 END (2400 hr): _____ SAMPLED BY: DE

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>11:58</u>	<u>2.25</u>	<u>7.20</u>	<u>1040</u>	<u>63.2</u>	<u>Cloudy</u>	<u>Mod</u>	<u>Strong</u>
<u>12:02</u>	<u>4.5</u>	<u>7.25</u>	<u>1020</u>	<u>63.5</u>	<u>Cloudy</u>	<u>mod</u>	<u>strong</u>
<u>12:05</u>	<u>6.75</u>	<u>7.11</u>	<u>1030</u>	<u>63.6</u>	<u>Cloudy</u>	<u>MOD</u>	<u>strong</u>

Pumped dry Yes / NO

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:
 DTW: _____ TOB/TOC _____

<p>PURGING EQUIPMENT/I.D. #</p> <p><input type="checkbox"/> Bailer: _____ <input type="checkbox"/> Airlift Pump: _____</p> <p><input checked="" type="checkbox"/> Centrifugal Pump: <u>15</u> <input type="checkbox"/> Dedicated: _____</p> <p><input type="checkbox"/> Other: _____</p>	<p>SAMPLING EQUIPMENT/I.D. #</p> <p><input checked="" type="checkbox"/> Bailer: <u>15-</u></p> <p><input type="checkbox"/> Dedicated: _____</p> <p><input type="checkbox"/> Other: <u>Dispos</u></p>
---	---

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW1</u>	<u>12-17-96</u>	<u>12:10</u>	<u>3</u>	<u>40ml</u>	<u>lba</u>	<u>HCC</u>	<u>TPHG / BTEX / MIBZ</u>
			<u>2</u>	<u>1L</u>	<u>AMB</u>	<u>NO</u>	<u>TPHD, TPHM</u>

REMARKS: light sheen on top of water

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 3600192A LOCATION: 29013/13004 st WELL ID #: MW-2
 CLIENT/STATION No.: FORMER DORPOLIER site FIELD TECHNICIAN: Pedro Ruiz

<u>WELL INFORMATION</u>			<u>CASING</u>		<u>GAL/</u>			
Depth to Liquid: _____	TOB _____	TOC _____	<u>DIAMETER</u>	_____	<u>LINEAR FT.</u>	_____	<u>SAMPLE TYPE</u>	
Depth to water: _____	TOB _____	TOC _____	<input checked="" type="checkbox"/> 2	_____	0.17	<input checked="" type="checkbox"/> Groundwater		
Total depth: _____	TOB _____	TOC _____	<input type="checkbox"/> 3	_____	0.38	<input type="checkbox"/> Duplicate		
Date: _____	Time (2400): _____		<input type="checkbox"/> 4	_____	0.66	<input type="checkbox"/> Extraction well		
			<input type="checkbox"/> 4.5	_____	0.83	<input type="checkbox"/> Trip blank		
Probe Type	<input type="checkbox"/> Oil/Water interface _____		<input type="checkbox"/> 5	_____	1.02	<input type="checkbox"/> Field blank		
and	<input type="checkbox"/> Electronic indicator _____		<input type="checkbox"/> 6	_____	1.5	<input type="checkbox"/> Equipment blank		
I.D. #	<input type="checkbox"/> Other; _____		<input type="checkbox"/> 8	_____	2.6	<input type="checkbox"/> Other; _____		

TD 19.75 - DTW 5.10 = 14.65 Gal/Linear Foot .17 = 2.49 x Number of Casings 3 = Calculated Purge 7.47

DATE PURGED: 12-17-96 START: 12:23 END (2400 hr): _____ PURGED BY: PE
 DATE SAMPLED: 12-17-96 START: 12:35 END (2400 hr): _____ SAMPLED BY: PE

TIME .. (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>12:27</u>	<u>2.5</u>	<u>7.00</u>	<u>2430</u>	<u>62.5</u>	<u>cloudy</u>	<u>mod</u>	<u>strong</u>
<u>12:30</u>	<u>5</u>	<u>6.99</u>	<u>2110</u>	<u>62.3</u>	<u>cloudy</u>	<u>mod</u>	<u>strong</u>
<u>12:33</u>	<u>7.5</u>	<u>6.95</u>	<u>2160</u>	<u>62.7</u>	<u>cloudy</u>	<u>mod</u>	<u>strong</u>

