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P. O. Box 4032 • Concord, California 94524-4032

ENVIRONMENTAL  
PROTECTION

22 MAR 26 AM 9:31

Marla D. Guensler  
Senior Engineer

(925) 246-8776  
(925) 246-8798 Facsimile  
Marla.D.Guensler@Exxon.Sprint.com

March 22, 1999

Ms. Eva Chu  
Alameda County Department of Environmental Health  
Hazardous Materials Division  
1131 Harbor Bay Parkway  
Alameda, California 94502-6577

**RE: Exxon RAS #7-0104, 1725 Park Street, Alameda, CA**

Dear Ms. Chu:

Attached for your review and comment is a copy of the report entitled *Ground Water Monitoring Report, Fourth Quarter 1998 and First Quarter 1999*, for the above-referenced site. The report was prepared Delta Environmental Consultants, Inc., (Delta) of Rancho Cordova, California, and details the results of the October 1998 and January 1999 ground water monitoring and sampling events.

Please note that on November 12, 1997, monitoring well MW-10 was inadvertently destroyed by Chevron's consultant for the former Chevron service station located immediately northeast of the Exxon site. Apparently, it was one of the many wells destroyed at that site following regulatory concurrence of case closure. Delta recommends that this well not be replaced as it is not necessary, because potential off-site migration of petroleum hydrocarbons will be monitored at MW-9 which is directly downgradient of the Exxon site. It is Exxon's understanding that you spoke with Mr. Jim Brownell of Delta regarding the need for MW-10 and concurred with Delta's opinion, but indicated that before you would make a final decision, you wanted to review the data in the next monitoring report (enclosed).

If you have any questions, please contact me at (925) 246-8776.

Sincerely,



Marla D. Guensler  
Senior Engineer  
Enclosure (1)

MDG/mg

cc: w/attachment:

Mr. Stephen Hill - California Regional Water Quality control Board - San Francisco Bay Region

w/out attachment:

Mr. James R. Brownell - Delta



**Delta**  
Environmental  
Consultants, Inc.

3164 Gold Camp Drive  
Suite 200  
Rancho Cordova, CA 95670-6021  
U.S.A.  
916/638-2085  
FAX: 916/638-8385

March 3, 1999

Ms. Marla Guensler  
Exxon Company, U.S.A.  
2300 Clayton Road, Suite 640  
Concord, California 94520

Subject: *Ground Water Monitoring Report,  
Fourth Quarter 1998 and First Quarter 1999*  
Exxon Service Station No. 7-0104  
1725 Park Street  
Alameda, California  
Delta Project No. D094-832

Dear Ms. Guensler:

Delta Environmental Consultants, Inc. (Delta), has been authorized by Exxon Company, U.S.A. (Exxon), to conduct quarterly ground water monitoring and remediation activities at Exxon Service Station No. 7-0104, located at 1725 Park Street, Alameda, California. This report presents the results of quarterly ground water monitoring conducted on October 19, 1998, and January 13, 1999. The location of the site is shown in Figure 1 and site features are illustrated in Figure 2. Work conducted at the site by Delta was performed in accordance with the field methods and procedures described in Enclosure A.

#### Ground Water Elevation Measurements, Flow Direction, and Hydraulic Gradient

Depth to ground water was measured on October 19, 1998, in monitoring wells MW-1 through MW-9 and MW-11 and recovery wells EW-1 through EW-5. Depth to ground water was measured in monitoring wells MW-1 through MW-9, MW-11, and MW-12, and recovery wells EW-1 through EW-5 on January 13, 1999. Depth to ground water could not be measured in monitoring well MW-10 because the well appears to have been inadvertently destroyed by Chevron's consultant for the adjacent site. On January 13, 1999, depth to ground water in the measured wells ranged from 5.19 (MW-12) to 13.85 (EW-3) feet below the top of the well casings. Ground water elevations in the measured monitoring wells increased approximately 0.25 foot from the July 1998 measurements. Cumulative ground water level measurements collected by Delta are presented in Table 1. Historical ground water monitoring and sampling data collected by previous consultants (June 7, 1988 through February 25, 1994) are presented in Enclosure B.

A ground water elevation contour map constructed from the ground water level measurements recorded on January 13, 1999, is included as Figure 3. The contour map suggests the ground water flow direction is radially towards the recovery wells. During the monitoring event, the soil vapor extraction system was in operation, and the ground water treatment system was operating. The historical ground water flow direction is toward the northeast when the ground water treatment system is not operating.

Ms. Marla Guensler  
Exxon Company, U.S.A.  
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### Subjective Analysis

Liquid-phase petroleum hydrocarbons were not observed in any of the measured monitoring wells during the second quarter 1998 and first quarter 1999 site visits.

### Monitoring Well Sampling and Analytical Results

The Alameda County Health Services (ACHS) authorized a reduction in sampling at the site. This reduction requires monitoring wells MW-6 and MW-11 to be sampled quarterly; monitoring wells MW-1, MW-2, MW-4, MW-5, MW-7, and MW-10 to be sampled semi-annually during the first and third quarters. Sampling monitoring wells MW-3, MW-8, MW-9, and MW-12, and extraction wells EW-1 through EW-5 has been discontinued. However, monitoring wells MW-8 and MW-9 will be sampled in 1999. A copy of the ACHS letter is included in Enclosure C.

Ground water samples were collected from monitoring wells MW-8 and MW-11 on October 19, 1998, and from MW-1, MW-2, MW-4 through MW-8, and MW-11 on January 13, 1999. A ground water sample could not be collected from monitoring well MW-10 because the well was inadvertently destroyed by Chevron's consultant for the site located immediately northeast of the Exxon site, on November 12, 1997. The ground water samples collected on October 19, 1998 and January 13, 1999 were submitted to Sequoia Analytical (a California-certified laboratory) for analyses of benzene, toluene, ethylbenzene, total xylenes (BTEX) and methyl tertiary butyl ether (MTBE) by EPA Method 8020, and total purgeable petroleum hydrocarbons (TPPH) as gasoline by EPA Method 8015. Cumulative analytical results for the ground water samples collected to date by Delta are summarized in Table 1. A copy of the laboratory analytical reports and chain-of-custody documentation for the ground water samples collected on October 19, 1998, and January 13, 1999 are presented in Enclosure D. A summary of historical analytical results for ground water samples collected by previous consultants (June 7, 1988 through February 25, 1994) is presented in Enclosure B.

Ground water samples collected from monitoring well MW-8 were below laboratory reporting limits for all analytes. The chemical analyses on ground water samples collected from monitoring well MW-11 during the October 19, 1998 monitoring event detected benzene at a concentration of 1,200 micrograms per liter ( $\mu\text{g/L}$ ) and TPPH as gasoline at a concentration of 29,000  $\mu\text{g/L}$ . MTBE using EPA Method 8020 was detected in the ground water samples collected from monitoring well MW-11 at a concentration of 1,700  $\mu\text{g/L}$ .

Ground water samples were collected from monitoring wells MW-1, MW-2, MW-4 through MW-8, and MW-11, on January 13, 1999. Benzene concentrations were detected ranging from 8.0  $\mu\text{g/L}$  in MW-1 and MW-8 to 4,750  $\mu\text{g/L}$  in MW-2. TPPH as gasoline concentrations were detected ranging from 273  $\mu\text{g/L}$  in MW-7 to 50,900  $\mu\text{g/L}$  in MW-11. MTBE concentrations were detected ranging from 9.78  $\mu\text{g/L}$  in MW-1 to 3,650  $\mu\text{g/L}$  in MW-5. A dissolved petroleum hydrocarbon constituents map based on analytical results for ground water samples collected on January 13, 1999, is included as Figure 4.

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### Ground Water Remediation System Status

The ground water remediation system is sampled on a monthly basis, as required in the discharge permit issued by the East Bay Municipal Utility District (EBMUD). Influent, mid-carbon, and effluent water samples are collected for analyses of BTEX by EPA Method 5030/8020, and TPPH as gasoline by EPA Method 8015 Modified. As per the discharge permit, the ground water remediation system analytical sampling results are presented in semi-annual reports to EBMUD.

### Recommendations

Delta recommends that monitoring point MW-10 be dropped from the required monitoring program. Potential off-site migration of petroleum hydrocarbons will be monitored at monitoring well MW-9 which is directly downgradient of the site.

### Future Work

The next quarterly monitoring event for this site is scheduled for April 1999, at which time monitoring wells MW-6, MW-8, MW-9, and MW-11 will be sampled. Monitoring wells MW-1, MW-2, MW-4 through MW-10 (if the replacement well has been installed) and MW-11 will be sampled during July 1999. Delta anticipates continuing operation of the ground water remediation system.

Delta recommends that a copy of this report be forwarded to the following agencies:

Ms. Eva Chu  
Alameda County Department of Environmental  
Health Hazardous Material Division  
1131 Harbor Bay Parkway  
Alameda, California 94502-6577

Mr. Richard Hiett  
Regional Water Quality Control Board  
San Francisco Bay Region  
1515 Clay Street, Suite 1400  
Oakland, California 94612

### Remarks/Signatures

The interpretations contained in this report represent our professional opinions, and are based in part, on information supplied by the client. These opinions are based on currently available information and are arrived at in accordance with currently accepted hydrogeologic and engineering practices at this time and location. Other than this, no warranty is implied or intended.

Ms. Marla Guensler  
Exxon Company, U.S.A.  
March 3, 1999  
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If you have any questions regarding this project, please contact Jim Brownell at (916) 638-2765.

Sincerely,

**DELTA ENVIRONMENTAL CONSULTANTS, INC.**

*J. Brownell for*

Benjamin I. Heningburg  
Staff Geologist

*James R. Brownell*

James R. Brownell, R.G.  
Project Manager  
California Registered Geologists No. 5028

BIH (LRP022.832)  
Enclosures



**TABLE 1**  
**GROUND WATER MONITORING DATA**

Exxon Service Station No. 7-0104

1725 Park Street

Alameda, California

Monitoring Well	Date	Reference Elevation		Ground Water Elevation		Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPPH as gasoline	MTBE	Oxygenate Compounds	Comments
		feet	feet	feet	feet	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	
MW-1	09/12/94	17.35	7.11	10.24	200	1.9	210	6.6	1,600 <sup>a</sup>	NA	NA	NA	No LPH or sheen
	10/01/94		7.44	9.91	200	<0.5	160	6.6	1,400 <sup>a</sup>	NA	NA	NA	No LPH or sheen
	01/13/95		5.13	12.22	410 <sup>b</sup>	17	280 <sup>b</sup>	89	2,100 <sup>a</sup>	NA	NA	NA	No LPH or sheen
	04/27/95		6.57	10.78	460	41	340	270	4,700	NA	NA	NA	No LPH or sheen
	08/03/95		7.46	9.89	140	<5.0	160	9.9	1,900	30	NA	NA	No LPH or sheen
	10/17/95		7.67	9.68	6.2	<0.5	13	0.75	280	5.5	NA	NA	No LPH or sheen
	01/24/96		6.52	10.83	21	1.4	38	3.1	740	440	NA	NA	No LPH or sheen
	04/24/96		5.95	11.40	200	110	1,000	740	7,800	250	NA	NA	No LPH or sheen
	07/26/96		7.60	9.75	8.0	0.99	26	1.0	620	23	NA	NA	No LPH or sheen
	10/30/96		8.06	9.29	14	2.9	85	3.5	700	33	NA	NA	No LPH or sheen
	01/31/97		5.12	12.23	420	33	1,400	480	7,600	<200	NA	NA	No LPH or sheen
	04/10/97	NM	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	Not measured
	07/10/97		7.54	9.81	10	<0.5	<0.5	<0.5	580	12	NA	NA	No LPH or sheen
	10/08/97	NM	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	Not measured
	01/28/98		4.48	12.87	110	2.8	170	14	820	<2.5 <sup>c</sup>	NA	NA	No LPH or sheen
	04/14/98		4.69	12.66	NS	NS	NS	NS	NS	NS	NS	NS	Not Measured
	07/30/98		6.19	11.16	210	<5.0	550	<5.0	2,700	41	NA	NA	No LPH or sheen
	10/19/98		6.72	10.63	NS	NS	NS	NS	NS	NS	NS	NS	No LPH or sheen
	01/13/99		6.52	10.83	8.0	<0.5	<0.5	<0.5	491	9.78	NA	NA	No LPH or sheen

**TABLE 1**  
**GROUND WATER MONITORING DATA**

Exxon Service Station No. 7-0104

1725 Park Street  
Alameda, California

Monitoring Well	Date	Reference Elevation		Ground Water Elevation		Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPPH as gasoline	MTBE	Oxygenate Compounds	Comments
		(feet)	(feet)	(feet)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	
MW-2	09/12/94	16.67	6.71	9.96	4,400	120	1,700	2,100	31,000 <sup>a</sup>	NA	NA	No LPH or sheen	
	10/01/94		7.22	9.45	4,500	250	1,800	2,400	45,000 <sup>a</sup>	NA	NA	No LPH or sheen	
	01/13/95		4.46	12.22	NS	NS	NS	NS	NS	NS	NS	No LPH or sheen	
	04/27/95		6.92	9.75	7,000	840	2,400	3,400	44,000	NA	NA	No LPH or sheen	
	08/03/95		6.96	9.71	4,600	170	1,600	1,100	30,000	37,000	NA	No LPH or sheen	
	10/17/95		7.83	8.84	5,400	190	2,000	1,500	45,000	14,000	NA	No LPH or sheen	
	01/24/96		6.45	10.22	5,000	810	2,200	2,200	30,000	4,100	NA	No LPH or sheen	
	04/24/96		6.00	10.67	8,700	410	2,200	2,000	34,000	22,000	NA	No LPH or sheen	
	07/26/96		7.14	9.53	10,000	<200	1,800	760	40,000	18,000	NA	No LPH or sheen	
	10/30/96		6.95	9.72	9,100	<250	2,400	730	43,000	18,000	NA	No LPH or sheen	
	01/31/97		5.07	11.60	2,400	630	1,500	3,300	28,000	8,000 <sup>c</sup>	NA	No LPH or sheen	
	04/10/97		NM	NC	NS	NS	NS	NS	NS	NS	NS	Not measured	
	07/10/97		7.34	9.33	2,900	82	1,500	530	18,000	2,600	NA	No LPH or sheen	
	10/08/97		NM	NC	NS	NS	NS	NS	NS	NS	NS	Not measured	
	01/28/98		4.46	12.21	5,600	410	1,500	720	29,000	28,000 <sup>c</sup>	NA	No LPH or sheen	
	04/14/98		4.48	12.19	NS	NS	NS	NS	NS	NS	NS	Not Measured	
	07/30/98		6.01	10.66	7,500	<200	1,300	280	24,000	6,300	NA	No LPH or sheen	
	10/19/98		6.35	10.32	NS	NS	NS	NS	NS	NS	NS	No LPH or sheen	
	01/13/99		6.54	10.13	4,750	211	1,760	45.3	18,400	2,200	NA	No LPH or sheen	

