

PACIFIC
ENVIRONMENTAL
GROUP, INC.

1/38

August 19, 1997

Project 360-014.2B

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

Re: Quarterly Report - Second Quarter 1997
Former Dorr-Olive Site
2901 Glascoc Street, Oakland, California

Dear Mr. Buran:

The following presents the results of second quarter 1997 monitoring for the above referenced site (Figure 1). This letter has been prepared for Glascoc Street Properties by Pacific Environmental Group, Inc. (PACIFIC). This report also includes a summary of remedial activities performed at the site during the second quarter of 1997, and a response to the Alameda County Health Care Services Agency (ACHCSA) letter dated July 17, 1997 regarding remedial activities at the site.

SCOPE OF WORK

All seven existing groundwater monitoring wells (MW-1 through MW-4, and MW-6 through MW-8; Figure 2) were gauged and sampled by PACIFIC on June 25, 1997. 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 tertiary butyl ether (MtBE). Wells MW-6 and MW-8 were also sampled and analyzed for volatile organic compounds (VOCs) and selected metals. Depth-to-groundwater, TEPH-d, and benzene concentrations for the second quarter 1997 sampling event are shown on Figure 2. The certified analytical reports (CARs), chain-of-custody documentation, and field data sheets are presented in Attachment A.

GROUNDWATER LEVELS

Groundwater levels in site monitoring wells decreased an average 1.22 feet since the last monitoring event (Table 1). Groundwater flow is still generally to the south/southwest (toward the Oakland Estuary), consistent with previous measurements, at a gradient of

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approximately 0.019 (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, and was detected in six wells at the site this quarter. The highest TEPH-d concentrations were found in wells MW-1 and MW-2 (Figure 2). TEPH-d found in samples from wells MW-1, MW-2, and MW-6 was characterized as a weathered diesel. The chromatograms for three other wells (MW-3, MW-4, and MW-7) 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. The maximum concentration of TPPH-g in site wells this quarter was reported as 630 micrograms per liter ($\mu\text{g/L}$) in Well MW-2, and was reported as a weathered gasoline. The only benzene concentration was reported as 3.2 $\mu\text{g/L}$ in Well MW-6. MtBE was detected in four wells this quarter (MW-1, MW-3, MW-6, and MW-7); the maximum concentration of MtBE detected was 580 $\mu\text{g/L}$ in upgradient well MW-7.

No wells wells were reported to have detectable concentrations of motor oil. The laboratory quantified hydrocarbons in the C16 to C36 range while running the analysis for motor oil; however, the laboratory narrative at the end of the CARs specifically indicate that no motor oil was detected (see CARs in Attachment A). The hydrocarbons quantified in the motor oil analysis for wells MW-1, MW-2 and MW-6 are a combination of a portion of weathered diesel from C16 through C24 and unidentified hydrocarbons in the C24 through C36 range.

STATUS OF REMEDIAL ACTIVITIES

In May 1997, PACIFIC installed oxygen releasing compound (ORC) modules in wells MW-1, MW-2, and MW-6 to enhance groundwater remediation. PACIFIC measured and recorded dissolved oxygen concentrations in the wells prior to installation of the ORC modules and once during the second quarter groundwater monitoring event (Table 4). All wells showed a significant increase in dissolved oxygen concentration after installation of the ORC modules.

RESPONSE TO ACHCSA LETTER OF JULY 17, 1997

In a letter from ACHCSA dated July 17, 1997, Mr. Barney Chan requested that Glascock Street Properties perform analyses for certain metals and halogenated volatile organics on groundwater samples for wells MW-6 and MW-8. It had previously been agreed that the above analyses would be performed for the above wells at least once per year. As noted earlier in this report, these analyses were completed during the second quarter monitoring event and the results are contained in this report.

Mr. Chan also requested that Glascock Street Properties prepare a workplan for additional remediation activities at the site to address concentrations of TEPH-d and motor oil at the site. As noted earlier in this report, laboratory analysis of groundwater from the site indicates that no detectable quantities of motor oil are present. Therefore, the primary constituent of concern at the site is diesel. In response to his letter, I had several telephone conversations and a meeting with Mr. Chan to discuss site conditions and prepare a response. The following paragraphs outline our proposed remedial plan for this site.

In the *Site Assessment and Remedial Action Recommendations* report, dated February 29, 1996, PACIFIC proposed a remedial action program composed of: 1) limited excavation of soil with elevated hydrocarbon concentrations (i.e., source removal); 2) recovery of separate phase hydrocarbons (if present) through bioslurping, and; 3) enhanced bioremediation to address residual dissolved hydrocarbons. The proposed treatment was considered to be among the best available technologies and most cost beneficial for this site. PACIFIC also proposed a groundwater cleanup goal of 10 milligrams per liter (mg/L) total petroleum hydrocarbons (TPH) or until groundwater concentrations have decreased to asymptotic conditions. This cleanup goals was not accepted by ACHCSA, and no remedial goal for groundwater at the site has yet been established. Limited excavation of soil with elevated hydrocarbons has been completed to the cleanup levels accepted by ACHCSA, no SPH is present at the site, and enhanced bioremediation is in progress at the site.

PACIFIC believes it is prudent to establish groundwater cleanup goals for the site before pursuing further remedial action, to ensure that any remedial activities would minimize the likelihood of imposing a burden on the people of the state with the expense of remediation, and would not unreasonably affect the present and potential beneficial uses of water. In order to develop groundwater cleanup goals for the site, it is therefore necessary to understand the beneficial uses of groundwater at the site. PACIFIC does not believe groundwater at this site would be considered a source of drinking water (MUN), as the intrusion of water from the estuary would likely make it undesirable from a taste and odor standpoint, as well as from a total dissolved solids/salinity perspective. The anticipated beneficial uses of groundwater at the site are therefore considered to be recharge of estuarine environments (EST) and navigable waters (NAV); EST would likely be the more sensitive of these two beneficial uses.

PACIFIC reviewed the San Francisco Bay Region Regional Water Quality Control Plan (Basin Plan) prepared by the Cal/EPA San Francisco Bay Regional Water Quality Control Board (RWQCB) to develop groundwater cleanup goals based on EST beneficial use. The Basin Plan specifically addresses management of San Francisco Bay estuarine systems, stating that the RWQCB's strategy will be to implement a "wasteload allocation" (i.e., a numerical objective for each contributor based on the total amount of each pollutant which can safely enter the system without exceeding water quality goals). However, the Basin Plan goes on to say that since the wasteload allocation program has not been fully implemented, the objective for specific pollutants presented in the Basin Plan are considered reasonable for purposes of interim regulation. The Basin Plan establishes two main objectives relative to the dissolved

hydrocarbons at the site: 1) a numerical hydrocarbon objective, and; 2) a narrative toxicity objective.

The Basin Plan does not contain a water quality goal for diesel, but does establish a 10 mg/L water quality protection standard for oil and grease in point source effluent discharges, based on a 10 to 1 initial dilution of the effluent. Since the dilution of groundwater at initial dilution are estimated to be orders of magnitude higher than the 10 to 1 dilution, this standard should be considered very conservative as a cleanup goal for groundwater at the site.

PACIFIC drew from several sources to establish a numerical objective related to preventing toxicity effects in the estuary: 1) *Aquatic Toxicity of Petroleum Products* (ATPP), Burns and McDonnell, March 1997, and; 2) *The California Ocean Plan* (Ocean Plan) in *A Compilation of Water Quality Goals*, Central Valley RWQCB, May 1993. The APP report recommended a numerical toxicity objective of 3 mg/L for diesel, based on bioassay tests and evaluation. However, Burns and McDonnell went on to conclude that since the RWQCB intended to set toxicity limits at the point of discharge of groundwater without accounting for initial dilution by surface water, this limit should be considered very conservative. For comparison, the Ocean Plan lists a water quality objective for oil and grease of 25 mg/L as a 30-day average for protection of marine aquatic life.

Balancing all of the above information, and recognizing that the ACHCSA was not comfortable approving the previous groundwater cleanup goal proposed, PACIFIC proposes a cleanup goal of 6.5 mg/L TPH for this site. Based on this cleanup goal, and the history of groundwater monitoring data for the site, PACIFIC proposes no further modification of the remedial plan. We propose to continue groundwater monitoring and enhanced biodegradation activities until reaching the above cleanup goal or until asymptotic conditions are achieved. We believed that this approach will provide reasonable protection of beneficial uses of groundwater at the site without undue burden to the people of the state.

If you have any questions regarding the contents of this report, please call:

Sincerely,

Pacific Environmental Co.

Andrew D. Lehane
Project Engineer
RCE 55798



Attachments: Table 1 - Groundwater Elevation Data
Table 2 - Groundwater and Analytical Data - TPPH-g, BTEX Compounds,
TEPH-d, Motor Oil, and MtBE

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Table 3 - Groundwater Analytical Data - PCBs, Metals, and VOCs
Table 4 - Groundwater Sampling Data - Dissolved Oxygen

Figure 1 - Site Location Map

Figure 2 - Groundwater Monitoring Map - Second Quarter 1997

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

cc: Mr. Werner Sicvol, BP Oil Company
Mr. Barney Chan, ACHCSA

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
	03/21/97		7.90	2.86
MW-2	06/25/97		9.20	1.56
	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	03/21/97		6.25	4.38
	06/25/97		8.01	2.62
	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
MW-4	12/17/96		4.92	4.95
	03/21/97		5.72	4.15
	06/25/97		6.35	3.52
	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
MW-5	07/02/96		7.95	2.69
	12/17/96		6.35	4.29
	03/21/97		7.30	3.34
	06/25/97		7.95	2.69
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

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-5	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
MW-6	05/15/96	10.27	7.46	2.81
	08/28/95		8.06	2.21
	12/06/95		8.78	1.49
	01/18/96	10.28	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
	03/21/97		9.00	1.28
	06/25/97		11.50	-1.22
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
	03/21/97		3.75	6.11
	06/25/97		4.75	5.11
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
	03/21/97		8.60	2.01
	06/25/97		10.27	0.34
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	NA	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
	03/21/97	590	5.5	0.66	ND	ND	5,500 e	5,000 d	71
	06/25/97	470 h	ND	ND	ND	ND	39,000 e	26,000 d	45
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
	03/21/97	230	2.1	1.9	ND	ND	17,000 e	16,000 d	ND
	06/25/97	630 h	ND	ND	ND	ND	16,000 e	13,000 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
	03/21/97	760 h	ND	ND	ND	0.94	2,100 e	1900 d	5.6
	06/25/97	180 h	ND	ND	ND	0.58	610 g	ND	5.3
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
	03/21/97	ND	ND	ND	ND	ND	180 g	500 d	ND
	06/25/97	ND	ND	ND	ND	ND	120 g	ND	ND