Pumped dry Yes / (No)

Cobalt 0-100 Clear Cloudy Yellow Brown	NTU 0-200 Heavy Moderate Light Trace	Strong Moderate Faint None
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FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:
 DTW: _____ TOB/TOC _____

<u>PURGING EQUIPMENT/I.D. #</u> <input type="checkbox"/> Bailer: _____ <input checked="" type="checkbox"/> Centrifugal Pump: <u>15</u> <input type="checkbox"/> Other: _____	<u>SAMPLING EQUIPMENT/I.D. #</u> <input checked="" type="checkbox"/> Bailer: <u>15-</u> <input type="checkbox"/> Dedicated: _____ <input type="checkbox"/> Other: <u>15005</u>
---	---

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-2</u>	<u>12-17-96</u>	<u>12:35</u>	<u>3</u>	<u>10ml</u>	<u>lba</u>	<u>HCC</u>	<u>TPH, BTEX, MTBE</u>
			<u>2</u>	<u>1L</u>	<u>Amb</u>	<u>NO</u>	<u>TPH, D, TPH, MO</u>

REMARKS: _____

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 3600192A LOCATION: 2901 Colby WELL ID #: MW-3

CLIENT/STATION No.: FORMER DORR POLYMER SITE FIELD TECHNICIAN: RED POZ

WELL INFORMATION	CASING DIAMETER	GAL/ LINEAR FT.	SAMPLE TYPE
Depth to Liquid: _____ TOB _____ TOC _____	<input checked="" type="checkbox"/> 2 _____ 0.17		<input checked="" type="checkbox"/> Groundwater
Depth to water: _____ TOB _____ TOC _____	<input type="checkbox"/> 3 _____ 0.38		<input type="checkbox"/> Duplicate
Total depth: _____ TOB _____ TOC _____	<input type="checkbox"/> 4 _____ 0.66		<input type="checkbox"/> Extraction well
Date: _____ Time (2400): _____	<input type="checkbox"/> 4.5 _____ 0.83		<input type="checkbox"/> Trip blank
Probe Type <input type="checkbox"/> Oil/Water interface _____	<input type="checkbox"/> 5 _____ 1.02		<input type="checkbox"/> Field blank
and <input type="checkbox"/> Electronic indicator _____	<input type="checkbox"/> 6 _____ 1.5		<input type="checkbox"/> Equipment blank
I.D. # <input type="checkbox"/> Other; _____	<input type="checkbox"/> 8 _____ 2.6		<input type="checkbox"/> Other; _____

TD 1980 DTW 192 = 1788 Gal/Linear Foot .17 = 250 Number of Casings 3 Calculated = Purge 7.58

DATE PURGED: 12-17-96 START: 10:27 END (2400 hr): _____ PURGED BY: RE
 DATE SAMPLED: 12-17-96 START: 10:43 END (2400 hr): _____ SAMPLED BY: RE

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>10:30</u>	<u>2.5</u>	<u>6.88</u>	<u>1500</u>	<u>62.3</u>	<u>cloudy</u>	<u>mod</u>	<u>FAINT</u>
<u>10:37</u>	<u>5</u>	<u>6.93</u>	<u>1490</u>	<u>62.8</u>	<u>Cloudy</u>	<u>mod</u>	<u>FAINT</u>
<u>10:40</u>	<u>7.5</u>	<u>6.87</u>	<u>1480</u>	<u>62.9</u>	<u>Cloudy</u>	<u>mod</u>	<u>FAINT</u>

Pumped dry Yes NO

Cobalt 0-100 Clear Cloudy Yellow Brown	NTU 0-200 Heavy Moderate Light Trace	Strong Moderate Faint None
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FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: _____ TOB/TOC _____

PURGING EQUIPMENT/I.D. # <input type="checkbox"/> Bailer: _____ <input checked="" type="checkbox"/> Centrifugal Pump: <u>15</u> <input type="checkbox"/> Other: _____	SAMPLING EQUIPMENT/I.D. # <input checked="" type="checkbox"/> Bailer: <u>15-4</u> <input type="checkbox"/> Dedicated: _____ <input type="checkbox"/> Other: _____
--	--