**TABLE 1**  
**GROUND WATER MONITORING DATA**

Exxon Service Station No. 7-0104

1725 Park Street  
Alameda, California

Monitoring Well	Date	Reference Elevation		Ground Water Elevation		Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPPH as gasoline	MTBE	Oxygenate Compounds	Comments
		Water (feet)	Water (feet)	(feet)	(feet)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	
MW-3	09/12/94	17.11	6.58	10.53	580	8	340	100	3,100 <sup>a</sup>	NA	NA	No LPH or sheen	
	10/01/94		6.85	10.26	640	11	230	130	3,800 <sup>a</sup>	NA	NA	No LPH or sheen	
	01/13/95		5.27	11.84	690	24	210	130	3,800 <sup>a</sup>	NA	NA	No LPH or sheen	
	04/27/95		6.05	11.06	940	35	810	530	7,500	NA	NA	No LPH or sheen	
	08/03/95		6.71	10.40	380	<5.0	140	45	1,900	24	NA	No LPH or sheen	
	10/17/95		7.46	9.65	950	29	230	190	6,100	<5.0	NA	No LPH or sheen	
	01/24/96		5.83	11.28	730	15	190	110	3,000	<100	NA	No LPH or sheen	
	04/24/96		5.38	11.73	1,200	130	1,000	1,400	11,000	<100	NA	No LPH or sheen	
	07/26/96		6.80	10.31	800	16	24	56	2,500	250	NA	No LPH or sheen	
	10/30/96		7.20	9.91	1,300	28	170	180	5,200	2,900	NA	No LPH or sheen	
	01/31/97		4.31	12.80	NS	NS	NS	NS	NS	NS	NS	No LPH or sheen	
	04/10/97		NM	NC	NS	NS	NS	NS	NS	NS	NS	Not measured	
	07/10/97		NM	NC	NS	NS	NS	NS	NS	NS	NS	Not measured	
	10/08/97		NM	NC	NS	NS	NS	NS	NS	NS	NS	Not measured	
	01/28/98		4.03	13.08	NS	NS	NS	NS	NS	NS	NS	No LPH or sheen	
	04/14/98		3.80	13.31	NS	NS	NS	NS	NS	NS	NS	No LPH or sheen	
	07/30/98		5.84	11.27	NS	NS	NS	NS	NS	NS	NS	No LPH or sheen	
	10/19/98		6.25	10.86	NS	NS	NS	NS	NS	NS	NS	No LPH or sheen	
	01/13/99		6.14	10.97	NS	NS	NS	NS	NS	NS	NS	No LPH or sheen	

**TABLE 1**  
**GROUND WATER MONITORING DATA**

Exxon Service Station No. 7-0104

1725 Park Street  
Alameda, California

Monitoring Well	Date	Reference Elevation (feet)	Depth to Water (feet)	Ground Water Elevation		Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	TPPH as gasoline (µg/L)	MTBE (µg/L)	Oxygenate Compounds (µg/L)	Comments
				Benzene (µg/L)	Toluene (µg/L)								
MW-4	09/12/94	17.34	6.80	10.54	900	57	310	490	5,200 <sup>a</sup>	NA	NA	NA	No LPH or sheen
	10/01/94		7.09	10.25	1,200	66	360	380	9,100 <sup>a</sup>	NA	NA	NA	No LPH or sheen
	01/13/95		4.66	12.68	1,300	200	550	1,000	25,000 <sup>a</sup>	NA	NA	NA	No LPH or sheen
	04/27/95		5.54	11.80	650	130	350	590	5,900	NA	NA	NA	No LPH or sheen
	08/03/95		6.92	10.42	1,000	<12	170	140	4,200	5,700	NA	NA	No LPH or sheen
	10/17/95		7.50	9.84	1,300	30	360	380	6,900	1,700	NA	NA	No LPH or sheen
	01/24/96		5.81	11.53	1,900	46	290	330	6,300	830	NA	NA	No LPH or sheen
	04/24/96		5.44	11.90	1,800	<20	190	130	5,000	1,600	NA	NA	No LPH or sheen
	07/26/96		7.03	10.31	1,700	<25	340	280	9,100	1,200	NA	NA	No LPH or sheen
	10/30/96		7.57	9.77	1,100	35	420	300	5,300	1,500	NA	NA	No LPH or sheen
	01/31/97		4.22	13.12	1,200	28	490	130	6,500	40,000	NA	NA	No LPH or sheen
	04/10/97	NM	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	Not measured
	07/10/97		7.56	9.78	1,100	120	470	720	10,000	11,000	NA	NA	No LPH or sheen
	10/08/97	NM	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	Not measured
	01/28/98		3.70	13.64	450	6.8	220	73	1,700	4,900 <sup>c</sup>	NA	NA	No LPH or sheen
	04/14/98		3.81	13.53	NS	NS	NS	NS	NS	NS	NS	NS	Not Measured
	07/30/98		5.96	11.38	680	<10	220	56	2,900	2,800	NA	NA	No LPH or sheen
	10/19/98		6.51	10.83	NS	NS	NS	NS	NS	NS	NS	NS	No LPH or sheen
	01/13/99		6.24	11.10	146	<10	60.9	16.2	2,140	1,800	NA	NA	No LPH or sheen

**TABLE 1**  
**GROUND WATER MONITORING DATA**

Exxon Service Station No. 7-0104

1725 Park Street

Alameda, California

Monitoring Well	Date	Reference Elevation (feet)	Depth to Water (feet)	Ground Water Elevation		Benzene	Toluene	Ethyl- benzene	Total Xylenes	TPPH as gasoline	MTBE	Oxygenate Compounds	Comments
				Water (feet)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	
MW-5	09/12/94	16.71	7.12	9.59	2,300	17	320	230	10,000 <sup>a</sup>	NA	NA	No LPH or sheen	
	10/01/94		7.06	9.65	2,300	19	220	200	11,000 <sup>a</sup>	NA	NA	Sheen	
	01/13/95		4.85	11.88	NS	NS	NS	NS	NS	NS	NS	NS	LPH thickness of 0.02'
	04/27/95		6.51	10.20	2,200	72	540	350	14,000	NA	NA	No LPH or sheen	
	08/03/95		7.24	9.47	2,100	<100	210	<100	<10,000	39,000	NA	No LPH or sheen	
	10/17/95		7.80	8.91	1,800	14	240	170	13,000	38,000	NA	No LPH or sheen	
	01/24/96		6.66	10.05	2,400	79	340	190	10,000	20,000	NA	No LPH or sheen	
	04/24/96		5.80	10.91	3,700	120	520	170	13,000	33,000	NA	No LPH or sheen	
	07/26/96		7.67	9.04	3,400	53	280	76	15,000	140,000	NA	No LPH or sheen	
	10/30/96		7.77	8.94	2,600	76	260	150	10,000	110,000 <sup>a</sup>	NA	No LPH or sheen	
	01/31/97		4.90	11.81	2,400	66	430	140	10,000	34,000 <sup>c</sup>	NA	No LPH or sheen	
	04/10/97		NM	NC	NS	NS	NS	NS	NS	NS	NS	Not measured	
	07/10/97		7.65	9.06	1,400	120	190	120	9,800	36,000/ 52,000 <sup>c</sup>	NA	No LPH or sheen	
	10/08/97		NM	NC	NS	NS	NS	NS	NS	NS	NS	Not measured	
	01/28/98		3.95	12.76	1,500	34	73	57	6,500	15,000 <sup>c</sup>	NA	No LPH or sheen	
	04/14/98		4.30	12.41	NS	NS	NS	NS	NS	NS	NS	Not Measured	
	07/30/98		5.86	10.85	1,700	26	110	66	8,300	4,300	NA	No LPH or sheen	
	10/19/98		6.20	10.51	NS	NS	NS	NS	NS	NS	NS	No LPH or sheen	
	01/13/99		6.37	10.34	1,240	11.1	<10	<10	4,780	3,650	NA	No LPH or sheen	

**TABLE 1**  
**GROUND WATER MONITORING DATA**

Exxon Service Station No. 7-0104

1725 Park Street

Alameda, California

Monitoring Well	Date	Reference Elevation (feet)	Depth to Water (feet)	Ground Water Elevation		Benzene (µg/L)	Toluene (µg/L)	Ethyl- benzene (µg/L)	Total Xylenes (µg/L)	TPPH as gasoline (µg/L)	MTBE (µg/L)	Oxygenate Compounds (µg/L)	Comments
				Benzene (µg/L)	Toluene (µg/L)								
MW-6	09/12/94	17.56	6.88	10.68	150	4.4	170	85	1,500 <sup>a</sup>	NA	NA	NA	No LPH or sheen
	10/01/94		7.15	10.41	120	<0.5	99	38	87 <sup>a</sup>	NA	NA	NA	No LPH or sheen
	01/13/95		4.80	12.76	710	220	780	1,100	9,900 <sup>a</sup>	NA	NA	NA	No LPH or sheen
	04/27/95		6.14	11.42	340	40	460	320	3,900	NA	NA	NA	No LPH or sheen
	08/03/95		6.83	10.73	89	<2.5	110	63	1,100	65	NA	NA	No LPH or sheen
	10/17/95		7.66	9.90	410	74	850	110	8,500	<5.0	NA	NA	No LPH or sheen
	01/24/96		5.86	11.70	560	1,500	2,200	7,500	31,000	<5.0	NA	NA	No LPH or sheen
	04/24/96		5.39	12.17	460	570	1,400	3,300	15,000	280	NA	NA	No LPH or sheen
	07/26/96		6.97	10.59	270	660	1,600	5,500	27,000	1,300	NA	NA	No LPH or sheen
	10/30/96		7.45	10.11	490	440	1,800	6,200	28,000	900	NA	NA	No LPH or sheen
	01/31/97		4.30	13.26	190	1,000	380	1,400	7,000	770	NA	NA	No LPH or sheen
	04/10/97		NM	NC	NS	NS	NS	NS	NS	NS	NS	NS	Not measured
	07/10/97		7.57	9.99	200	<50	300	860	6,800	1,100	NA	NA	No LPH or sheen
	10/08/97		7.48	10.08	870	7,300	2,600	12,000	51,000	580	700 <sup>c</sup>	NA	No LPH or sheen
	01/28/98		3.74	13.82	650	2,300	900	2,700	15,000	2,400 <sup>c</sup>	NA	NA	No LPH or sheen
	04/14/98		3.92	13.64	850	3,300	1,200	4,300	25,000	2,100 <sup>c</sup>	NA	NA	No LPH or sheen
	07/30/98		6.09	11.47	270	65	500	630	5,900	910	NA	NA	No LPH or sheen
	10/19/98		6.56	11.00	NS	NS	NS	NS	NS	NS	NS	NS	No LPH or sheen
	01/13/99		6.35	11.21	204	107	297	304	3,150	422	NA	NA	No LPH or sheen

**TABLE 1**  
**GROUND WATER MONITORING DATA**

Exxon Service Station No. 7-0104

1725 Park Street  
 Alameda, California

Monitoring Well	Date	Reference Elevation		Ground Water Elevation		Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPPH as gasoline	MTBE	Oxygenate Compounds	Comments
		feet	feet	feet	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	
MW-7	09/12/94	17.12	6.43	10.69	490	50	280	70	6,000 <sup>a</sup>	NA	NA	NA	No LPH or sheen
	10/01/94		6.71	10.41	940	670	310	160	8,900 <sup>a</sup>	NA	NA	NA	No LPH or sheen
	01/13/95		4.29	12.83	590	780	970	4,200	20,000 <sup>a</sup>	NA	NA	NA	No LPH or sheen
	04/27/95		5.00	12.12	410	32	410	230	8,800	NA	NA	NA	No LPH or sheen
	08/03/95		6.53	10.59	390	<50	290	<50	4,900	17,000	NA	NA	No LPH or sheen
	10/17/95		7.23	9.89	530	26	240	25	6,700	17,000	NA	NA	No LPH or sheen
	01/24/96		5.26	11.86	2,000	390	350	230	9,300	60,000	NA	NA	No LPH or sheen
	04/24/96		5.06	12.06	2,400	850	150	130	9,000	360,000	NA	NA	No LPH or sheen
	07/26/96		6.62	10.50	530	25	60	46	4,800	86,000	NA	NA	No LPH or sheen
	10/30/96		7.09	10.03	180	9.8	58	38	3,400	28,000	NA	NA	No LPH or sheen
	01/31/97		3.65	13.47	300	18	48	37	3,800	45,000	NA	NA	No LPH or sheen
	04/10/97		NM	NC	NS	NS	NS	NS	NS	NS	NS	NS	Not measured
	07/10/97		7.44	9.68	70	<25	<25	<25	3,500	18,000	NA	NA	No LPH or sheen
	10/08/97		NM	NC	NS	NS	NS	NS	NS	NS	NS	NS	Not measured
	01/28/98		3.06	14.06	1.0	<0.5	<0.5	0.67	100	250 <sup>c</sup>	NA	NA	No LPH or sheen
	04/14/98		3.10	14.02	NS	NS	NS	NS	NS	NS	NS	NS	Not Measured
	07/30/98		5.78	11.34	1.4	<0.5	<0.5	<0.5	100	670	NA	NA	No LPH or sheen
	10/19/98		6.25	10.87	NS	NS	NS	NS	NS	NS	NS	NS	No LPH or sheen
	01/13/99		5.98	11.14	<2.5	<2.5	<2.5	<2.5	273	530	NA	NA	No LPH or sheen

**TABLE 1**  
**GROUND WATER MONITORING DATA**

Exxon Service Station No. 7-0104

1725 Park Street  
 Alameda, California

Monitoring Well	Date	Reference Elevation (feet)	Depth to Water (feet)	Ground Water Elevation (feet)		Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	TPPH as gasoline (µg/L)	MTBE (µg/L)	Oxygenate Compounds (µg/L)	Comments
				Water	Elevation								
MW-8	09/12/94	16.33	6.42	9.91	<0.5	<0.5	<0.5	<0.5	<0.5	<50 <sup>a</sup>	NA	NA	No LPH or sheen
	10/01/94		6.62	9.71	<0.5	<0.5	<0.5	<0.5	<0.5	<50 <sup>a</sup>	NA	NA	No LPH or sheen
	01/13/95		5.25	11.08	<0.5	<0.5	<0.5	<0.5	<0.5	<50 <sup>a</sup>	NA	NA	No LPH or sheen
	04/27/95		6.00	10.33	<0.5	<0.5	<0.5	<0.5	<0.5	<50	NA	NA	No LPH or sheen
	08/03/95		6.28	10.05	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<2.5	NA	No LPH or sheen
	10/17/95		6.93	9.40	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<5.0	NA	No LPH or sheen
	01/24/96		5.71	10.62	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<5.0	NA	No LPH or sheen
	04/24/96		5.52	10.81	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<5.0	NA	No LPH or sheen
	07/26/96		6.27	10.06	<0.5	<0.5	<0.5	<0.5	<0.5	<50	230	NA	No LPH or sheen
	10/30/96		6.69	9.64	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<5.0	NA	No LPH or sheen
	01/31/97		5.18	11.15	NS	NS	NS	NS	NS	NS	NS	NS	No LPH or sheen
	04/10/97		NM	NC	NS	NS	NS	NS	NS	NS	NS	NS	Not measured
	07/10/97		NM	NC	NS	NS	NS	NS	NS	NS	NS	NS	Not measured
	10/08/97		NM	NC	NS	NS	NS	NS	NS	NS	NS	NS	Not measured
	01/28/98		5.11	11.22	NS	NS	NS	NS	NS	NS	NS	NS	No LPH or sheen
	04/14/98		5.02	11.31	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<2.5	NA	No LPH or sheen
	07/30/98		5.84	10.49	<0.5	<0.5	<0.5	<0.5	<0.5	<50	6.6	NA	No LPH or sheen
	10/19/98		6.07	10.26	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<2.5	NA	No LPH or sheen
	01/13/99		5.59	10.74	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<2.0	NA	No LPH or sheen