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-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
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
	03/21/97	300	3.5	0.91	ND	0.79	18,000 e	17,000 d	19
MW-7	06/25/97	590 h	3.2	ND	ND	ND	9,300 e	7,900 d	15
	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	03/21/97	ND	ND	ND	ND	ND	79 g	ND	190
	06/25/97	ND	ND	ND	ND	ND	58 g	ND	580
	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
	03/21/97	ND	ND	ND	ND	ND	ND	ND	ND
	06/25/97	ND	ND	ND	ND	ND	ND	ND	ND
	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
<p>µg/L = micrograms per liter NS = Not Sampled ND = Not Detected (see CAR for detection limit) NA = Not Analyzed MW-5* = Well MW-5 was destroyed in September 1996. 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. h = Chromatogram pattern is weathered gasoline.</p>									

Table 3
Groundwater Analytical Data -
PCBs, Metals, and VOCs

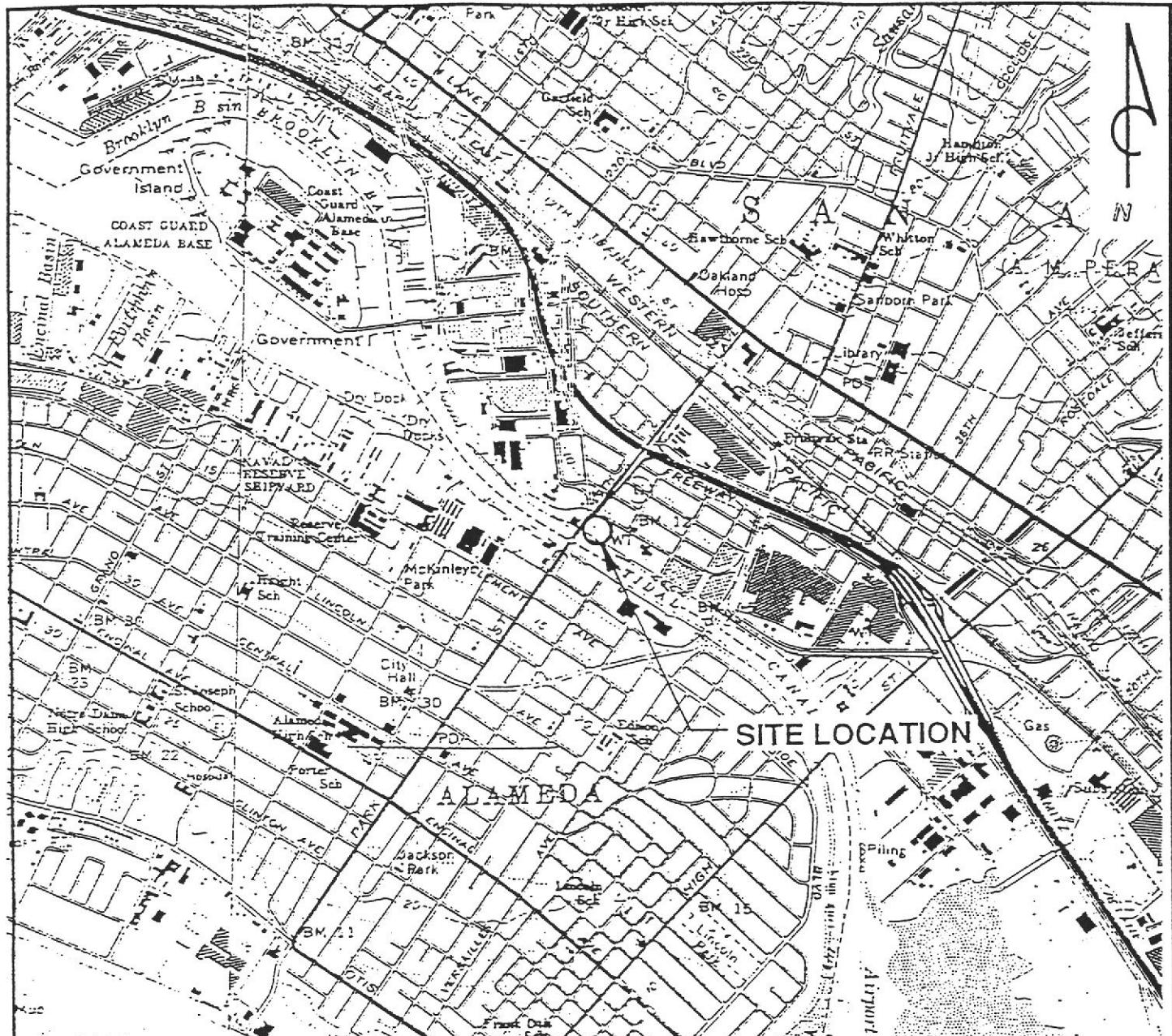
Former Dorr-Oliver Site
2901 Glascock Street
Oakland, California

Well Number	Date Sampled	PCB's (µg/L)	Cadmium (µg/L)	Chromium (µg/L)	Lead (µg/L)	Nickel (µg/L)	Zinc (µg/L)	VOCs (µg/L)
MW-1	11/29/95	NA	NA	NA	NA	NA	NA	ND
	01/18/96	NA	ND	ND	ND	ND	ND	NA
	06/25/97	NA	NA	NA	NA	NA	NA	NA
MW-2	11/29/95	NA	NA	NA	NA	NA	NA	NA
	01/18/96	NA	ND	ND	ND	ND	ND	NA
	06/25/97	NA	NA	NA	NA	NA	NA	NA
MW-3	11/29/95	NA	NA	NA	NA	NA	NA	NA
	01/18/96	NA	ND	ND	ND	ND	51.2	NA
	06/25/97	NA	NA	NA	NA	NA	NA	NA
MW-4	11/29/95	NA	NA	NA	NA	NA	NA	ND a
	01/18/96	NA	ND	ND	ND	ND	20.5	NA
	06/25/97	NA	NA	NA	NA	NA	NA	NA
MW-5	11/29/95	NA	NA	NA	NA	NA	NA	NA
	01/18/96	NA	ND	ND	ND	ND	22.6	NA
MW-6	11/29/95	ND	ND	822	107	1,190	851	ND
	01/18/96	NA	ND	ND	ND	ND	ND	NA
	06/25/97	NA	ND	0.14	ND	0.2	0.18	ND d
MW-7	11/29/95	NA	NA	NA	NA	NA	NA	ND b
	01/18/96	NA	ND	ND	ND	ND	25.1	NA
	06/25/97	NA	NA	NA	NA	NA	NA	NA
MW-8	11/29/95	ND	ND	319	42.0	381	309	ND c
	01/18/96	NA	ND	ND	ND	ND	ND	NA
	06/25/97	NA	ND	0.54	ND	0.69	0.42	ND
<p>µg/L = micrograms per liter PCBs = Polychlorinated Bi-Phenyls VOCs = Volatile Organic Compounds ND = Not Detected (see CAR for detection limit) NA = Not Analyzed</p>								
<p>a 0.61 µg/L 1,1-Dichloroethane b 0.79 µg/L 1,1-Dichloroethane 0.74 µg/L <i>trans</i>-1,2-Dichloroethene c 0.53 µg/L Vinyl Chloride 1.3 µg/L Trichloroethene d 2.5 µg/L Chloroethene 0.97 µg/L 1,1-Dichloroethane 3.4 µg/L <i>trans</i>-1,2-Dichloroethene 1.4 µg/L Vinyl Chloride</p>								

Table 4
Groundwater Sampling Data
Dissolved Oxygen

Former Dorr-Oliver Site
2901 Glascock Street
Oakland, California

Well Number	Date Sampled	Dissolved Oxygen (ppm)
MW-1	05/16/97	1
	06/25/97	(3)
MW-2	05/16/97	1
	06/25/97	(3)
MW-6	05/16/97	1
	06/25/97	(4)



**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

SCALE IN FEET

2000 0 . 2000

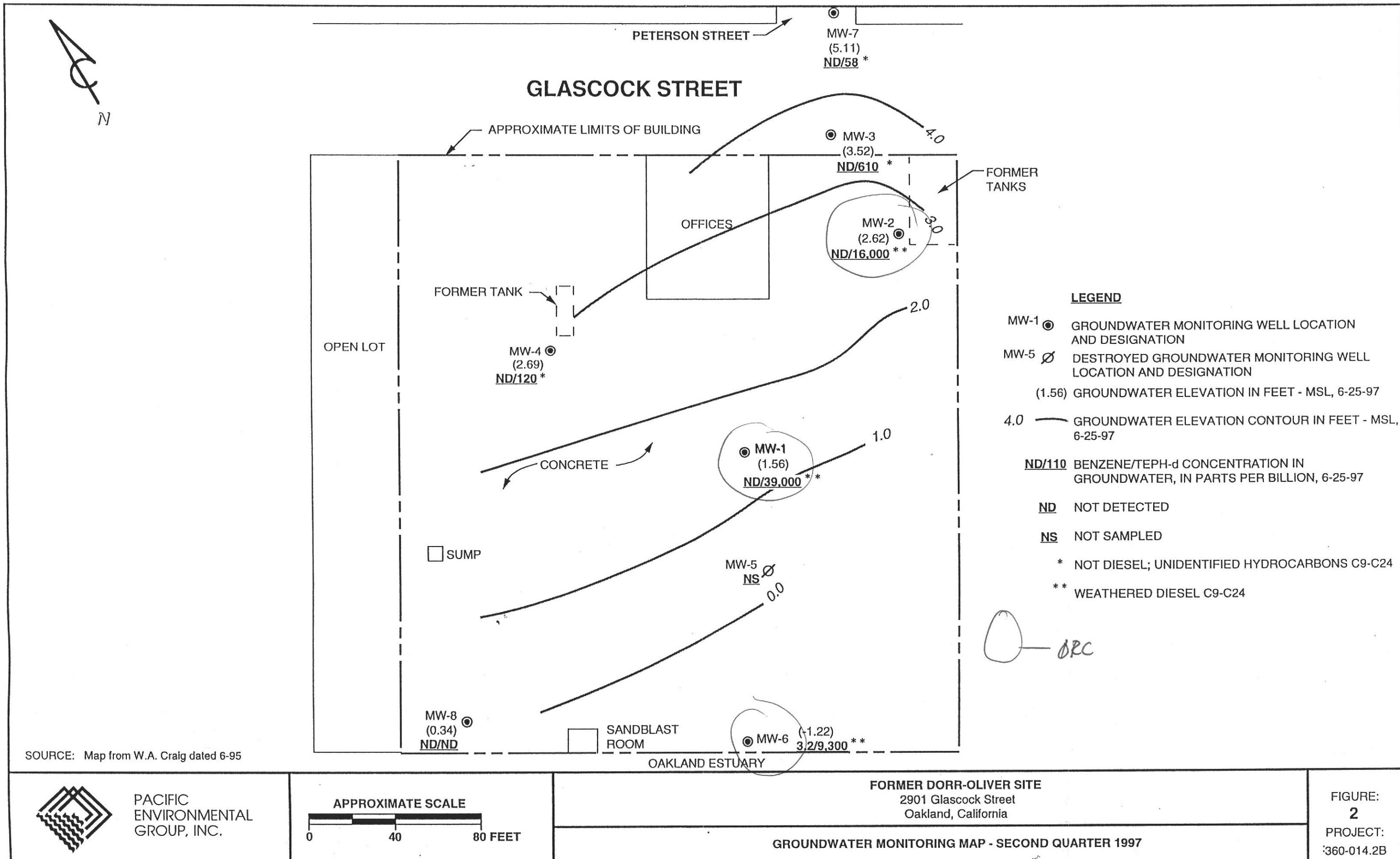


PACIFIC
ENVIRONMENTAL
GROUP, INC.

