



3164 Gold Camp Drive
Suite 200
Rancho Cordova, CA 95670
916/638-2085
FAX: 916/638-8385

97 APR 19 PM 4:09
ENVIRONMENTAL
PROTECTION

March 13, 1997

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

Subject: *Quarterly Ground Water Monitoring Report, First Quarter 1997*
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 letter report presents the results of quarterly ground water monitoring and data collection conducted on January 31, 1997. 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 Elevations, Flow Direction, and Hydraulic Gradient

Ground water was measured in each of the twelve monitoring wells (MW-1 through MW-12) and the five recovery wells (EW-1 through EW-5). Ground water depths in the wells ranged from 3.65 (MW-7) to 19.21 (EW-2) feet below the top of the well casings. Ground water elevations in the monitoring wells increased approximately 2.4 feet from the previous measurements collected in October 1996. 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 water table contour map constructed from the ground water level measurements recorded on January 31, 1997, is included as Figure 3. The contour map indicates an induced ground water flow direction toward recovery wells EW-1 through EW-3, and EW-5. The ground water extraction system has induced an average hydraulic gradient of approximately 4.4 in the vicinity of recovery wells EW-1 and EW-2. The historical ground water flow direction is towards the east, when the ground water treatment system is not operational.

Subjective Analysis

Liquid-phase petroleum hydrocarbons were not observed in any monitoring wells during the first quarter 1997 site visit.

Analytical Results

The Alameda County Health Services (ACHS) requested a reduction in sampling for the site. This reduction required 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 the third quarters, and the discontinuation of sampling monitoring wells MW-3, MW-8, MW-9, MW-12 and extraction wells EW-1 through EW-5. A copy of the ACHS letter is included in Enclosure B. The ACHS requested a one-time analysis for methyl tertiary butyl ether (MTBE) utilizing EPA 8260 on samples collected from monitoring wells MW-2, MW-5 and MW-11.

Ground water samples were collected from monitoring wells MW-1, MW-2, MW-4 through MW-7, MW-10, and MW-11 on January 31, 1997, and submitted to Sequoia Analytical (a California-certified laboratory) for analyses of benzene, toluene, ethylbenzene, total xylenes (BTEX) by EPA Method 8020, and total purgeable petroleum hydrocarbons (TPPH) as gasoline by DHS LUFT Method. Monitoring wells MW-1, MW-4, MW-6, and MW-10 were additionally analyzed for MTBE by EPA Method 8020 and monitoring wells MW-2, MW-5, and MW-11 were additionally analyzed for MTBE by EPA Method 8260 (GC-MS). Cumulative analytical results from samples collected by Delta are presented in Table 2. 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 C.

The analytical results for the January 1997 monitoring event reported detectable concentrations of TPPH as gasoline ranging from 3,800 micrograms per liter ($\mu\text{g/L}$) in MW-7 to 28,000 $\mu\text{g/L}$ (MW-2). Detectable concentrations of benzene ranged from 170 $\mu\text{g/L}$ (MW-11) to 2,400 $\mu\text{g/L}$ (MW-2 and MW-5). Benzene was not detected above the laboratory detection limits in the ground water samples obtained from monitoring well MW-10. Detectable MTBE concentrations ranged from 10 $\mu\text{g/L}$ (MW-10) to 45,000 $\mu\text{g/L}$ (MW-7).

A dissolved benzene concentration map based on analytical results for ground water samples collected on January 31, 1997, is included as Figure 4. A copy of the laboratory analytical report and chain-of-custody documentation is presented in Enclosure D.

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 and effluent water samples are collected for analyses of BTEX by EPA Method 5030/8020, and TPPH as gasoline by DHS LUFT Method. As per the revised discharge permit dated February 14, 1995, the ground water remediation system analytical sampling results are presented in semi-annual reports to EBMUD.

Future Work

The next quarterly monitoring event for this site is scheduled for April 1997. Delta anticipates continuing operation of the ground water remediation system.

Ms. Marla Guensler
Exxon Company, U.S.A.
March 13, 1997
Page 3

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

Mr. Richard Hiett
Regional Water Quality Board
San Francisco Bay Region
2101 Webster Street, Suite 500
Oakland, California 94612

Mr. Larry Seto
Alameda County Department of Environmental Health
Hazardous Material Division
80 Swan Way, Room 200
Oakland, California 94621

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

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.

If you have any questions regarding this project, please contact Richard Munsch at (916) 638-2085.

Sincerely,

DELTA ENVIRONMENTAL CONSULTANTS, INC.

Richard D. Munsch for

J. William Speth
Staff Geologist

Richard D. Munsch

Richard D. Munsch
Project Manager

Owen M. Kittredge
Owen M. Kittredge, R.G.
California Registered Geologist No: 5853



JWS (LRP006.832)
Enclosures

TABLE 1

GROUND WATER LEVEL MEASUREMENTS

Exxon Service Station No. 7-0104
1725 Park Street
Alameda, California

<u>Monitoring Well</u>	<u>Date</u>	<u>Top of Riser Elevation (ft)^a</u>	<u>Depth to Water (ft)</u>	<u>Ground Water Elevation (ft)</u>	<u>Comments</u>
MW-1	09/12/94	17.35	7.11	10.24	No LPH or Sheen
	10/01/94		7.44	9.91	No LPH or Sheen
	01/13/95		5.13	12.22	No LPH or Sheen
	04/27/95		6.57	10.78	No LPH or Sheen
	08/03/95		7.46	9.89	No LPH or Sheen
	10/17/95		7.67	9.68	No LPH or Sheen
	01/24/96		6.52	10.83	No LPH or Sheen
	04/24/96		5.95	11.40	No LPH or Sheen
	07/26/96		7.60	9.75	No LPH or Sheen
	10/30/96		8.06	9.29	No LPH or Sheen
	01/31/97		5.12	12.23	No LPH or Sheen
MW-2	09/12/94	16.67	6.71	9.96	No LPH or Sheen
	10/01/94		7.22	9.45	Sheen
	01/13/95		4.46	12.22 ^b	LPH Thickness 0.01
	04/27/95		6.92	9.75	No LPH or Sheen
	08/03/95		6.96	9.71	No LPH or Sheen
	10/17/95		7.83	8.84	No LPH or Sheen
	01/24/96		6.45	10.22	No LPH or Sheen
	04/24/96		6.00	10.67	No LPH or Sheen
	07/26/96		7.14	9.53	No LPH or Sheen
	10/30/96		6.95	9.72	No LPH or Sheen
	01/31/97		5.07	11.60	No LPH or Sheen
MW-3	09/12/94	17.11	6.58	10.53	No LPH or Sheen
	10/01/94		6.85	10.26	No LPH or Sheen
	01/13/95		5.27	11.84	No LPH or Sheen
	04/27/95		6.05	11.06	No LPH or Sheen
	08/03/95		6.71	10.40	No LPH or Sheen
	10/17/95		7.46	9.65	No LPH or Sheen
	01/24/96		5.83	11.28	No LPH or Sheen
	04/24/96		5.38	11.73	No LPH or Sheen
	07/26/96		6.80	10.31	No LPH or Sheen
	10/30/96		7.20	9.91	No LPH or Sheen
	01/31/97		4.31	12.80	No LPH or Sheen

