EXXON COMPANY, U.S.A.

POS OFFICE BOX 4032 • CONCORD, CA 94524-2032

ENVIRONMENTAL ENGINEERING

G. D. GIBSON
SENIOR ENVIRONMENTAL ENGINEER

March 4, 1991

Exxon RAS 7-0104
1725 Park Street
Alameda, California

Ms. Katherine Chesick
Alameda County Health Agency
Division of Hazardous Materials
80 Swan Way, Suite 200
Oakland, California 94621

Dear Ms. Chesick:

Per our meeting on February 26, attached for your review and comment is the letter report on Groundwater Monitoring Results, Fourth Quarter 1990 for the above referenced Exxon Company, U.S.A. facility in the City of Alameda. This report, by Harding Lawson Associates of Novato, California, presents the results of the groundwater sampling event performed in December, 1990.

Detectable levels of dissolved hydrocarbons continue to be detected in all wells at this site. A workplan for the installation of an interim remediation system will be submitted by April 15. Additionally, further investigation into the extent of soil and groundwater impact will continue. Should you have any questions or concerns after your review, please contact me at (415) 246-8768. Thank you.

Sincerely,

Gary D. Gibson

GDG:hs
0256E
Attachment

c - w/attachment:
Mr. L. Feldman - San Francisco Bay Region Water Quality Control Board

w/o attachment:
Mr. D. J. Bertoch
Mr. P. J. Brininstool
Ms. J. E. Folger
Mr. J. R. Hastings
Ms. S. M. Watson - Harding Lawson Associates

91 MAR -5 AM 11:07

EXXON COMPANY, U.S.A.

POST OFFICE BOX 4032 • CONCORD, CA. 94524-2032 • (415) 246-8700

90 MAY 25 PM 12:40

MARKETING DEPARTMENT

ENVIRONMENTAL ENGINEERING

G. D. GIBSON
SENIOR ENVIRONMENTAL ENGINEER

May 18, 1990

Various Exxon Sites
Alameda County, California

Alameda County
Environmental Health Department
80 Swan Way, Suite 200
Oakland, California 94621

Dear Sirs:

Please find the attached certifications of Red Jacket line leak detector tests which were performed at the Exxon Company, U.S.A. facilities in your area of authority. These leak detector tests are being performed annually in compliance with the California Underground Storage Tank Regulations. Also attached is the 3 page test procedure which was followed by the contractors performing these tests.

Should you have any questions after your review, please contact me at (415) 246-8768. Thank you.

Sincerely,

Gary D. Gibson

GDG:vv
1126E/1145E
Attachments

c - w/o attachment:
Ms. S. K. Halsted
Mr. J. R. Hastings
Mr. L. W. Lindeen
Mr. M. Thomson - Alameda County District Attorney's Office
Mr. E. E. Villasenor

RAS # 7-8932
Address 1790 Marina Blvd
San Leandro

UBK-14

The leak detectors (piston type and/or diaphram type) were tested on a date between 09/01/89 and 10/30/89 according to the attached testing procedure. Each leak detector either :

1) Passed and was sealed, or

(2) Failed, was replaced, retested, passed and sealed.

Contractor: EA/Remediation tech. inc.
Date: 11/29/89

EA/RTI
EA BECKER DIVISION
P.O. BOX 5058
NAPA, CA 94581

0031S

Harding Lawson Associates

January 25, 1991

4167,326.02

Exxon Company, U.S.A.
Post Office Box 4032
Concord, California 94520

Attention: Mr. Gary D. Gibson
Senior Environmental Engineer

Gentlemen:

Groundwater Monitoring Results, Fourth Quarter 1990
Exxon Station #7-0104
Alameda, California

This letter presents the results of Harding Lawson Associates' (HLA) December 1990 sampling of seven groundwater monitoring wells at Exxon Station #7-0104, 1725 Park Street, Alameda, California (site). The site history and detailed monitoring well sampling procedures are described in HLA report *Phase II Evaluation of Petroleum Hydrocarbons, Exxon Service Station R/S #7-0104, 1725 Park Street, Alameda, California*, dated March 21, 1989. This sampling event was conducted on December 17, 1990, and represents HLA's sixth round of sampling and the third of the current year-long monitoring program.

Groundwater-Level Monitoring and Groundwater Sampling

HLA has obtained monthly groundwater-level and free-phase hydrocarbon measurements from seven onsite monitoring wells since September 1989. All measurements were performed with an electric oil-water interface probe. During monthly groundwater monitoring, the groundwater collected from each well was visually inspected for the presence of free-phase petroleum product using a clear Lucite bailer. No free-phase petroleum product was observed in any of the wells during the course of this investigation.

Prior to groundwater sample collection on December 17, 1990, the seven monitoring wells were purged a minimum of three well volumes. The wells were purged with a PVC bailer or centrifugal pump. The purged water was stored onsite in 55-gallon drums. Measurements of pH, conductivity, and temperature of the purged water were monitored and recorded during purging of the wells. Copies of HLA's Groundwater Sampling Forms documenting sampling activities are attached to this letter.

Groundwater samples were collected from each of the monitoring wells using a stainless steel bailer and decanted into 40-milliliter volatile organic analysis (VOA) vials. A quality assurance/quality control (QA/QC) field blank water sample was prepared in the field by decanting deionized water into appropriate sample containers. The groundwater samples and QA/QC field blank were labeled, placed in a cooler with blue ice, and transported under chain of custody procedures to NET Pacific Laboratory (NET), Santa Rosa, California. NET is a state-certified hazardous waste laboratory.

To help prevent potential cross-contamination, all water-level measurement and sampling equipment was decontaminated prior to use by steam cleaning.

Laboratory Analyses

The groundwater samples and field blank were analyzed for total petroleum hydrocarbons (TPH) calibrated as gasoline, and for benzene, toluene, ethylbenzene, and xylenes (BTEX). Groundwater analytical results are summarized in Table 1, along with analytical results from HLA's previous groundwater sampling rounds. Copies of laboratory reports from the December 17, 1990, sampling are attached to this letter.

Groundwater Gradient and Flow Direction

Potentiometric surface elevations from the December 1990 groundwater-level survey are presented in Table 2, along with previously measured potentiometric surface elevations. Potentiometric surface elevations at the site have increased slightly over the past three months from the previous measurements. The groundwater table appears to be fluctuating in response to changes in precipitation induced recharge. Plate 1 presents a generalized potentiometric surface map for the site. As shown on Plate 1, the generalized local direction of groundwater flow is toward the east at an approximate gradient of 0.01 ft/ft. This flow direction is consistent with previous potentiometric surface data obtained during this investigation.

Laboratory Analytical Results

Laboratory analytical results from the December sampling indicate that petroleum hydrocarbon constituents were detected in all seven wells onsite. Detected concentrations of TPH as gasoline ranged from 2.1 to 140 milligrams per liter (mg/l). The highest concentrations of petroleum hydrocarbon constituents were detected in groundwater samples collected from Monitoring Wells MW-2, MW-6 and MW-7, located adjacent to and downgradient of the fuel storage and distribution systems. No petroleum hydrocarbons were detected in the field blank submitted to the laboratory for analysis.