FORMER DORR-OLIVER SITE
2901 Glascock Street
Oakland, California

SITE LOCATION MAP

FIGURE:
1
PROJECT:
360-014.2B



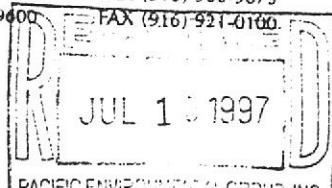
ATTACHMENT A

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



Sequoia
Analytical

680 Chesapeake Drive Redwood City, CA 94063 (415) 364-9600 FAX (415) 364-9233
404 N. Wiget Lane Walnut Creek, CA 94598 (510) 988-9600 FAX (510) 988-9673
819 Striker Avenue, Suite 8 Sacramento, CA 95834 (916) 921-9600 FAX (916) 921-0160



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

Client Proj. ID: 360-014.2A/Oakland

Sampled: 06/25/97

Lab Proj. ID: 9706F69

Received: 06/26/97

Analyzed: see below

Attention: Andrew LeHane

Reported: 07/10/97

LABORATORY ANALYSIS

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No:	9706F69-05			
Sample Desc :	LIQUID,MW-6			
Cadmium	mg/L	07/08/97	0.010	N.D.
Chromium	mg/L	07/08/97	0.010	0.14
Lead	mg/L	07/08/97	0.10	N.D.
Nickel	mg/L	07/08/97	0.050	0.20
Zinc	mg/L	07/08/97	0.010	0.18
Lab No:	9706F69-07			
Sample Desc :	LIQUID,MW-8			
Cadmium	mg/L	07/09/97	0.010	N.D.
Chromium	mg/L	07/09/97	0.010	0.54
Lead	mg/L	07/09/97	0.10	N.D.
Nickel	mg/L	07/09/97	0.050	0.69
Zinc	mg/L	07/09/97	0.010	0.42

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

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Tod Granicher
Project Manager



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680 Chesapeake Drive Redwood City, CA 94063 (415) 364-9600 FAX (415) 364-9233
404 N. Wiget Lane Walnut Creek, CA 94598 (510) 988-9600 FAX (510) 988-9673
819 Striker Avenue, Suite 8 Sacramento, CA 95834 (916) 921-9600 FAX (916) 921-0100

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

Attention: Andrew LeHane

Client Proj. ID: 360-014.2A/Oakland
Sample Descript: MW-1
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9706F69-01

Sampled: 06/25/97
Received: 06/26/97
Extracted: 07/07/97
Analyzed: 07/08/97
Reported: 07/10/97

QC Batch Number: GC0703970HBPEXA
Instrument ID: GCHP4B

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	.....	2500
Chromatogram Pattern:	.....	.....
Weathered Diesel	.....	C9-C24
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	280 Q

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

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404 N. Wiget Lane Walnut Creek, CA 94598 (510) 988-9600 FAX (510) 988-9673
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2025 Gateway Place, Suite 440
San Jose, CA 95110

Attention: Andrew LeHane

Client Proj. ID: 360-014.2A/Oakland
Sample Descript: MW-1
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9706F69-01

Sampled: 06/25/97
Received: 06/26/97
Extracted: 07/07/97
Analyzed: 07/08/97
Reported: 07/10/97

QC Batch Number: GC0703970HBPEXA
Instrument ID: GCHP4B

Fuel Fingerprint : Motor Oil

Analyte	Detection Limit ug/L	Sample Results ug/L
Extractable HC as Motor Oil	.....	26000
Chromatogram Pattern:		
Unidentified HC	.....	C16-C36
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	280 Q

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

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680 Chesapeake Drive Redwood City, CA 94063 (415) 364-9600 FAX (415) 364-9233
404 N. Wiget Lane Walnut Creek, CA 94598 (510) 988-9600 FAX (510) 988-9673
819 Striker Avenue, Suite 8 Sacramento, CA 95834 (916) 921-9600 FAX (916) 921-0100

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2025 Gateway Place, Suite 440
San Jose, CA 95110

Attention: Andrew LeHane

Client Proj. ID: 360-014.2A/Oakland
Sample Descript: MW-1
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9706F69-01

Sampled: 06/25/97
Received: 06/26/97
Analyzed: 07/09/97
Reported: 07/10/97

QC Batch Number: GC070997BTEX06A
Instrument ID: GCHP06

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	.....	250
Methyl t-Butyl Ether	.....	12
Benzene	.....	45
Toluene	2.5	N.D.
Ethyl Benzene	2.5	N.D.
Xylenes (Total)	2.5	N.D.
Chromatogram Pattern: Weathered Gas	.....	C9-C12
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	118

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

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TJG
Tod Granicher
Project Manager



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680 Chesapeake Drive
404 N. Wiget Lane
819 Striker Avenue, Suite 8

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834

(415) 364-9600
(510) 988-9600
(916) 921-9600

FAX (415) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100

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2025 Gateway Place, Suite 440
San Jose, CA 95110

Attention: Andrew LeHane

QC Batch Number: GC070997BTEX06A
Instrument ID: GCHP06

Client Proj. ID: 360-014.2A/Oakland
Sample Descript: MW-2
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9706F69-02

Sampled: 06/25/97
Received: 06/26/97
Analyzed: 07/09/97
Reported: 07/10/97

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte

TPPH as Gas
Methyl t-Butyl Ether
Benzene
Toluene
Ethyl Benzene
Xylenes (Total)
Chromatogram Pattern:
Weathered Gas

	Detection Limit ug/L	Sample Results ug/L
Methyl t-Butyl Ether	250	630
Benzene	12	N.D.
Toluene	2.5	N.D.
Ethyl Benzene	2.5	N.D.
Xylenes (Total)	2.5	N.D.
Chromatogram Pattern: Weathered Gas	2.5	N.D.
		C10-C12

Surrogates

Trifluorotoluene

	Control Limits %	% Recovery
Trifluorotoluene	70 130	112

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

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680 Chesapeake Drive Redwood City, CA 94063 (415) 364-9600 FAX (415) 364-9233
404 N. Wiget Lane Walnut Creek, CA 94598 (510) 988-9600 FAX (510) 988-9673
819 Striker Avenue, Suite 8 Sacramento, CA 95834 (916) 921-9600 FAX (916) 921-0100

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

Attention: Andrew LeHane

QC Batch Number: GC0703970HBPEXA
Instrument ID: GCHP4A

Client Proj. ID: 360-014.2A/Oakland
Sample Descript: MW-2
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9706F69-02

Sampled: 06/25/97
Received: 06/26/97
Extracted: 07/07/97
Analyzed: 07/08/97
Reported: 07/10/97

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	.....	500
Chromatogram Pattern: Weathered Diesel	.....	.....
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	164 Q

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

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819 Striker Avenue, Suite 8 Sacramento, CA 95834 (916) 921-9600 FAX (916) 921-0100

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

Attention: Andrew LeHane

QC Batch Number: GC0703970HBPEXA
Instrument ID: GCHP4A

Client Proj. ID: 360-014.2A/Oakland
Sample Descript: MW-2
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9706F69-02

Sampled: 06/25/97
Received: 06/26/97
Extracted: 07/07/97
Analyzed: 07/08/97
Reported: 07/10/97

Fuel Fingerprint : Motor Oil

Analyte	Detection Limit ug/L	Sample Results ug/L
Extractable HC as Motor Oil	.....	5000
Chromatogram Pattern:	.....	.....
Unidentified HC	.....	13000
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	164 Q

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

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404 N. Wiget Lane
819 Striker Avenue, Suite 8

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Walnut Creek, CA 94598
Sacramento, CA 95834

(415) 364-9600
(510) 988-9600
(916) 921-9600

FAX (415) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100

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2025 Gateway Place, Suite 440
San Jose, CA 95110

Attention: Andrew LeHane

QC Batch Number: GC0703970HBPEXA
Instrument ID: GCHP4A

Client Proj. ID: 360-014.2A/Oakland
Sample Descript: MW-3
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9706F69-03

Sampled: 06/25/97
Received: 06/26/97
Extracted: 07/07/97
Analyzed: 07/07/97
Reported: 07/10/97

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	.....	.....
Chromatogram Pattern:	50	610
Unidentified HC	.....	C9-C24
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	100

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

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819 Striker Avenue, Suite 8 Sacramento, CA 95834 (916) 921-9600 FAX (916) 921-0100

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2025 Gateway Place, Suite 440
San Jose, CA 95110

Attention: Andrew LeHane

QC Batch Number: GC0703970HBPEXA
Instrument ID: GCHP4A

Client Proj. ID: 360-014.2A/Oakland
Sample Descript: MW-3
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9706F69-03

Sampled: 06/25/97
Received: 06/26/97
Extracted: 07/07/97
Analyzed: 07/07/97
Reported: 07/10/97

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 100

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

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404 N. Wiget Lane
819 Striker Avenue, Suite 8

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834

(415) 364-9600
(510) 988-9600
(916) 921-9600

FAX (415) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100

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2025 Gateway Place, Suite 440
San Jose, CA 95110

Client Proj. ID: 360-014.2A/Oakland
Sample Descript: MW-3
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9706F69-03

Sampled: 06/25/97
Received: 06/26/97

Attention: Andrew LeHane

Analyzed: 07/08/97
Reported: 07/10/97

QC Batch Number: GC070897BTEX06A
Instrument ID: GCHP06

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte

Detection Limit
ug/L

Sample Results
ug/L

TPPH as Gas
Methyl t-Butyl Ether
Benzene
Toluene
Ethyl Benzene
Xylenes (Total)
Chromatogram Pattern:
Weathered Gas

.....	50	.....	180
.....	2.5	.....	5.3
.....	0.50	.....	N.D.
.....	0.50	.....	N.D.
.....	0.50	.....	N.D.
.....	0.50	.....	0.58
.....	.....	.....	C6-C12

Surrogates

Trifluorotoluene

Control Limits %

70 130

% Recovery
101

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

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404 N. Wiget Lane
819 Striker Avenue, Suite 8

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834

(415) 364-9600
(510) 988-9600
(916) 921-9600

FAX (415) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100

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

Attention: Andrew LeHane

QC Batch Number: GC0703970HBPEXA
Instrument ID: GCHP4B

Client Proj. ID: 360-014.2A/Oakland
Sample Descript: MW-4
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9706F69-04

Sampled: 06/25/97
Received: 06/26/97
Extracted: 07/07/97
Analyzed: 07/08/97
Reported: 07/10/97

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	.....	120
Chromatogram Pattern:		
Unidentified HC	.....	C9-C24
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	91

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

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819 Striker Avenue, Suite 8 Sacramento, CA 95834 (916) 921-9600 FAX (916) 921-0100

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

Attention: Andrew LeHane

QC Batch Number: GC070797BTEX01A
Instrument ID: GCHP01

Client Proj. ID: 360-014.2A/Oakland
Sample Descript: MW-4
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9706F69-04

Sampled: 06/25/97
Received: 06/26/97
Analyzed: 07/07/97
Reported: 07/10/97

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte

TPPH as Gas
Methyl t-Butyl Ether
Benzene
Toluene
Ethyl Benzene
Xylenes (Total)
Chromatogram Pattern:

Detection Limit 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:		N.D.