TABLE 1-Continued

GROUND WATER LEVEL DATA

Exxon Service Station No. 7-0104
1725 Park Street
Alameda, California

<u>Monitoring Well</u>	<u>Date</u>	<u>Top of Riser Elevation (ft)^a</u>	<u>Depth to Water (ft)</u>	<u>Ground Water Elevation (ft)</u>	<u>Comments</u>
MW-4	09/12/94	17.34	6.80	10.54	No LPH or Sheen
	10/01/94		7.09	10.25	No LPH or Sheen
	01/13/95		4.66	12.68	No LPH or Sheen
	04/27/95		5.54	11.80	No LPH or Sheen
	08/03/95		6.92	10.42	No LPH or Sheen
	10/17/95		7.50	9.84	No LPH or Sheen
	01/24/96		5.81	11.53	No LPH or Sheen
	04/24/96		5.44	11.90	No LPH or Sheen
	07/26/96		7.03	10.31	No LPH or Sheen
	10/30/96		7.57	9.77	No LPH or Sheen
	01/31/97		4.22	13.12	No LPH or Sheen
MW-5	09/12/94	16.71	7.12	9.59	No LPH or Sheen
	10/01/94		7.06	9.65	Sheen
	01/13/95		4.85	11.88 ^b	LPH Thickness 0.02
	04/27/95		6.51	10.20	No LPH or Sheen
	08/03/95		7.24	9.47	No LPH or Sheen
	10/17/95		7.80	8.91	No LPH or Sheen
	01/24/96		6.66	10.05	No LPH or Sheen
	04/24/96		5.80	10.91	No LPH or Sheen
	07/26/96		7.67	9.04	No LPH or Sheen
	10/30/96		7.77	8.94	No LPH or Sheen
	01/31/97		4.90	11.81	No LPH or Sheen
MW-6	09/12/94	17.56	6.88	10.68	No LPH or Sheen
	10/01/94		7.15	10.41	No LPH or Sheen
	01/13/95		4.80	12.76	No LPH or Sheen
	04/27/95		6.14	11.42	No LPH or Sheen
	08/03/95		6.83	10.73	No LPH or Sheen
	10/17/95		7.66	9.90	No LPH or Sheen
	01/24/96		5.86	11.70	No LPH or Sheen
	04/24/96		5.39	12.17	No LPH or Sheen
	07/26/96		6.97	10.59	No LPH or Sheen
	10/30/96		7.45	10.11	No LPH or Sheen
	01/31/97		4.30	13.26	No LPH or Sheen

TABLE 1-Continued

GROUND WATER LEVEL DATA

Exxon Service Station No. 7-0104
 1725 Park Street
 Alameda, California

<u>Monitoring Well</u>	<u>Date</u>	<u>Top of Riser Elevation (ft)^a</u>	<u>Depth to Water (ft)</u>	<u>Ground Water Elevation (ft)</u>	<u>Comments</u>
MW-7	09/12/94	17.12	6.43	10.69	No LPH or Sheen
	10/01/94		6.71	10.41	No LPH or Sheen
	01/13/95		4.29	12.83	No LPH or Sheen
	04/27/95		5.00	12.12	No LPH or Sheen
	08/03/95		6.53	10.59	No LPH or Sheen
	10/17/95		7.23	9.89	No LPH or Sheen
	01/24/96		5.26	11.86	No LPH or Sheen
	04/24/96		5.06	12.06	No LPH or Sheen
	07/26/96		6.62	10.50	No LPH or Sheen
	10/30/96		7.09	10.03	No LPH or Sheen
01/31/97	3.65	13.47	No LPH or Sheen		
MW-8	09/12/94	16.33	6.42	9.91	No LPH or Sheen
	10/01/94		6.62	9.71	No LPH or Sheen
	01/13/95		5.25	11.08	No LPH or Sheen
	04/27/95		6.00	10.33	No LPH or Sheen
	08/03/95		6.28	10.05	No LPH or Sheen
	10/17/95		6.93	9.40	No LPH or Sheen
	01/24/96		5.71	10.62	No LPH or Sheen
	04/24/96		5.52	10.81	No LPH or Sheen
	07/26/96		6.27	10.06	No LPH or Sheen
	10/30/96		6.69	9.64	No LPH or Sheen
01/31/97	5.18	11.15	No LPH or Sheen		
MW-9	09/12/94	15.62	6.84	8.78	No LPH or Sheen
	10/01/94		6.97	8.65	No LPH or Sheen
	01/13/95		6.18	9.44	No LPH or Sheen
	04/27/95		6.58	9.04	No LPH or Sheen
	08/03/95		6.72	8.90	No LPH or Sheen
	10/17/95		7.09	8.53	No LPH or Sheen
	01/24/96		6.46	9.16	No LPH or Sheen
	04/24/96		6.43	9.19	No LPH or Sheen
	07/26/96		6.80	8.82	No LPH or Sheen
	10/30/96		6.94	8.68	No LPH or Sheen
01/31/97	6.10	9.52	No LPH or Sheen		

TABLE 1-Continued

GROUND WATER LEVEL DATA

Exxon Service Station No. 7-0104
1725 Park Street
Alameda, California

<u>Monitoring Well</u>	<u>Date</u>	<u>Top of Riser Elevation (ft)^a</u>	<u>Depth to Water (ft)</u>	<u>Ground Water Elevation (ft)</u>	<u>Comments</u>
MW-10	09/12/94	16.79	7.04	9.75	No LPH or Sheen
	10/01/94		7.30	9.49	No LPH or Sheen
	01/13/95		6.04	10.75	No LPH or Sheen
	04/27/95		6.66	10.13	No LPH or Sheen
	08/03/95		7.23	9.56	No LPH or Sheen
	10/17/95		7.93	8.86	No LPH or Sheen
	01/24/96		6.43	10.36	No LPH or Sheen
	04/24/96		6.42	10.37	No LPH or Sheen
	07/26/96		7.47	9.32	No LPH or Sheen
	10/30/96		7.88	8.91	No LPH or Sheen
01/31/97	5.88	10.91	No LPH or Sheen		
MW-11	10/17/95	18.04	7.72	10.32	No LPH or Sheen
	01/24/96		5.97	12.07	No LPH or Sheen
	04/24/96		5.84	12.20	No LPH or Sheen
	07/26/96		6.98	11.06	No LPH or Sheen
	10/30/96		7.54	10.50	No LPH or Sheen
	01/31/97		5.00	13.04	No LPH or Sheen
MW-12	10/17/95	16.30	6.38	9.92	No LPH or Sheen
	01/24/96		4.86	11.44	No LPH or Sheen
	04/24/96		4.46	11.84	No LPH or Sheen
	07/26/96		5.90	10.40	No LPH or Sheen
	10/30/96		6.56	9.74	No LPH or Sheen
	01/31/97		4.57	11.73	No LPH or Sheen
EW-1	09/12/94	16.22	6.13	10.09	No LPH or Sheen
	10/01/94		7.63	8.59	No LPH or Sheen
	01/13/95		11.46	4.76	No LPH or Sheen
	04/27/95		15.47	0.75	No LPH or Sheen
	08/03/95		13.85	2.37	No LPH or Sheen
	10/17/95		8.05	8.17	No LPH or Sheen
	01/24/96		11.07	5.15	No LPH or Sheen
	04/24/96		6.20	10.02	No LPH or Sheen
	07/26/96		13.93	2.29	No LPH or Sheen
	10/30/96		13.74	2.48	No LPH or Sheen
01/31/97	8.40	7.82	No LPH or Sheen		

TABLE 1-Continued

GROUND WATER LEVEL DATA

Exxon Service Station No. 7-0104
 1725 Park Street
 Alameda, California

<u>Monitoring Well</u>	<u>Date</u>	<u>Top of Riser Elevation (ft)^a</u>	<u>Depth to Water (ft)</u>	<u>Ground Water Elevation (ft)</u>	<u>Comments</u>
EW-2	09/12/94	16.05	6.09	9.96	Sheen
	10/01/94		7.32	8.73	Sheen
	01/13/95		14.38	1.67	No LPH or Sheen
	04/27/95		15.23	0.82	No LPH or Sheen
	08/03/95		7.19	8.86	No LPH or Sheen
	10/17/95		18.97	-2.92	No LPH or Sheen
	01/24/96		20.32	-4.27	No LPH or Sheen
	04/24/96		9.46	6.59	No LPH or Sheen
	07/26/96		16.50	-0.45	No LPH or Sheen
	10/30/96		20.30	-4.25	No LPH or Sheen
	01/31/97		19.21	-3.16	No LPH or Sheen
EW-3	09/12/94	16.02	6.12	9.9	No LPH or Sheen
	10/01/94		10.52	5.5	No LPH or Sheen
	01/13/95		18.13	-2.11	No LPH or Sheen
	04/27/95		23.07	-7.05	No LPH or Sheen
	08/03/95		22.90	-6.88	No LPH or Sheen
	10/17/95		22.87	-6.85	No LPH or Sheen
	01/24/96		20.97	-4.95	No LPH or Sheen
	04/24/96		18.10	-2.08	No LPH or Sheen
	07/26/96		13.14	2.88	No LPH or Sheen
	10/30/96		9.24	6.78	No LPH or Sheen
	01/31/97		11.10	4.92	No LPH or Sheen
EW-4	09/12/94	16.61	5.69	10.92	No LPH or Sheen
	10/01/94		7.90	8.71	No LPH or Sheen
	01/13/95		11.36	5.25	No LPH or Sheen
	04/27/95		16.30	0.31	No LPH or Sheen
	08/03/95		6.45	10.16	No LPH or Sheen
	10/17/95		15.89	0.72	No LPH or Sheen
	01/24/96		6.03	10.58	No LPH or Sheen
	04/24/96		4.97	11.64	No LPH or Sheen
	07/26/96		6.54	10.07	No LPH or Sheen
	10/30/96		6.53	10.08	No LPH or Sheen
	01/31/97		3.98	12.63	No LPH or Sheen