**TABLE 1**  
**GROUND WATER MONITORING DATA**

Exxon Service Station No. 7-0104

1725 Park Street

Alameda, California

Monitoring Well	Date	Reference Elevation		Ground Water Elevation		Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPPH as gasoline	MTBE	Oxygenate Compounds	Comments
		feet	feet	feet	feet	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	
MW-9	09/12/94	15.62	6.84	8.78	<0.5	<0.5	<0.5	<0.5	<0.5	<50 <sup>a</sup>	NA	NA	No LPH or sheen
	10/01/94		6.97	8.65	<0.5	<0.5	<0.5	<0.5	<0.5	<50 <sup>a</sup>	NA	NA	No LPH or sheen
	01/13/95		6.18	9.44	<0.5	<0.5	<0.5	<0.5	<0.5	<50 <sup>a</sup>	NA	NA	No LPH or sheen
	04/27/95		6.58	9.04	<0.5	<0.5	<0.5	<0.5	<0.5	<50	NA	NA	No LPH or sheen
	08/03/95		6.72	8.90	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<2.5	NA	No LPH or sheen
	10/17/95		7.09	8.53	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<5.0	NA	No LPH or sheen
	01/24/96		6.46	9.16	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<5.0	NA	No LPH or sheen
	04/24/96		6.43	9.19	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<5.0	NA	No LPH or sheen
	07/26/96		6.80	8.82	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<5.0	NA	No LPH or sheen
	10/30/96		6.94	8.68	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<5.0	NA	No LPH or sheen
	01/31/97		6.10	9.52	NS	NS	NS	NS	NS	NS	NS	NS	No LPH or sheen
	04/10/97		NM	NC	NS	NS	NS	NS	NS	NS	NS	NS	Not measured
	07/10/97		NM	NC	NS	NS	NS	NS	NS	NS	NS	NS	Not measured
	10/08/97		NM	NC	NS	NS	NS	NS	NS	NS	NS	NS	Not measured
	01/28/98		5.66	9.96	NS	NS	NS	NS	NS	NS	NS	NS	No LPH or sheen
	04/14/98		NM	NC	NS	NS	NS	NS	NS	NS	NS	NS	Not Measured
	07/30/98		6.17	9.45	NS	NS	NS	NS	NS	NS	NS	NS	No LPH or sheen
	10/19/98		6.40	9.22	NS	NS	NS	NS	NS	NS	NS	NS	No LPH or sheen
	01/13/99		6.28	9.34	NS	NS	NS	NS	NS	NS	NS	NS	No LPH or sheen

**TABLE 1**  
**GROUND WATER MONITORING DATA**

Exxon Service Station No. 7-0104

1725 Park Street  
 Alameda, California

Monitoring Well	Date	Reference Elevation		Depth to Water		Ground Water Elevation		Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPPH as gasoline	MTBE	Oxygenate Compounds	Comments
		(feet)	(feet)	(feet)	(feet)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	
MW-10	09/12/94	16.79	7.04	9.75	<0.5	<0.5	1.6	<0.5	71*	NA	NA	No LPH or sheen			
	10/01/94		7.30	9.49	1.1	<0.5	2.8	0.73	330*	NA	NA	No LPH or sheen			
	01/13/95		6.04	10.75	<0.5	<0.5	<0.5	<0.5	90*	NA	NA	No LPH or sheen			
	04/27/95		6.66	10.13	<0.5	<0.5	5.4	1.3	140	NA	NA	No LPH or sheen			
	08/03/95		7.23	9.56	<0.5	<0.5	<0.5	<0.5	150	<2.5	NA	No LPH or sheen			
	10/17/95		7.93	8.86	<0.5	<0.5	<0.5	<0.5	<50	95	NA	No LPH or sheen			
	01/24/96		6.43	10.36	1.6	0.52	62	28	760	24	NA	No LPH or sheen			
	04/24/96		6.42	10.37	<0.5	<0.5	7.1	<0.5	110	6.8	NA	No LPH or sheen			
	07/26/96		7.47	9.32	<0.5	<0.5	12	0.86	140	<5.0	NA	No LPH or sheen			
	10/30/96		7.88	8.91	<0.5	<0.5	<0.5	<0.5	<50	5.6	NA	No LPH or sheen			
	01/31/97		5.88	10.91	<0.5	<0.5	<0.5	<0.5	<50	10	NA	No LPH or sheen			
	04/10/97	NM	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	Not measured		
	07/10/97		7.32	9.47	<0.5	<0.5	<0.5	<0.5	<50	<2.5	NA	No LPH or sheen			
	10/08/97	NM	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	Not measured		

Well destroyed on November 12, 1997

**TABLE 1**  
**GROUND WATER MONITORING DATA**

Exxon Service Station No. 7-0104

1725 Park Street  
Alameda, California

Monitoring Well	Date	Reference Elevation		Ground Water Elevation		Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPPH as gasoline	MTBE	Oxygenate Compounds	Comments
		feet	feet	feet	feet	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	
MW-11	10/17/95	18.04	7.72	10.32	3,800	150	950	4,500	34,000	890	NA	No LPH or sheen	
	01/24/96		5.97	12.07	3,800	1,200	2,100	9,800	44,000	<500	NA	No LPH or sheen	
	04/24/96		5.84	12.20	2,900	1,400	1,700	8,300	34,000	720	NA	No LPH or sheen	
	07/26/96		6.98	11.06	4,600	4,200	950	9,500	39,000	800	NA	No LPH or sheen	
	10/30/96		7.54	10.50	4,200	3,600	2,100	9,600	53,000	990	NA	No LPH or sheen	
	01/31/97		5.00	13.04	170	2,500	940	4,300	23,000	310 <sup>c</sup>	NA	No LPH or sheen	
	04/10/97		NM	NC	1,200	440	970	6,400	29,000	200	NA	No LPH or sheen	
	07/10/97		7.30	10.74	1,700	870	1,900	12,000	42,000	690	NA	No LPH or sheen	
	10/08/97		7.62	10.42	1,700	2,500	1,400	9,900	42,000	1,100	1,300 <sup>c</sup>	No LPH or sheen	
	01/28/98		4.77	13.27	2,400	3,500	1,700	7,900	35,000	6,800 <sup>c</sup>	NA	No LPH or sheen	
	04/14/98		4.68	13.36	1,700	250	500	2,000	15,000	1,200 <sup>c</sup>	NA	No LPH or sheen	
	07/30/98		6.33	11.71	1,600	560	1,000	4,300	24,000	1,700	NA	No LPH or sheen	
	10/19/98		6.65	11.39	1,200	2,500	920	4,900	29,000	1,700	NA	No LPH or sheen	
	01/13/99		6.42	11.62	2,210	6,440	2,030	10,600	50,900	1,920	NA	No LPH or sheen	

**TABLE 1**  
**GROUND WATER MONITORING DATA**

Exxon Service Station No. 7-0104

1725 Park Street  
Alameda, California

Monitoring Well	Date	Reference Elevation (feet)	Depth to Water (feet)	Ground Water Elevation		Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPPH as gasoline	MTBE	Oxygenate Compounds	Comments
				(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	
MW-12	10/17/95	16.30	6.38	9.92	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<5.0	NA	No LPH or sheen
	01/24/96		4.86	11.44	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<5.0	NA	No LPH or sheen
	04/24/96		4.46	11.84	<0.5	0.68	<0.5	<0.5	0.72	<50	<5.0	NA	No LPH or sheen
	07/26/96		5.90	10.40	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<5.0	NA	No LPH or sheen
	10/30/96		6.56	9.74	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<5.0	NA	No LPH or sheen
	01/31/97		4.57	11.73	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<5.0	NA	No LPH or sheen
	04/10/97		NM	NC	NS	NS	NS	NS	NS	NS	NS	NS	Not measured
	07/10/97		NM	NC	NS	NS	NS	NS	NS	NS	NS	NS	Not measured
	10/08/97		NM	NC	NS	NS	NS	NS	NS	NS	NS	NS	Not measured
	01/28/98		3.90	12.40	NS	NS	NS	NS	NS	NS	NS	NS	No LPH or sheen
	04/14/98		3.67	12.63	NS	NS	NS	NS	NS	NS	NS	NS	No LPH or sheen
	07/30/98		5.00	11.30	NS	NS	NS	NS	NS	NS	NS	NS	No LPH or sheen
	10/19/98		NM	NC	NS	NS	NS	NS	NS	NS	NS	NS	No LPH or sheen
	01/13/99		5.19	11.11	NS	NS	NS	NS	NS	NS	NS	NS	No LPH or sheen

**TABLE 1**  
**GROUND WATER MONITORING DATA**

Exxon Service Station No. 7-0104

1725 Park Street

Alameda, California

Monitoring Well	Date	Reference Elevation (feet)	Depth to Water (feet)	Ground Water Elevation		Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	TPPH as gasoline (µg/L)	MTBE (µg/L)	Oxygenate Compounds (µg/L)	Comments
				Benzene (µg/L)	Toluene (µg/L)								
EW-1	09/12/94	16.22	6.13	10.09	40	<0.5	10	5.4	400 <sup>a</sup>	NA	NA	NA	No LPH or sheen
	10/01/94		7.63	8.59	<0.5	4.4	30	11	3,400 <sup>a</sup>	NA	NA	NA	No LPH or sheen
	01/13/95		11.46	4.76	40	<0.5	12	16	680 <sup>a</sup>	NA	NA	NA	No LPH or sheen
	04/27/95		15.47	0.75	NS	NS	NS	NS	NS	NS	NS	NS	No LPH or sheen
	08/03/95		13.85	2.37	2.7	<1.2	<1.2	<1.2	<125	590	NA	NA	No LPH or sheen
	10/17/95		8.05	8.17	220	<0.5	160	36	3,600	400	NA	NA	No LPH or sheen
	01/24/96		11.07	5.15	4.3	<0.5	1.3	0.53	64	260	NA	NA	No LPH or sheen
	04/24/96		6.20	10.02	130	2.3	35	2.1	740	3,000	NA	NA	No LPH or sheen
	07/26/96		13.93	2.29	<0.5	<0.5	<0.5	<0.5	<50	960	NA	NA	No LPH or sheen
	10/30/96		13.74	2.48	0.52	<0.5	<0.5	<0.5	<50	5,300	NA	NA	No LPH or sheen
	01/31/97		8.40	7.82	NS	NS	NS	NS	NS	NS	NS	NS	No LPH or sheen
	04/10/97		NM	NC	NS	NS	NS	NS	NS	NS	NS	NS	Not measured
	07/10/97		NM	NC	NS	NS	NS	NS	NS	NS	NS	NS	Not measured
	10/08/97		NM	NC	NS	NS	NS	NS	NS	NS	NS	NS	Not measured
	01/28/98		3.35	12.87	NS	NS	NS	NS	NS	NS	NS	NS	No LPH or sheen
	04/14/98		3.52	12.70	NS	NS	NS	NS	NS	NS	NS	NS	No LPH or sheen
	07/30/98		5.48	10.74	NS	NS	NS	NS	NS	NS	NS	NS	No LPH or sheen
	10/19/98		5.77	10.45	NS	NS	NS	NS	NS	NS	NS	NS	No LPH or sheen
	01/13/99		5.49	10.73	NS	NS	NS	NS	NS	NS	NS	NS	No LPH or sheen

**TABLE 1**  
**GROUND WATER MONITORING DATA**

Exxon Service Station No. 7-0104

1725 Park Street  
Alameda, California

Monitoring Well	Date	Reference Elevation		Ground Water Elevation		Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPPH as gasoline	MTBE	Oxygenate Compounds	Comments	
		Well	Date	(feet)	Depth to Water	(feet)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)		
EW-2	09/12/94	16.05		6.09		9.96	2,000	79	180	290	8,800 <sup>a</sup>	NA	NA	No LPH or sheen
	10/01/94			7.32		8.73	1,400	6.7	700	310	9,500 <sup>a</sup>	NA	NA	No LPH or sheen
	01/13/95			14.38		1.67	930	270	21	280	5,700 <sup>a</sup>	NA	NA	No LPH or sheen
	04/27/95			15.23		0.82	NS	NS	NS	NS	NS	NS	NS	No LPH or sheen
	08/03/95			7.19		8.86	170	27	36	64	830	1,600	NA	No LPH or sheen
	10/17/95			18.97		-2.92	<0.5	<0.5	<0.5	5.1	180	3,600	NA	No LPH or sheen
	01/24/96			20.32		-4.27	290	82	14	170	1,700	6,400	NA	No LPH or sheen
	04/24/96			9.46		6.59	670	200	110	490	3,500	7,300	NA	No LPH or sheen
	07/26/96			16.50		-0.45	250	56	10	220	1,400	14,000	NA	No LPH or sheen
	10/30/96			20.30		-4.25	200	44	8.8	190	1,500	13,000	NA	No LPH or sheen
	01/31/97			19.21		-3.16	NS	NS	NS	NS	NS	NS	NS	No LPH or sheen
	04/10/97			NM		NC	NS	NS	NS	NS	NS	NS	NS	Not measured
	07/10/97			NM		NC	NS	NS	NS	NS	NS	NS	NS	Not measured
	10/08/97			NM		NC	NS	NS	NS	NS	NS	NS	NS	Not measured
	01/28/98			3.35		12.70	NS	NS	NS	NS	NS	NS	NS	No LPH or sheen
	04/14/98			3.45		12.60	NS	NS	NS	NS	NS	NS	NS	No LPH or sheen
	07/30/98			11.50		4.55	NS	NS	NS	NS	NS	NS	NS	No LPH or sheen
	10/19/98			5.67		10.38	NS	NS	NS	NS	NS	NS	NS	No LPH or sheen
	01/13/99			9.57		6.48	NS	NS	NS	NS	NS	NS	NS	No LPH or sheen

**TABLE 1**  
**GROUND WATER MONITORING DATA**

Exxon Service Station No. 7-0104

1725 Park Street  
 Alameda, California

Monitoring Well	Date	Reference Elevation		Ground Water Elevation		Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPPH as gasoline	MTBE	Oxygenate Compounds	Comments
		feet	feet	feet	feet	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	
EW-3	09/12/94	16.02	6.12	9.96	44	5.9	12	31	300 <sup>a</sup>	NA	NA	No LPH or sheen	
	10/01/94		10.52	5.50	12	0.42	1.7	3.7	140 <sup>a</sup>	NA	NA	No LPH or sheen	
	01/13/95		18.13	-2.11	4.6	7.6	1.2	6.6	230 <sup>a</sup>	NA	NA	No LPH or sheen	
	04/27/95		23.07	-7.05	NS	NS	NS	NS	NS	NS	NS	No LPH or sheen	
	08/03/95		22.90	-6.88	<2.0	<2.0	<2.0	<2.0	<200	1,400	NA	No LPH or sheen	
	10/17/95		22.87	-6.85	4.4	<0.5	<0.5	<0.5	74	2,400	NA	No LPH or sheen	
	01/24/96		20.97	-4.95	16	<0.5	<0.5	<0.5	120	2,300	NA	No LPH or sheen	
	04/24/96		18.10	-2.08	34	3.7	8.9	11	180	3,800	NA	No LPH or sheen	
	07/26/96		13.14	2.88	45	0.7	<0.5	2.1	180	2,000	NA	No LPH or sheen	
	10/30/96		9.24	6.78	60	8.2	<0.5	100	660	2,800	NA	No LPH or sheen	
	01/31/97		11.10	4.92	NS	NS	NS	NS	NS	NS	NS	No LPH or sheen	
	04/10/97		NM	NC	NS	NS	NS	NS	NS	NS	NS	Not measured	
	07/10/97		NM	NC	NS	NS	NS	NS	NS	NS	NS	Not measured	
	10/08/97		NM	NC	NS	NS	NS	NS	NS	NS	NS	Not measured	
	01/28/98		3.42	12.60	NS	NS	NS	NS	NS	NS	NS	No LPH or sheen	
	04/14/98		3.50	12.52	NS	NS	NS	NS	NS	NS	NS	No LPH or sheen	
	07/30/98		18.57	-2.55	NS	NS	NS	NS	NS	NS	NS	No LPH or sheen	
	10/19/98		5.65	10.37	NS	NS	NS	NS	NS	NS	NS	No LPH or sheen	
	01/13/99		13.85	2.17	NS	NS	NS	NS	NS	NS	NS	No LPH or sheen	