Surrogates

Trifluorotoluene

Control Limits % 70 130

% Recovery
81

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

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404 N. Wiget Lane
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Redwood City, CA 94063
Walnut Creek, CA 94598
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(415) 364-9600
(510) 988-9600
(916) 921-9600

FAX (415) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100

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

Attention: Andrew LeHane

Client Proj. ID: 360-014.2A/Oakland
Sample Descript: MW-4
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9706F69-04

Sampled: 06/25/97
Received: 06/26/97
Extracted: 07/07/97
Analyzed: 07/08/97
Reported: 07/10/97

QC Batch Number: GC0703970HBPEXA
Instrument ID: GCHP4B

Fuel Fingerprint : Motor Oil

Analyte

Extractable HC as Motor Oil
Chromatogram Pattern:

Detection Limit
ug/L

500

Sample Results
ug/L

N.D.

Surrogates

n-Pentacosane (C25)

Control Limits %
50 150

% Recovery
91

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

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(415) 364-9600
(510) 988-9600
(916) 921-9600

FAX (415) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100

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San Jose, CA 95110

Attention: Andrew LeHane

Client Proj. ID: 360-014.2A/Oakland
Sample Descript: MW-6
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9706F69-05

Sampled: 06/25/97
Received: 06/26/97
Extracted: 07/07/97
Analyzed: 07/08/97
Reported: 07/10/97

QC Batch Number: GC0703970HBPEXA
Instrument ID: GCHP4A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte

TEPH as Diesel
Chromatogram Pattern:
Weathered Diesel

Detection Limit
ug/L

..... 250

Sample Results
ug/L

9300

Surrogates

n-Pentacosane (C25)

Control Limits %
50 150

% Recovery
235 Q

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

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819 Striker Avenue, Suite 8

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834

(415) 364-9600
(510) 988-9600
(916) 921-9600

FAX (415) 364-9233
FAX (510) 988-9673
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2025 Gateway Place, Suite 440
San Jose, CA 95110

Attention: Andrew LeHane

QC Batch Number: GC0703970HBPEXA
Instrument ID: GCHP4A

Client Proj. ID: 360-014.2A/Oakland
Sample Descript: MW-6
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9706F69-05

Sampled: 06/25/97
Received: 06/26/97
Extracted: 07/07/97
Analyzed: 07/08/97
Reported: 07/10/97

Fuel Fingerprint : Motor Oil

Analyte

Extractable HC as Motor Oil
Chromatogram Pattern:
Unidentified HC

Surrogates
n-Pentacosane (C25)

	Detection Limit ug/L	Sample Results ug/L
Extractable HC as Motor Oil	..... 2500	.....
Chromatogram Pattern:	.....	7900
Unidentified HC	.....	C16-C36
	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	235 Q

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

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680 Chesapeake Drive Redwood City, CA 94063 (415) 364-9600 FAX (415) 364-9233
404 N. Wiget Lane Walnut Creek, CA 94598 (510) 988-9600 FAX (510) 988-9673
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San Jose, CA 95110

Attention: Andrew LeHane

Client Proj. ID: 360-014.2A/Oakland
Sample Descript: MW-6
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9706F69-05

Sampled: 06/25/97
Received: 06/26/97
Analyzed: 07/09/97
Reported: 07/10/97

QC Batch Number: GC070997BTEX06A
Instrument ID: GCHP06

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	.....	250
Methyl t-Butyl Ether	.....	590
Benzene	.....	15
Toluene	.....	3.2
Ethyl Benzene	.....	N.D.
Xylenes (Total)	.....	N.D.
Chromatogram Pattern: Weathered Gas	.....	N.D.
		C9-C12
Surrogates		
Trifluorotoluene	Control Limits % 70 130	% Recovery 108

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

SEQUOIA ANALYTICAL - ELAP #1210

311
Tod Granicher
Project Manager



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680 Chesapeake Drive Redwood City, CA 94063 (415) 364-9600 FAX (415) 364-9233
404 N. Wiget Lane Walnut Creek, CA 94598 (510) 988-9600 FAX (510) 988-9673
819 Striker Avenue, Suite 8 Sacramento, CA 95834 (916) 921-9600 FAX (916) 921-0100

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

Attention: Andrew LeHane

QC Batch Number: GC070897801008A
Instrument ID: GCHP08

Client Proj. ID: 360-014.2A/Oakland
Sample Descript: MW-6
Matrix: LIQUID
Analysis Method: EPA 8010
Lab Number: 9706F69-05

Sampled: 06/25/97
Received: 06/26/97
Analyzed: 07/09/97
Reported: 07/10/97

Halogenated Volatile Organics (EPA 8010)

Analyte	Detection Limit ug/L	Sample Results ug/L
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon Tetrachloride	0.50	N.D.
Chlorobenzene	0.50	N.D.
Chloroethane	1.0	N.D.
2-Chloroethylvinyl ether	1.0	2.5
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,2-Dichlorobenzene	0.50	N.D.
1,3-Dichlorobenzene	0.50	N.D.
1,4-Dichlorobenzene	0.50	N.D.
1,1-Dichloroethane	0.50	N.D.
1,2-Dichloroethane	0.50	0.97
1,1-Dichloroethene	0.50	N.D.
cis-1,2-Dichloroethene	0.50	N.D.
trans-1,2-Dichloroethene	0.50	3.4
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	5.0	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	0.50	N.D.
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	N.D.
Trichlorofluoromethane	0.50	N.D.
Vinyl chloride	1.0	1.4
Surrogates		
1-Chloro-2-fluorobenzene	Control Limits % 70 130	% Recovery 95

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

SEQUOIA ANALYTICAL - ELAP #1210


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Project Manager



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

Attention: Andrew LeHane

QC Batch Number: GC0703970HBPEXA
Instrument ID: GCHP4A

Client Proj. ID: 360-014.2A/Oakland
Sample Descript: MW-7
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9706F69-06

Sampled: 06/25/97
Received: 06/26/97
Extracted: 07/07/97
Analyzed: 07/07/97
Reported: 07/10/97

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	.....	58
Chromatogram Pattern:		
Unidentified HC	.....	C9-C24
Surrogates		
n-Pentacosane (C25)	Control Limits % 50 150	% Recovery 99

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

SEQUOIA ANALYTICAL - ELAP #1210

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

Attention: Andrew LeHane

QC Batch Number: GC0703970HBPEXA
Instrument ID: GCHP4A

Client Proj. ID: 360-014.2A/Oakland
Sample Descript: MW-7
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9706F69-06

Sampled: 06/25/97
Received: 06/26/97
Extracted: 07/07/97
Analyzed: 07/07/97
Reported: 07/10/97

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 99

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

SEQUOIA ANALYTICAL - ELAP #1210

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819 Striker Avenue, Suite 8 Sacramento, CA 95834 (916) 921-9600 FAX (916) 921-0100

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

Attention: Andrew LeHane

QC Batch Number: GC070897BTEX06A
Instrument ID: GCHP06

Client Proj. ID: 360-014.2A/Oakland
Sample Descript: MW-7
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9706F69-06

Sampled: 06/25/97
Received: 06/26/97

Analyzed: 07/08/97
Reported: 07/10/97

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	200	N.D.
Methyl t-Butyl Ether	10	580
Benzene	2.0	N.D.
Toluene	2.0	N.D.
Ethyl Benzene	2.0	N.D.
Xylenes (Total)	2.0	N.D.
Chromatogram Pattern:		

Surrogates
Trifluorotoluene

Control Limits %	% Recovery
70	130

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

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819 Striker Avenue, Suite 8

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834

(415) 364-9600
(510) 988-9600
(916) 921-9600

FAX (415) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100

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

Attention: Andrew LeHane

QC Batch Number: GC0707970HBPEXZ
Instrument ID: GCHP4A

Client Proj. ID: 360-014.2A/Oakland
Sample Descript: MW-8
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9706F69-07

Sampled: 06/25/97
Received: 06/26/97
Extracted: 07/07/97
Analyzed: 07/09/97
Reported: 07/10/97

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern:	50	N.D.
Surrogates n-Pentacosane (C25)	Control Limits % 50 150	% Recovery 105

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

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819 Striker Avenue, Suite 8 Sacramento, CA 95834 (916) 921-9600 FAX (916) 921-0100

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

Attention: Andrew LeHane

Client Proj. ID: 360-014.2A/Oakland
Sample Descript: MW-8
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9706F69-07

Sampled: 06/25/97
Received: 06/26/97
Extracted: 07/07/97
Analyzed: 07/09/97
Reported: 07/10/97

QC Batch Number: GC0707970HBPEXA
Instrument ID: GCHP4A

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 105

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

SEQUOIA ANALYTICAL - ELAP #1210

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404 N. Wiget Lane
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Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834

(415) 364-9600
(510) 988-9600
(916) 921-9600

FAX (415) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100

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

Attention: Andrew LeHane

QC Batch Number: GC070797BTEX01A
Instrument ID: GCHP01

Client Proj. ID: 360-014.2A/Oakland
Sample Descript: MW-8
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9706F69-07

Sampled: 06/25/97
Received: 06/26/97
Analyzed: 07/07/97
Reported: 07/10/97

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte

TPPH as Gas
Methyl t-Butyl Ether
Benzene
Toluene
Ethyl Benzene
Xylenes (Total)
Chromatogram Pattern:

Detection Limit ug/L

Sample Results ug/L

50	N.D.
2.5	N.D.
0.50	N.D.

Surrogates

Trifluorotoluene

Control Limits % 70 130

% Recovery 88

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

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Redwood City, CA 94063
Walnut Creek, CA 94598
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(415) 364-9600
(510) 988-9600
(916) 921-9600
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FAX (510) 988-9673
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Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110

Attention: Andrew LeHane

QC Batch Number: GC070797801008A
Instrument ID: GCHP08

Client Proj. ID: 360-014.2A/Oakland
Sample Descript: MW-8
Matrix: LIQUID
Analysis Method: EPA 8010
Lab Number: 9706F69-07

Sampled: 06/25/97
Received: 06/26/97

Analyzed: 07/07/97
Reported: 07/10/97

Halogenated Volatile Organics (EPA 8010)

Analyte	Detection Limit ug/L	Sample Results ug/L
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon Tetrachloride	0.50	N.D.
Chlorobenzene	0.50	N.D.
Chloroethane	0.50	N.D.
2-Chloroethylvinyl ether	1.0	N.D.
Chloroform	1.0	N.D.
Chloromethane	0.50	N.D.
Dibromochloromethane	1.0	N.D.
1,2-Dichlorobenzene	0.50	N.D.
1,3-Dichlorobenzene	0.50	N.D.
1,4-Dichlorobenzene	0.50	N.D.
1,1-Dichloroethane	0.50	N.D.
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	0.50	N.D.
cis-1,2-Dichloroethene	0.50	N.D.
trans-1,2-Dichloroethene	0.50	N.D.
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	5.0	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	0.50	N.D.
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	N.D.
Trichlorofluoromethane	0.50	N.D.
Vinyl chloride	1.0	N.D.
Surrogates		
1-Chloro-2-fluorobenzene	Control Limits % 70 130	% Recovery 73

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

SEQUOIA ANALYTICAL - ELAP #1210

Tod Granicher
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 #: 9706F69 01-07

Reported: Jul 14, 1997

QUALITY CONTROL DATA REPORT

Analyte:	1,1-Dichloro-ethene	Trichloro-ethene	Chloro-Benzene
QC Batch#:	GC070797801008A	GC070797801008A	GC070797801008A
Analy. Method:	EPA 8010	EPA 8010	EPA 8010
Prep. Method:	EPA 5030	EPA 5030	EPA 5030

Analyst:	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	9706F0702	9706F0702	9706F0702
Sample Conc.:	N.D.	N.D.	N.D.
Prepared Date:	7/7/97	7/7/97	7/7/97
Analyzed Date:	7/7/97	7/7/97	7/7/97
Instrument I.D. #:	GCHP8	GCHP8	GCHP8
Conc. Spiked:	25 µg/L	25 µg/L	25 µg/L
Dilution Factor:	1	1	1
Result:	22	22	21
MS % Recovery:	88	88	84
Dup. Result:	23	22	22
MSD % Recov.:	92	88	88
RPD:	4.4	0.0	4.7
RPD Limit:	0-25	0-25	0-25

LCS #:	BLK070797	BLK070797	BLK070797
Prepared Date:	7/7/97	7/7/97	7/7/97
Analyzed Date:	7/7/97	7/7/97	7/7/97
Instrument I.D. #:	GCHP8	GCHP8	GCHP8
Conc. Spiked:	25 µg/L	25 µg/L	25 µg/L
LCS Result:	23	22	22
LCS % Recov.:	92	88	88
MS/MSD	60-140	60-140	60-140
LCS	65-135	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.

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

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SEQUOIA ANALYTICAL


 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 #: 9706F69 01-07

Reported: Jul 14, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Chloro-Benzene
QC Batch#:	GC070797802008A	GC070797802008A	GC070797802008A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030

Analyst:	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	9706F0702	9706F0702	9706F0702
Sample Conc.:	N.D.	N.D.	N.D.
Prepared Date:	7/7/97	7/7/97	7/7/97
Analyzed Date:	7/7/97	7/7/97	7/7/97
Instrument I.D. #:	GCHP8	GCHP8	GCHP8
Conc. Spiked:	25 µg/L	25 µg/L	25 µg/L
Dilution Factor:	1	1	1
Result:	24	23	22
MS % Recovery:	96	92	88
Dup. Result:	24	23	23
MSD % Recov.:	96	92	92
RPD:	0.0	0.0	4.4
RPD Limit:	0-25	0-25	0-25

LCS #:	BLK070797	BLK070797	BLK070797
Prepared Date:	7/7/97	7/7/97	7/7/97
Analyzed Date:	7/7/97	7/7/97	7/7/97
Instrument I.D. #:	GCHP8	GCHP8	GCHP8
Conc. Spiked:	25 µg/L	25 µg/L	25 µg/L
LCS Result:	24	23	22
LCS % Recov.:	96	92	88
MS/MSD	60-140	60-140	60-140
LCS	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.

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

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SEQUOIA ANALYTICAL


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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 #: 9706F69 01-07

Reported: Jul 14, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Chloro-Benzenes
QC Batch#:	GC070897802008A	GC070897802008A	GC070897802008A
Analyt. Method:	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030

Analyst:	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	9706F6802	9706F6802	9706F6802
Sample Conc.:	N.D.	N.D.	N.D.
Prepared Date:	7/8/97	7/8/97	7/8/97
Analyzed Date:	7/8/97	7/8/97	7/8/97
Instrument I.D. #:	GCHP8	GCHP8	GCHP8
Conc. Spiked:	25 µg/L	25 µg/L	25 µg/L
Dilution Factor:	10	10	10
Result:	220	210	210
MS % Recovery:	88	84	84
Dup. Result:	230	230	220
MSD % Recov.:	92	92	88
RPD:	4.4	9.1	4.7
RPD Limit:	0-25	0-25	0-25

LCS #:	BLK070997	BLK070997	BLK070997
Prepared Date:	7/9/97	7/9/97	7/9/97
Analyzed Date:	7/9/97	7/9/97	7/9/97
Instrument I.D. #:	GCHP8	GCHP8	GCHP8
Conc. Spiked:	25 µg/L	25 µg/L	25 µg/L
LCS Result:	26	25	24
LCS % Recov.:	104	100	96

MS/MSD	60-140	60-140	60-140
LCS	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.

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference
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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 #: 9706F69 01-07

Reported: Jul 14, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC070797BTEX01A	GC070797BTEX01A	GC070797BTEX01A	GC070797BTEX01A	GC070797BTEX01A
Analy. Method:	EPA 8020				
Prep. Method:	EPA 5030				

Analyst:	A. Porter				
MS/MSD #:	9706E6602	9706E6602	9706E6602	9706E6602	9706E6602
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	7/7/97	7/7/97	7/7/97	7/7/97	7/7/97
Analyzed Date:	7/7/97	7/7/97	7/7/97	7/7/97	7/7/97
Instrument I.D. #:	GCHP1	GCHP1	GCHP1	GCHP1	GCHP1
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
Result:	9.3	9.2	9.4	28	72
MS % Recovery:	93	92	94	93	120
Dup. Result:	9.6	9.5	9.8	29	76
MSD % Recov.:	96	95	98	97	127
RPD:	3.2	3.2	4.2	3.5	5.4
RPD Limit:	0-25	0-25	0-25	0-25	0-25

LCS #:	BLK070797	BLK070797	BLK070797	BLK070797	BLK070797
Prepared Date:	7/7/97	7/7/97	7/7/97	7/7/97	7/7/97
Analyzed Date:	7/7/97	7/7/97	7/7/97	7/7/97	7/7/97
Instrument I.D. #:	GCHP1	GCHP1	GCHP1	GCHP1	GCHP1
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
LCS Result:	9.5	9.3	9.6	28	73
LCS % Recov.:	95	93	96	93	122
MS/MSD	60-140	60-140	60-140	60-140	60-140
LCS	70-130	70-130	70-130	70-130	70-130
Control Limits					

SEQUOIA ANALYTICAL

Tod Granicher
 Project Manager

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.

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

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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 #: 9706F69 01-07

Reported: Jul 14, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC070897BTEX06A	GC070897BTEX06A	GC070897BTEX06A	GC070897BTEX06A	GC070897BTEX06A
Analy. Method:	EPA 8020				
Prep. Method:	EPA 5030				

Analyst:	A. Porter				
MS/MSD #:	9706E6603	9706E6603	9706E6603	9706E6603	9706E6603
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	7/8/97	7/8/97	7/8/97	7/8/97	7/8/97
Analyzed Date:	7/8/97	7/8/97	7/8/97	7/8/97	7/8/97
Instrument I.D. #:	GCHP6	GCHP6	GCHP6	GCHP6	GCHP6
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
Result:	9.2	9.2	9.3	27	68
MS % Recovery:	92	92	93	90	113
Dup. Result:	9.1	9.0	9.3	27	67
MSD % Recov.:	91	90	93	90	112
RPD:	1.1	2.2	0.0	0.0	1.5
RPD Limit:	0-25	0-25	0-25	0-25	0-25

LCS #:	BLK070897	BLK070897	BLK070897	BLK070897	BLK070897
Prepared Date:	7/8/97	7/8/97	7/8/97	7/8/97	7/8/97
Analyzed Date:	7/8/97	7/8/97	7/8/97	7/8/97	7/8/97
Instrument I.D. #:	GCHP6	GCHP6	GCHP6	GCHP6	GCHP6
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
LCS Result:	9.7	9.5	9.7	28	71
LCS % Recov.:	97	95	97	93	118

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

Please Note:

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SEQUOIA ANALYTICAL


 Tod Granicher
 Project Manager

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

9706F69.PPP <6>



**Sequoia
Analytical**

680 Chesapeake Drive Redwood City, CA 94063 (415) 364-9600 FAX (415) 364-9233
 404 N. Wiget Lane Walnut Creek, CA 94598 (510) 988-9600 FAX (510) 988-9673
 819 Striker Avenue, Suite 8 Sacramento, CA 95834 (916) 921-9600 FAX (916) 921-0100

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 #: 9706F69 01-07

Reported: Jul 14, 1997

QUALITY CONTROL DATA REPORT

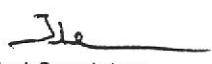
Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC070997BTEX06A	GC070997BTEX06A	GC070997BTEX06A	GC070997BTEX06A	GC070997BTEX06A
Analy. Method:	EPA 8020				
Prep. Method:	EPA 5030				

Analyst:	A. Porter				
MS/MSD #:	9706E2023	9706E2023	9706E2023	9706E2023	9706E2023
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	7/9/97	7/9/97	7/9/97	7/9/97	7/9/97
Analyzed Date:	7/9/97	7/9/97	7/9/97	7/9/97	7/9/97
Instrument I.D. #:	GCHP6	GCHP6	GCHP6	GCHP6	GCHP6
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
Result:	9.2	9.9	9.1	27	64
MS % Recovery:	92	89	91	90	107
Dup. Result:	8.8	8.7	.9.0	26	62
MSD % Recov.:	88	87	90	87	103
RPD:	4.4	2.3	1.1	3.8	3.2
RPD Limit:	0-25	0-25	0-25	0-25	0-25