Review of chemical analyses reveals that concentrations of petroleum constituents have increased in monitoring wells MW-1, MW-2, MW-4, MW-5 and MW-7 and have decreased in wells MW-3 and MW-6. The concentration of benzene detected in all monitoring wells at the site exceeds the California State Department of Health Services (DHS) action level of 0.7 microgram per liter (μg/l). Concentrations of toluene and total xylenes detected in wells MW-2, MW-4, MW-5, MW-6, and MW-7 exceed DHS action levels of 100 and 620 μg/l, respectively. Ethylbenzene concentrations detected in wells MW-2, MW-6, and MW-7 are in excess of the DHS action level of 680 μg/l.

HLA plans to continue quarterly sampling and monthly groundwater level monitoring and is currently developing site soil and groundwater remediation programs. The next quarterly sampling event is scheduled for March 1991.

We trust that this is the information Exxon requires at the present time. HLA recommends that copies of this report be submitted to the Regional Water Quality Control Board and the Alameda County Health Department for their review.

Please call us at 415/892-0821 if you have any questions.

Yours very truly,

HARDING LAWSON ASSOCIATES

S. Michelle Watson
Project Geologist

Michael L. Siembieda
Associate Geologist - RG 4007

REGISTERED GEOLOGIST
MICHAEL L. SIEMBIEDA
No. 4007
STATE OF CALIFORNIA

SMW/MLS/yml/D15140-H

Attachments: Table 1 - Summary of Chemical Results of Groundwater Samples
Table 2 - Potentiometric Surface Elevations and Product Thickness Measurements
Plate 1 - Generalized Potentiometric Surface Contour Map, December 17, 1990
Groundwater Sampling Forms
Laboratory Analytical Reports

Table 1. Summary of Chemical Results of Groundwater Samples

Well Number	Date	TPH Gasoline mg/l[1]	Benzene µg/l[2]	Toluene µg/l	Ethyl-benzene µg/l	Xylenes µg/l	Total Dissolved Solids mg/l
DHS Action Levels			0.7	100	680	620	
MW-1	06/07/88	27	5,000	77	1,100	2,700	NT[3]
	01/17/89	6.8	2,000	91	800	1,600	NT
	06/01/89	1.7	170	6.9	13	230	NT
	09/18/89	2.1	9.0	53	18	130	NT
	12/11/89	5.8	200	42	290	330	NT
	03/07/90	NT	NT	NT	NT	NT	910
	03/13/90	2.3	430	14	16	220	NT
	06/14/90	32	1,400	19	<5[4]	120	NT
	09/19/90	0.95	290	2.9	<0.5	27	NT
	12/17/90	2.1	550	13	350	110	NT
MW-2	06/07/88	110	12,000	12,000	2,100	12,000	NT
	01/17/89	30	6,600	3,300	1,600	7,700	NT
	06/01/89	8.7	330	280	680	1,200	NT
	09/18/89	17	580	280	570	220	NT
	12/11/89	32	1,000	850	310	1,200	NT
	03/13/90	39	3,500	1,500	2,100	3,900	NT
	06/14/90	34	3,800	730	1,600	3,900	NT
	09/19/90	63	670	180	390	1,000	NT
	12/17/90	140	3,700	2,500	3,000	8,300	NT
MW-3	06/07/88	28	6,000	80	940	1,900	NT
	01/17/89	5.3	2,500	230	590	1,100	NT
	06/01/89	5.4	330	300	570	680	NT
	09/18/89	12	680	170	350	860	NT
	12/11/89	14	1,100	150	670	690	NT
	03/13/90	18	6,300	200	1,100	1,100	NT
	06/14/90	9.5	1,300	880	310	1,800	NT
	09/19/90	16	5,000	65	1,500	450	NT
	12/17/90	6.7	1,500	64	650	460	NT

Table 1. Summary of Chemical Results of Groundwater Samples (continued)

Well Number	Date	TPH Gasoline mg/l	Benzene µg/l	Toluene µg/l	Ethyl-benzene µg/l	Xylenes µg/l	Total Dissolved Solids mg/l
DHS Action Levels			0.7	100	680	620	
MW-4	01/17/89	19	1,000	1,500	360	2,200	NT
	06/01/89	3.6	180	240	63	810	NT
	09/18/89	6.0	290	200	28	510	NT
	12/11/89	13	750	910	510	1,200	NT
	03/07/90	NT	NT	NT	NT	NT	370
	03/13/90	12	1,500	1,500	470	2,800	NT
	06/14/90	12	5,700	400	1,300	760	NT
	09/19/90	5.5	670	180	390	1,000	NT
	12/17/90	14	1,400	620	540	2,100	NT
MW-5	01/17/89	26	8,700	3,900	990	5,900	NT
	06/01/89	5.2	240	220	130	690	NT
	09/18/89	8.0	340	150	140	460	NT
	12/11/89	15	720	320	450	870	NT
	03/13/90	10	3,400	220	280	800	NT
	06/14/90	12	3,300	160	350	730	NT
	09/19/90	8.5	1,800	85	120	460	NT
	12/17/90	18	2,300	810	430	1,400	NT
MW-6	01/17/89	38	7,400	9,300	2,000	9,900	NT
	06/01/89	23	1,900	2,500	2,000	6,000	NT
	09/18/89	17	650	410	650	320	NT
	12/11/89	29	1,100	810	330	1,500	NT
	03/13/90	38	12,000	15,000	2,500	12,000	NT
	06/14/90	38	9,100	7,800	2,900	12,000	NT
	09/19/90	22	4,200	300	1,400	3,400	NT
	12/17/90	20	3,100	4,100	890	2,700	NT
MW-7	01/09/90	17	380	180	330	1,300	NT
	03/13/90	16	360	270	83	460	NT
	06/14/90	14	1,200	2,800	75	930	NT
	09/19/90	16	2,800	95	2,500	1,700	NT
	12/17/90	75	2,600	7,000	3,300	14,000	NT

Table 1. Summary of Chemical Results of Groundwater Samples (continued)

Well Number	Date	TPH Gasoline mg/l	Benzene µg/l	Toluene µg/l	Ethyl-benzene µg/l	Xylenes µg/l	Total Dissolved Solids mg/l
Field Blank	12/11/89	<0.05	0.88	0.95	0.62	1.7	NT
	12/17/90	<0.05	<0.05	<0.05	<0.05	<0.05	NT
Trip Blank	06/14/90	<0.05	<0.5	<0.5	<0.5	<0.5	NT
	09/19/90	<0.05	0.8	<0.5	0.6	1.0	NT

1 mg/l: milligrams per liter (parts per million)

2 µg/l: micrograms per liter (parts per billion)

3 NT: Not tested

4 <: Numbers preceded by "<" indicate that sample was below the indicated detection limit.