TABLE 1-Continued

GROUND WATER LEVEL DATA

Exxon Service Station No. 7-0104
 1725 Park Street
 Alameda, California

<u>Monitoring Well</u>	<u>Date</u>	<u>Top of Riser Elevation (ft)^a</u>	<u>Depth to Water (ft)</u>	<u>Ground Water Elevation (ft)</u>	<u>Comments</u>
EW-5	09/12/94	16.51	6.30	10.21	No LPH or Sheen
	10/01/94		11.83	4.68	No LPH or Sheen
	01/13/95		12.54	3.97	No LPH or Sheen
	04/27/95		13.11	3.40	No LPH or Sheen
	08/03/95		11.99	4.52	No LPH or Sheen
	10/17/95		13.43	3.08	No LPH or Sheen
	01/24/96		9.72	6.79	No LPH or Sheen
	04/24/96		8.13	8.38	No LPH or Sheen
	07/26/96		10.00	6.51	No LPH or Sheen
	10/30/96		9.82	6.69	No LPH or Sheen
	01/31/97		9.00	7.51	No LPH or Sheen

^a Elevation of top of well casing in relative to mean sea level (RESNA Industries, Inc., February 10, 1994).

^b Adjusted ground water elevations, based on the specific gravity of gasoline as 0.80.

LPH = Liquid-phase petroleum hydrocarbons.

TABLE 2

GROUND WATER SAMPLE RESULTS
Concentrations in micrograms per liter ($\mu\text{g/L}$)

Exxon Service Station No. 7-0104
1725 Park Street
Alameda, California

<u>Monitoring Well</u>	<u>Date</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl-benzene</u>	<u>Total Xylenes</u>	<u>TPPH as gasoline</u>	<u>MTBE</u>
MW-1	09/12/94	200	1.9	210	6.6	1,600 ^a	NA
	10/01/94	200	<0.5	160	6.6	1,400 ^a	NA
	01/13/95	410 ^b	17	280 ^b	89	2,100 ^a	NA
	04/27/95	460	41	340	270	4,700	NA
	08/03/95	140	<5.0	160	9.9	1,900	30
	10/17/95	6.2	<0.5	13	0.75	280	5.5
	01/24/96	21	1.4	38	3.1	740	440
	04/24/96	200	110	1,000	740	7,800	250
	07/26/96	8.0	0.99	26	1.0	620	23
	10/30/96	14	2.9	85	3.5	700	33
	01/31/97	420	33	1,400	480	7,600	<200
MW-2	09/12/94	4,400	120	1,700	2,100	31,000 ^a	NA
	10/01/94	4,500	250	1,800	2,400	45,000 ^a	NA
	01/13/95	NS	NS	NS	NS	NS	NA
	04/27/95	7,000	840	2,400	3,400	44,000	NA
	08/03/95	4,600	170	1,600	1,100	30,000	37,000
	10/17/95	5,400	190	2,000	1,500	45,000	14,000
	01/24/96	5,000	810	2,200	2,200	30,000	4,100
	04/24/96	8,700	410	2,200	2,000	34,000	22,000
	07/26/96	10,000	<200	1,800	760	40,000	18,000
	10/30/96	9,100	<250	2,400	730	43,000	18,000
	01/31/97	2,400	630	1,500	3,300	28,000	8,000 ^c
MW-3	09/12/94	580	8.0	340	100	3,100 ^a	NA
	10/01/94	640	11	230	130	3,800 ^a	NA
	01/13/95	690	24	210	130	3,800 ^a	NA
	04/27/95	940	35	810	530	7,500	NA
	08/03/95	380	<5.0	140	45	1,900	24
	10/17/95	950	29	230	190	6,100	<5.0
	01/24/96	730	15	190	110	3,000	<100
	04/24/96	1,200	130	1,000	1,400	11,000	<100
	07/26/96	800	16	24	56	2,500	250
	10/30/96	1,300	28	170	180	5,200	2,900
	01/31/97	NS	NS	NS	NS	NS	NS

TABLE 2-Continued

GROUND WATER SAMPLE RESULTS
Concentrations in micrograms per liter ($\mu\text{g/L}$)

Exxon Service Station No. 7-0104
1725 Park Street
Alameda, California

Monitoring Well	Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPPH as gasoline	MTBE
MW-4	09/12/94	900	57	310	490	5,200 ^a	NA
	10/01/94	1,200	66	360	380	9,100 ^a	NA
	01/13/95	1,300	200	550	1,000	25,000 ^c	NA
	04/27/95	650	130	350	590	5,900	NA
	08/03/95	1,000	<12	170	140	4,200	5,700
	10/17/95	1,300	30	360	380	6,900	1,700
	01/24/96	1,900	46	290	330	6,300	830
	04/24/96	1,800	<20	190	130	5,000	1,600
	07/26/96	1,700	<25	340	280	9,100	1,200
	10/30/96	1,100	35	420	300	5,300	1,500
	01/31/97	1,200	28	490	130	6,500	40,000
MW-5	09/12/94	2,300	17	320	230	10,000 ^a	NA
	10/01/94	2,300	19	220	200	11,000 ^a	NA
	01/13/95	NS	NS	NS	NS	NS	NA
	04/27/95	2,200	72	540	350	14,000	NA
	08/03/95	2,100	<100	210	<100	<10,000	39,000
	10/17/95	1,800	14	240	170	13,000	38,000
	01/24/96	2,400	79	340	190	10,000	20,000
	04/24/96	3,700	120	520	170	13,000	33,000
	07/26/96	3,400	53	280	76	15,000	140,000
	10/30/96	2,600	76	260	150	10,000	110,000 ^a
	01/31/97	2,400	66	430	140	10,000	34,000 ^c
MW-6	09/12/94	150	4.4	170	85	1,500 ^a	NA
	10/01/94	120	<0.5	99	38	87 ^a	NA
	01/13/95	710	220	780	1,100	9,900 ^a	NA
	04/27/95	340	40	460	320	3,900	NA
	08/03/95	89	<2.5	110	63	1,100	65
	10/17/95	410	74	850	110	8,500	<5.0
	01/24/96	560	1,500	2,200	7,500	31,000	<5.0
	04/24/96	460	570	1,400	3,300	15,000	280
	07/26/96	270	660	1,600	5,500	27,000	1,300
	10/30/96	490	440	1,800	6,200	28,000	900
	01/31/97	190	1,000	380	1,400	7,000	770

TABLE 2-Continued

GROUND WATER SAMPLE RESULTS
Concentrations in micrograms per liter ($\mu\text{g/L}$)

Exxon Service Station No. 7-0104
1725 Park Street
Alameda, California

<u>Monitoring Well</u>	<u>Date</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl-benzene</u>	<u>Total Xylenes</u>	<u>TPPH as gasoline</u>	<u>MTBE</u>
MW-7	09/12/94	490	50	280	70	6,000 ^a	NA
	10/01/94	940	670	310	160	8,900 ^a	NA
	01/13/95	590	780	970	4,200	20,000 ^a	NA
	04/27/95	410	32	410	230	8,800	NA
	08/03/95	390	<50	290	<50 ^c	4,900	17,000
	10/17/95	530	26	240	25	6,700	17,000
	01/24/96	2,000	390	350	230	9,300	60,000
	04/24/96	2,400	850	150	130	9,000	360,000
	07/26/96	530	25	60	46	4,800	86,000
	10/30/96	180	9.8	58	38	3,400	28,000
	01/31/97	300	18	48	37	3,800	45,000
MW-8	09/12/94	<0.5	<0.5	<0.5	<0.5	<50 ^a	NA
	10/01/94	<0.5	<0.5	<0.5	<0.5	<50 ^a	NA
	01/13/95	<0.5	<0.5	<0.5	<0.5	<50 ^a	NA
	04/27/95	<0.5	<0.5	<0.5	<0.5	<50	NA
	08/03/95	<0.5	<0.5	<0.5	<0.5	<50	<2.5
	10/17/95	<0.5	<0.5	<0.5	<0.5	<50	<5.0
	01/24/96	<0.5	<0.5	<0.5	<0.5	<50	<5.0
	04/24/96	<0.5	<0.5	<0.5	<0.5	<50	<5.0
	07/26/96	<0.5	<0.5	<0.5	<0.5	<50	230
	10/30/96	<0.5	<0.5	<0.5	<0.5	<50	<5.0
	01/31/97	NS	NS	NS	NS	NS	NS
MW-9	09/12/94	<0.5	<0.5	<0.5	<0.5	<50 ^a	NA
	10/01/94	<0.5	<0.5	<0.5	<0.5	<50 ^a	NA
	01/13/95	<0.5	<0.5	<0.5	<0.5	<50 ^a	NA
	04/27/95	<0.5	<0.5	<0.5	<0.5	<50	NA
	08/03/95	<0.5	<0.5	<0.5	<0.5	<50	<2.5
	10/17/95	<0.5	<0.5	<0.5	<0.5	<50	<5.0
	01/24/96	<0.5	<0.5	<0.5	<0.5	<50	<5.0
	04/24/96	<0.5	<0.5	<0.5	<0.5	<50	<5.0
	07/26/96	<0.5	<0.5	<0.5	<0.5	<50	<5.0
	10/30/96	<0.5	<0.5	<0.5	<0.5	<50	<5.0
	01/31/97	NS	NS	NS	NS	NS	NS