LCS #:	BLK070997	BLK070997	BLK070997	BLK070997	BLK070997
Prepared Date:	7/9/97	7/9/97	7/9/97	7/9/97	7/9/97
Analyzed Date:	7/9/97	7/9/97	7/9/97	7/9/97	7/9/97
Instrument I.D. #:	GCHP6	GCHP6	GCHP6	GCHP6	GCHP6
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
LCS Result:	9.0	8.8	9.0	26	62
LCS % Recov.:	90	88	90	87	103

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

SEQUOIA ANALYTICAL


 Tod Granicher
 Project Manager

Please Note:

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9706F69.PPP <7>



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 404 N. Wiget Lane Walnut Creek, CA 94598 (510) 988-9600 FAX (510) 988-9673
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Attention: Andrew Lehane

Client Project ID: 360-014.2A / Oakland
Matrix: LIQUID

Work Order #: 9706F69 01-07

Reported: Jul 14, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Beryllium	Chromium	Cadmium	Thallium
QC Batch#:	ME0708976010MDA	ME0708976010MDA	ME0708976010MDA	ME0708976010MDA
Analy. Method:	EPA 6010	EPA 6010	EPA 6010	EPA 6010
Prep. Method:	EPA 3010	EPA 3010	EPA 3010	EPA 3010

Analyst:	R. Butler	R. Butler	R. Butler	R. Butler
MS/MSD #:	9706F0201	9706F0201	9706F0201	9706F0201
Sample Conc.:	N.D.	N.D.	N.D.	0.37
Prepared Date:	7/8/97	7/8/97	7/8/97	7/8/97
Analyzed Date:	7/8/97	7/8/97	7/8/97	7/8/97
Instrument I.D. #:	MTJA2	MTJA2	MTJA2	MTJA2
Conc. Spiked:	1.0 mg/L	1.0 mg/L	1.0 mg/L	1.0 mg/L
Result:	1.0	1.0	1.0	1.4
MS % Recovery:	100	100	100	100
Dup. Result:	1.0	1.0	1.0	1.4
MSD % Recov.:	100	100	100	100
RPD:	0.0	0.0	0.0	0.0
RPD Limit:	0-20	0-20	0-20	0-20

LCS #:	BLKk070897	BLKk070897	BLKk070897	BLKk070897
Prepared Date:	7/8/97	7/8/97	7/8/97	7/8/97
Analyzed Date:	7/8/97	7/8/97	7/8/97	7/8/97
Instrument I.D. #:	MTJA2	MTJA2	MTJA2	MTJA2
Conc. Spiked:	1.0 mg/L	1.0 mg/L	1.0 mg/L	1.0 mg/L
LCS Result:	1.0	1.0	1.0	1.0
LCS % Recov.:	100	100	100	100

MS/MSD LCS Control Limits	80-120	80-120	80-120	80-120
---------------------------------	--------	--------	--------	--------

SEQUOIA ANALYTICAL


Tod Granicher
Project Manager

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

9706F69.PPP <8>



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680 Chesapeake Drive Redwood City, CA 94063 (415) 364-9600 FAX (415) 364-9233
404 N. Wiget Lane Walnut Creek, CA 94598 (510) 988-9600 FAX (510) 988-9673
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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 #: 9706F69 01-07

Reported: Jul 14, 1997

QUALITY CONTROL DATA REPORT

Analyte: Diesel

QC Batch#: GC0703970HBPEXA
Analy. Method: EPA 8015M
Prep. Method: EPA 3510

Analyst: B. Sullivan
MS/MSD #: 9706F9909
Sample Conc.: 230
Prepared Date: 7/3/97
Analyzed Date: 7/4/97
Instrument I.D.#: GCHP5A
Conc. Spiked: 1000 µg/L

Result: 930
MS % Recovery: 70

Dup. Result: 950
MSD % Recov.: 72

RPD: 2.1
RPD Limit: 0-50

LCS #: BLK070797

Prepared Date: 7/7/97
Analyzed Date: 7/7/97
Instrument I.D.#: GCHP4A
Conc. Spiked: 1000 µg/L

LCS Result: 820
LCS % Recov.: 82

MS/MSD	60-140
LCS	50-150
Control Limits	

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SEQUOIA ANALYTICAL


Tod Granicher
Project Manager

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

9706F69.PPP <9>



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San Jose, CA 95110

Attention: Andrew Lehane

Client Project ID: 360-014.2A / Oakland
Matrix: LIQUID

Work Order #: 9706F69 01-07

Reported: Jul 14, 1997

QUALITY CONTROL DATA REPORT

Analyte: Diesel

QC Batch#: GC0707970HBPEXZ
Analy. Method: EPA 8015M
Prep. Method: EPA 3520

Analyst: G. Fish
MS/MSD #: 9706F9804
Sample Conc.: N.D.
Prepared Date: 7/7/97
Analyzed Date: 7/9/97
Instrument I.D.#: GCHP4B
Conc. Spiked: 1000 µg/L

Result: 810
MS % Recovery: 81

Dup. Result: 950
MSD % Recov.: 95

RPD: 16
RPD Limit: 0-50

LCS #: BLK070797

Prepared Date: 7/7/97
Analyzed Date: 7/9/97
Instrument I.D.#: GCHP4B
Conc. Spiked: 1000 µg/L

LCS Result: 740
LCS % Recov.: 74

MS/MSD 60-140
LCS 50-150
Control Limits

SEQUOIA ANALYTICAL


Tod Granicher
Project Manager

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9706F69.PPP <10>



Sequoia
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680 Chesapeake Drive
404 N. Wiget Lane
819 Striker Avenue, Suite 8

Redwood City, CA 94063 (415) 364-9600
Walnut Creek, CA 94598 (510) 988-9600
Sacramento, CA 95834 (916) 921-9600

FAX (415) 364-9233
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FAX (916) 921-0100

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

Client Proj. ID: 360-014.2A/Oakland

Received: 06/26/97

Lab Proj. ID: 9706F69

Reported: 07/10/97

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 37 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

SEQUOIA ANALYTICAL

TG
Tod Granicher
Project Manager

Page: 1

SEQUOIA ANALYTICAL SAMPLE RECEIPT LOG

CLIENT NAME:
REC. BY (PRINT)

PEG
Alzad

WORKORDER:
DATE OF LOG-IN:

9706F69

丁巳

CIRCLE THE APPROPRIATE RESPONSE

- | | |
|--------------------------------------------------------------------------------|-----------------------------------------|
| 1. Custody Seal(s) | Present / Absent
Intact / Broken* |
| 2. Custody Seal #: | Put in Remarks Section |
| 3. Chain-of-Custody | Present / Absent* |
| 4. Traffic Reports or Packing List: | Present / Absent |
| 5. Airbill: | Airbill / Sticker
Present / Absent |
| 6. Airbill #: | |
| 7. Sample Tags: | Present / Absent |
| Sample Tags #s: | Listed / Not Listed on Chain-of-Custody |
| 8. Sample Condition: | Intact / Broken* / Leaking* |
| 9. Does information on custody reports, traffic reports and sample tags agree? | Yes / No* |
| 10. Proper Preservatives used: | Yes / No* |
| 11. Date Rec. at Lab: | 6/26/97 |
| 12. Time Rec. at Lab: | 1243 |
| 13. Temp Rec. at Lab: | 10°C |

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



**Sequoia
Analytical**

680 Chesapeake Drive Redwood City, CA 94063 (650) 364-9600 FAX (650) 364-9233
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Received: 06/26/97

Lab Proj. ID: 9706F69

Reported: 07/10/97

LABORATORY NARRATIVE

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

TEPH note: Chromatograms for samples in this set conform to a weathered diesel pattern, and show evidence of additional non-diesel components. The chromatographic images display no evidence of a known motor oil pattern. Consequently, it appears that these samples contain no detectable quantities of motor oil.

SEQUOIA ANALYTICAL

Tod Granicher
Project Manager

SITE INFORMATION FORM

IdentificationProject # 360-014, 2tStation # - N.A. -Site Address: 2901 Glascock St.
Oakland, CACounty: AlamedaProject Manager: Andrew L.Requestor: Andrew LClient: Glascock Street ProfitsProject Type

JUN 27 1997

Client P.O.C.: Dunn - Bureau 1st Time Visit Quarterly 1st 2nd 3rd 4th919796 Monthly Semi-Monthly Weekly One time event Other: _____Date of Request 12/6/96Ideal field date(s): Fourth quarter
1996/10/15 - 1996/12/31Check Appropriate CategoryBudget Hrs. 812Actual Hrs. 812

Mob de Mob _____

Field Tasks: For General Description

circle one:

Priority: 1. (emergency, must be done within 24 hrs); 2. (next visit); 3. (when available)

CONTACT GENE IN EIL 2 ICONICO, 53 JEWELL AVE @ GLASCOCK, (510) 261-1900
TO ARRANGE FOR ACCESS TO SITE,(2) TRACE GROUNDWATER [REMOVED] DTU MEASUREMENTS FOR
WELLS MW-1 THROUGH MW-8 (SEE ATTACHED FIGURE), NOTE
THAT MW-5 HAS BEEN REMOVED. (USE TOC FOR DTU)(3) COLLECT GROUNDWATER SAMPLES FROM WELLS MW-1 THROUGH MW-8
(EXCEPT MW-5). SAMPLES TO BE ANALYZED BY SEDUDIA
ANALYTICAL ON NORMAL TURN AROUND. ANALYSIS REQUIRED =
QUARTERLY FOR ALL WELLS: TPH-a, TPH-d, TPH-m; BTEX AND BE
+ ANNUALLY FOR (MW-6 & MW-8) (FIRST QUARTER '97): CADMIUM, MERCURY
LEAD, NICKEL = IN + CHLORINATED HYDROCARBONS (2010)(4) DTR SAMPLING ORDER: MW-4 MW-7 MW-2 MW-3 MW-6 MW-1
MW-2Comments, remarks, etc. from Field Staff (include problems encountered and out-of-scope work)(5) DTR WATER TO BE DEPOSED @ SEAPORT. MATERIAL WAS
PREVIOUSLY PROFILED FOR DRILLING @ SEAPORT, NO INTEGRITY.Task Completed TWO TO SEAPORT REC Samples taken Samples not required Soil Vapor Groundwater Weekly Semi-Monthly Monthly Quarterly Semi-Annual

PACIFIC ENVIRONMENTAL GROUP, INC.