Table 2. Potentiometric Surface and Product Thickness Measurements

Well Number	Elevation Top of Well Casing[1]	Date	Depth to Water BTOC[2] (feet)	Depth to Product BTOC (feet)	Product Thickness (feet)	Potentiometric Surface Elevation (feet above MSL)
MW-1	17.35	06-10-88	6.35	NP[3]	NP	11.00
		01-17-89	5.81	NP	NP	11.54
		01-24-89	5.16	NP	NP	12.19
		06-01-89	6.27	NP	Sheen	11.08
		09-18-89	7.11	NP	NP	10.24
		10-20-89	7.28	NP	NP	10.07
		11-22-89	7.02	NP	NP	10.33
		12-11-89	6.60	NP	NP	10.75
		02-13-90	6.02	NP	NP	11.33
		03-13-90	5.91	NP	NP	11.44
		04-18-90	6.18	NP	NP	11.17
		05-23-90	6.29	NP	NP	11.06
		06-14-90	6.19	NP	NP	11.28
		08-21-90	7.03	NP	NP	10.32
		09-19-90	7.26	NP	NP	10.09
		12-17-90	6.75	NP	NP	10.60
MW-2	16.67	06-10-88	6.20	NP	NP	10.47
		01-17-89	5.96	NP	NP	10.71
		01-24-89	5.04	NP	NP	11.63
		06-01-89	6.32	NP	Sheen	10.35
		09-18-89	6.73	NP	NP	9.94
		10-20-89	6.87	NP	NP	9.80
		11-22-89	6.80	NP	NP	9.87
		12-11-89	6.57	NP	NP	10.10
		02-13-90	6.12	NP	NP	10.55
		03-13-90	6.02	NP	NP	10.65
		04-18-90	6.35	NP	NP	10.32
		05-23-90	6.28	NP	NP	10.39
		06-14-90	6.14	NP	NP	10.53
		08-21-90	6.70	NP	NP	9.97
		09-19-90	6.84	NP	NP	9.83
		12-17-90	6.46	NP	NP	10.21

Table 2. Potentiometric Surface and Product Thickness Measurements (continued)

Well Number	Elevation Top of Well Casing[1]	Date	Depth to Water BTOC[2] (feet)	Depth to Product BTOC (feet)	Product Thickness (feet)	Potentiometric Surface Elevation (feet above MSL)
MW-3	17.11	06-10-88	6.05	NP	NP	11.06
		01-17-89	5.49	NP	NP	11.62
		01-24-89	5.38	NP	NP	11.73
		06-01-89	5.96	NP	NP	11.15
		09-18-89	6.65	NP	NP	10.46
		10-20-89	6.88	NP	NP	10.23
		11-22-89	6.74	NP	NP	10.37
		12-11-89	6.37	NP	NP	10.74
		02-13-90	5.58	NP	NP	11.53
		03-13-90	5.48	NP	NP	11.63
		04-18-90	6.01	NP	NP	11.10
		05-23-90	6.14	NP	NP	10.97
		06-14-90	5.83	NP	NP	11.28
		08-21-90	6.67	NP	NP	10.44
		09-19-90	6.88	NP	NP	10.23
		12-17-90	6.46	NP	NP	10.65
MW-4	17.34	01-17-89	5.36	NP	NP	11.98
		01-24-89	5.46	NP	NP	11.88
		06-01-89	6.01	NP	NP	11.33
		09-18-89	6.80	NP	NP	10.54
		10-20-89	7.08	NP	NP	10.26
		11-22-89	6.82	NP	NP	10.52
		12-11-89	6.37	NP	NP	10.97
		02-13-90	5.49	NP	NP	11.85
		03-13-90	5.44	NP	NP	11.90
		04-18-90	6.14	NP	NP	11.20
		05-23-90	6.22	NP	NP	11.12
		06-14-90	5.92	NP	NP	11.42
		08-21-90	6.83	NP	NP	10.51
		09-19-90	7.07	NP	NP	10.27
		12-17-90	6.50	NP	NP	10.84
MW-5	16.71	01-17-89	5.39	NP	NP	11.32
		01-24-89	5.51	NP	NP	11.20
		06-01-89	5.83	NP	Sheen	10.88

Table 2. Potentiometric Surface and Product Thickness Measurements (continued)

Well Number	Elevation Top of Well Casing[1]	Date	Depth to Water BTOC[2] (feet)	Depth to Product BTOC (feet)	Product Thickness (feet)	Potentiometric Surface Elevation (feet above MSL)
MW-5	16.71	09-18-89	6.52	NP	NP	10.19
		10-20-89	6.72	NP	NP	9.99
		11-22-89	6.54	NP	NP	10.17
		12-11-89	6.21	NP	NP	10.50
		02-13-90	5.60	NP	NP	11.11
		03-13-90	5.54	NP	NP	11.17
		04-18-90	5.75	NP	NP	10.76
		05-23-90	5.98	NP	NP	10.73
		06-14-90	5.81	NP	NP	10.90
		08-21-90	6.51	NP	NP	10.20
		09-19-90	6.70	NP	NP	10.01
		12-17-90	6.24	NP	Sheen	10.47
MW-6	17.56	01-17-89	5.59	NP	NP	11.97
		01-24-89	5.27	NP	NP	12.29
		06-01-89	6.25	NP	Sheen	11.31
		09-18-89	6.95	NP	NP	10.61
		10-20-89	7.24	NP	NP	10.32
		11-22-89	7.05	NP	NP	10.51
		12-11-89	6.63	NP	NP	10.93
		02-13-90	5.70	NP	NP	11.86
		03-13-90	5.63	NP	NP	11.93
		04-18-90	6.26	NP	NP	11.30
		05-23-90	6.42	NP	NP	11.14
		06-14-90	6.19	NP	NP	11.37
		08-21-90	7.01	NP	NP	10.55
		09-19-90	7.23	NP	NP	10.33
		12-17-90	6.66	NP	NP	10.90
MW-7	17.12	02-13-90	4.98	NP	NP	12.14
		03-13-90	4.94	NP	NP	12.18
		05-23-90	5.87	NP	NP	11.25

Table 2. Potentiometric Surface and Product Thickness Measurements (continued)