TABLE 2-Continued

GROUND WATER SAMPLE RESULTS
Concentrations in micrograms per liter ($\mu\text{g/L}$)

Exxon Service Station No. 7-0104
1725 Park Street
Alameda, California

<u>Monitoring Well</u>	<u>Date</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl-benzene</u>	<u>Total Xylenes</u>	<u>TPPH as gasoline</u>	<u>MTBE</u>
MW-10	09/12/94	<0.5	<0.5	1.6	<0.5	71 ^a	NA
	10/01/94	1.1	<0.5	2.8	0.73	330 ^a	NA
	01/13/95	<0.5	<0.5	<0.5	<0.5	90 ^a	NA
	04/27/95	<0.5	<0.5	5.4	1.3	140	NA
	08/03/95	<0.5	<0.5	<0.5	<0.5	150	<2.5
	10/17/95	<0.5	<0.5	<0.5	<0.5	<50	95
	01/24/96	1.6	0.52	62	28	760	24
	04/24/96	<0.5	<0.5	7.1	<0.5	110	6.8
	07/26/96	<0.5	<0.5	12	0.86	140	<5.0
	10/30/96	<0.5	<0.5	<0.5	<0.5	<50	5.6
	01/31/97	<0.5	<0.5	<0.5	<0.5	<50	10
MW-11	10/17/95	3,800	150	950	4,500	34,000	890
	01/24/96	3,800	1,200	2,100	9,800	44,000	<500
	04/24/96	2,900	1,400	1,700	8,300	34,000	720
	07/26/96	4,600	4,200	950	9,500	39,000	800
	10/30/96	4,200	3,600	2,100	9,600	53,000	990
	01/31/97	170	2,500	940	4,300	23,000	310 ^c
MW-12	10/17/95	<0.5	<0.5	<0.5	<0.5	<50	<5.0
	01/24/96	<0.5	<0.5	<0.5	<0.5	<50	<5.0
	04/24/96	<0.5	0.68	<0.5	0.72	<50	<5.0
	07/26/96	<0.5	<0.5	<0.5	<0.5	<50	<5.0
	10/30/96	<0.5	<0.5	<0.5	<0.5	<50	<5.0
	01/31/97	NS	NS	NS	NS	NS	NS
EW-1	09/12/94	40	<0.5	10	5.4	400 ^a	NA
	10/01/94	<0.5	4.4	30	11	3,400 ^a	NA
	01/13/95	40	<0.5	12	16	680 ^a	NA
	04/27/95	NS	NS	NS	NS	NS	NA
	08/03/95	2.7	<1.2	<1.2	<1.2	<125	590
	10/17/95	220	<0.5	160	36	3,600	400
	01/24/96	4.3	<0.5	1.3	0.53	64	260
	04/24/96	130	2.3	35	2.1	740	3,000
	07/26/96	<0.5	<0.5	<0.5	<0.5	<50	960
	10/30/96	0.52	<0.5	<0.5	<0.5	<50	5,300
	01/31/97	NS	NS	NS	NS	NS	NS

TABLE 2-Continued

GROUND WATER SAMPLE RESULTS
Concentrations in micrograms per liter ($\mu\text{g/L}$)

Exxon Service Station No. 7-0104
1725 Park Street
Alameda, California

<u>Monitoring Well</u>	<u>Date</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl-benzene</u>	<u>Total Xylenes</u>	<u>TPPH as gasoline</u>	<u>MTBE</u>
EW-2	09/12/94	2,000	79	180	290	8,800 ^a	NA
	10/01/94	1,400	6.7	700	310	9,500 ^a	NA
	01/13/95	930	270	21	280	5,700 ^a	NA
	04/27/95	NS	NS	NS	NS	NS	NA
	08/03/95	170	27	36	64	830	1,600
	10/17/95	<0.5	<0.5	<0.5	5.1	180	3,600
	01/24/96	290	82	14	170	1,700	6,400
	04/24/96	670	200	110	490	3,500	7,300
	07/26/96	250	56	10	220	1,400	14,000
	10/30/96	200	44	8.8	190	1,500	13,000
	01/31/97	NS	NS	NS	NS	NS	NS
EW-3	09/12/94	44	5.9	12	31	300 ^a	NA
	10/01/94	12	0.42	1.7	3.7	140 ^a	NA
	01/13/95	4.6	7.6	1.2	6.6	230 ^a	NA
	04/27/95	NS	NS	NS	NS	NS	NA
	08/03/95	<2.0	<2.0	<2.0	<2.0	<200	1,400
	10/17/95	4.4	<0.5	<0.5	<0.5	74	2,400
	01/24/96	16	<0.5	<0.5	<0.5	120	2,300
	04/24/96	34	3.7	8.9	11	180	3,800
	07/26/96	45	0.70	<0.5	2.1	180	2,000
	10/30/96	60	8.2	<0.5	100	660	2,800
	01/31/97	NS	NS	NS	NS	NS	NS
EW-4	09/12/94	1,700	12	210	77	4,000 ^a	NA
	10/01/94	100	1.5	15	11	460 ^a	NA
	01/13/95	89	8.8	1.6	82	520 ^a	NA
	04/27/95	NS	NS	NS	NS	NS	NA
	08/03/95	3,100	1,100	2,000	8,200	42,000	17,000
	10/17/95	6.3	<0.5	<0.5	<0.5	92	2,500
	01/24/96	79	2.5	2.9	10	220	9,200
	04/24/96	49	36	69	1,100	4,600	860
	07/26/96	610	6.2	200	300	2,900	15,000
	10/30/96	68	11	<2.5	71	550	3,400
	01/31/97	NS	NS	NS	NS	NS	NS

TABLE 2-Continued

GROUND WATER SAMPLE RESULTS
Concentrations in micrograms per liter ($\mu\text{g/L}$)

Exxon Service Station No. 7-0104
1725 Park Street
Alameda, California

Monitoring Well	Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPPH as gasoline	MTBE
EW-5	09/12/94	26	1.7	11	12	180 ^a	NA
	10/01/94	16	0.92	5.7	8.5	130 ^a	NA
	01/13/95	0.6	0.8	0.6	2.9	130 ^a	NA
	04/27/95	NS	NS	NS	NS	NS	NA
	08/03/95	<0.5	<0.5	<0.5	<0.5	70	210
	10/17/95	1.5	<0.5	<0.5	3.0	78	50
	01/24/96	280	66	22	370	2,500	350
	04/24/96	690	240	380	1,300	6,400	400
	07/26/96	82	2.5	2.4	100	850	84
	10/30/96	110	5.1	2.2	120	1,200	68
	01/31/97	NS	NS	NS	NS	NS	NS

^a Total volatile hydrocarbons by DHS/LUFT manual method.

^b Result obtained from a 1:10 dilution analyzed on January 17, 1995.