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-3</u>	<u>12-17-96</u>	<u>10:43</u>	<u>3</u>	<u>10ml</u>	<u>lba</u>	<u>HCC</u>	<u>TPHG, 1, 3, 5, 10, 15, 20</u>
			<u>2</u>	<u>1L</u>	<u>Amb</u>	<u>NO</u>	<u>TPHD, TPHMO</u>

REMARKS: _____

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 3600192A LOCATION: 2901 B / McCoy St WELL ID #: MW-1

CLIENT/STATION No.: FORMER DORR POWER PLANT FIELD TECHNICIAN: REDO POIZ

<u>WELL INFORMATION</u>			<u>CASING</u>	<u>GAL/</u>	
Depth to Liquid: _____	TOB _____	TOC _____	<u>DIAMETER</u>	<u>LINEAR FT.</u>	<u>SAMPLE TYPE</u>
Depth to water: _____	TOB _____	TOC _____	<input checked="" type="checkbox"/> 2 _____	0.17	<input checked="" type="checkbox"/> Groundwater
Total depth: _____	TOB _____	TOC _____	<input type="checkbox"/> 3 _____	0.38	<input type="checkbox"/> Duplicate
Date: _____	Time (2400): _____		<input type="checkbox"/> 4 _____	0.66	<input type="checkbox"/> Extraction well
			<input type="checkbox"/> 4.5 _____	0.83	<input type="checkbox"/> Trip blank
Probe Type	<input type="checkbox"/> Oil/Water interface _____		<input type="checkbox"/> 5 _____	1.02	<input type="checkbox"/> Field blank
and	<input type="checkbox"/> Electronic indicator _____		<input type="checkbox"/> 6 _____	1.5	<input type="checkbox"/> Equipment blank
I.D. #	<input type="checkbox"/> Other: _____		<input type="checkbox"/> 8 _____	2.6	<input type="checkbox"/> Other: _____

TD 19.70 DTW 0.35 = 13.35 Gal/Linear Foot .17 = 2.26 x Number of Casings 3 = Calculated Purge 6.80

DATE PURGED: 12-17-98 START: 10:50 END (2400 hr): _____ PURGED BY: RE

DATE SAMPLED: 12-17-98 START: 11:05 END (2400 hr): _____ SAMPLED BY: RE

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>10:57</u>	<u>2.25</u>	<u>7.01</u>	<u>1150</u>	<u>60.8</u>	<u>Cloudy</u>	<u>Mod</u>	<u>None</u>
<u>10:57</u>	<u>1.5</u>	<u>7.11</u>	<u>1140</u>	<u>60.2</u>	<u>Cloudy</u>	<u>mod</u>	<u>None</u>
<u>11:00</u>	<u>0.75</u>	<u>7.05</u>	<u>1120</u>	<u>60.5</u>	<u>Cloudy</u>	<u>MOD</u>	<u>None</u>

Pumped dry Yes / (NO)

Cobach 0-100 Clear Cloudy Yellow Brown	NTU 0-200 Heavy Moderate Light Trace	Seong Moderate Faint None
--	--	------------------------------------

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: _____ TOB/TOC _____

<u>PURGING EQUIPMENT/I.D. #</u>	<u>SAMPLING EQUIPMENT/I.D. #</u>
<input type="checkbox"/> Bailer: _____	<input checked="" type="checkbox"/> Bailer: <u>15 B</u>
<input checked="" type="checkbox"/> Centrifugal Pump: <u>15</u>	<input type="checkbox"/> Dedicated: _____
<input type="checkbox"/> Other: _____	<input type="checkbox"/> Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW1</u>	<u>12.17.98</u>	<u>11:05</u>	<u>3</u>	<u>10ml</u>	<u>lba</u>	<u>HCC</u>	<u>TPH, BTEX, MTB</u>
			<u>2</u>	<u>1L</u>	<u>Amb</u>	<u>NO</u>	<u>TPH, TPHm</u>

REMARKS: _____

[Signature]

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 3600192A LOCATION: 29010/140003 st WELL ID #: MW6