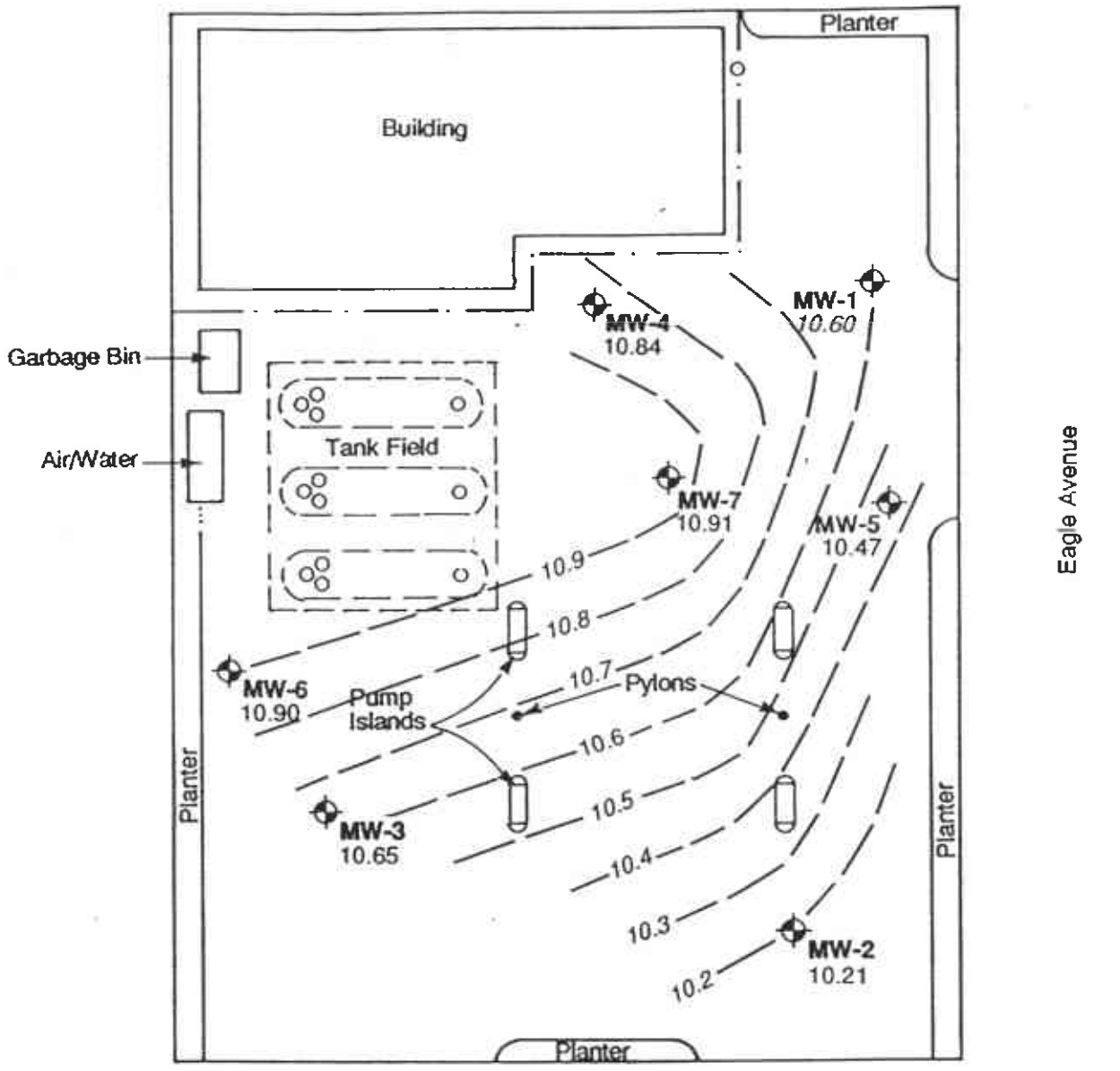
Well Number	Elevation Top of Well Casing[1]	Date	Depth to Water BTOC[2] (feet)	Depth to Product BTOC (feet)	Product Thickness (feet)	Potentiometric Surface Elevation (feet above MSL)
MW-7	17.12	06-14-90	5.55	NP	NP	11.57
		09-19-90	6.79	NP	NP	10.33
		12-17-90	6.15	NP	NP	10.97

1 Elevations surveyed to mean sea level.

2 BTOC - Below top of casing.

3 NP: No product.

20690



EXPLANATION

Park Street

MW-1 ⊕ Monitoring Well Location

10.21 Potentiometric Surface Elevation in Feet Above Mean Sea Level

10.2 Potentiometric Surface Elevation Contour

N

0 20 40

APPROXIMATE SCALE IN FEET

Harding Lawson Associates
Engineering and Environmental Services

Generalized Potentiometric Surface Contour Map - December 17, 1990
Exxon Station #7-0104
Alameda, California

PLATE **1**

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
CVD	04167,326.02		1/91		

Harding Lawson Associates
Engineers and Geoscientists

GROUND-WATER SAMPLING FORM

Well No. MW-1
Well Type: ☒ Monitor ☐ Extraction ☐ Other
Well Material: ☒ PVC ☐ St. Steel ☐ Other
Date 10-15-90 Time 1155
Sampled by DME / TMD (Initials)

Job Name Exxon Alameda
Job Number 04167.326.02
Recorded by David Meeus (Signature)

WELL PURGING

PURGE VOLUME

Casing Diameter (D in inches):
☐ 2-inch ☒ 4-inch ☐ 6-inch ☐ Other
Total Depth of Casing (TD in feet BTOC): 20.5
Water Level Depth (WL in feet BTOC): 6.72
Number of Well Volumes to be purged (# Vols)
☒ 3 ☐ 4 ☐ 5 ☐ 10 ☐ Other

PURGE METHOD

☒ Bailer - Type: PVC
☐ Submersible ☐ Centrifugal ☐ Bladder; Pump No.:
☐ Other - Type:

PUMP INTAKE SETTING

☐ Near Bottom ☐ Near Top ☐ Other
Depth in feet (BTOC): Screen Interval in feet (BTOC): from to

PURGE VOLUME CALCULATION:

(20.5 TD (feet) − 6.72 WL (feet)) X 4 D (inches)^2 X 3 # Vols X 0.0408 = 30 Calculated Purge Volume gallons

PURGE TIME

1030 Start 1046 Stop Elapsed

PURGE RATE

Initial gpm Final gpm

ACTUAL PURGE VOLUME

Dry @ 23 gallons

FIELD PARAMETER MEASUREMENT

Minutes Since Pumping Began	pH	Cond. (µmhos/cm)	T ☒ °C ☐ °F	Other NTU
0	6.3	445	20.5	34
10	6.3	430	21	>100
20	6.2	435	21.5	>100
23	6.4	420	21.5	>100

Minutes Since Pumping Began	pH	Cond. (µmhos/cm)	T ☐ °C ☐ °F	Other
Meter Nos.	PH 4666	Cond 3385	Tur 3374	

Observations During Purging (Well Condition, Turbidity, Color, Odor): Clear, very slight odor
Discharge Water Disposal: ☐ Sanitary Sewer ☐ Storm Sewer ☒ Other 55 gallon on drum onsite

WELL SAMPLING

SAMPLING METHOD

☒ Bailer - Type: SS
☐ Submersible ☐ Centrifugal ☐ Bladder; Pump No.:

☐ Same As Above
☐ Grab - Type:
☐ Other - Type:

SAMPLE DISTRIBUTION

Sample Series: 9012

Sample No.	Volume/Cont.	Analysis Requested	Preservatives	Lab	Comments
1704	3 VOAs	TPHL/BTEX	NONE	NET	

QUALITY CONTROL SAMPLES

Duplicate Samples

Original Sample No.	Duplicate Sample No.

Blank Samples

Type	Sample No.

Other Samples

Type	Sample No.