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

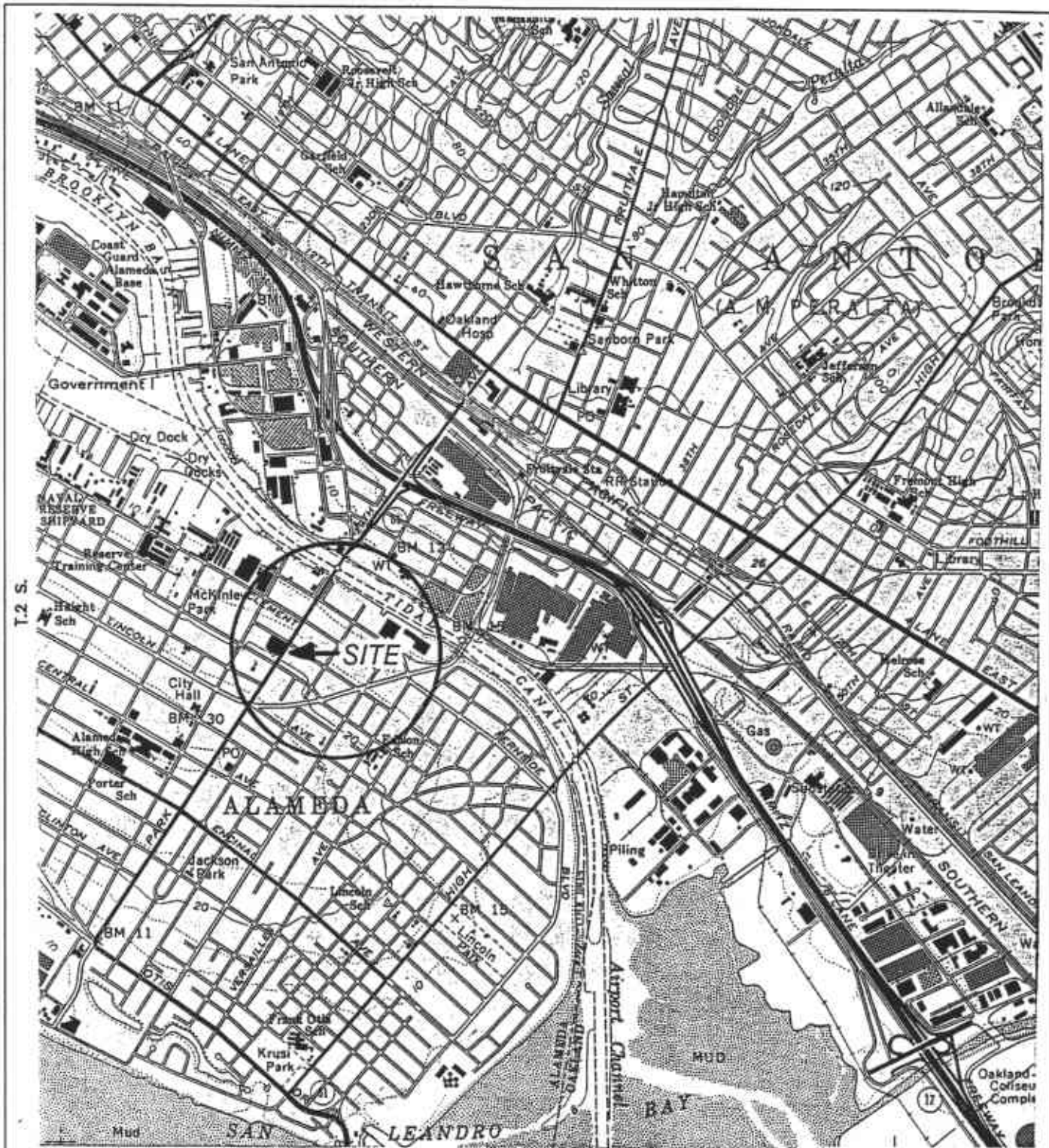
TPPH = Total purgeable petroleum hydrocarbons by DHS LUFT method or total petroleum hydrocarbons (TPH) by EPA Method 8015 Modified, except as noted.

MTBE = Methyl tertiary butyl ether by EPA Method 8020.

NA = Not analyzed.

NS = Not sampled.

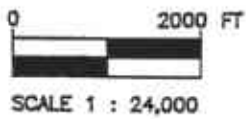
NOTE: Elevated detection limit quantified by multiplying laboratory reporting limits by Report Limit Multiplication Factor.



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



QUADRANGLE LOCATION

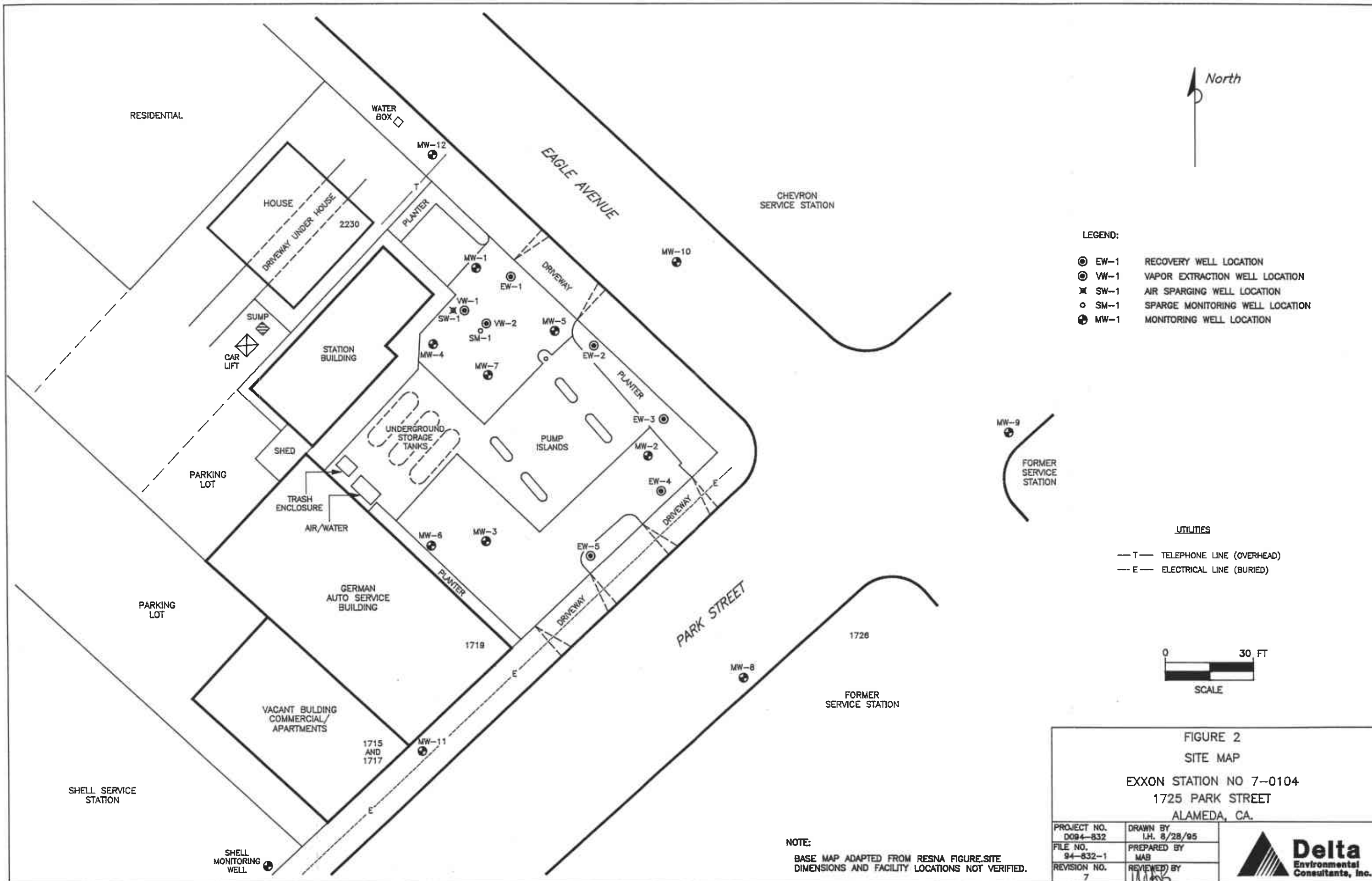


R.3 W.