**TABLE 1**  
**GROUND WATER MONITORING DATA**

Exxon Service Station No. 7-0104

1725 Park Street  
Alameda, California

Monitoring Well	Date	Reference Elevation (feet)	Depth to Water (feet)	Ground Water Elevation		Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	TPPH as gasoline (µg/L)	MTBE (µg/L)	Oxygenate Compounds (µg/L)	Comments
				Benzene	Toluene								
EW-4	09/12/94	16.61	5.69	10.92	1,700	12	210	77	4,000*	NA	NA	NA	No LPH or sheen
	10/01/94		7.90	8.71	100	1.5	15	11	460*	NA	NA	NA	No LPH or sheen
	01/13/95		11.36	5.25	89	8.8	1.6	82	520*	NA	NA	NA	No LPH or sheen
	04/27/95		16.30	0.31	NS	NS	NS	NS	NS	NS	NS	NS	No LPH or sheen
	08/03/95		6.45	10.16	3,100	1,100	2,000	8,200	42,000	17,000	NA	NA	No LPH or sheen
	10/17/95		15.89	0.72	6.3	<0.5	<0.5	<0.5	92	2,500	NA	NA	No LPH or sheen
	01/24/96		6.03	10.58	79	2.5	2.9	10	220	9,200	NA	NA	No LPH or sheen
	04/24/96		4.97	11.64	49	36	69	1,100	4,600	860	NA	NA	No LPH or sheen
	07/26/96		6.54	10.07	610	6.2	200	300	2,900	15,000	NA	NA	No LPH or sheen
	10/30/96		6.53	10.08	68	11	<2.5	71	550	3,400	NA	NA	No LPH or sheen
	01/31/97		3.98	12.63	NS	NS	NS	NS	NS	NS	NS	NS	No LPH or sheen
	04/10/97		NM	NC	NS	NS	NS	NS	NS	NS	NS	NS	Not measured
	07/10/97		NM	NC	NS	NS	NS	NS	NS	NS	NS	NS	Not measured
	10/08/97		NM	NC	NS	NS	NS	NS	NS	NS	NS	NS	Not measured
	01/28/98		3.22	13.39	NS	NS	NS	NS	NS	NS	NS	NS	No LPH or sheen
	04/14/98		3.20	13.41	NS	NS	NS	NS	NS	NS	NS	NS	No LPH or sheen
	07/30/98		4.89	11.72	NS	NS	NS	NS	NS	NS	NS	NS	No LPH or sheen
	10/19/98		5.16	11.45	NS	NS	NS	NS	NS	NS	NS	NS	No LPH or sheen
	01/13/99		5.57	11.04	NS	NS	NS	NS	NS	NS	NS	NS	No LPH or sheen

**TABLE 1**  
**GROUND WATER MONITORING DATA**

Exxon Service Station No. 7-0104

1725 Park Street

Alameda, California

Monitoring Well	Date	Reference Elevation (feet)	Depth to Water (feet)	Ground Water Elevation		Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPPH as gasoline	MTBE	Oxygenate Compounds	Comments
				(feet)	(feet)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	
EW-5	09/12/94	16.51	6.30	10.21	26	1.7	11	12	180 <sup>a</sup>	NA	NA	NA	No LPH or sheen
	10/01/94		11.83	4.68	16	0.92	5.7	8.5	130 <sup>a</sup>	NA	NA	NA	No LPH or sheen
	01/13/95		12.54	3.97	0.6	0.8	0.6	2.9	130 <sup>a</sup>	NA	NA	NA	No LPH or sheen
	04/27/95		13.11	3.40	NS	NS	NS	NS	NS	NS	NS	NS	No LPH or sheen
	08/03/95		11.99	4.52	<0.5	<0.5	<0.5	<0.5	<0.5	70	210	NA	No LPH or sheen
	10/17/95		13.43	3.08	1.5	<0.5	<0.5	3.0	78	50	NA	NA	No LPH or sheen
	01/24/96		9.72	6.79	280	66	22	370	2,500	350	NA	NA	No LPH or sheen
	04/24/96		8.13	8.38	690	240	380	1,300	6,400	400	NA	NA	No LPH or sheen
	07/26/96		10.00	6.51	82	2.5	2.4	100	850	84	NA	NA	No LPH or sheen
	10/30/96		9.82	6.69	110	5.1	2.2	120	1,200	68	NA	NA	No LPH or sheen
	01/31/97		9.00	7.51	NS	NS	NS	NS	NS	NS	NS	NS	No LPH or sheen
	04/10/97		NM	NC	NS	NS	NS	NS	NS	NS	NS	NS	Not measured
	07/10/97		NM	NC	NS	NS	NS	NS	NS	NS	NS	NS	Not measured
	10/08/97		NM	NC	NS	NS	NS	NS	NS	NS	NS	NS	Not measured
	01/28/98		3.54	12.97	NS	NS	NS	NS	NS	NS	NS	NS	No LPH or sheen
	04/14/98		3.65	12.86	NS	NS	NS	NS	NS	NS	NS	NS	No LPH or sheen
	07/30/98		7.63	8.88	NS	NS	NS	NS	NS	NS	NS	NS	No LPH or sheen
	10/19/98		5.75	10.76	NS	NS	NS	NS	NS	NS	NS	NS	No LPH or sheen
	01/13/99		7.03	9.48	NS	NS	NS	NS	NS	NS	NS	NS	No LPH or sheen

<sup>a</sup> Total volatile hydrocarbons by DHS /LUFT Manual Method.

Results obtained from a 1:10 dilution analyzed on January 17, 1995.

Methyl tertiary butyl ether by EPA Method 8260 (GC/MS)

Reference elevation = Elevation surveyed relative mean sea level.

Depth to ground water = Measured from notch/mark on north edge of well casing.

Ground water elevation = adjusted ground water elevations, based on the specific gravity of gasoline as 0.80.

Total purgeable petroleum hydrocarbons by EPA Method 8015 Modified or DHS LUFT Method or total petroleum hydrocarbons (TPH) by EPA Method 8015 Modified.

MTBE = Methyl tertiary butyl ether by EPA Method 8015 Modified except as otherwise noted.

Oxygenate compounds = Ethanol, t-butanol, MTBE, diisopropyl ether, ethyl-t-butyl ether, and t-amyl methyl by EPA Method 8260.

µg/L = Micrograms per liter.

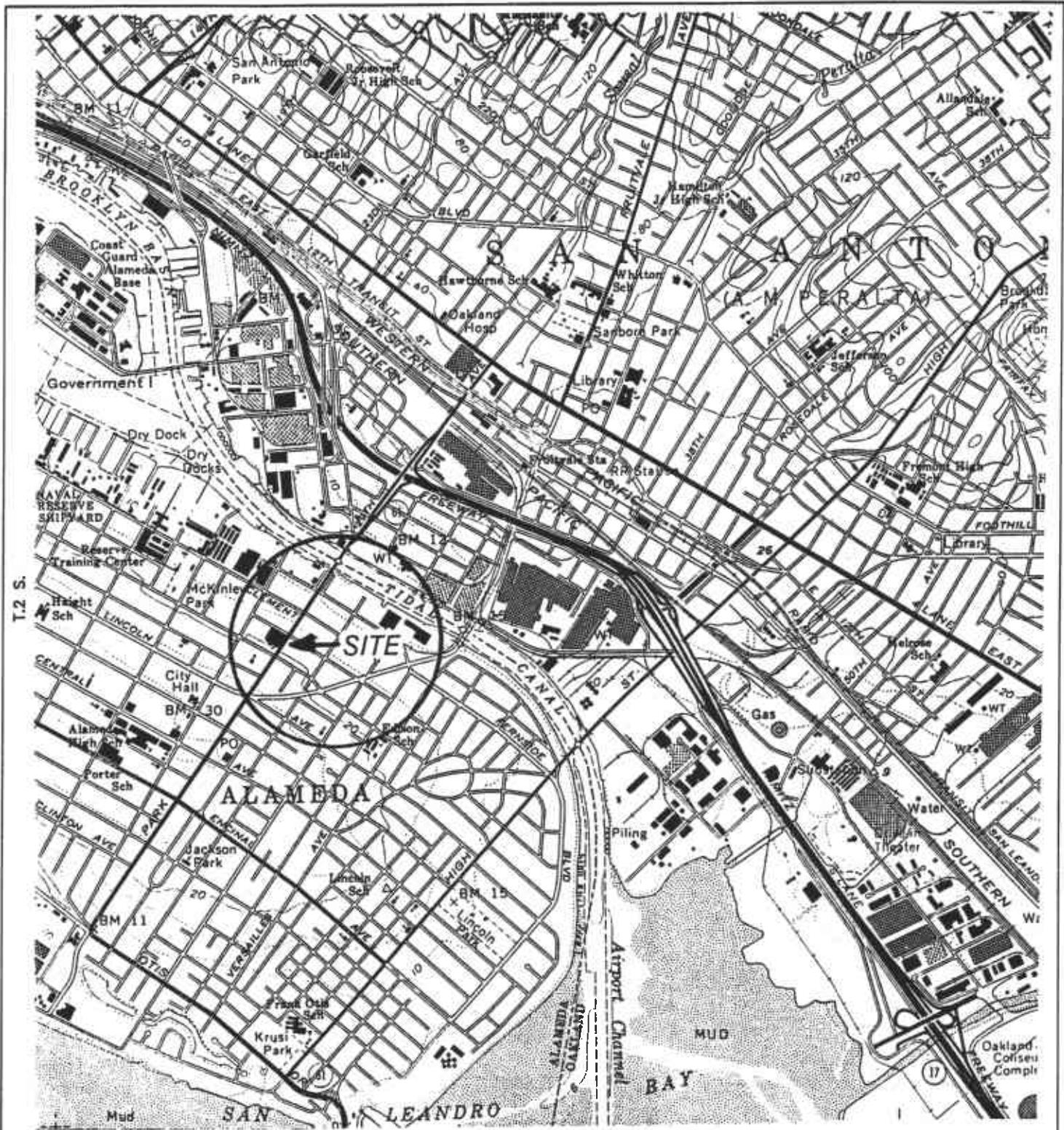
LPH = Liquid-phase petroleum hydrocarbons.

NS = Not sampled.

NA = Not analyzed.

NM = Not measured.

NC = Not calculated.