CLIENT/STATION No.: FORMER DORR DIER SITE FIELD TECHNICIAN: REDO POIZ

WELL INFORMATION	CASING DIAMETER	GAL/ LINEAR FT.	SAMPLE TYPE
Depth to Liquid: _____ TOB _____ TOC _____	<input checked="" type="checkbox"/> 2 _____ 0.17		<input checked="" type="checkbox"/> Groundwater
Depth to water: _____ TOB _____ TOC _____	<input type="checkbox"/> 3 _____ 0.38		<input type="checkbox"/> Duplicate
Total depth: _____ TOB _____ TOC _____	<input type="checkbox"/> 4 _____ 0.66		<input type="checkbox"/> Extraction well
Date: _____ Time (2400): _____	<input type="checkbox"/> 4.5 _____ 0.83		<input type="checkbox"/> Trip blank
	<input type="checkbox"/> 5 _____ 1.02		<input type="checkbox"/> Field blank
Probe Type and I.D. #	<input type="checkbox"/> 6 _____ 1.5		<input type="checkbox"/> Equipment blank
<input type="checkbox"/> Oil/Water interface _____	<input type="checkbox"/> 8 _____ 2.6		<input type="checkbox"/> Other; _____
<input type="checkbox"/> Electronic indicator _____			
<input type="checkbox"/> Other; _____			

TD 19.50 - DTW 9.40 = 10.1 x Gal/Linear Foot .17 = 1.71 x Number of Casings 3 = Calculated Purge 5.15

DATE PURGED: 12-17-96 START: 11:35 END (2400 hr): _____ PURGED BY: RE
 DATE SAMPLED: 12-17-96 START: 11:45 END (2400 hr): _____ SAMPLED BY: RE

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>11:39</u>	<u>1.75</u>	<u>7.58</u>	<u>1500</u>	<u>620</u>	<u>CLEAR</u>	<u>Mod</u>	<u>HEAVY</u>
<u>11:42</u>	<u>3.5</u>	<u>7.55</u>	<u>1480</u>	<u>625</u>	<u>CLEAR</u>	<u>Mod</u>	<u>HEAVY</u>
<u>11:45</u>	<u>5.25</u>	<u>7.45</u>	<u>1530</u>	<u>630</u>	<u>CLEAR</u>	<u>Mod</u>	<u>HEAVY</u>

Pumped dry Yes / (No)

Cobalt 0-100 Clear Cloudy Yellow Brown	NTU 0-200 Heavy Moderate Light Trace	Strong Moderate Faint None
--	--	-------------------------------------

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: _____ TOB/TOC _____

PURGING EQUIPMENT/I.D. # <input type="checkbox"/> Bailer: _____ <input checked="" type="checkbox"/> Centrifugal Pump: <u>15</u> <input type="checkbox"/> Other: _____	SAMPLING EQUIPMENT/I.D. # <input checked="" type="checkbox"/> Bailer: <u>15-</u> <input type="checkbox"/> Dedicated: _____ <input type="checkbox"/> Other: <u>Dispos</u>
<input type="checkbox"/> Airlift Pump: _____ <input type="checkbox"/> Dedicated: _____	

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW6</u>	<u>12-17-96</u>	<u>11:45</u>	<u>3</u>	<u>10ml</u>	<u>lba</u>	<u>HCC</u>	<u>TPH G / BTEX / MTBE</u>
			<u>2</u>	<u>1L</u>	<u>Amb</u>	<u>NO</u>	<u>TPH D, TPH M</u>

REMARKS: HEAVY SHEEN OF SPH ON TOP OF WATER & BAILER

REDO

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 3600192A LOCATION: 29019/140013 st WELL ID #: MW-7

CLIENT/STATION No.: FORMER DORR POLYMER SITE FIELD TECHNICIAN: REPO Ruiz

WELL INFORMATION	CASING	GAL/ LINEAR FT.	SAMPLE TYPE
Depth to Liquid: _____ TOB _____ TOC _____	DIAMETER		
Depth to water: _____ TOB _____ TOC _____	<input checked="" type="checkbox"/> 2 _____ 0.17		<input checked="" type="checkbox"/> Groundwater
Total depth: _____ TOB _____ TOC _____	<input type="checkbox"/> 3 _____ 0.38		<input type="checkbox"/> Duplicate
Date: _____ Time (2400): _____	<input type="checkbox"/> 4 _____ 0.66		<input type="checkbox"/> Extraction well
	<input type="checkbox"/> 4.5 _____ 0.83		<input type="checkbox"/> Trip blank
Probe Type and I.D. #	<input type="checkbox"/> 5 _____ 1.02		<input type="checkbox"/> Field blank
<input type="checkbox"/> Oil/Water interface _____	<input type="checkbox"/> 6 _____ 1.5		<input type="checkbox"/> Equipment blank
<input type="checkbox"/> Electronic indicator _____	<input type="checkbox"/> 8 _____ 2.6		<input type="checkbox"/> Other: _____
<input type="checkbox"/> Other: _____			