Completed by: [Signature]Date: 6-25-97Checked by: [Signature]

FIELD REPORT

DEPTH TO WATER/SEPARATE-PHASE HYDROCARBON SURVEY

PROJECT No.: 3600CV/2ALOCATION: 2601 G/Glycosyl gtDATE: 6/25/97CLIENT/STATION NO. Former Oliver siteFIELD TECHNICIAN: PS

DAY OF WEEK: _____

PROBE TYPE/ID No.

 Oil/Water IF/ _____ H₂O level indicator _____ Other: _____

Drw 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)				LIQUID REMOVED (gallons)	SPH H ₂ O	
											SPH Depth (feet) TOB/TOC	SPH Thickness (feet)	Fresh	Weathered	Gas	Oil	Lite Medium Heavy
Mw1	9:10	-	-	-	-	-	-	19.80	9.20 9.23	9.40 9.40							
Mw2	9:18	-	-	-	-	-	-	19.75	8.01 8.01	8.13 8.13							
Mw3	9:10	-	-	-	-	-	-	19.80	6.35 6.35	6.72 6.72							
Mw4	9:11	-	-	-	-	-	-	19.70	7.95 7.95	8.31 8.31							
Mw5								Destroyed									
Mw6	9:32	-	-	-	-	-	-	19.50	11.50 11.50	10.10 10.10							
Mw7	9:35	-	-	-	-	-	-	17.75	4.75 4.75	5.15 5.15							
Mw8	9:17	-	-	-	-	-	-	17.70	10.87 10.20	10.80 10.80							

Comments:

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 3600192A LOCATION: 290167/400191 ft WELL ID #: Mw-1

CLIENT/STATION No.: Former Derridow Field TECHNICIAN: Pedro Ruiz

WELL INFORMATION

Depth to Liquid: TOB TOC
 Depth to water: TOB TOC
 Total depth: TOB TOC
 Date: _____ Time (2400): _____

Probe Type and I.D. #
 Oil/Water interface _____
 Electronic indicator _____
 Other; _____

CASINGDIAMETER

<input checked="" type="checkbox"/>	2	0.17
<input type="checkbox"/>	3	0.38
<input type="checkbox"/>	4	0.66
<input type="checkbox"/>	4.5	0.83
<input type="checkbox"/>	5	1.02
<input type="checkbox"/>	6	1.5
<input type="checkbox"/>	8	2.6

GAL/LINEAR FT.

- Groundwater
- Duplicate
- Extraction well
- Trip blank
- Field blank
- Equipment blank
- Other;

$$\text{TD } 9.80 \text{ DTW } 9.20 = 10.0 \times \text{Foot } .17 = 1.80 \times \text{Number of Casings } 3 \text{ Calculated Purge } 5.10$$

DATE PURGED: 6-25-97 START: 11:45 END (2400 hr): PURGED BY: PE

DATE SAMPLED: 6-25-97 START: 11:55 END (2400 hr): SAMPLED BY: PE

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. ($\mu\text{mhos/cm}$ @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
11:48	1.5	7.38	1220	66.1	Brown	Mod	Stearny
11:51	3.5	7.10	1230	66.7	Brown	Mod	Stearny
11:54	5.25	7.17	1250	66.1	Brown	Mod	Strong

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. #

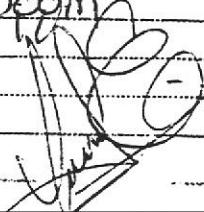
Bailer: _____ Airlift Pump: _____
 Centrifugal Pump: 15 Dedicated: _____
 Other: _____

SAMPLING EQUIPMENT/I.D. #

Bailer: 15-3
 Dedicated: _____
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
Mw-1	6-25-97	11:55	3	10ml	lab	HCC	TPH G/BTEX/mTBE
			a	1l	Amb.	NO	TPH D/TDH MO
				1L	PLAST.	H2O2	METALS

REMARKS: DO: 30cm



FIELD DATA SHEET

ENTER SAMPLE FIELD DATA SHEET

PROJECT No.: 3600192A LOCATION: 2901 Gagor St WELL ID #: Mw-2CLIENT/STATION No.: Former Dwyer FIELD TECHNICIAN: Pedro RuizWELL INFORMATION

Depth to Liquid: _____ TOB _____ TOC _____
 Depth to water: _____ TOB _____ TOC _____
 Total depth: _____ TOB _____ TOC _____
 Date: _____ Time (2400): _____

Probe Type and I.D. # Oil/Water interface _____
 Electronic indicator _____
 Other: _____

CASINGDIAMETER

<input checked="" type="checkbox"/>	2	0.17
<input type="checkbox"/>	3	0.38
<input type="checkbox"/>	4	0.66
<input type="checkbox"/>	4.5	0.83
<input type="checkbox"/>	5	1.02
<input type="checkbox"/>	6	1.5
<input type="checkbox"/>	8	2.6

GAL/LINEAR FT.SAMPLE TYPE

- Groundwater
 Duplicate
 Extraction well
 Trip blank
 Field blank
 Equipment blank
 Other: _____

$$\text{TD } 19.75 - \text{ DTW } 801 = 11.74 \times \frac{\text{Gal/Linear}}{\text{Foot}} .17 = 1.99 \times \frac{\text{Number of}}{\text{Casings}} 3 = \text{Calculated Purge}$$

DATE PURGED: 6/25/97 START: 10:01 END (2400 hr): — PURGED BY: REDATE SAMPLED: 6/25/97 START: 10:15 END (2400 hr): — SAMPLED BY: RE

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (µmhos/cm @ 25°C)	TEMPERATURE °F	COLOR	TURBIDITY	ODOR
<u>10:08</u>	<u>A</u>	<u>7.31</u>	<u>2010</u>	<u>67.7</u>	<u>Cloudy</u>	<u>Heavy</u>	<u>steamy</u>
<u>10:11</u>	<u>A</u>	<u>7.35</u>	<u>2010</u>	<u>67.3</u>	<u>Cloudy</u>	<u>Heavy</u>	<u>steamy</u>
<u>10:15</u>	<u>B</u>	<u>7.30</u>	<u>2010</u>	<u>67.1</u>	<u>Cloudy</u>	<u>Heavy</u>	<u>steamy</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. #

Bailer: _____ Airlift Pump: _____
 Centrifugal Pump: 15 Dedicated: _____
 Other: _____

SAMPLING EQUIPMENT/I.D. #

Bailer: 15-2
 Dedicated: _____
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>Mw-2 6/25/97</u>	<u>10:15</u>	<u>3</u>	<u>A</u>	<u>10ml</u>	<u>1/2A</u>	<u>HCC</u>	<u>TPHg / BTEX / MTBE</u>
				<u>1L</u>	<u>1/2A</u>	<u>NO</u>	<u>TPHg, TPHmo</u>
				<u>1L</u>	<u>Plast.</u>	<u>H2O23</u>	<u>metals</u>

REMARKS: DO. 3 ppm

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 3600192A LOCATION: 290169/Acrey St. WELL ID #: MW-3CLIENT/STATION No.: Former DPPD FIELD TECHNICIAN: Rodrigo RuizWELL INFORMATION

Depth to Liquid: _____ TOB _____ TOC _____
 Depth to water: _____ TOB _____ TOC _____
 Total depth: _____ TOB _____ TOC _____
 Date: _____ Time (2400): _____

Probe Type and I.D. # _____
 Oil/Water interface _____
 Electronic indicator _____
 Other: _____

CASING

2 _____
 3 _____
 4 _____
 4.5 _____
 5 _____
 6 _____
 8 _____

GAL/

LINEAR FT. _____ 0.17 _____ 0.38 _____ 0.66 _____ 0.83 _____ 1.02 _____ 1.5 _____ 2.6 _____

SAMPLE TYPE
 Groundwater
 Duplicate
 Extraction well
 Trip blank
 Field blank
 Equipment blank
 Other: _____

$$\text{TD } 1980 \text{ DTW } 6.35 = 13.45 \times \frac{\text{Gal/Linear}}{\text{Foot}} .17 = 2.28 \times \frac{\text{Number of}}{\text{Casings}} 3 = \text{Calculated} \\ = \text{Purge } 6.85$$

DATE PURGED: 6.25.97 START: 10:25 END (2400 hr): PURGED BY: REDATE SAMPLED: 6.25.97 START: 10:35 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>10:28</u>	<u>0.05</u>	<u>7.12</u>	<u>1150</u>	<u>67.2</u>	<u>Cloudy</u>	<u>Mud</u>	<u>Faint</u>
<u>10:31</u>	<u>1.5</u>	<u>7.15</u>	<u>1000</u>	<u>67.5</u>	<u>Cloudy</u>	<u>Mud</u>	<u>Faint</u>
<u>10:31</u>	<u>0.75</u>	<u>7.50</u>	<u>1170</u>	<u>66.9</u>	<u>Cloudy</u>	<u>Mud</u>	<u>Faint</u>

Pumped dry Yes / No

Cobalt C-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. #

Bailer: _____ Airlift Pump: _____
 Centrifugal Pump: i5 Dedicated: _____
 Other: _____

SAMPLING EQUIPMENT/I.D. #

Bailer: i5-7
 Dedicated: _____
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-3</u>	<u>6.25.97</u>	<u>10:35</u>	<u>3</u>	<u>40ml</u>	<u>Obs</u>	<u>HCC</u>	<u>TPHCB/3TEX/mTBC</u>
			<u>2</u>	<u>1L</u>	<u>Amb</u>	<u>NO</u>	<u>TPHD, TPHMO</u>
			<u>1L</u>	<u>Plast</u>	<u>H23</u>	<u>METALS</u>	

REMARKS: 

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 36000192A LOCATION: 290169/Near 5th WELL ID #: Mw-1CLIENT/STATION No.: Former DPPR FIELD TECHNICIAN: Rodrigo RuizWELL INFORMATIONDepth to Liquid: TOB TOCCASINGGAL/DIAMETERLINEAR FT.SAMPLE TYPEDepth to water: TOB TOC 2 0.17 GroundwaterTotal depth: TOB TOC 3 0.38 Duplicate

Date: _____ Time (2400): _____

 4 0.66 Extraction well 4.5 0.83 Trip blank 5 1.02 Field blank 6 1.5 Equipment blank 8 2.6 Other; _____

Probe Type
and
I.D. #

Oil/Water interface _____
 Electronic indicator _____
 Other; _____

$$\text{TD } 19.70 - \text{ DTW } 7.95 = 11.75 \times \frac{\text{Gal/Linear}}{\text{Foot .17}} = 1.99 \times \text{Casings } 3 = \text{Calculated} \\ = \text{Purge } 5.99$$

DATE PURGED: 6/25/97 START: 10:45 END (2400 hr): 11:00 PURGED BY: REDATE SAMPLED: 6/25/97 START: 11:00 END (2400 hr): 11:30 SAMPLED BY: RE