GENERAL NOTES:  
BASE MAP FROM U.S.G.S.  
OAKLAND EAST, CA  
7.5 MINUTE TOPOGRAPHIC  
PHOTOREVISED 1980

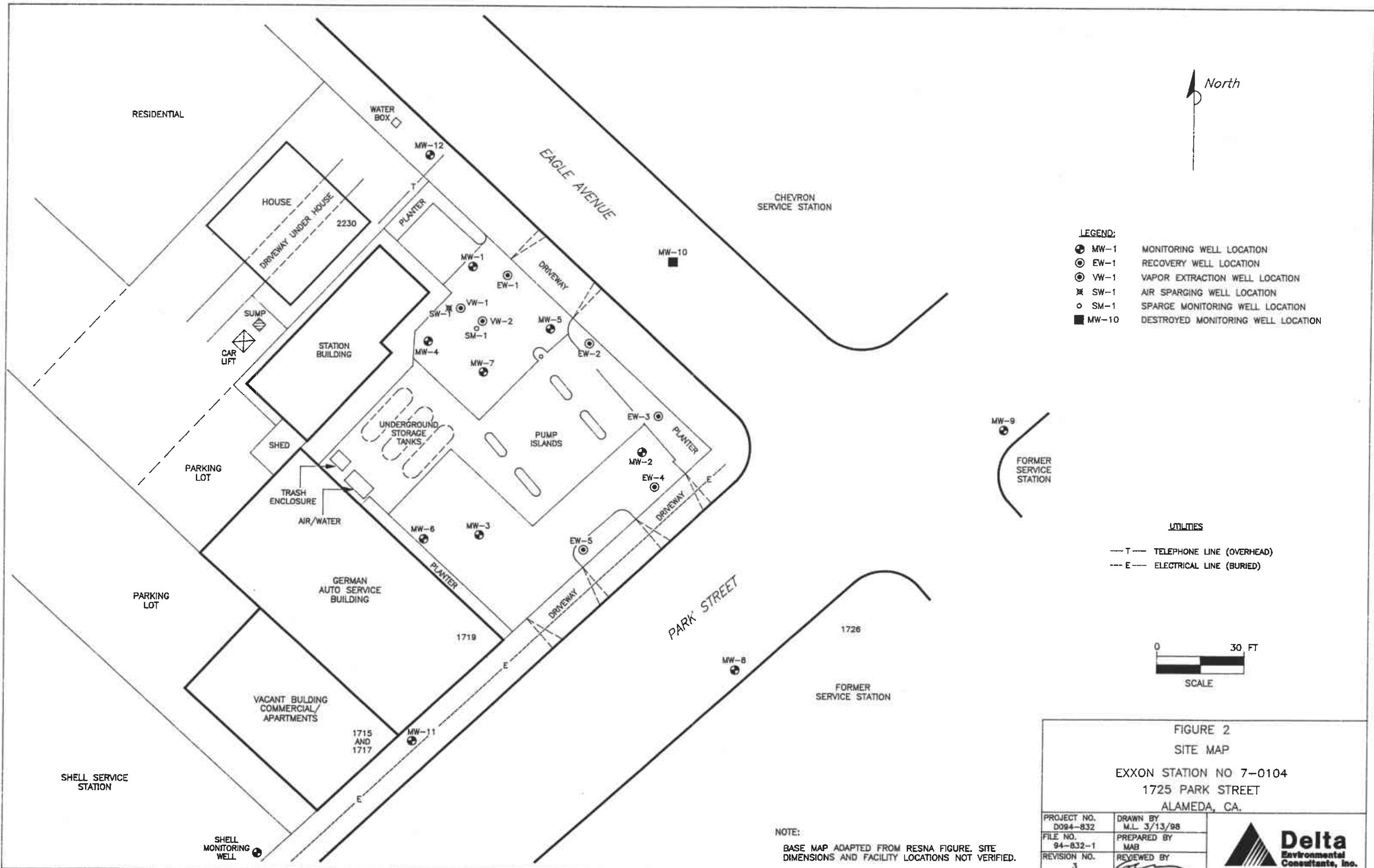


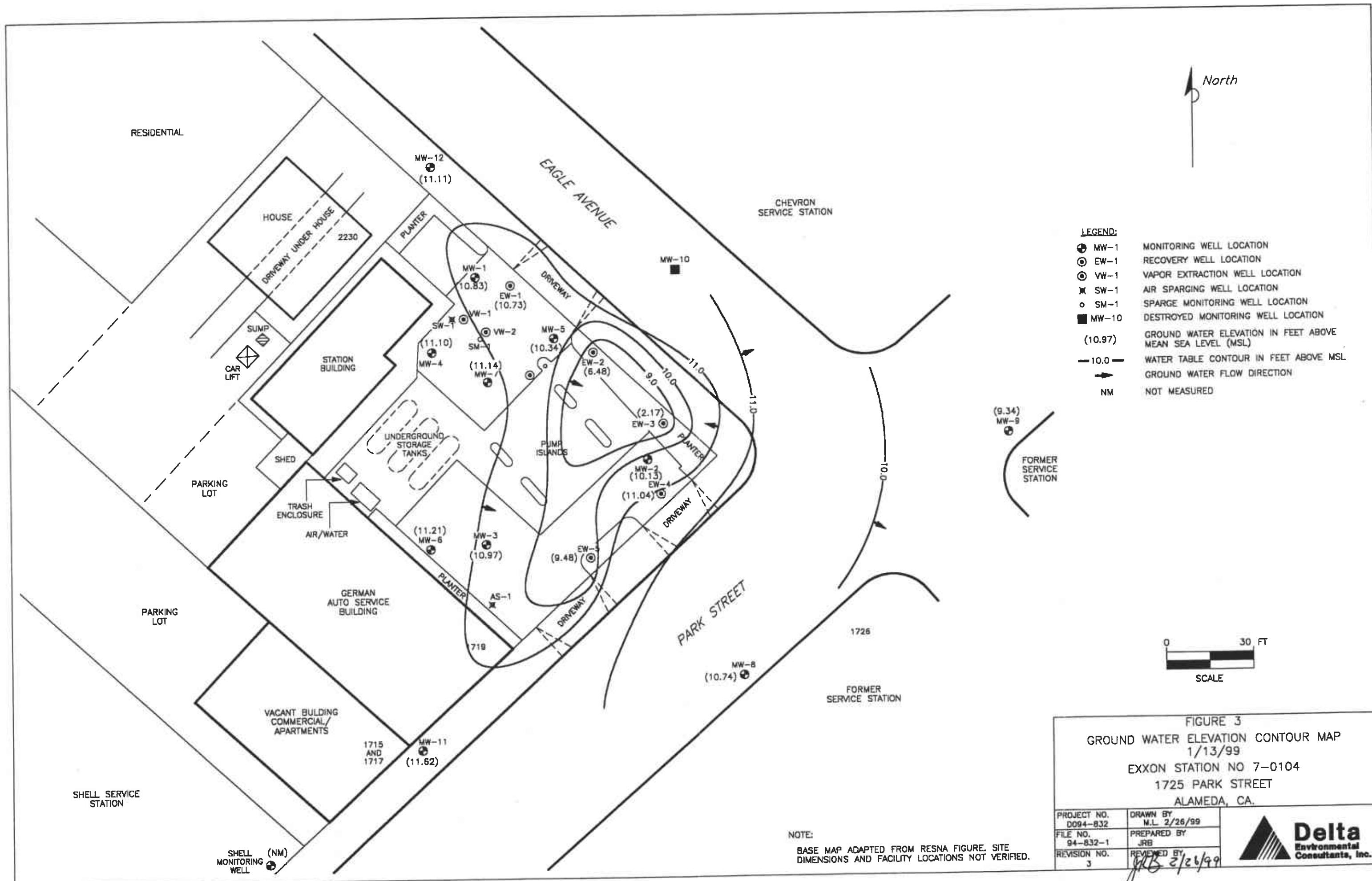
0 2000 FT  
SCALE 1 : 24,000

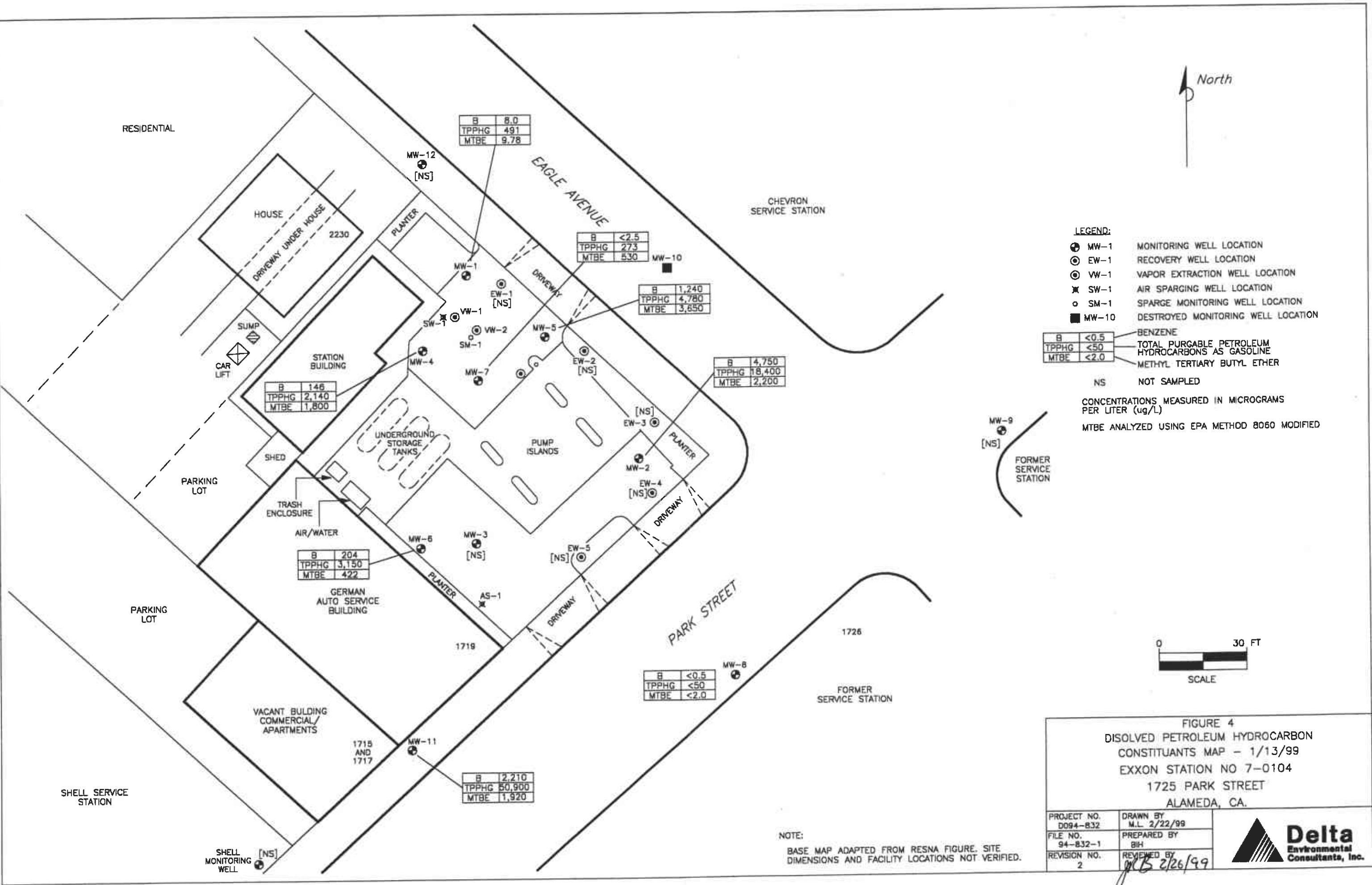
FIGURE 1  
SITE LOCATION MAP  
EXXON STATION NO 7-0104  
1725 PARK STREET  
ALAMEDA, CA.

PROJECT NO. D084-832	DRAWN BY L.H. 9/27/84
FILE NO. —	PREPARED BY RDM
REVISION NO. 1	REVIEWED BY J.D. 05/94









**ENCLOSURE A**

**Field Methods and Procedures**

## FIELD METHODS AND PROCEDURES

### 1.0 GROUND WATER AND LIQUID-PHASE PETROLEUM HYDROCARBON DEPTH ASSESSMENT

A water/hydrocarbon interface probe was used to assess the liquid-phase hydrocarbon (LPH) thickness, if present, and a water level indicator was used to measure the ground water depth in monitoring wells that do not contain LPH. Depth to ground water was measured from the top of each monitoring well casing. The tip of the water level indicator was subjectively analyzed for hydrocarbon sheen.

### 2.0 SUBJECTIVE ANALYSIS OF GROUND WATER

Prior to purging, a water sample was collected from the monitoring well for subjective assessment. The sample was retrieved by gently lowering a clean, disposable bailer to approximately one-half the bailer length past the air/liquid interface. The bailer was then retrieved, and the sample contained within the bailer was examined for floating LPH and the appearance of a LPH sheen.

### 3.0 MONITORING WELL PURGING AND SAMPLING

Monitoring wells were purged using a centrifugal pump until three well volumes of water had been removed. Ground water removed from the wells was discharged to the sanitary sewer after treatment through the ground water remediation system located at the subject site. After purging, ground water levels were allowed to stabilize. A ground water sample was then removed from each of the wells using a disposable bailer. If the well was purged dry, it was allowed to sufficiently recharge and a sample was collected. Samples were collected in air-tight vials, appropriately labeled, and stored on ice from the time of collection through the time of delivery to the laboratory. A chain-of-custody form was completed to ensure sample integrity. Ground water samples were transported to the laboratory and analyzed within the EPA-specified holding times for the requested analyses.

**ENCLOSURE B**

**Historical Ground Water Level Data and Analytical Results**  
**(June 7, 1988 through February 25, 1994)**

**TABLE 1**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
**Exxon Service Station No. 7-C104**  
**1725 Park Street**  
**Alameda, California**  
**(Page 1 of 11)**

Well ID # (TOC)	Sampling Date	SUBJ < . . . . . feet . . . . . >	DTW	Elev.	TPHg < . . . . . parts per billion . . . . . >	S	T	E	X
MW-1 (17.35)	06/07/88	NM	NM	—	27,000	5,000	77	1,100	2,700
	06/10/88#	NLPH	6.35	11.00					
	01/17/89	NLPH	5.81	11.54	6,800	2,000	91	800	1,500
	01/24/89#	NLPH	5.16	12.19					
	06/01/89	sheen	6.27	11.08	1,700	170	6.9	13	230
	09/18/89	NLPH	7.11	10.24	2,100	9.0	53	18	130
	10/20/89#	NLPH	7.28	10.07					
	11/22/89#	NLPH	7.02	10.33					
	12/11/89	NLPH	6.60	10.75	5,800	200	42	290	330
	02/13/90#	NLPH	6.02	11.33					
	03/07/90a#	NM	NM	—					
	03/13/90	NLPH	5.91	11.44	2,300	430	14	16	220
	04/18/90#	NLPH	6.18	11.17					
	05/23/90#	NLPH	6.29	11.06					
	06/14/90	NLPH	6.19	11.28	32,000	1,400	19	<5	120
	08/21/90#	NLPH	7.03	10.32					
	09/19/90	NLPH	7.26	10.09	950	290	2.9	<0.5	27
	12/17/90	NLPH	6.75	10.60	2,100	550	13	350	110
	01/31/91#	NLPH	6.78	10.57					
	02/25/91#	NLPH	6.59	10.76					
	03/19/91	NLPH	5.85	11.50	1,400	900	45	390	150
	04/22/91#	sheen	5.72	11.63					
	05/17/91#	NLPH	6.00	11.35					
	07/24/91	NLPH	6.79	10.56	9,700	1,300	670	950	2,100
	09/10/91#	NLPH	7.25	10.10					
	09/23/91#	NLPH	7.33	10.02					
	10/21/91#	NLPH	7.53	9.82					
	10/22/91	NM	NM	—	540	220	1.8	110	7.8
	11/18/91#	NLPH	7.13	10.22					
	12/11/91#	NLPH	7.25	10.10					
	01/21/92	NLPH	6.54	10.81	1,800	650	23	300	64
	02/20/92#	NLPH	4.82	12.53					
	03/19/92#	NLPH	5.24	12.11					
	04/24/92	NLPH	5.71	11.64	4,900	1,500	78	660	250
	05/13/92#	NLPH	5.99	11.36					
	06/24/92#	NLPH	6.65	10.70					
	07/16/92	NLPH	6.72	10.63	3,400	1,000	11	550	100
	08/19/92#	NLPH	7.07	10.28					
	09/24/92	NLPH	7.36	9.99	3,700	1,300	21	330	<10
	02/05/93	NLPH	5.21	12.14	11,000	2,400	160	1,400	790
	04/30/93	NLPH	5.88	11.47	6,500	330	320	640	1,300
	05/14/93#	NLPH	7.22	10.13					

See notes on page 11 of 11.

TABLE 1  
 CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA  
 Exxon Service Station No. 7-0104  
 1725 Park Street  
 Alameda, California  
 (Page 2 of 11)

Well ID # (TOC)	Sampling Date	SUBJ	DTW < ..... feet ..... >	Elev.	TPHg < ..... >	S	T	E	X
MW-1 cont. (17.35)	07/15/93	NLPH	8.01	9.34	7,600	270	62	1,100	1,000
	10/21/93#	NM	7.83	9.52					
	11/16/93	NLPH	8.69	8.66	840	18	1.4	72	17
	11/30/93#	NM	8.38	8.69					
	12/17/93#	NM	7.42	9.93					
	01/31/93#	NM	6.37	10.98					
	02/24-25/94	NLPH	6.23	10.84	810	15	9.0	98	58
MW-2 (16.67)	06/07/88	—	—	—	110,000	12,000	12,000	2,100	12,000
	06/10/88#	NLPH	6.20	10.47					
	01/17/89	NLPH	5.96	10.71	30,000	6,600	3,300	1,600	7,700
	01/24/89#	NLPH	5.04	11.63					
	06/01/89	sheen	6.32	10.35	8,700	330	280	680	1,200
	09/18/89	NLPH	6.73	9.94	17,000	520	280	570	220
	10/20/89#	NLPH	6.87	9.80					
	11/22/89#	NLPH	6.30	9.87					
	12/11/89	NLPH	6.57	10.10	32,000	1,000	850	310	1,200
	02/13/90#	NLPH	6.12	10.55					
	03/13/90	NLPH	6.02	10.65	39,000	3,500	1,500	2,100	3,900
	04/18/90#	NLPH	6.35	10.32					
	05/23/90#	NLPH	6.28	10.39					
	06/14/90	NLPH	6.14	10.53	34,000	3,300	730	1,600	3,900
	08/21/90#	NLPH	6.70	9.97					
	09/19/90	NLPH	6.84	9.83	63,000	670	180	390	1,000
	12/17/90	NLPH	6.46	10.21	140,000	3,700	2,500	3,000	8,300
	01/31/91#	sheen	6.66	10.01					
	02/25/91#	NLPH	6.50	10.17					
	03/19/91	sheen	5.76	10.91	48,000	4,500	1,600	2,100	5,500
	04/22/91#	NLPH	5.78	10.89					
	05/17/91#	NLPH	6.01	10.66					
	07/24/91	NLPH	6.43	10.24	49,000	3,500	2,200	2,000	6,400
	09/10/91#	NLPH	6.81	9.86					
	09/23/91#	NLPH	6.82	9.95					
	10/21/91#	NLPH	7.01	9.66					
	10/22/91	—	—	—	34,000	3,700	1,100	1,800	5,200
	11/18/91#	NLPH	6.66	10.01					
	12/11/91#	NLPH	6.85	9.82					
	01/21/92	NLPH	6.22	10.45	21,000	4,600	1,300	1,700	5,100
	02/20/92#	NLPH	5.28	11.39					
	03/19/92#	NLPH	5.34	11.33					
	04/24/92	sheen	5.75	10.92	36,000	5,000	970	2,300	5,200
	05/13/92#	NLPH	5.95	10.72					

See notes on page 11 of 11.