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

PROJECT NO. D094-832	DRAWN BY L.H. 9/27/94
FILE NO. —	PREPARED BY RDM
REVISION NO. 1	REVIEWED BY [Signature] 10/5/94



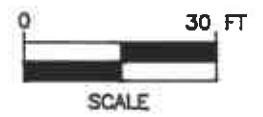


LEGEND:

- ⊙ EW-1 RECOVERY WELL LOCATION
- ⊙ VW-1 VAPOR EXTRACTION WELL LOCATION
- ⊗ SW-1 AIR SPARGING WELL LOCATION
- SM-1 SPARGE MONITORING WELL LOCATION
- ⊕ MW-1 MONITORING WELL LOCATION

UTILITIES

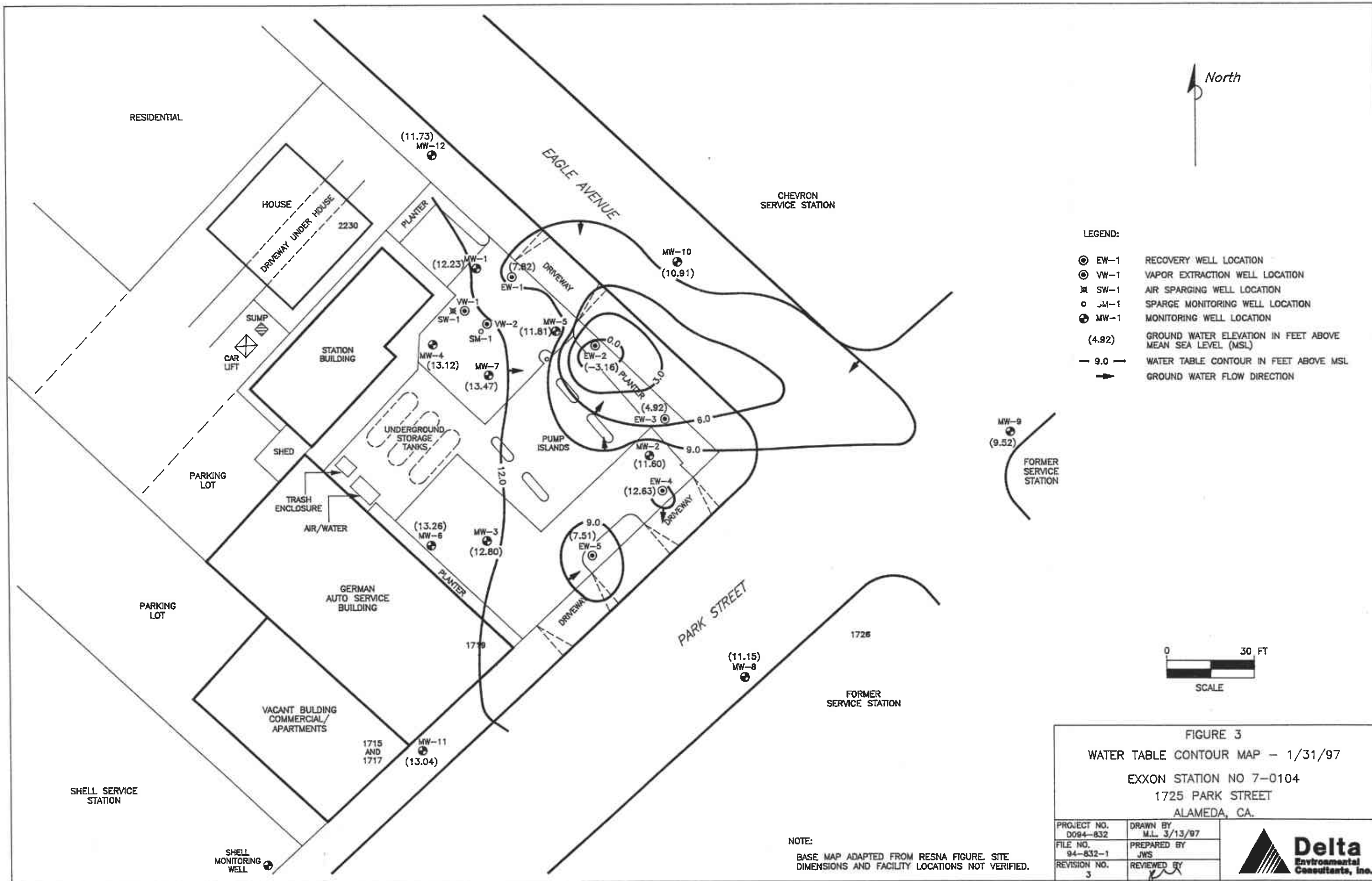
- - - T - TELEPHONE LINE (OVERHEAD)
- - - E - ELECTRICAL LINE (BURIED)



**FIGURE 2
SITE MAP
EXXON STATION NO 7-0104
1725 PARK STREET
ALAMEDA, CA.**

PROJECT NO. D094-832	DRAWN BY L.H. 8/28/95	
FILE NO. 94-832-1	PREPARED BY MAB	
REVISION NO. 7	REVIEWED BY <i>[Signature]</i>	

NOTE:
BASE MAP ADAPTED FROM RESNA FIGURE.SITE
DIMENSIONS AND FACILITY LOCATIONS NOT VERIFIED.



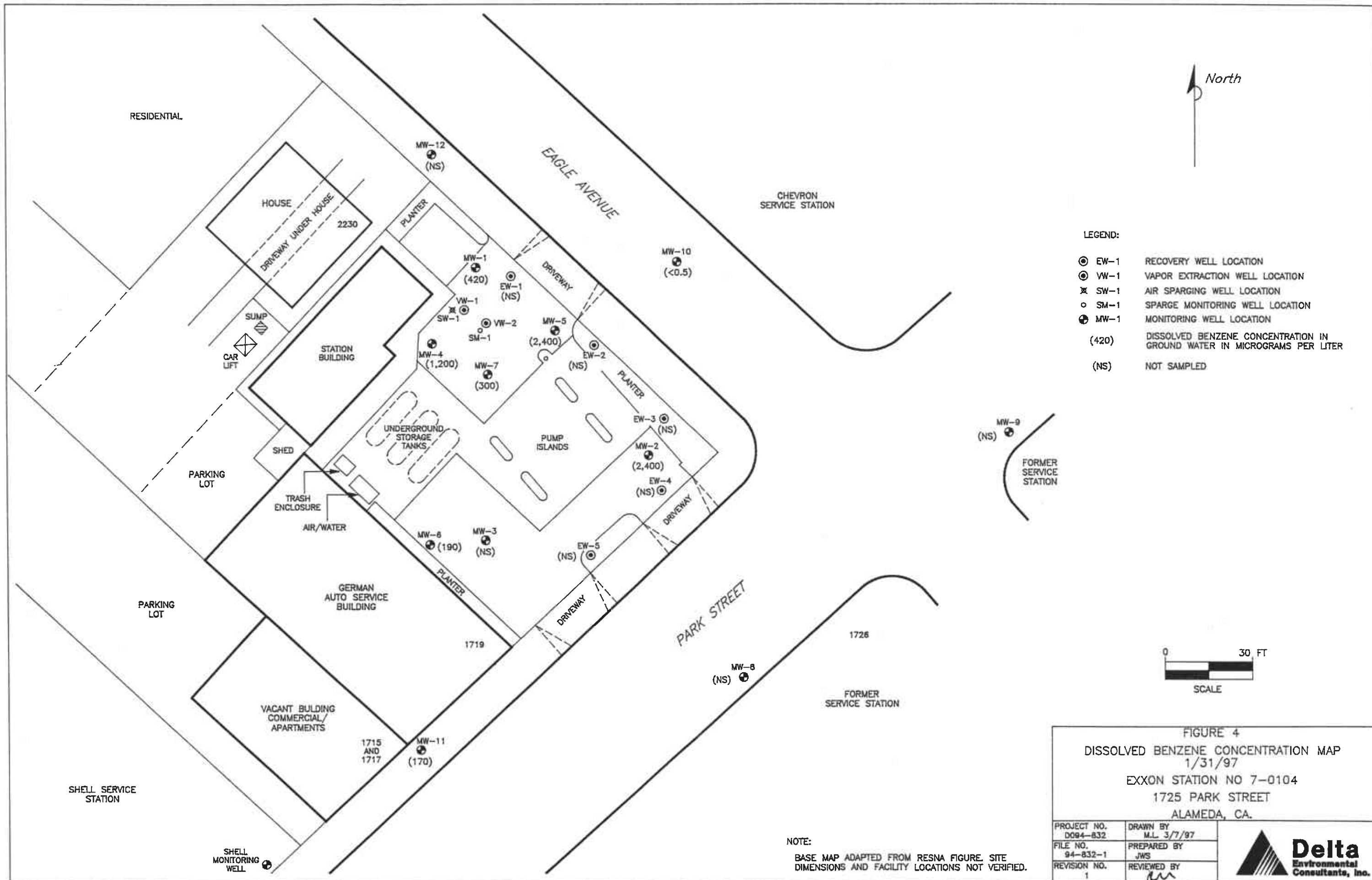
- LEGEND:**
- ⊙ EW-1 RECOVERY WELL LOCATION
 - ⊙ VW-1 VAPOR EXTRACTION WELL LOCATION
 - ⊗ SW-1 AIR SPARGING WELL LOCATION
 - SM-1 SPARGE MONITORING WELL LOCATION
 - ⊕ MW-1 MONITORING WELL LOCATION
 - (4.92) GROUND WATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL (MSL)
 - 9.0 - WATER TABLE CONTOUR IN FEET ABOVE MSL
 - GROUND WATER FLOW DIRECTION

FIGURE 3
WATER TABLE CONTOUR MAP - 1/31/97
EXXON STATION NO 7-0104
1725 PARK STREET
ALAMEDA, CA.