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
10:49	2	7.51	750	65.8	Cloudy	Mod	Nicous
10:50	1	7.48	760	66.5	Cloudy	Mod	Nicous
10:55	6	7.51	707	66.3	Cloudy	Mod	Nicous

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/TOCPURGING EQUIPMENT/I.D. #

- Bailer: _____ Airlift Pump: _____
 Centrifugal Pump: 15 Dedicated: _____
 Other: _____

SAMPLING EQUIPMENT/I.D. #

- Bailer: 15-11
 Dedicated: _____
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
Mw-1	6/25/97	11:00	3	10ml	100	HCC	TPH/G / 3TEX/m³B
			2	1L	Amb	NO	TPH/D, TPH/Mo
			1L	Plast	H223		Metals

REMARKS:

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 3600192A LOCATION: 29013 Hwy 91 WELL ID #: MW-6CLIENT/STATION No.: Former Copper Mine FIELD TECHNICIAN: Pedro RuizWELL INFORMATION

Depth to Liquid: _____ TOB _____ TOC _____
 Depth to water: _____ TOB _____ TOC _____
 Total depth: _____ TOB _____ TOC _____
 Date: _____ Time (2400): _____

Probe Type and I.D. # Oil/Water interface _____
 Electronic indicator _____
 Other: _____

CASINGDIAMETERGAL/LINEAR FT.SAMPLE TYPE

<input checked="" type="checkbox"/>	2	0.17
<input type="checkbox"/>	3	0.38
<input type="checkbox"/>	4	0.66
<input type="checkbox"/>	4.5	0.83
<input type="checkbox"/>	5	1.02
<input type="checkbox"/>	6	1.5
<input type="checkbox"/>	8	2.6

- Groundwater
 Duplicate
 Extraction well
 Trip blank
 Field blank
 Equipment blank
 Other: _____

$$\text{TD } 19.50 \text{ DTW } 11.50 = 8 \quad \text{Gal/Linear} \times \text{Foot } .17 = 1.36 \times \text{Casings } 3 = \text{Calculated Purge } 4.08$$

DATE PURGED: 6/25/97 START: 11:23 END (2400 hr): — PURGED BY: REDATE SAMPLED: 6/25/97 START: 11:35 END (2400 hr): — SAMPLED BY: RE

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (µmhos/cm @ 25°C)	TEMPERATURE °F	COLOR	TURBIDITY	ODOR
11:27	1.25	7.57	1380	65.7	Brown	Heavy	Strong
11:30	2.5	7.60	1350	65.8	Brown	Heavy	Strong
11:33	3.75	7.59	1310	65.1	Brown	Heavy	Strong

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. #

Bailer: _____ Airlift Pump: _____
 Centrifugal Pump: i5 Dedicated: _____
 Other: _____

SAMPLING EQUIPMENT/I.D. #

Bailer: Bigpos
 Dedicated: _____
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
MW 6/25/97	11:35	48	10ml	10ml	H2O	H2O	TPHg/3tex/mg
			1L	1L	AMB	NO	TPHD, TPHmo
			1L	PLAST	H2O	H2O	metals

REMARKS: DO 5 ppm

FIELD DATA SHEET

TER SAMPLE FIELD DATA SHEET

PROJECT No.: 3600112A LOCATION: 29016th Avenue St WELL ID #: MW-7

CLIENT/STATION No.: Former Dupont site FIELD TECHNICIAN: Pedro Ruiz

WELL INFORMATION

Depth to Liquid: _____ TOB _____ TOC _____

Depth to water: _____ TOB _____ TOC _____

Total depth: _____ TOB _____ TOC _____

Date: _____ Time (2400): _____

Probe Type
and
I.D. #

Oil/Water interface _____
 Electronic indicator _____
 Other: _____

CASING

DIAMETER

<input checked="" type="checkbox"/>	2	0.17
<input type="checkbox"/>	3	0.38
<input type="checkbox"/>	4	0.66
<input type="checkbox"/>	4.5	0.83
<input type="checkbox"/>	5	1.02
<input type="checkbox"/>	6	1.5
<input type="checkbox"/>	8	2.6

GAL/

LINEAR FT.

- Groundwater
- Duplicate
- Extraction well
- Trip blank
- Field blank
- Equipment blank
- Other: _____

$$TD \underline{17.75} - DTW \underline{17.5} = \underline{13} \quad \begin{matrix} \text{Gal/Linear} \\ \times \text{Foot} \end{matrix} \underline{.17} = \underline{2.21} \quad \begin{matrix} \text{Number of} \\ \times \text{Casings} \end{matrix} \underline{3} \quad \begin{matrix} \text{Calculated} \\ = \text{Purge} \end{matrix} \underline{6.63}$$

DATE PURGED: 6/25/97 START: 10:00 END (2400 hr): PURGED BY: RE

DATE SAMPLED: 6/25/97 START: 10:10 END (2400 hr): SAMPLED BY: RE

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (µmhos/cm @ 25°C)	TEMPERATURE °F	COLOR	TURBIDITY	ODOR
10:03	2.25	7.57	1380	69.1	Cloudy	Upd	odor
10:06	4.5	7.12	1400	69.2	Cloudy	Upd	odor
10:10	6.75	7.32	1370	69.3	Cloudy	Upd	odor

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.

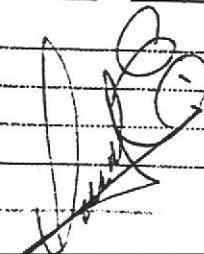
Bailer: _____ Airlift Pump: _____
 Centrifugal Pump: i5 Dedicated: _____
 Other: _____

SAMPLING EQUIPMENT/I.D.

Bailer: 15-9
 Dedicated: _____
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-7 6/25/97</u>	<u>10:10</u>	<u>3</u>	<u>10ml</u>	<u>10A</u>	<u>Amb</u>	<u>HCC</u>	<u>TPH/G / BTEX/mIBP</u>
			<u>a</u>	<u>1L</u>	<u>PLAST</u>	<u>NO</u>	<u>TPH/D, TPH/mo</u>
			<u>1L</u>	<u>PLAST</u>	<u>HU23</u>	<u>metals</u>	

REMARKS: _____



FIELD DATA SHEET

TER SAMPLE FIELD DATA SHEET

PROJECT No.: 3600192A LOCATION: 290167/400957 WELL ID #: 44-8CLIENT/STATION No.: Former Properties of FIELD TECHNICIAN: Reneo RuizWELL INFORMATION

Depth to Liquid: _____ TOB _____ TOC _____

Depth to water: _____ TOB _____ TOC _____

Total depth: _____ TOB _____ TOC _____

Date: _____ Time (2400): _____

Probe Type
and
I.D. #

- Oil/Water interface _____
- Electronic indicator _____
- Other: _____

CASINGDIAMETERGAL/LINEAR FT.

<input checked="" type="checkbox"/>	2	0.17
<input type="checkbox"/>	3	0.38
<input type="checkbox"/>	4	0.66
<input type="checkbox"/>	4.5	0.83
<input type="checkbox"/>	5	1.02
<input type="checkbox"/>	6	1.5
<input type="checkbox"/>	8	2.6

SAMPLE TYPE

- Groundwater
- Duplicate
- Extraction well
- Trip blank
- Field blank
- Equipment blank
- Other: _____

$$\text{TD } 1770 - \text{ DTW } 10.00 = 7.5 \quad \text{Gal/Linear} \quad \times \text{Foot } 17 = 127 \quad \text{Number of Casings } 3 \quad \text{Calculated Purge } 3.82$$

DATE PURGED: 6/25/97 START: 11:03 END (2400 hr): — PURGED BY: REDATE SAMPLED: 6/25/97 START: 11:15 END (2400 hr): — SAMPLED BY: RE

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. ($\mu\text{mhos/cm}$ @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
11:06	1.05	7.01	2280	66.5	Brown	Heavy	None
11:09	0.5	7.10	2260	66.8	Brown	Moderate	None
11:12	3.75	7.07	2330	65.8	Brown	Heavy	None

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. #

- Bailer: _____
- Airlift Pump: _____
- Centrifugal Pump: i5
- Dedicated: _____
- Other: _____

SAMPLING EQUIPMENT/I.D. #

- Bailer: 15-17
- Dedicated: _____
- Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
MWS 6/25/97		11:15	4	10ml	CBP	HCC	TPH/G / BTEX / MTBE
			2	1L	AMB	NO	TPHD / TPHMO
			1	1L	PLAST	H2O23	METALS

REMARKS: 

Chain of Custody

PROJECT No. 36001101
 Facility No. Former Drycleaner Site S/C
 Client engineer: Denise Boren

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

Facility Address: 1901 6th Avenue, San Jose, CA

PACIFIC Point of Contact: Audrey Alvarado

Sampler: Pedro Perez

Billing Reference Number: 31501

Laboratory Name: Sedco

Comments:

Sample I.D.	Cont. No.	Container Size (ml)	Sample Preserv.	Matrix	W-water S-soil A-air C-comp.	G-grab D-disc.	Sampling Date	Sampling Time	BTEX/VPHgas (8015/8020)	TPH (8015)	Oil and Grease (5520)	Total Dislvd. Metals (EPA 8240) 8210)	VOC (EPA 6241/6271/601/8010)	SVOC (EPA 8270)	HVOC (EPA 8240)	FUEL FINGERPRINT AS DIESEL & MOTOR OIL AS DIESEL & MOTOR OIL	Cadmium, Lead Chromium, Nickel, Zinc CHLORINATED Hazardous Substances
Mw1	5	40mL	HCl NP	W	9	02597		11:55	X							X	
Mw2	1	1						10:15									
Mw3	1	1						10:35									
Mw4	1	1						11:00									
Mw5	7	1	HCl NP H2O2					11:35									
Mw6	7	1	HCl NP H2O2					10:10									
Mw7	5	1	HCl NP													X X	
Mw8	7	1	HCl NP H2O2					11:15								X X	

Condition of Sample:

Temperature Received:

Mail original Analytical Report to:
Pacific Environmental Group

Turnaround Time:

inquired by	Date	Time
	02597	13:00
inquired by	Date	Time
inquired by	Date	Time
inquired by	Date	Time

Received by

Date

Time

2025 Gateway Place #440

San Jose, CA 95110



Received by

Date

Time

620 Contra Costa Blvd. #209

Pleasant Hill, CA 94523



Received by

Date

Time

25725 Jeronimo Rd. #576C

Mission Viejo, CA 92622



Received by laboratory

Date

Time

4020 148th Ave NE #B

Redmond, WA 98052



As Col. reqd

TUE/FINGERPRINT
AS DIESEL & MOTOR OIL
SPICA GEL/CLEANUP