**TABLE 1**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
**Exxon Service Station No. 7-0104**  
**1725 Park Street**  
**Alameda, California**  
**(Page 3 of 11)**

Well ID # (TOC)	Sampling Date	SUBJ	DTW < ..... feet ..... >	Elev.	TPHg < ..... >	S	T	E	X
MW-2 cont. (16.67)	06/24/92#	NLPH	6.39	10.28					
	07/16/92	sheen	6.50	10.17	42,000	3,500	490	1,800	3,700
	08/19/92#	NLPH	6.69	9.98					
	09/24/92	sheen	6.74	9.93	26,000	3,600	670	1,700	3,300
	02/05/93#	0.01	5.56	11.10					
	04/30/93	sheen	5.78	10.89	280,000	11,000	6,500	5,500	160,000
	05/14/93#	NA	NA	—					
	07/15/93#	0.01	7.89	8.79					
	10/21/93#	NM	7.24	9.43					
	11/16/93#	0.02	8.37	8.32					
	11/30/93#	NM	7.93	8.74					
	12/17/93#	NM	7.74	8.93					
	01/31/94#	NM	6.32	10.35					
	02/24-25/94	NLPH	6.93	9.74	51,000	11,000	1,700	2,700	5,500
MW-3 (17.11)	06/07/88	NM	NM	—	28,000	6,000	80	940	1,900
	06/10/88#	NLPH	6.05	11.06					
	01/17/89	NLPH	5.49	11.62	5,300	2,500	230	590	1,100
	01/24/89#	NLPH	5.38	11.73					
	06/01/89	NLPH	5.96	11.15	5,400	330	300	570	580
	09/18/89	NLPH	6.65	10.46	12,000	620	170	350	860
	10/20/89#	NLPH	6.89	10.23					
	11/22/89#	NLPH	6.74	10.37					
	12/11/89	NLPH	6.37	10.74	14,000	1,100	150	670	690
	02/13/90#	NLPH	5.58	11.53					
	03/13/90	NLPH	5.48	11.63	18,000	6,300	200	1,100	1,100
	04/18/90#	NLPH	6.01	11.10					
	05/23/90#	NLPH	6.14	10.97					
	06/14/90	NLPH	5.83	11.28	9,500	1,300	880	310	1,800
	08/21/90#	NLPH	6.67	10.44					
	09/19/90	NLPH	6.88	10.23	16,000	5,000	65	1,500	450
	12/17/90	NLPH	6.46	10.65	6,700	1,500	64	650	460
	01/31/91#	NLPH	6.24	10.87					
	02/25/91#	NLPH	6.18	10.93					
	03/19/91	NLPH	5.35	11.76	18,000	4,200	2,100	1,100	1,200
	04/22/91#	NLPH	5.72	11.39					
	05/17/91#	NLPH	5.55	11.56					
	07/24/91	NLPH	6.41	10.70	38,000	6,200	990	2,900	9,600
	09/10/91#	NLPH	6.80	10.31					
	09/23/91#	NLPH	6.80	10.31					
	10/21/91#	NLPH	7.09	10.02					
	10/22/91	NM	NM	—	23,000	3,400	150	2,500	4,400

See pages 80-82, page 11 of 11

**TABLE 1**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
**Exxon Service Station No. 7-0104**  
 1725 Park Street  
 Alameda, California  
 (Page 4 of 11)

Well ID #	Sampling Date	SUBJ	DTW	Elev.	TPHg	S	T	E	X
(TOC)		< . . . . . >	feet		< . . . . . >	parts per billion			
MW-3 cont. (17.11)	11/18/91#	NLPH	6.74	10.37					
	12/11/91#	NLPH	6.79	10.32					
	01/21/92	NLPH	6.16	10.95	13,000	2,700	30	1,800	740
	02/20/92#	NLPH	4.89	12.22					
	03/19/92#	NLPH	4.85	12.25					
	04/24/92	NLPH	5.28	11.83	17,000	4,200	170	1,600	600
	05/13/92#	NLPH	5.58	11.53					
	06/24/92#	NLPH	6.22	10.89					
	07/16/92	NLPH	6.36	10.75	11,000	2,700	230	1,100	570
	08/19/92#	NLPH	6.65	10.46					
	09/24/92	NLPH	6.93	10.18	7,100	2,000	44	1,000	220
	02/05/93	NLPH	4.71	12.40	13,000	3,600	110	1,300	430
	04/30/93	NLPH	5.46	11.65	13,000	1,600	370	1,600	1,800
	05/14/93#	NLPH	6.53	10.58					
	07/15/93	NLPH	7.28	9.83	2,100	310	15	230	58
	10/21/93#	NM	7.42	9.69					
	11/16/93	NLPH	8.02	9.09	4,000	400	400	120	490
	11/30/93	—	7.79	9.32	—	—	—	—	—
	12/17/93#	NM	7.13	9.98					
	01/31/94#	NM	6.32	10.79					
	02/24-25/94	NLPH	6.04	11.07	3,300	280	52	150	400
MW-4 (17.34)	01/17/89	NLPH	5.36	11.98	19,000	1,000	1,500	360	2,200
	01/24/89#	NLPH	5.46	11.88					
	06/01/89	NLPH	6.01	11.33	3,600	120	240	63	810
	09/18/89	NLPH	6.80	10.54	6,000	290	200	28	510
	10/20/89#	NLPH	7.08	10.26					
	11/22/89#	NLPH	6.82	10.52					
	12/11/89	NLPH	6.37	10.97	13,000	750	910	510	1,200
	02/13/90#	NLPH	5.49	11.85					
	03/07/90a#	NM	NM	—					
	03/13/90	NLPH	5.44	11.90	12,000	1,500	1500	470	28,000
	04/18/90#	NLPH	6.14	11.20					
	05/23/90#	NLPH	6.22	11.12					
	06/14/90	NLPH	5.92	11.42	12,000	5,700	400	1,300	760
	08/21/90#	NLPH	6.83	10.51					
	09/19/90	NLPH	7.07	10.27	5,500	670	180	390	1,000
	12/17/90	NLPH	6.50	10.84	14,000	1,400	620	540	2,100
	01/31/91#	NLPH	6.66	10.68					
	02/25/91#	NLPH	6.21	11.13					
	03/19/91	NLPH	5.29	12.05	11,000	1,500	740	620	2,100
	04/22/91#	NLPH	5.26	12.08					

See notes on page 11 of 11.

**TABLE 1**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
**Exxon Service Station No. 7-0104**  
**1725 Park Street**  
**Alameda, California**  
**(Page 5 of 11)**

Well ID #	Sampling (TOC)	Date	SUBJ	DTW < . . . . . feet . . . . . >	Elev.	TPHg < . . . . . parts per billion . . . . . >	B	T	E	X
MW-4 cont. (17.34)	05/17/91#	NLPH	5.60	11.74						
	07/24/91	NLPH	6.54	10.80	10,000	1,200	440	410	1,200	
	09/10/91#	NLPH	7.04	10.30						
	09/23/91#	NLPH	7.14	10.20						
	10/21/91#	sheen	7.30	10.04						
	10/22/91	—	—	—	4,600	750	190	350	780	
	11/18/91#	NLPH	6.90	10.44						
	12/11/91#	NLPH	7.01	10.33						
	01/21/92	NLPH	6.25	11.09	6,000	1,300	320	510	1,200	
	02/20/92#	NLPH	4.79	12.55						
	03/19/92#	NLPH	4.70	12.64						
	04/24/92	sheen	5.25	12.09	11,000	1,700	630	710	1,600	
	05/13/92#	sheen	5.62	11.72						
	06/24/92#	sheen	6.19	11.15						
	07/16/92	sheen	6.51	10.83	5,400	870	240	440	700	
	08/19/92#	NLPH	6.35	10.49						
	09/24/92	NLPH	7.17	10.17	5,900	1,300	130	530	690	
	02/05/93	NLPH	4.61	12.73	15,000	2,300	820	980	2,200	
	04/30/93	NLPH	5.59	11.75	21,000	4,000	960	1,500	2,900	
	05/14/93#	NLPH	6.50	10.84						
	07/15/93	NLPH	7.50	9.84	2,300	440	55	130	220	
	10/21/93#	NM	7.77	9.57						
	11/16/93	NLPH	8.27	9.07	5,100	820	160	250	760	
	11/30/93	—	8.02	9.32	—	—	—	—	—	
	12/17/93#	NM	7.04	10.30						
	01/31/94#	NM	6.36	10.98						
	02/24-25/94	NLPH	5.78	11.56	9,800	2,200	190	660	1,200	
MW-5 (16.71)	01/17/89	NLPH	5.39	11.32	26,000	8,700	3,900	990	5,900	
	01/24/89#	NLPH	5.51	11.20						
	06/01/89	sheen	5.83	10.88	5,200	240	220	130	690	
	09/18/89	NLPH	6.52	10.19	8,000	340	150	140	460	
	10/20/89#	NLPH	6.72	9.99						
	11/22/89#	NLPH	6.54	10.17						
	12/11/89	NLPH	6.21	10.50	15,000	720	320	450	870	
	02/13/90#	NLPH	5.60	11.11						
	03/07/90#	NM	—	—						
	03/13/90	NLPH	5.54	11.17	10,000	3,400	220	280	800	
	04/18/90#	NLPH	5.75	10.96						
	05/23/90#	NLPH	5.98	10.73						
	06/14/90	NLPH	5.81	10.90	12,000	3,300	160	350	730	
	08/21/90#	NLPH	6.51	10.20						

See notes on page 11 of 11.

**TABLE 1**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
**Exxon Service Station No. 7-0104**  
**1725 Park Street**  
**Alameda, California**  
**(Page 6 of 11)**

Well ID # (TOC)	Sampling Date	SUBJ	DTW	Elev.	TPHg	S	T	E	X
			< ..... feet ..... >		< ..... . . . . . parts per billion >				
MW-5 cont. (16.71)	09/19/90	NLPH	6.70	10.01	8,500	1,800	85	120	460
	12/17/90	sheen	6.24	10.47	18,000	2,300	810	430	1,400
	01/31/91#	NLPH	6.31	10.40					
	02/25/91#	NLPH	6.13	10.58					
	03/19/91	NLPH	5.32	11.39	17,000	2,900	610	580	1,200
	04/22/91#	sheen	5.30	11.41					
	05/17/91#	NLPH	5.59	11.12					
	07/24/91	NLPH	6.33	10.38	16,000	3,200	320	690	1,100
	09/10/91#	NLPH	6.66	10.05					
	09/23/91#	NLPH	6.75	9.96					
	10/21/91#	sheen	6.92	9.79					
	10/22/91	NM	NM	—	6,600	2,000	64	320	480
	11/18/91#	NLPH	6.55	10.16					
	12/11/91#	NLPH	6.64	10.07					
	01/21/92	sheen	6.07	10.64	14,000	4,000	190	630	1,300
	02/20/92#	NLPH	4.83	11.88					
	03/19/92#	sheen	4.83	11.88					
	04/24/92	sheen	5.32	11.39	12,000	2,600	120	620	530
	05/13/92#	sheen	5.61	11.10					
	06/24/92#	NLPH	6.17	10.54					
	07/16/92	sheen	6.25	10.46	20,000	4,000	48	880	720
	08/19/92#	sheen	6.53	10.18					
	09/24/92	sheen	6.80	9.91	9,300	2,200	31	330	250
	02/05/93#	NLPH	4.70	12.01					
	04/30/93	sheen	5.43	11.28	30,000	5,900	450	1,900	1,500
	05/14/93#	NLPH	7.31	9.40					
	07/15/93#	0.07	7.93	8.84					
	10/21/93#	NM	7.25	9.46					
	11/15/93#	0.04	8.42	8.32					
	11/30/93#	—	8.10	8.61					
	12/17/93#	NM	7.43	9.28					
	01/31/94#	NM	5.95	10.76					
	02/24-25/94#	sheen	6.23	10.48					
MW-6 (17.56)	01/17/89	NLPH	5.59	11.97	38,000	7,400	9,300	2,000	9,900
	01/24/89#	NLPH	5.27	12.29					
	06/01/89	sheen	6.25	11.31	23,000	1,900	2,500	2,000	6,000
	09/18/89	NLPH	6.95	10.61	17,000	650	410	650	320
	10/20/89#	NLPH	7.24	10.32					
	11/22/89#	NLPH	7.05	10.51					
	12/11/89	NLPH	6.63	10.93	29,000	1,100	810	330	1,500
	02/13/90#	NLPH	5.70	11.36					

See notes on page 11 of 11.

**TABLE 1**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
**Exxon Service Station No. 7-0104**  
**1725 Park Street**  
**Alameda, California**  
**(Page 7 of 11)**

Well ID # (TOC)	Sampling Date	SUBJ < . . . . . >	DTW feet . . . . .	Elev. —	TPHg < . . . . . >	S parts per billion . . . . .	T	E	X
MW-6 cont. (17.56)	03/07/90#	NM	NM	—					
	03/13/90	NLPH	5.63	11.93	38,000	12,000	15,000	2,500	12,000
	04/18/90#	NLPH	6.25	11.30					
	05/23/90#	NLPH	6.42	11.14					
	06/14/90	NLPH	6.19	11.37	38,000	9,100	7,800	2,900	12,000
	08/21/90#	NLPH	7.01	10.55					
	09/19/90	NLPH	7.23	10.33	22,000	4,200	300	1,400	3,400
	12/17/90	NLPH	6.66	10.90	20,000	3,100	4,100	890	2,700
	01/31/91#	NLPH	6.39	11.17					
	02/25/91#	NLPH	6.39	11.17					
	03/19/91	NLPH	5.57	11.99	180,000	11,000	55,000	5,600	28,000
	04/22/91#	NLPH	5.42	12.14					
	05/17/91#	NLPH	5.73	11.83					
	07/24/91	NLPH	6.72	10.84	42,000	5,400	2,300	2,000	9,000
	09/10/91#	NLPH	7.15	10.41					
	09/23/91#	NLPH	7.25	10.31					
	10/21/91#	NLPH	7.42	10.14					
	10/22/91	NM	NM	—	18,000	3,100	700	1,400	2,900
	11/18/91#	NLPH	7.08	10.48					
	12/11/91#	NLPH	7.17	10.39					
	01/21/92	NLPH	6.40	11.16	9,400	2,100	370	1,000	1,100
	02/20/92#	NLPH	5.06	12.50					
	03/19/92#	NLPH	4.36	12.70					
	04/24/92	NLPH	5.44	12.12	42,000	3,500	8,000	2,100	8,000
	05/13/92#	NLPH	5.83	11.73					
	06/24/92#	NLPH	6.50	11.06					
	07/16/92	NLPH	6.68	10.38	14,000	1,500	1,000	1,000	2,500
	08/19/92#	NLPH	7.00	10.56					
	09/24/92	NLPH	7.28	10.28	4,700	790	97	540	540
	02/05/93	NLPH	4.84	12.72	26,000	2,500	4,300	1,700	5,300
	04/30/93	NLPH	5.69	11.87	9,600	1,000	410	1,100	1,600
	05/14/93#	NLPH	6.52	11.04					
	07/15/93	NLPH	7.51	10.05	4,600	250	72	540	650
	10/21/93#	NM	7.85	9.71					
	11/16/93	NLPH	8.29	9.27	410	41	12	47	71
	11/30/93#	NM	8.08	9.48					
	12/17/93#	NM	7.27	10.29					
	01/31/94#	NM	6.52	10.94					
	02/24-25/94	NLPH	6.23	11.33	4,300	190	190	300	460

See notes on page 11 of 11.