Harding Lawson Associates
Engineers and Geoscientists

GROUND-WATER SAMPLING FORM

Well No. MW-2
Well Type: ☒ Monitor ☐ Extraction ☐ Other
Well Material: ☒ PVC ☐ St. Steel ☐ Other
Date 12-17-90 Time 1210
Sampled by TOM ORINTAS (Initials)

Job Name EXXON ALAMEDA
Job Number 4167.326.02
Recorded by Tom Orintas (Signature)

WELL PURGING

PURGE VOLUME

Casing Diameter (D in inches):
☐ 2-inch ☒ 4-inch ☐ 6-inch ☐ Other
Total Depth of Casing (TD in feet BTOC): 16.0
Water Level Depth (WL in feet BTOC): 6.46
Number of Well Volumes to be purged (# Vols)
☒ 3 ☐ 4 ☐ 5 ☐ 10 ☐ Other

PURGE METHOD

☒ Bailer - Type: PVC
☐ Submersible ☐ Centrifugal ☐ Bladder; Pump No.:
☐ Other - Type:

PUMP INTAKE SETTING

☐ Near Bottom ☐ Near Top ☐ Other
Depth in feet (BTOC): _____ Screen Interval in feet (BTOC): from _____ to _____

PURGE VOLUME CALCULATION

$(16.0 \text{ TD (feet)} - 6.46 \text{ WL (feet)}) \times 4^2 \text{ D (inches)} \times 3 \text{ \# Vols} \times 0.0408 = 18.7$ gallons Calculated Purge Volume

PURGE TIME

1133 Start 1200 Stop _____ Elapsed

PURGE RATE

Initial _____ gpm Final _____ gpm

ACTUAL PURGE VOLUME

19 gallons

FIELD PARAMETER MEASUREMENT

Minutes Since Pumping Began	pH	Cond. (µmhos/cm)	T ☒ °C ☐ °F	Other NTU
0 gals	6.6	625	19.9	21
7	6.8	650	20.2	>100
14	6.9	650	20.3	>100
19	6.9	675	20.3	>100

Minutes Since Pumping Began	pH	Cond. (µmhos/cm)	T ☐ °C ☐ °F	Other
Meter Nos.				

Observations During Purging (Well Condition, Turbidity, Color, Odor): SHEEN, STRONG GASOLINE ODOR
Discharge Water Disposal: ☐ Sanitary Sewer ☐ Storm Sewer ☒ Other DRUM

WELL SAMPLING

SAMPLING METHOD

☒ Bailer - Type: S.S.
☐ Submersible ☐ Centrifugal ☐ Bladder; Pump No.:
☐ Same As Above
☐ Grab - Type:
☐ Other - Type:

SAMPLE DISTRIBUTION

Sample Series: 9012

Sample No.	Volume/Cont.	Analysis Requested	Preservatives	Lab	Comments
1707	3 VOAs	TPH (GAS); BTEX	NONE	NET	

QUALITY CONTROL SAMPLES

Duplicate Samples

Original Sample No.	Duplicate Sample No.

Blank Samples

Type	Sample No.

Other Samples

Type	Sample No.

Harding Lawson Associates
Engineers and Geoscientists

GROUND-WATER SAMPLING FORM

Well No. MW-3
Well Type: ☒ Monitor ☐ Extraction ☐ Other
Well Material: ☒ PVC ☐ St. Steel ☐ Other
Date 12-17-90 Time 1005
Sampled by TMD OME (Initials)

Job Name EXXON ALAMEDA
Job Number 4167.326.02
Recorded by Tom Durkard (Signature)

WELL PURGING

PURGE VOLUME

Casing Diameter (D in inches):
☐ 2-inch ☒ 4-inch ☐ 6-inch ☐ Other
Total Depth of Casing (TD in feet BTOC): 14.2
Water Level Depth (WL in feet BTOC): 6.46
Number of Well Volumes to be purged (# Vols)
☒ 3 ☐ 4 ☐ 5 ☐ 10 ☐ Other

PURGE METHOD

☒ Bailer - Type: PVC
☐ Submersible ☐ Centrifugal ☐ Bladder; Pump No.:
☐ Other - Type:

PUMP INTAKE SETTING

☐ Near Bottom ☐ Near Top ☐ Other
Depth in feet (BTOC): Screen Interval in feet (BTOC): from to

PURGE VOLUME CALCULATION

$(14.2 - 6.46) \times 4^2 \times 3 \times 0.0408 = 15.2$ gallons

(14.2 = TD (feet); 6.46 = WL (feet); 4 = D (inches); 3 = # Vols; 15.2 = Calculated Purge Volume)

PURGE TIME

0944 Start 1000 Stop Elapsed

PURGE RATE

Initial gpm Final gpm

ACTUAL PURGE VOLUME

15.5 gallons

FIELD PARAMETER MEASUREMENT

Minutes Since Pumping Began	pH	Cond. (µmhos/cm)	T ☒ °C ☐ °F	Other NTU
0 gals	7.0	650	20.0	16
5	6.8	675	19.7	>100
10	6.7	675	19.5	>100
15.5	6.7	675	19.5	>100

Minutes Since Pumping Began	pH	Cond. (µmhos/cm)	T ☐ °C ☐ °F	Other
Meter Nos.				

Observations During Purging (Well Condition, Turbidity, Color, Odor): SLIGHT GASOLINE ODOR
Discharge Water Disposal: ☐ Sanitary Sewer ☐ Storm Sewer ☒ Other DRUM

WELL SAMPLING

SAMPLING METHOD

☒ Bailer - Type: S.S.
☐ Submersible ☐ Centrifugal ☐ Bladder; Pump No.:
☐ Same As Above
☐ Grab - Type:
☐ Other - Type:

SAMPLE DISTRIBUTION

Sample Series: 9012

Sample No.	Volume/Cont.	Analysis Requested	Preservatives	Lab	Comments
1701	3 VOAs	TPH (GAS); BTEX	NONE	NET	

QUALITY CONTROL SAMPLES

Duplicate Samples

Original Sample No.	Duplicate Sample No.

Blank Samples

Type	Sample No.

Other Samples

Type	Sample No.