PROJECT NO. D094-832	DRAWN BY M.L. 3/13/97
FILE NO. 94-832-1	PREPARED BY JWS
REVISION NO. 3	REVIEWED BY <i>[Signature]</i>



NOTE:
 BASE MAP ADAPTED FROM RESNA FIGURE. SITE DIMENSIONS AND FACILITY LOCATIONS NOT VERIFIED.



LEGEND:

- ⊙ EW-1 RECOVERY WELL LOCATION
- ⊙ VW-1 VAPOR EXTRACTION WELL LOCATION
- ⊗ SW-1 AIR SPARGING WELL LOCATION
- SM-1 SPARGE MONITORING WELL LOCATION
- ⊕ MW-1 MONITORING WELL LOCATION
- (420) DISSOLVED BENZENE CONCENTRATION IN GROUND WATER IN MICROGRAMS PER LITER
- (NS) NOT SAMPLED

FIGURE 4
 DISSOLVED BENZENE CONCENTRATION MAP
 1/31/97
 EXXON STATION NO 7-0104
 1725 PARK STREET
 ALAMEDA, CA.

PROJECT NO. D094-832	DRAWN BY M.L. 3/7/97
FILE NO. 94-832-1	PREPARED BY JWS
REVISION NO. 1	REVIEWED BY <i>[Signature]</i>



NOTE:
 BASE MAP ADAPTED FROM RESNA FIGURE. SITE DIMENSIONS AND FACILITY LOCATIONS NOT VERIFIED.

ENCLOSURE A

Field Methods and Procedures

FIELD METHODS AND PROCEDURES

1.0 GROUND WATER AND LIQUID-PHASE 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

**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

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.

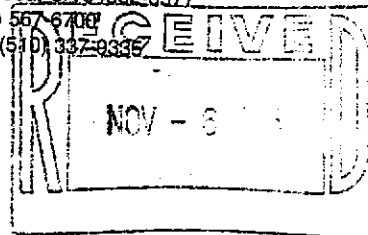
If you have any questions, I can be reached at (510) 567-6762.

eva chu
Hazardous Materials Specialist

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

ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION (LOP)
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

(510) 567-6700
FAX (510) 337-9335



ENCLOSURE C

**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. 7-0104

1725 Park Street
 Alameda, California

(Page 2 of 11)

Well ID # (TOC)	Sampling Date	SUBJ < >	DTW feet >	Elev. < >	TPHg < >	B	T	E	X
						parts per billion >			
MW-1 cont. (17.35)	07/15/93	NLPH	8.01	9.24	7,500	270	62	1,100	1,000
	10/21/93#	NM	7.33	9.52			1.4	72	17
	11/16/93	NLPH	8.53	8.56	340	18			
	11/30/93#	NM	8.38	8.59					
	12/17/93#	NM	7.42	9.23					
	01/31/93#	NM	6.37	10.98	310	15	9.0	98	58
	02/24-25/94	NLPH	6.23	10.84					
MW-2 (16.57)	06/07/88	-	-	-	110,000	12,000	12,000	2,100	12,000
	06/10/88#	NLPH	6.20	10.47				1,500	7,700
	01/17/89	NLPH	5.96	10.71	30,000	5,500	3,300		
	01/24/89#	NLPH	5.04	11.53			230	580	1,200
	06/01/89	sheen	6.32	10.35	2,700	330	230	570	220
	09/13/89	NLPH	6.73	9.94	17,000	520			
	10/20/89#	NLPH	6.37	9.90					
	11/22/89#	NLPH	6.30	9.37					
	12/11/89	NLPH	6.57	10.10	32,000	1,000	350	310	1,200
	02/13/90#	NLPH	6.12	10.55					
	02/13/90	NLPH	6.02	10.55	39,000	3,500	1,500	2,100	3,900
	04/13/90#	NLPH	6.35	10.32					
	05/23/90#	NLPH	6.29	10.39					
	06/14/90	NLPH	6.14	10.53	34,000	3,300	730	1,500	3,300
	08/21/90#	NLPH	6.70	9.97					
	09/19/90	NLPH	6.34	9.33	53,000	570	120	330	1,000
	12/17/90	NLPH	6.46	10.21	140,000	3,700	2,500	3,000	3,300
	01/31/91#	sheen	6.56	10.01					
	02/25/91#	NLPH	6.50	10.17					
	03/19/91	sheen	6.76	10.91	48,000	4,500	1,300	2,100	5,500
	04/22/91#	NLPH	6.78	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	6.31	9.36					
	09/23/91#	NLPH	6.32	9.35					
	10/21/91#	NLPH	7.01	9.56	34,000	3,700	1,100	1,300	5,200
	10/22/91	-	-	-					
	11/13/91#	NLPH	6.56	10.01					
	12/11/91#	NLPH	6.25	9.52					
	01/21/92	NLPH	6.22	10.45	21,000	4,500	1,300	1,700	5,100
	02/20/92#	NLPH	6.23	11.39					
	03/19/92#	NLPH	6.34	11.33					
04/24/92	sheen	6.75	10.92	36,000	5,000	970	2,300	5,200	
05/13/92#	NLPH	6.95	10.72						

See notes on page 11 of 11.

0511M02.FM (17077.2)

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 < >	B	T	E	X
						parts per billion >			
MW-2 cont. (16.57)	06/24/82#	NLPH	6.39	10.29					
	07/16/82	sneen	6.50	10.17	42,000	3,500	490	1,300	2,700
	08/19/82#	NLPH	6.59	9.98					
	09/24/82	sneen	6.74	9.93	25,000	3,300	670	1,700	3,300
	02/05/83#	0.01	6.58	11.10					
	04/30/83	sneen	6.78	10.89	290,000	11,000	6,500	5,500	160,000
	05/14/83#	NA	NA	-					
	07/15/83#	0.01	7.39	8.79					
	10/21/83#	NM	7.24	9.43					
	11/16/83#	0.02	8.37	8.32					
	11/30/83#	NM	7.93	8.74					
	12/17/83#	NM	7.74	8.93					
	01/31/84#	NM	6.22	10.25					
	02/24-25/84	NLPH	6.93	9.74	51,000	11,000	1,700	2,700	5,500
	MW-3 (17.11)	06/07/88	NM	NM	-	23,000	6,000	30	940
06/10/88#		NLPH	6.05	11.06					
01/17/89		NLPH	6.49	11.52	5,300	2,500	220	530	1,100
01/24/89#		NLPH	6.32	11.73					
06/01/89		NLPH	6.36	11.15	5,400	320	300	570	520
09/13/89		NLPH	6.55	10.46	12,000	380	170	350	360
10/20/89#		NLPH	6.38	10.23					
11/22/89#		NLPH	6.74	10.37					
12/11/89		NLPH	6.37	10.74	14,000	1,100	150	670	590
02/13/90#		NLPH	6.52	11.53					
03/13/90		NLPH	6.48	11.53	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	6.33	11.23	9,500	1,300	380	370	1,300
08/21/90#		NLPH	6.57	10.44					
09/19/90		NLPH	6.38	10.23	16,000	5,000	65	1,500	450
12/17/90		NLPH	6.46	10.55	6,700	1,500	64	650	460
01/31/91#		NLPH	6.24	10.37					
02/25/91#		NLPH	6.18	10.93					
03/19/91		NLPH	6.35	11.76	13,000	4,200	2,100	1,100	1,200
04/22/91#		NLPH	6.72	11.29					
05/17/91#		NLPH	6.35	11.56					
07/24/91		NLPH	6.41	10.70	33,000	6,200	990	2,900	3,300
09/10/91#		NLPH	6.30	10.31					
09/23/91#		NLPH	6.30	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 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 4 of 11)