TABLE 1  
 CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA  
 Exxon Service Station No. 7-01C4  
 1725 Park Street  
 Alameda, California  
 (Page 8 of 11)

Well ID # (TOC)	Sampling Date	SUBJ < . . . . . >	DTW feet . . . . .	Elev. ---	TPHg < . . . . . >	S parts per billion . . . . .	T . . . . .	E . . . . .	X . . . . .
MW-7 (17.12)	01/09/90	NM	NM	---	17,000	330	180	330	1,300
	02/13/90#	NLPH	4.98	12.14					
	03/13/90	NLPH	4.94	12.18	16,000	360	270	83	460
	05/23/90#	NLPH	5.87	11.25					
	06/14/90	NLPH	5.55	11.57	14,000	1,200	2,800	75	930
	09/19/90	NLPH	6.79	10.33	16,000	2,800	95	2,500	1,700
	12/17/90	NLPH	6.15	10.97	75,000	2,500	7,000	3,300	14,000
	01/31/91#	NLPH	6.54	10.48					
	02/25/91#	NLPH	5.80	11.32					
	03/19/91	NLPH	4.96	12.16	44,000	1,500	740	3,400	8,600
	04/22/91#	NLPH	4.82	12.30					
	05/17/91#	NLPH	5.18	11.94					
	07/24/91	NLPH	6.22	10.90	18,000	1,300	160	2,700	1,000
	09/10/91#	NLPH	6.71	10.41					
	09/23/91#	NLPH	6.84	10.28					
	10/21/91#	NLPH	7.00	10.12					
	10/22/91	--	--	—	10,000	990	26	1,900	490
	11/18/91#	NLPH	6.56	10.56					
	12/11/91#	NLPH	6.68	10.44					
	01/21/92	NLPH	5.99	11.13	23,000	2,200	3,000	1,800	6,100
	02/20/92#	NLPH	4.36	12.76					
	03/19/92#	NLPH	4.22	12.90					
	04/24/92	NLPH	4.84	12.28	25,000	1,400	220	2,100	2,600
	05/13/92#	NLPH	5.24	11.88					
	06/24/92#	NLPH	6.04	11.08					
	07/16/92	NLPH	6.19	10.93	8,700	470	45	970	86
	08/19/92#	NLPH	6.55	10.57					
	09/24/92	NLPH	6.83	10.29	9,200	560	48	1,300	54
	02/05/93	NLPH	4.11	13.01	33,000	1,100	2,300	1,200	4,200
	04/30/93b	NLPH	5.29	11.93	13,000	240	85	710	320
	05/14/93#	NLPH	5.91	11.21					
	07/15/93	NLPH	7.07	10.05	6,900	200	30	500	43
	10/21/93#	NM	7.55	9.57					
	11/16/93	NLPH	7.85	9.27	7,400	300	85	480	120
	11/30/93#	NM	7.66	9.46					
	12/17/93#	NM	6.75	10.37					
	01/31/94#	NM	6.22	10.90					
	02/24-25/94	NLPH	5.52	11.60	7,200	470	120	400	330

See notes on page 11 of 11.

TABLE 1  
 CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA  
 Exxon Service Station No. 7-0104  
 1725 Park Street  
 Alameda, California  
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Well ID # (TOC)	Sampling Date	SUBJ < . . . . . >	DTW feet . . . . .	Elev. < . . . . . >	TPHg < . . . . . >	B < . . . . . parts per billion . . . . . >	T	E	X
MW-8 (16.33)	05/14/93	NLPH	6.54	9.79	<50	<0.5	<1.0	<0.5	<0.5
	07/15/93	NLPH	6.57	9.76	<50	<0.5	<0.5	<0.5	<0.5
	10/21/93#	NM	6.83	9.50					
	11/16/93	NLPH	7.15	9.18	<50	<0.5	<0.5	<0.5	<0.5
	11/30/93	—	6.94	9.39	—	—	—	—	—
	12/17/93#	NM	6.48	9.85					
	01/31/94#	NM	6.13	10.20					
	02/24-25/94	NLPH	5.80	10.53	<50	<0.5	<0.5	<0.5	<0.5
MW-9 (15.62)	05/14/93	NLPH	6.61	9.01	<50	<0.5	<1.0	<0.5	<0.5
	07/15/93	NLPH	6.79	8.83	<50	<0.5	<0.5	<0.5	<0.5
	10/21/93#	NM	6.97	8.65					
	11/16/93	NLPH	7.12	8.50	<50	<0.5	<0.5	<0.5	<0.5
	11/30/93	—	6.98	8.64	—	—	—	—	—
	12/17/93#	NM	6.73	8.87					
	01/31/94#	NM	6.71	8.91					
	02/24-25/94	NLPH	6.45	9.17	<50	<0.5	<0.5	<0.5	<0.5
MW-10 (16.79)	05/14/93	NLPH	6.91	9.88	97	<0.5	<0.5	9.8	22
	07/15/93	NLPH	7.47	9.32	160	<0.5	<0.5	15	19
	10/21/93#	NM	7.57	9.22					
	11/16/93	NLPH	8.17	8.62	<50	<0.5	<0.5	<0.5	<0.5
	11/30/93	—	7.96	8.83	—	—	—	—	—
	12/17/93#	NM	7.25	9.54					
	01/31/94#	NM	6.66	10.13					
	02/24-25/94	NLPH	6.53	10.26	280	<0.5	<0.5	12	7.0
EW-1 (16.22)	10/21/93#	NM	6.67	9.55					
	12/17/93#	NM	10.09	6.13					
	01/31/94#	NM	5.38	10.84					
	02/24-25/94	NLPH	5.58	10.64	1,000	140	4.5	15	120
EW-2 (16.05)	10/21/93#	NM	6.71	9.34					
	12/17/93#	NM	14.95	1.10					
	01/31/94#	NM	5.35	10.70					
	02/24-25/94	LPH	14.30	1.75	5,200	1,200	390	63	410
EW-3 (16.02)	10/21/93#	NM	6.55	9.47					
	12/17/93#	NM	15.65	0.37					
	01/31/94#	NM	5.34	10.68					
	02/24-25/94	NLPH	21.00	-4.98	91	<0.5	<0.5	<0.5	<0.5

See notes on page 11 of 11.

**TABLE 1**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
 Exxon Service Station No. 7-0104  
 1725 Park Street  
 Alameda, California  
 (Page 10 of 11)

Well ID # (TOC)	Sampling Date	SUBJ	DTW	Elev.	TPHg	S	T	E	X
		< . . . . . feet . . . . . >			< . . . . . parts per billion . . . . . >				
EW-4 (15.51)	10/21/93# 12/17/93# 01/31/94# 02/24-25/94	NM NM NM LPH	6.13 14.60 5.08 14.88	9.48 1.01 10.53 0.73	4,600	1,800	140	13	450
EW-5 (16.51)	10/21/93# 12/17/93# 01/31/94# 02/24-25/94	NM NM NM NLPH	6.77 14.20 5.64 11.95	9.74 2.31 10.87 4.56	1,000	140	45	3.4	190
Field Blanks	12/11/89 12/17/90 03/19/91 07/24/91 10/22/91 01/21/92 07/16/92	-- -- -- -- -- -- --	-- -- -- -- -- -- --	-- <50 <50 <50 <50 <50 <50	0.88 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5	0.95 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5	0.62 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5	1.7 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5	
Travel Blanks	06/14/90 09/19/90 04/24/92 09/24/92	-- -- -- --	-- -- -- --	-- <50 <50 230	<0.5 0.2 <0.5 <0.5	<0.5 <0.5 <0.5 <0.5	<0.5 0.6 <0.5 <0.5	<0.5 1.0 <0.5 <0.5	
Maximum Contaminant Levels (MCLs) (DHS)					--	1.0	—	680	1,750
Drinking Water Action Level (DWAL) (DHS)					--	—	100	—	—

See notes on page 11 of 11.

TABLE 1  
CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA  
Exxon Service Station No. 7-01C4

1725 Park Street

Alameda, California

(Page 11 of 11)

Well ID # (TOC)	Sampling Date	SUBJ	DTW	Elev.	TPHg	S	T	E	X
		< . . . . . >		< . . . . . >					

Notes:

- TOC = Elevation of top of well casing; datum is mean sea level, revised February 10, 1994.
- SUBJ = Results of subjective evaluation, liquid-phase product thickness (PT) in feet
- DTW = Depth to water
- Elev. = Elevation of groundwater; datum is mean sea level; adjusted for free-phase petroleum hydrocarbons when present using the equation: Elev. = TOC - [DTW + (PT \* 0.8)] where PT is the product thickness
- TPHg = Total petroleum hydrocarbons as gasoline analyzed using EPA method 5030/8015
- BTEX = Benzene, Toluene, Ethylbenzene, and total Xylenes analyzed using EPA method 5030/8020
- NM = Not Monitored
- NLPH = No liquid-phase petroleum hydrocarbons present in well
- LPH = Liquid-phase petroleum hydrocarbons present in well, thickness not measured, or not measurable.
- NA = Well not accessible on this date
- < = Less than the indicated detection limit shown by the laboratory
- = Not applicable
- # = Well not sampled on this date
- a = 03/07/90 sampling: Total Dissolved Solids were detected in samples from MW-1 and MW-4 at 910 parts-per-million (ppm), and 370 ppm, respectively.
- b = a peak eluting before benzene was present in the groundwater samples from MW-5 and MW-7, and is suspected to be methyl-tert-butyl-ether (MTBE).

**ENCLOSURE C**

**Alameda County Health Services Reduction  
Sampling Letter Dated November 1, 1996**

ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY  
DAVID J. KEARS, Agency Director



STID 3601

November 1, 1996

Ms. Marla Guensler  
Exxon-Environmental Engineering  
P.O.Box 4032  
Concord, CA 94524-4032

ENVIRONMENTAL HEALTH SERVICE  
ENVIRONMENTAL PROTECTION (LOP)  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502-5577  
(510) 567-6708  
FAX (510) 332-3375

NOV - 3

RE: Groundwater Sampling at Exxon RAS #7-0104, 1725 Park St,  
Alameda, CA

Dear Ms. Guensler:

I have completed review of Delta Environmental Consultants, Inc's September 1996 Quarterly Ground Water Monitoring Report for the above referenced site. There is adequate groundwater data at this time where the sampling frequency of the monitoring wells may be reduced as follows:

1. Quarterly sampling of wells MW-6 and MW-11;
2. Semi-annual sampling of wells MW-1, MW-2, MW-4, MW-5, MW-7, and MW-10 in the first and third quarters; and,
3. Discontinue sampling of wells MW-3, MW-8, MW-9, MW-12, and EW-1 through EW-5.

It is also noted that most of the wells indicate the possible presence of MTBE in groundwater. In the next sampling event, groundwater from wells MW-2, MW-5, and MW-11 should be analyzed for MTBE using EPA Method 8260. Once confirmed, method 8260 is no longer necessary. And, MTBE can continue to be quantified using method 8020.

If you have any questions, I can be reached at (510) 567-6762.

Eva Chu

eva chu  
Hazardous Materials Specialist

c: Richard Munsch, Delta, 3164 Gold Camp Drive, Suite 200, Rancho Cordova, CA 95670

**ENCLOSURE D**

Laboratory Analytical Reports



**Sequoia  
Analytical**

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8  
1455 McDowell Blvd. North, Ste. D

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834  
Petaluma, CA 94954

(650) 364-9600      FAX (650) 364-9233  
(925) 988-9600      FAX (925) 988-9673  
(916) 921-9600      FAX (916) 921-0100  
(707) 792-1865      FAX (707) 792-0342

January 25, 1999

Jim Brownell  
Delta Environmental Consultants  
3164 Gold Camp Dr., Suite 200  
Rancho Cordova, CA 95670

RE: Exxon/P901222

Dear Jim Brownell

Enclosed are the results of analyses for sample(s) received by the laboratory on January 15, 1999. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Matt Sakai  
Project Manager

CA ELAP Certificate Number 2245

RECEIVED  
JAN 28 1999  
SACRAMENTO  
CA



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Analytical**

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Delta Environmental Consultants  
3164 Gold Camp Dr., Suite 200  
Rancho Cordova, CA 95670

Project: Exxon  
Project Number: 7-0104  
Project Manager: Jim Brownell

Sampled: 1/13/99  
Received: 1/15/99  
Reported: 1/25/99

### ANALYTICAL REPORT FOR P901222

Sample Description	Laboratory Sample Number	Sample Matrix	Date Sampled
MW-1	P901222-01	Water	1/13/99
MW-2	P901222-02	Water	1/13/99
MW-4	P901222-03	Water	1/13/99
MW-5	P901222-04	Water	1/13/99
MW-6	P901222-05	Water	1/13/99
MW-7	P901222-06	Water	1/13/99
MW-8	P901222-07	Water	1/13/99
MW-11	P901222-08	Water	1/13/99



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Delta Environmental Consultants  
3164 Gold Camp Dr., Suite 200  
Rancho Cordova, CA 95670

Project: Exxon  
Project Number: 7-0104  
Project Manager: Jim Brownell

Sampled: 1/13/99  
Received: 1/15/99  
Reported: 1/25/99

**Total Petroleum Hydrocarbons as Gasoline and BTEX by EPA 8015M/8020M**  
**Sequoia Analytical - Petaluma**

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
<b>MW-1</b>								
Gasoline	9010387	1/21/99	1/22/99		50.0	491	ug/l	
Benzene	"	"	"		0.500	8.00	"	
Toluene	"	"	"		0.500	ND	"	
Ethylbenzene	"	"	"		0.500	ND	"	
Xylenes (total)	"	"	"		0.500	ND	"	
Methyl tert-butyl ether	"	"	"		2.00	9.78	"	
Surrogate: <i>a,a,a</i> -Trifluorotoluene	"	"	"	65.0-135		119	%	
Surrogate: 4-Bromofluorobenzene	"	"	"	65.0-135		104	"	
<b>MW-2</b>								
Gasoline	9010387	1/21/99	1/22/99		2500	18400	ug/l	
Benzene	"	"	"		25.0	4750	"	
Toluene	"	"	"		25.0	211	"	
Ethylbenzene	"	"	"		25.0	1760	"	
Xylenes (total)	"	"	"		25.0	45.3	"	
Methyl tert-butyl ether	"	"	"		100	2200	"	
Surrogate: <i>a,a,a</i> -Trifluorotoluene	"	"	"	65.0-135		116	%	
Surrogate: 4-Bromofluorobenzene	"	"	"	65.0-135		100	"	
<b>MW-4</b>								
Gasoline	9010387	1/21/99	1/22/99		1000	2140	ug/l	
Benzene	"	"	"		10.0	146	"	
Toluene	"	"	"		10.0	ND	"	
Ethylbenzene	"	"	"		10.0	60.9	"	
Xylenes (total)	"	"	"		10.0	16.2	"	
Methyl tert-butyl ether	"	"	"		40.0	1800	"	
Surrogate: <i>a,a,a</i> -Trifluorotoluene	"	"	"	65.0-135		116	%	
Surrogate: 4-Bromofluorobenzene	"	"	"	65.0-135		99.7	"	
<b>MW-5</b>								
Gasoline	9010387	1/21/99	1/22/99		1000	4780	ug/l	
Benzene	"	"	"		10.0	1240	"	
Toluene	"	"	"		10.0	11.1	"	
Ethylbenzene	"	"	"		10.0	ND	"	
Xylenes (total)	"	"	"		10.0	ND	"	
Methyl tert-butyl ether	"	"	"		40.0	3650	"	
Surrogate: <i>a,a,a</i> -Trifluorotoluene	"	"	"	65.0-135		116	%	
Surrogate: 4-Bromofluorobenzene	"	"	"	65.0-135		99.7	"	
<b>MW-6</b>								
Gasoline	9010391	1/21/99	1/22/99		250	3150	ug/l	



**Sequoia  
Analytical**

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Delta Environmental Consultants  
3164 Gold Camp Dr., Suite 200  
Rancho Cordova, CA 95670