OFFICE COPY

Harding Lawson Associates
Engineers and Geoscientists

GROUND-WATER SAMPLING FORM

Job Name Exxon Alameda
Job Number 041667 [illegible]02
Recorded by [signature] (Signature)

Well No. MW-4
Well Type: ☒ Monitor ☐ Extraction ☐ Other
Well Material: ☒ PVC ☐ St. Steel ☐ Other
Date 12/17/90 Time 1015
Sampled by DLE TMD (Initials)

WELL PURGING

PURGE VOLUME

Casing Diameter (D in inches):
☐ 2-inch ☒ 4-inch ☐ 6-inch ☐ Other
Total Depth of Casing (TD in feet BTOC): 18'
Water Level Depth (WL in feet BTOC): 6.50
Number of Well Volumes to be purged (# Vols)
☐ 3 ☐ 4 ☐ 5 ☐ 10 ☐ Other

PURGE METHOD

☒ Bailer - Type: PVC
☐ Submersible ☐ Centrifugal ☐ Bladder; Pump No.:
☐ Other - Type:

PUMP INTAKE SETTING

☐ Near Bottom ☐ Near Top ☐ Other
Depth in feet (BTOC): Screen Interval in feet (BTOC): from to

PURGE VOLUME CALCULATION:

(18.0 (TD) − 6.50 (WL)) × 4 (D, inches)^2 × 3 (# Vols) × 0.0408 = 23 gallons (Calculated Purge Volume)

PURGE TIME

0954 Start Stop Elapsed

PURGE RATE

Initial gpm Final gpm

ACTUAL PURGE VOLUME

gallons

FIELD PARAMETER MEASUREMENT

Minutes Since Pumping Began	pH	Cond. (µmhos/cm)	T ☒ °C ☐ °F	Other Turb
0	6.4	600	20.0	11
10	6.3	550	20.5	>100
20 15,5	6.3	575	21	>100
23				

Minutes Since Pumping Began	pH	Cond. (µmhos/cm)	T ☐ °C ☐ °F	Other
Meter Nos.	pH 4/6/6	Cond 3385	Tur 3379	

Observations During Purging (Well Condition, Turbidity, Color, Odor): Clear, slight odor
Discharge Water Disposal: ☐ Sanitary Sewer ☐ Storm Sewer ☒ Other 55 gal

WELL SAMPLING

SAMPLING METHOD

☒ Bailer - Type: SS
☐ Submersible ☐ Centrifugal ☐ Bladder; Pump No.:

☐ Same As Above
☐ Grab - Type:
☐ Other - Type:

SAMPLE DISTRIBUTION

Sample Series: 9012

Sample No.	Volume/Cont.	Analysis Requested	Preservatives	Lab	Comments
1702	3 VOAs	TPHL/BTEX	NONE	NET	

QUALITY CONTROL SAMPLES

Duplicate Samples

Original Sample No.	Duplicate Sample No.

Blank Samples

Type	Sample No.

Other Samples

Type	Sample No.

RL004

OFFICE COPY

0746

Harding Lawson Associates
Engineers and Geoscientists

GROUND-WATER SAMPLING FORM

Well No. MW-5
Well Type: ☒ Monitor ☐ Extraction ☐ Other
Well Material: ☒ PVC ☐ St. Steel ☐ Other
Date 12/17/90 Time 1140
Sampled by DME (Initials)

Job Name Exxon Alameda
Job Number 04167.326.02
Recorded by [signature] (Signature)

WELL PURGING

PURGE VOLUME

Casing Diameter (D in inches):
☐ 2-inch ☒ 4-inch ☐ 6-inch ☐ Other
Total Depth of Casing (TD in feet BTOC): 19'
Water Level Depth (WL in feet BTOC): 6.28
Number of Well Volumes to be purged (# Vols)
☒ 3 ☐ 4 ☐ 5 ☐ 10 ☐ Other

PURGE METHOD

☒ Bailer - Type: PVC
☐ Submersible ☐ Centrifugal ☐ Bladder; Pump No.:
☐ Other - Type:

PUMP INTAKE SETTING

☐ Near Bottom ☐ Near Top ☐ Other
Depth in feet (BTOC): Screen Interval in feet (BTOC): from to

PURGE VOLUME CALCULATION:

(19' (TD) - 6.28 (WL)) X 4 (D, inches)^2 X 3 (# Vols) X 0.0408 = 25 gallons (Calculated Purge Volume)

PURGE TIME

1116 Start 1624 Stop Elapsed

PURGE RATE

Initial gpm Final gpm

ACTUAL PURGE VOLUME

Dry @ 18 gallons

FIELD PARAMETER MEASUREMENT

Minutes Since Pumping Began	pH	Cond. (µmhos/cm)	T ☒ °C ☐ °F	Other NTU
0	5.4	450	14	36
10	6.3	450	19	700
18	6.2	470	20	>100

Minutes Since Pumping Began	pH	Cond. (µmhos/cm)	T ☐ °C ☐ °F	Other
Meter Nos.	PH 4666	Cond 3385	Tur 3597	

Observations During Purging (Well Condition, Turbidity, Color, Odor):
Discharge Water Disposal: ☐ Sanitary Sewer ☐ Storm Sewer ☒ Other 55 gal drum onsite

WELL SAMPLING

SAMPLING METHOD

☒ Bailer - Type: SS
☐ Submersible ☐ Centrifugal ☐ Bladder; Pump No.:

☐ Same As Above
☐ Grab - Type:
☐ Other - Type:

SAMPLE DISTRIBUTION

Sample Series: 9018

Sample No.	Volume/Cont.	Analysis Requested	Preservatives	Lab	Comments
1706	3 VOAs	TPHL/BTEX	NONE	NET	

QUALITY CONTROL SAMPLES

Duplicate Samples

Original Sample No.	Duplicate Sample No.

Blank Samples

Type	Sample No.
Field Blank	1708

Other Samples

Type	Sample No.

OFFICE COPY

Harding Lawson Associates
Engineers and Geoscientists

GROUND-WATER SAMPLING FORM

Well No. MW-6
Well Type: ☑ Monitor ☐ Extraction ☐ Other ____
Well Material: ☑ PVC ☐ St. Steel ☐ Other ____
Date 12-17-90 Time 1040
Sampled by TMS (Initials)

Job Name EXXON ALAMEDA
Job Number 4167.326.02
Recorded by Tom Durkan (Signature)

WELL PURGING

PURGE VOLUME

Casing Diameter (D in inches):
☐ 2-inch ☑ 4-inch ☐ 6-inch ☐ Other ____
Total Depth of Casing (TD in feet BTOC): 18.6
Water Level Depth (WL in feet BTOC): 6.66
Number of Well Volumes to be purged (# Vols)
☑ 3 ☐ 4 ☐ 5 ☐ 10 ☐ Other ____

PURGE METHOD

☑ Bailer - Type: PVC
☐ Submersible ☐ Centrifugal ☐ Bladder; Pump No.: ____
☐ Other - Type: ____

PUMP INTAKE SETTING

☐ Near Bottom ☐ Near Top ☐ Other ____
Depth in feet (BTOC): ____ Screen Interval in feet (BTOC): from ____ to ____

PURGE VOLUME CALCULATION:

$(18.6 - 6.66) \times 4^2 \times 3 \times 0.0408 = 23.4$ gallons

(TD (feet) − WL (feet)) × D (inches)² × # Vols × 0.0408 = Calculated Purge Volume

PURGE TIME

1018 Start 1036 Stop 18 Elapsed

PURGE RATE

Initial ____ gpm Final ____ gpm

ACTUAL PURGE VOLUME

24 gallons

FIELD PARAMETER MEASUREMENT

Minutes Since Pumping Began	pH	Cond. (µmhos/cm)	T ☑ °C ☐ °F	Other NTU
0 gals	7.0	500	18.9	>100
8	6.6	525	19.4	>100
16	6.6	525	19.5	>100
24	6.6	525	19.4	>100

Minutes Since Pumping Began	pH	Cond. (µmhos/cm)	T ☐ °C ☐ °F	Other ____
Meter Nos.				