TD 19.75 - DTW 3.45 = 14.3 Gal/Linear Foot .17 = 2.43 x Number of Casings 3 = Calculated = Purge 7.29

DATE PURGED: 12-17-96 START: 10:10 END (2400 hr): _____ PURGED BY: RE

DATE SAMPLED: 12-17-96 START: 10:20 END (2400 hr): _____ SAMPLED BY: RE

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>10:13</u>	<u>2.5</u>	<u>7.23</u>	<u>1570</u>	<u>63.1</u>	<u>CLEAR</u>	<u>Mod</u>	<u>None</u>
<u>10:16</u>	<u>5</u>	<u>6.90</u>	<u>1580</u>	<u>61.5</u>	<u>CLEAR</u>	<u>Mod</u>	<u>None</u>
<u>10:20</u>	<u>7.5</u>	<u>6.93</u>	<u>1600</u>	<u>65.3</u>	<u>CLEAR</u>	<u>Mod</u>	<u>None</u>

Pumped dry Yes No

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: _____ TOB/TOC _____

PURGING EQUIPMENT/I.D. # <input type="checkbox"/> Bailer: _____ <input checked="" type="checkbox"/> Centrifugal Pump: <u>15</u> <input type="checkbox"/> Other: _____	SAMPLING EQUIPMENT/I.D. # <input checked="" type="checkbox"/> Bailer: <u>15-11</u> <input type="checkbox"/> Dedicated: _____ <input type="checkbox"/> Other: _____
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SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-7</u>	<u>12-17-96</u>	<u>10:00</u>	<u>3</u>	<u>10ml</u>	<u>lba</u>	<u>HCC</u>	<u>TPH, BTEX, MTB</u>
			<u>2</u>	<u>1L</u>	<u>Amb</u>	<u>NO</u>	<u>TPH, TPHMO</u>

REMARKS: _____

[Handwritten Signature]

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 3600192A LOCATION: 29016/4/COCK 3/ WELL ID #: MW-8

CLIENT/STATION No.: FORMER DORRIVER SITE FIELD TECHNICIAN: REDO POIZ

<u>WELL INFORMATION</u>			<u>CASING</u>		<u>GAL/</u>		<u>SAMPLE TYPE</u>	
Depth to Liquid: _____	TOB _____	TOC _____	<u>DIAMETER</u>		<u>LINEAR FT.</u>			
Depth to water: _____	TOB _____	TOC _____	<input checked="" type="checkbox"/>	<u>2</u>	_____	<u>0.17</u>	<input checked="" type="checkbox"/>	Groundwater
Total depth: _____	TOB _____	TOC _____	<input type="checkbox"/>	<u>3</u>	_____	<u>0.38</u>	<input type="checkbox"/>	Duplicate
Date: _____	Time (2400): _____		<input type="checkbox"/>	<u>4</u>	_____	<u>0.66</u>	<input type="checkbox"/>	Extraction well
			<input type="checkbox"/>	<u>4.5</u>	_____	<u>0.83</u>	<input type="checkbox"/>	Trip blank
Probe Type	<input type="checkbox"/>	Oil/Water interface _____	<input type="checkbox"/>	<u>5</u>	_____	<u>1.02</u>	<input type="checkbox"/>	Field blank
and	<input type="checkbox"/>	Electronic indicator _____	<input type="checkbox"/>	<u>6</u>	_____	<u>1.5</u>	<input type="checkbox"/>	Equipment blank
I.D. #	<input type="checkbox"/>	Other; _____	<input type="checkbox"/>	<u>8</u>	_____	<u>2.6</u>	<input type="checkbox"/>	Other; _____

TD 17.10 - DTW 8.52 = 9.18 x Foot 17 Gal/Linear = 1.56 x Casings 3 Calculated = Purge 168