Project: Exxon  
Project Number: 7-0104  
Project Manager: Jim Brownell

Sampled: 1/13/99  
Received: 1/15/99  
Reported: 1/25/99

**Total Petroleum Hydrocarbons as Gasoline and BTEX by EPA 8015M/8020M**  
**Sequoia Analytical - Petaluma**

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
<b>MW-6 (continued)</b>								
				<b>P901222-05</b>			<b>Water</b>	
Benzene	9010391	1/21/99	1/22/99		2.50	204	ug/l	
Toluene	"	"	"		2.50	107	"	
Ethylbenzene	"	"	"		2.50	297	"	
Xylenes (total)	"	"	"		2.50	304	"	
Methyl tert-butyl ether	"	"	"		10.0	422	"	
Surrogate: <i>a,a,a</i> -Trifluorotoluene	"	"	"	65.0-135		102	%	
Surrogate: 4-Bromofluorobenzene	"	"	"	65.0-135		112	"	
<b>MW-7</b>								
				<b>P901222-06</b>			<b>Water</b>	
Gasoline	9010391	1/21/99	1/22/99		250	273	ug/l	
Benzene	"	"	"		2.50	ND	"	
Toluene	"	"	"		2.50	ND	"	
Ethylbenzene	"	"	"		2.50	ND	"	
Xylenes (total)	"	"	"		2.50	ND	"	
Methyl tert-butyl ether	"	"	"		10.0	530	"	
Surrogate: <i>a,a,a</i> -Trifluorotoluene	"	"	"	65.0-135		102	%	
Surrogate: 4-Bromofluorobenzene	"	"	"	65.0-135		110	"	
<b>MW-8</b>								
				<b>P901222-07</b>			<b>Water</b>	
Gasoline	9010391	1/21/99	1/21/99		50.0	ND	ug/l	
Benzene	"	"	"		0.500	ND	"	
Toluene	"	"	"		0.500	ND	"	
Ethylbenzene	"	"	"		0.500	ND	"	
Xylenes (total)	"	"	"		0.500	ND	"	
Methyl tert-butyl ether	"	"	"		2.00	ND	"	
Surrogate: <i>a,a,a</i> -Trifluorotoluene	"	"	"	65.0-135		101	%	
Surrogate: 4-Bromofluorobenzene	"	"	"	65.0-135		113	"	
<b>MW-11</b>								
				<b>P901222-08</b>			<b>Water</b>	
Gasoline	9010391	1/21/99	1/22/99		2500	50900	ug/l	
Benzene	"	"	"		25.0	2210	"	
Toluene	"	"	"		25.0	6440	"	
Ethylbenzene	"	"	"		25.0	2030	"	
Xylenes (total)	"	"	"		25.0	10600	"	
Methyl tert-butyl ether	"	"	"		100	1920	"	
Surrogate: <i>a,a,a</i> -Trifluorotoluene	"	"	"	65.0-135		102	%	
Surrogate: 4-Bromofluorobenzene	"	"	"	65.0-135		108	"	



**Sequoia  
Analytical**

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Delta Environmental Consultants 3164 Gold Camp Dr., Suite 200 Rancho Cordova, CA 95670	Project: Exxon Project Number: 7-0104 Project Manager: Jim Brownell	Sampled: 1/13/99 Received: 1/15/99 Reported: 1/25/99
--	---	--

**Total Petroleum Hydrocarbons as Gasoline and BTEX by EPA 8015M/8020M/Quality Control**  
**Sequoia Analytical - Petaluma**

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit	Recov. Recov. Limits %	RPD %	RPD % Notes*
<b>Batch: 9010387</b>									
<u>Date Prepared: 1/21/99</u>									
<u>9010387-BLK1</u>									
Blank									
Gasoline	1/21/99			ND	ug/l	50.0			
Benzene	"			ND	"	0.500			
Toluene	"			ND	"	0.500			
Ethylbenzene	"			ND	"	0.500			
Xylenes (total)	"			ND	"	0.500			
Methyl tert-butyl ether	"			ND	"	2.00			
Surrogate: a,a,a-Trifluorotoluene	"	300		343	"	65.0-135	114		
Surrogate: 4-Bromofluorobenzene	"	300		310	"	65.0-135	103		
<b>LCS</b>									
<u>9010387-BS1</u>									
Gasoline	1/21/99	1000		944	ug/l	65.0-135	94.4		
Surrogate: 4-Bromofluorobenzene	"	300		301	"	65.0-135	100		
<b>Matrix Spike</b>									
<u>9010387-MS1</u>									
Gasoline	1/21/99	1000	ND	913	ug/l	65.0-135	91.3		
Surrogate: 4-Bromofluorobenzene	"	300		292	"	65.0-135	97.3		
<b>Matrix Spike Dup</b>									
<u>9010387-MSD1</u>									
Gasoline	1/21/99	1000	ND	934	ug/l	65.0-135	93.4	20.0	2.27
Surrogate: 4-Bromofluorobenzene	"	300		301	"	65.0-135	100		
<b>Batch: 9010391</b>									
<u>Date Prepared: 1/21/99</u>									
<u>9010391-BLK1</u>									
Blank									
Gasoline	1/21/99			ND	ug/l	50.0			
Benzene	"			ND	"	0.500			
Toluene	"			ND	"	0.500			
Ethylbenzene	"			ND	"	0.500			
Xylenes (total)	"			ND	"	0.500			
Methyl tert-butyl ether	"			ND	"	2.00			
Surrogate: a,a,a-Trifluorotoluene	"	300		305	"	65.0-135	102		
Surrogate: 4-Bromofluorobenzene	"	300		333	"	65.0-135	111		
<b>LCS</b>									
<u>9010391-BS1</u>									
Gasoline	1/21/99	1000		1070	ug/l	65.0-135	107		
Surrogate: 4-Bromofluorobenzene	"	300		328	"	65.0-135	109		
<b>Matrix Spike</b>									
<u>9010391-MS1</u>									
Gasoline	1/21/99	1000	ND	1060	ug/l	65.0-135	106		
Surrogate: 4-Bromofluorobenzene	"	300		334	"	65.0-135	111		



**Sequoia  
Analytical**

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Delta Environmental Consultants  
3164 Gold Camp Dr., Suite 200  
Rancho Cordova, CA 95670

Project: Exxon  
Project Number: 7-0104  
Project Manager: Jim Brownell

Sampled: 1/13/99  
Received: 1/15/99  
Reported: 1/25/99

**Total Petroleum Hydrocarbons as Gasoline and BTEX by EPA 8015M/8020M/Quality Control  
Sequoia Analytical - Petaluma**

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
<b>Matrix Spike Dup</b>										
Gasoline	1/21/99	1000	ND	1050	ug/l	65.0-135	105	20.0	0.948	
Surrogate: 4-Bromo fluorobenzene	"	300		332	"	65.0-135	111			



**Sequoia  
Analytical**

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Delta Environmental Consultants  
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Rancho Cordova, CA 95670

Project: Exxon  
Project Number: 7-0104  
Project Manager: Jim Brownell

Sampled: 1/13/99  
Received: 1/15/99  
Reported: 1/25/99

#### Notes and Definitions

#	Note
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
Recov.	Recovery
RPD	Relative Percent Difference



Sequoia Analytical  
680 Chesapeake Dr.  
Redwood City, CA 94063  
(415) 364-9600 • FAX (415) 364-9233

# EXXON COMPANY, U.S.A.

P.O. Box 2180, Houston, TX 77002-7426

## CHAIN OF CUSTODY

P-101666

COOLER CUSTODY SEALS INTACT  NOT INTACT  N/A

COOLER TEMPERATURE 5 °C

Consultant's Name: Delta Environmental Consultants, Inc		Page <u>1</u> of <u>1</u>
Address: 3164 Gold Camp Dr. #200 Rancho Cordova CA 95810		Site Location: Alameda, CA
Project #: 7-0104	Consultant Project #: D094-832	Consultant Work Release #: 19432522
Project Contact: Jim Brownell	Phone #: 916 638 2085	Laboratory Work Release #:
EXXON Contact: Marla Grenster	Phone #:	EXXON RAS #: 7-0104
Sampled by (print): Martin Morgan	Sampler's Signature:	
Shipment Method:	Air Bill #:	

TAT:  24 hr  48 hr  72 hr  96 hr  Standard (10 day)

### ANALYSIS REQUIRED

Sample Description	Collection Date	Collection Time	Matrix Soil/Water/Air	Prsv	# of Cont.	Sequoia's Sample #	TPH/Gas BTEX/ 8015/ 8020	TPH/ Diesel EPA 8015	TRPH S.M. 5520	MTBE 8020		Temperature: ON ICE
MW-1	1-13-99	0753	H <sub>2</sub> O	HCl	6	p901222-01	X			X		Inbound Seal: Yes No
MW-2		0822				-02	X			X		Outbound Seal: Yes No
MW-4		0804				-03	X			X		
MW-5		0813				-04	X			X		
MW-6		0844				-05	X			X		
MW-7		0833				-06	X			X		
MW-8		0703				-07	X			X		
MW-11	1-13-99	0651	↓	↓	↓	-08	X			X		

Rec'd. with Manning 115 13:25

RELINQUISHED BY / AFFILIATION	Date	Time	ACCEPTED / AFFILIATION	Date	Time	Additional Comments
Marla Grenster / Delta Environmental	1-13-99	1100	John P. Koenig / Exxon	1-13-99	1100	
John P. Koenig / Exxon	1-13-99	1435	John P. Koenig / Exxon	1-13-99	1540	
John P. Koenig / Exxon	1-13-99	1540	John P. Koenig / Exxon	1-14-99	1200	

Pink - Client

Yellow - Sequoia

White - Sequoia



Sequoia  
Analytical

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Delta Environmental  
3164 Gold Camp Drive, #200  
Rancho Cordova, CA 95670  
Attention: Jim Brownell

Client Proj. ID: Exxon 7-0104, DO94-832  
Sample Descript: MW-8  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9810F16-01

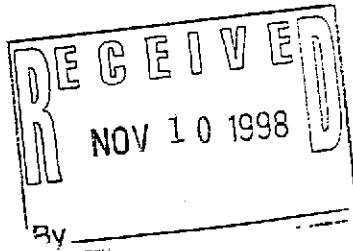
Sampled: 10/19/98  
Received: 10/20/98  
Analyzed: 10/23/98  
Reported: 10/30/98

QC Batch Number: GC102398BTEX30A  
Instrument ID: GCHP30

### Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70      130	95



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

SEQUOIA ANALYTICAL - ELAP #1210

Mei Mei Shin  
Project Manager



Sequoia  
Analytical

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FAX (707) 792-0342

Delta Environmental  
3164 Gold Camp Drive, #200  
Rancho Cordova, CA 95670  
Attention: Jim Brownell

Client Proj. ID: Exxon 7-0104, DO94-832  
Sample Descript: MW-11  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9810F16-02

Sampled: 10/19/98  
Received: 10/20/98  
Analyzed: 10/28/98  
Reported: 10/30/98

QC Batch Number: GC102898BTEX03A  
Instrument ID: GCHP03

### Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	10000	29000
Methyl t-Butyl Ether	500	1700
Benzene	100	1200
Toluene	100	2500
Ethyl Benzene	100	920
Xylenes (Total)	100	4900
Chromatogram Pattern:		gas
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	94

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

SEQUOIA ANALYTICAL - ELAP #1210

Mei Mei Shin  
Project Manager



**Sequoia  
Analytical**

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DELTA ENVIRONMENTAL  
3164 Gold Camp Dr. #200  
Rancho Cordova, CA 95670  
Attention: Jim Brownell

Client Project ID: EXXON 7-0104, D094-832

QC Sample Group: 9810F16

Reported: Nov 3, 1998

### QUALITY CONTROL DATA REPORT

Matrix: Liquid  
Method: EPA 8015  
Analyst: P.ALCALA

ANALYTE Gasoline

QC Batch #: GC102898BTEX03A

Sample No.: 9810C21-3

Date Prepared: 10/28/98

Date Analyzed: 10/28/98

Instrument I.D.#: GCHP03

Sample Conc., ug/L: N.D.  
Conc. Spiked, ug/L: 250

Matrix Spike, ug/L: 260  
% Recovery: 103

Matrix  
Spike Duplicate, ug/L: 220  
% Recovery: 88

Relative % Difference: 16

RPD Control Limits: 0-25

LCS Batch#: GC102898BTEX03A

Date Prepared: 10/28/98  
Date Analyzed: 10/28/98  
Instrument I.D.#: GCHP03

Conc. Spiked, ug/L: 250

LCS Recovery, ug/L: 260  
LCS % Recovery: 102

Percent Recovery Control Limits:

MS/MSD	60-140
LCS	70-130

Quality Assurance Statement: All standard operating procedures and quality control requirements have been met.

Please Note:

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

SEQUOIA ANALYTICAL

Mei Mei Shin  
Project Manager



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DELTA ENVIRONMENTAL  
3164 Gold Camp Dr. #200  
Rancho Cordova, CA 95670  
Attention: Jim Brownell

Client Project ID: EXXON 7-0104, D094-832

QC Sample Group: 9810F16

Reported: Nov 3, 1998

### QUALITY CONTROL DATA REPORT

Matrix: Liquid  
Method: EPA 8015  
Analyst: MM

**ANALYTE** Gasoline

QC Batch #: GC102398BTEX30A

Sample No.: GW9810A62-04  
Date Prepared: 10/23/98  
Date Analyzed: 10/23/98  
Instrument I.D.#: GCHP30

Sample Conc., ug/L: N.D.  
Conc. Spiked, ug/L: 250

Matrix Spike, ug/L: 270  
% Recovery: 108

Matrix  
Spike Duplicate, ug/L: 280  
% Recovery: 112

Relative % Difference: 3.6

RPD Control Limits: 0-25

LCS Batch#: GC102398BTEX30A

Date Prepared: 10/23/98  
Date Analyzed: 10/23/98  
Instrument I.D.#: GCHP30

Conc. Spiked, ug/L: 250

LCS Recovery, ug/L: 280  
LCS % Recovery: 112

Percent Recovery Control Limits:

MS/MSD	60-140
LCS	70-130

Quality Assurance Statement: All standard operating procedures and quality control requirements have been met.

Please Note:

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

SEQUOIA ANALYTICAL

Mei Mei Shin  
Project Manager



**Sequoia  
Analytical**

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Delta Environmental  
3164 Gold Camp Drive, #200  
Rancho Cordova, CA 95670  
Attention: Jim Brownell

Client Proj. ID: Exxon 7-0104, DO94-832  
Lab Proj. ID: 9810F16

Received: 10/20/98  
Reported: 10/30/98

## LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 76 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

**SEQUOIA ANALYTICAL**

Mei Mei Shin  
Project Manager



Sequvia Middle School

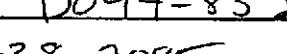
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Redwood City, CA 94063

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**EXXON COMPANY, U.S.A.**

P.O. Box 2180, Houston, TX 77002-7426

**CHAIN OF CUSTODY**

Consultant's Name:	Delta Environmental Consultants, Inc.		Page <u>1</u> of <u>1</u>
Address:	3164 Gold Camp Dr. #200 Rancho Cordova, CA 95870		Site Location: Alameda, CA
Project #:	7-0104	Consultant Project #:	D094-832
Project Contact:	Jim Brownell	Phone #:	916 638 2085
EXXON Contact:	Maria Gvensler	Phone #:	
Sampled by (print):	Martin Morgan	Sampler's Signature:	
Shipment Method:	Garrison Carrier	Air Bill #:	

TAT:  24 hr  48 hr  72 hr  96 hr  Standard (10 day) 98/6 F1

#### **ANALYSIS REQUIRE**

**RELINQUISHED BY / AFFILIATION**

*Date*      *Time*

ACCEPTED / AFFILIATION

Date Time

#### ***Additional Comments***

*Abies* | *Delta*  
*John Muir / sequoia*  
*andrewsii / Sequoia*

10/20/98 1505

10/20/88 1535

**ACCEPTED / AFFILIATION**

John Youell / Segovia  
Sandi Hoss / Segovia

10) 20/CF 1005

10/20/2015 1535

(D-2) 193