Observations During Purging (Well Condition, Turbidity, Color, Odor): TURBID, SILTY, SLIGHT GASOLINE ODOR
Discharge Water Disposal: ☐ Sanitary Sewer ☐ Storm Sewer ☑ Other DRUM

WELL SAMPLING

SAMPLING METHOD

☑ Bailer - Type: S.S.
☐ Submersible ☐ Centrifugal ☐ Bladder; Pump No.: ____
☐ Same As Above
☐ Grab - Type: ____
☐ Other - Type: ____

SAMPLE DISTRIBUTION

Sample Series: 9012

Sample No.	Volume/Cont.	Analysis Requested	Preservatives	Lab	Comments
1703	3 VOAs	TPH (GAS); BTEX	NONE	NET	

QUALITY CONTROL SAMPLES

Duplicate Samples

Original Sample No.	Duplicate Sample No.

Blank Samples

Type	Sample No.

Other Samples

Type	Sample No.

Harding Lawson Associates
Engineers and Geoscientists

GROUND-WATER SAMPLING FORM

Well No. MW-7
Well Type: ☒ Monitor ☐ Extraction ☐ Other
Well Material: ☒ PVC ☐ St. Steel ☐ Other
Job Name EXXON ALAMEDA
Job Number 4167.326.02
Date 12-17-90 Time 1110
Recorded by TOM Duhaud (Signature)
Sampled by TMD (Initials)

WELL PURGING

PURGE VOLUME

Casing Diameter (D in inches):
☐ 2-inch ☒ 4-inch ☐ 6-inch ☐ Other
Total Depth of Casing (TD in feet BTOC): 17'
Water Level Depth (WL in feet BTOC): 6.15
Number of Well Volumes to be purged (# Vols)
☒ 3 ☐ 4 ☐ 5 ☐ 10 ☐ Other

PURGE METHOD

☒ Bailer - Type: PVC
☐ Submersible ☐ Centrifugal ☐ Bladder; Pump No.:
☐ Other - Type:

PUMP INTAKE SETTING

☐ Near Bottom ☐ Near Top ☐ Other
Depth in feet (BTOC): Screen Interval in feet (BTOC): from to

PURGE VOLUME CALCULATION:

(17' (TD feet) − 6.15 (WL feet)) × 4² (D inches) × 3 (# Vols) × 0.0408 = 21.2 gallons (Calculated Purge Volume)

PURGE TIME

1055 Start 1105 Stop 10 Elapsed

PURGE RATE

Initial gpm Final gpm

ACTUAL PURGE VOLUME

23 gallons

FIELD PARAMETER MEASUREMENT

Minutes Since Pumping Began	pH	Cond. (µmhos/cm)	T ☒ °C ☐ °F	Other MTA
0 gals	6.7	600	19.0	15
8	6.6	575	19.4	>100
16	6.6	575	19.4	>100
23	6.6	575	19.5	>100

Minutes Since Pumping Began	pH	Cond. (µmhos/cm)	T ☐ °C ☐ °F	Other
Meter Nos.				

Observations During Purging (Well Condition, Turbidity, Color, Odor): SILTY, TURBID; SLIGHT GASOLINE ODOR
Discharge Water Disposal: ☐ Sanitary Sewer ☐ Storm Sewer ☒ Other DRUM

WELL SAMPLING

SAMPLING METHOD

☒ Bailer - Type: S.S.
☐ Submersible ☐ Centrifugal ☐ Bladder; Pump No.:

☐ Same As Above
☐ Grab - Type:
☐ Other - Type:

SAMPLE DISTRIBUTION

Sample Series: 9012

Sample No.	Volume/Cont.	Analysis Requested	Preservatives	Lab	Comments
1705	3 VOAs	TPH (GAS); BTEX	NONE	NET	

QUALITY CONTROL SAMPLES

Duplicate Samples

Original Sample No.	Duplicate Sample No.

Blank Samples

Type	Sample No.

Other Samples

Type	Sample No.

NET® NATIONAL ENVIRONMENTAL TESTING, INC.

NET Pacific, Inc.
435 Tesconi Circle
Santa Rosa, CA 95401
Tel: (707) 526-7200
Fax: (707) 526-9623

Michelle Watson
Harding Lawson Associates
200 Rush Landing
Novato, CA 94947

Date: 01-07-91
NET Client Acct No: 281
NET Pacific Log No: 5366
Received: 12-17-90 1500

Client Reference Information

Exxon, Alameda; Job: 4167,326.02

Sample analysis in support of the project referenced above has been completed and results are presented on following pages. Please refer to the enclosed "Key to Abbreviations" for definition of terms. Should you have questions regarding procedures or results, please feel welcome to contact Client Services.

Approved by:

Jules Skamarack
Laboratory Manager

JS:rct
Enclosure(s)

NET Pacific, Inc.

Client No: 281 Date: 01-07-91
Client Name: Harding Lawson Associates
NET Log No: 5366 Page: 2

Ref: Exxon, Alameda; Job: 4167,326.02

Parameter	Method	Reporting Limit	Descriptor, Lab No. and Results 90121701 12-17-90 1005 70949	 90121702 12-17-90 1015 70950	Units
PETROLEUM HYDROCARBONS			--	--	
VOLATILE (WATER)			--	--	
DILUTION FACTOR *			10	10	
DATE ANALYZED			12-27-90	12-21-90	
METHOD GC FID/5030			--	--	
as Gasoline		0.05	6.7	14	mg/L
METHOD 602			--	--	
DILUTION FACTOR *			100	100	
DATE ANALYZED			12-20-90	12-28-90	
Benzene		0.5	1,500	1400	ug/L
Ethylbenzene		0.5	650	540	ug/L
Toluene		0.5	64	620	ug/L
Xylenes, total		0.5	460	2100	ug/L

NET Pacific, Inc.

Client No: 281 Date: 01-07-91
Client Name: Harding Lawson Associates
NET Log No: 5366 Page: 3

Ref: Exxon, Alameda; Job: 4167,326.02

Parameter	Method	Reporting Limit	Descriptor, Lab No. and Results 90121703 12-17-90 1040 70951	 90121704 12-17-90 1055 70952	Units
PETROLEUM HYDROCARBONS			--	--	
VOLATILE (WATER)			--	--	
DILUTION FACTOR *			10	1	
DATE ANALYZED			12-21-90	12-20-90	
METHOD GC FID/5030			--	--	
as Gasoline		0.05	20	2.1	mg/L
METHOD 602			--	--	
DILUTION FACTOR *			100	1	
DATE ANALYZED			12-28-90	12-20-90	
Benzene		0.5	3100	550	ug/L
Ethylbenzene		0.5	890	350	ug/L
Toluene		0.5	4100	13	ug/L
Xylenes, total		0.5	2700	110	ug/L

NET Pacific, Inc.