DATE PURGED: 12-17-98 START: 11:13 END (2400 hr): _____ PURGED BY: RE
 DATE SAMPLED: 12-17-98 START: 11:25 END (2400 hr): _____ SAMPLED BY: RE

TIME .. (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>11:10</u>	<u>1.5</u>	<u>7.35</u>	<u>1300</u>	<u>61.7</u>	<u>BRA</u>	<u>HEAVY</u>	<u>None</u>
<u>11:19</u>	<u>3</u>	<u>7.18</u>	<u>1470</u>	<u>62.6</u>	<u>BPR</u>	<u>HEAVY</u>	<u>None</u>
<u>11:23</u>	<u>4.5</u>	<u>7.50</u>	<u>1520</u>	<u>63.3</u>	<u>BPR</u>	<u>HEAVY</u>	<u>None</u>

Pumped dry Yes (NO)
 FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:
 DTW: _____ TOB/TOC _____

<u>PURGING EQUIPMENT/I.D. #</u>		<u>SAMPLING EQUIPMENT/I.D. #</u>	
<input type="checkbox"/> Bailer: _____	<input type="checkbox"/> Airlift Pump: _____	<input checked="" type="checkbox"/> Bailer: <u>157</u>	<input type="checkbox"/> Dedicated: _____
<input checked="" type="checkbox"/> Centrifugal Pump: <u>15</u>	<input type="checkbox"/> Dedicated: _____	<input type="checkbox"/> Other: _____	<input type="checkbox"/> Other: _____
<input type="checkbox"/> Other: _____			

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MWB</u>	<u>12-17-98</u>	<u>11:25</u>	<u>3</u>	<u>10ml</u>	<u>1BA</u>	<u>HCC</u>	<u>TPH, TBTX, mib</u>
			<u>2</u>	<u>1L</u>	<u>Amb</u>	<u>NO</u>	<u>TPH, TPH mo</u>

REMARKS: _____

Chain of Custody

Pacific Environmental Group, Inc.

2025 Gateway Place #440, San Jose CA 95110

Phone 408 441 7790 Fax 408 441 7539

PROJECT No. **300 OLY 2A**

Facility No: **FORMER Dorr Oliver site**

Facility Address: **2901 GLASCOCK ST. OAKLAND CA**

Billing Reference Number: **33171**

CLIENT engineer: **DEMU'S BURAN**

PACIFIC Point of Contact: **ANDREW LEANE** Sampler:

Laboratory Name: **SEDOQA**

Sample I.D.	Cont. No.	Container Size (ml)	Sample Preserv.	Matrix	Type	Sampling Date	Sampling Time	Matrix		Total Dislvd. Metals	VOC (EPA 8240)	SVOC (EPA 8270)	HVOC (EPA 8010)	Comments:
								W=water S=soil A=air	G=grab D=disc. C=comp.					
Mw1	5	40/LL	HCC/UP	w	G	12/17/96	12:10	BTEX/ VPHgas (8015/8020)	TPH (8015)	X	X			TPH motor oil FUEL FINGERPRINT AS motor oil by EPA 8015
Mw2	1						12:35							
Mw3							10:43							
Mw4							11:05							
Mw6							11:45							
Mw7							10:20							
Mw8							11:25							

Condition of Sample:		Temperature Received:		Mail original Analytical Report to:		Turnaround Time:	
		Received by: _____ Date: _____ Time: _____		Pacific Environmental Group		Priority Rush (1 day) <input type="checkbox"/>	
				2025 Gateway Place #440 San Jose, CA 95110 <input checked="" type="checkbox"/>		Rush (2 days) <input type="checkbox"/>	
				620 Contra Costa Blvd. #209 Pleasant Hill, CA 94523 <input type="checkbox"/>		Expedited (5 days) <input type="checkbox"/>	
				25725 Jeronimo Rd. #576C Mission Viejo, CA 92622 <input type="checkbox"/>		Standard (10 days) <input checked="" type="checkbox"/>	
Relinquished by: _____ Date: _____ Time: _____		Received by laboratory: _____ Date: _____ Time: _____		4020 148th Ave NE #B Redmond, WA 98052 <input type="checkbox"/>		As Contracted <input type="checkbox"/>	