Client No: 281 Date: 01-07-91
Client Name: Harding Lawson Associates
NET Log No: 5366 Page: 4

Ref: Exxon, Alameda; Job: 4167,326.02

Parameter	Method	Reporting Limit	Descriptor, Lab No. and Results 90121705 12-17-90 1110 70953	 90121706 12-17-90 1140 70954	Units
PETROLEUM HYDROCARBONS			--	--	
VOLATILE (WATER)			--	--	
DILUTION FACTOR *			50	10	
DATE ANALYZED			12-20-90	12-21-90	
METHOD GC FID/5030			--	--	
as Gasoline		0.05	75	18	mg/L
METHOD 602			--	--	
DILUTION FACTOR *			200	100	
DATE ANALYZED			12-21-90	12-28-90	
Benzene		0.5	2600	2300	ug/L
Ethylbenzene		0.5	3300	430	ug/L
Toluene		0.5	7000	810	ug/L
Xylenes, total		0.5	14,000	1400	ug/L

NET Pacific, Inc.

Client No: 281 Date: 01-07-91
Client Name: Harding Lawson Associates
NET Log No: 5366 Page: 5

Ref: Exxon, Alameda; Job: 4167,326.02

Parameter	Method	Reporting Limit	Descriptor, Lab No. and Results 90121707 12-17-90 1210 70955	 90121708 12-17-90 1159 70956	Units
PETROLEUM HYDROCARBONS			--	--	
VOLATILE (WATER)			--	--	
DILUTION FACTOR *			100	1	
DATE ANALYZED			12-20-90	12-20-90	
METHOD GC FID/5030			--	--	
as Gasoline		0.05	140	ND	mg/L
METHOD 602			--	--	
DILUTION FACTOR *			100	1	
DATE ANALYZED			12-20-90	12-20-90	
Benzene		0.5	3700	ND	ug/L
Ethylbenzene		0.5	3000	ND	ug/L
Toluene		0.5	2500	ND	ug/L
Xylenes, total		0.5	8300	ND	ug/L

Ref: Exxon, Alameda; Job: 4167,326.02

QUALITY CONTROL DATA

Parameter	Reporting Limits	Units	Cal Verf Stand % Recovery	Blank Data	Spike % Recovery	Duplicate Spike % Recovery	RPD
Gasoline	0.05	mg/L	88	ND	93	90	3.3
Benzene	0.5	ug/L	98	ND	100	109	9.0
Toluene	0.5	ug/L	104	ND	101	109	7.8
Gasoline	0.05	mg/L	111	ND	107	118	9.6
Gasoline	0.05	mg/L	123	ND	117	118	< 1
Benzene	0.5	ug/L	114	ND	87	90	3.4
Toluene	0.5	ug/L	107	ND	97	99	2.0

COMMENT: Blank Results were ND on other analytes tested.

NET Pacific, Inc.

KEY TO ABBREVIATIONS and METHOD REFERENCES

<	:	Less than; When appearing in results column indicates analyte not detected at the value following. This datum supercedes the listed Reporting Limit.
*	:	Reporting Limits are a function of the dilution factor for any given sample. To obtain the actual reporting limits for this sample, multiply the stated Reporting Limits by the dilution factor (but do not multiply reported values).
ICVS	:	Initial Calibration Verification Standard (External Standard).
mean	:	Average; sum of measurements divided by number of measurements.
mg/Kg (ppm)	:	Concentration in units of milligrams of analyte per kilogram of sample, wet-weight basis (parts per million).
mg/L	:	Concentration in units of milligrams of analyte per liter of sample.
mL/L/hr	:	Milliliters per liter per hour.
MPN/100 mL	:	Most probable number of bacteria per one hundred milliliters of sample.
N/A	:	Not applicable.
NA	:	Not analyzed.
ND	:	Not detected; the analyte concentration is less than applicable listed reporting limit.
NTU	:	Nephelometric turbidity units.
RPD	:	Relative percent difference, 100 [Value 1 - Value 2]/mean value.
SNA	:	Standard not available.
ug/Kg (ppb)	:	Concentration in units of micrograms of analyte per kilogram of sample, wet-weight basis (parts per billion).
ug/L	:	Concentration in units of micrograms of analyte per liter of sample.
umhos/cm	:	Micromhos per centimeter.

Method References

Methods 100 through 493: see "Methods for Chemical Analysis of Water & Wastes", U.S. EPA, 600/4-79-020, rev. 1983.

Methods 601 through 625: see "Guidelines Establishing Test Procedures for the Analysis of Pollutants" U.S. EPA, 40 CFR, Part 136, rev. 1988.

Methods 1000 through 9999: see "Test Methods for Evaluating Solid Waste", U.S. EPA SW-846, 3rd edition, 1986.

SM: see "Standard Methods for the Examination of Water & Wastewater, 16th Edition, APHA, 1985.

Harding Lawson Associates
7655 Redwood Boulevard
P.O. Box 578
Novato, California 94948
415/892-0821
Telecopy: General: 415/892-0831
Accounting: 415/898-1052

5364

CHAIN OF CUSTODY FORM

Lab: NET

Samplers: TM OZINKARD
DM EVANS

Job Number: 4167,326.02

Name/Location: EXXON / ALAMEDA

Project Manager: Michelle MATTSON

Recorder: Tom Dunkard
(Signature Required)

SOURCE CODE	MATRIX: Water	Sediment	Soil	Oil	#CONTAINERS & PRESERV.: Unpres.	H_2SO_4	HNO_3	SAMPLE NUMBER OR LAB NUMBER: Yr	Wk	Seq	DATE: Yr	Mo	Dy	Time	STATION DESCRIPTION/ NOTES	ANALYSIS REQUESTED: EPA 601/8010	EPA 602/8020	EPA 624/8240	EPA 625/8270	ICP METALS	EPA 8015M/TPH	TPH (GASOLINE); BTEX
23	X				3			90	12	1701	90	12	7	1005								X
23	X				3					1702				1015								X
23	X				3					1703				1040								X
23	X				3					1704				1055								X
23	X				3					1705				1110								X
23	X				3					1706				1140								X
23	X				3					1707				1210								X
23	X				3					1708				1159								X

LAB NUMBER: Yr	Wk	Seq	DEPTH IN FEET	COL MTD CD	QA CODE	MISCELLANEOUS
						2 Week Turnaround Time

CHAIN OF CUSTODY RECORD

RELINQUISHED BY: (Signature) Tom Dunkard	RECEIVED BY: (Signature)	DATE/TIME 12/17/90 12:30
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature) Chris Fowler	DATE/TIME 12/17/90 14:00
RELINQUISHED BY: (Signature) Chris Fowler	RECEIVED BY: (Signature)	DATE/TIME
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
DISPATCHED BY: (Signature) DATE/TIME	RECEIVED FOR LAB BY: (Signature)	DATE/TIME 12/17/90 1500

METHOD OF SHIPMENT: cooler w/ blue ice

Laboratory Copy White | Project Office Copy Yellow | Field or Office Copy Pink

6533