Well ID # (TOC)	Sampling Date	SUBJ < >	DTW feet >	Env. >	TPHg < >	B < >	T parts per billion >	E >	X >
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	1,300	740
	02/20/92#	NLPH	4.39	12.22					
	03/19/92#	NLPH	4.35	12.25					
	04/24/92	NLPH	5.28	11.33	17,000	4,200	170	1,500	600
	05/13/92#	NLPH	5.58	11.53					
	06/24/92#	NLPH	6.22	10.39					
	07/16/92	NLPH	6.36	10.75	11,000	2,700	230	1,100	570
	08/19/92#	NLPH	6.55	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	3,500	110	1,300	430
	04/30/93	NLPH	5.46	11.35	13,000	1,500	370	1,500	1,300
	05/14/93#	NLPH	6.55	10.53					
	07/15/93	NLPH	7.28	9.33	2,100	310	15	230	58
	10/21/93#	NM	7.42	9.59					
	11/16/93	NLPH	8.02	9.09	4,000	400	400	120	490
	11/30/93		7.79	9.22					
	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	290	52	150	400	
MW-4 (17.34)	01/17/89	NLPH	6.36	11.38	19,000	1,000	1,300	360	2,200
	01/24/89#	NLPH	6.46	11.38					
	06/01/89	NLPH	6.01	11.33	3,300	190	240	53	910
	09/18/89	NLPH	6.30	10.54	6,000	390	200	28	570
	10/20/89#	NLPH	7.08	10.26					
	11/22/89#	NLPH	6.32	10.52					
	12/11/89	NLPH	6.37	10.97	13,000	750	310	570	1,200
	02/13/90#	NLPH	6.49	11.25					
	03/07/90#	NM	NM						
	03/13/90	NLPH	6.44	11.90	12,000	1,500	1,500	470	28,000
	04/12/90#	NLPH	6.14	11.20					
	05/23/90#	NLPH	6.22	11.12					
	06/14/90	NLPH	6.22	11.42	12,000	3,700	400	1,300	750
	08/21/90#	NLPH	6.33	10.51					
	09/19/90	NLPH	7.07	10.27	6,500	570	190	390	1,000
	12/17/90	NLPH	6.30	10.34	14,000	1,400	520	540	2,100
	01/31/91#	NLPH	6.56	10.58					
02/25/91#	NLPH	6.21	11.13						
03/19/91	NLPH	6.29	12.05	11,000	1,500	740	520	2,100	
04/22/91#	NLPH	6.25	12.08						

See notes on page 11 of 11.

0512.MGLC.FRM.170077.20

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 # (TOC)	Sampling Date	SUBJ < >	DTW feet >	Elev. < >	TPHg < >	B	T	M	X
					parts per billion >				
MW-4 cont. (17.24)	05/17/91#	NLPH	5.50	11.74					
	07/24/91	NLPH	5.54	10.30	10,000	1,200	440	470	1,200
	09/10/91#	NLPH	7.04	10.30					
	09/23/91#	NLPH	7.14	10.20					
	10/21/91#	sneen	7.30	10.04					
	10/22/91	—	—	—	4,500	750	190	350	780
	11/13/91#	NLPH	3.90	10.44					
	12/11/91#	NLPH	7.01	10.33					
	01/21/92	NLPH	5.25	11.09	5,000	1,300	320	570	1,200
	02/20/92#	NLPH	4.79	12.55					
	03/19/92#	NLPH	4.70	12.54					
	04/24/92	sneen	5.25	12.09	11,000	1,700	530	710	1,500
	05/13/92#	sneen	5.52	11.72					
	06/24/92#	sneen	5.19	11.15					
	07/16/92	sneen	5.51	10.33	5,400	870	240	440	700
	08/19/92#	NLPH	3.35	10.49					
	09/24/92	NLPH	7.17	10.17	5,900	1,300	120	530	590
	02/05/93	NLPH	4.51	12.73	15,000	2,300	320	980	2,200
	04/30/93	NLPH	5.59	11.75	21,000	4,000	960	1,500	2,300
	05/14/93#	NLPH	5.50	10.34					
	07/15/93	NLPH	7.50	9.34	2,500	440	55	130	220
	10/27/93#	NM	7.77	9.57					
	11/16/93	NLPH	3.27	9.07	5,100	320	160	250	750
	11/30/93	—	3.02	9.32	—	—	—	—	—
12/17/93#	NM	7.04	10.30						
01/31/94#	NM	5.36	10.98						
02/24-25/94	NLPH	5.73	11.55	9,300	2,200	190	550	1,200	
MW-5 (16.71)	01/17/89	NLPH	5.39	11.32	25,000	8,700	3,900	990	5,900
	01/24/89#	NLPH	5.51	11.20					
	06/01/89	sneen	5.33	10.98	5,200	240	220	130	590
	09/18/89	NLPH	6.52	10.19	3,000	340	150	140	460
	10/20/89#	NLPH	6.72	9.99					
	11/22/89#	NLPH	6.54	10.17					
	12/11/89	NLPH	5.21	10.50	15,000	720	320	450	370
	02/13/90#	NLPH	5.50	11.11					
	03/07/90#	NM	NM	—					
	03/13/90	NLPH	5.54	11.17	10,000	3,400	220	290	800
	04/18/90#	NLPH	5.75	10.96					
	05/23/90#	NLPH	5.98	10.73					
	06/14/90	NLPH	5.31	10.90	12,000	3,300	160	350	730
	08/21/90#	NLPH	6.51	10.20					

See notes on page 11 of 11.

1512MGT5-FM-170077-20

TABLE 1
 CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
 Exxon Service Station No. 7-2104
 1725 Park Street
 Alameda, California
 (Page 6 of 11)

Well ID # (TOC)	Sampling Date	SUBJ < >	DTW feet >	Elev. >	TPHg < >	B < >	T parts per billion >	E < >	X < >	
MW-3 cont. (16.71)	09/19/90	NLPH	8.70	10.01	3.500	1,300	35	120	460	
	12/17/90	sneen	6.24	10.47	18,000	2,500	310	450	1,400	
	01/31/91#	NLPH	6.31	10.40						
	02/25/91#	NLPH	6.13	10.58						
	03/19/91	NLPH	6.32	11.39	17,000	2,900	310	530	1,200	
	04/22/91#	sneen	6.20	11.41						
	05/17/91#	NLPH	6.53	11.12						
	07/24/91	NLPH	6.33	10.38	16,000	3,200	320	620	1,100	
	09/10/91#	NLPH	6.56	10.05						
	09/23/91#	NLPH	6.75	9.96						
	10/21/91#	sneen	6.92	9.79						
	10/22/91	NM	NM	—		6,300	2,000	64	320	480
	11/18/91#	NLPH	6.55	10.16						
	12/11/91#	NLPH	6.34	10.07						
	01/21/92	sneen	6.07	10.54	14,000	4,000	190	630	1,300	
	02/20/92#	NLPH	4.33	11.38						
	03/19/92#	sneen	4.33	11.38						
	04/24/92	sneen	6.32	11.39	12,000	2,500	120	620	630	
	05/13/92#	sneen	6.31	11.10						
	06/24/92#	NLPH	6.17	10.54						
	07/16/92	sneen	6.25	10.46	20,000	4,000	48	330	720	
	08/19/92#	sneen	6.53	10.18						
	09/24/92	sneen	6.30	9.91	9,300	2,200	31	330	250	
02/05/93b#	NLPH	4.70	12.01							
04/30/93	sneen	6.43	11.28	30,000	6,300	450	1,900	1,500		
05/14/93#	NLPH	7.31	9.40							
07/15/93#	0.07	7.33	8.34							
10/21/93#	NM	7.25	9.46							
11/15/93#	0.04	8.42	8.32							
11/30/93#	—	8.10	8.51							
12/17/93#	NM	7.43	9.29							
01/31/94#	NM	6.95	10.76							
02/24-25/94#	sneen	6.23	10.48							
MW-6 (17.56)	01/17/89	NLPH	6.59	11.97	53,000	7,400	9,200	2,000	9,900	
	01/24/89#	NLPH	6.27	12.29						
	06/01/89	sneen	6.25	11.51	23,000	1,900	2,500	2,000	6,000	
	09/19/89	NLPH	6.95	10.51	17,000	650	410	650	320	
	10/20/89#	NLPH	7.24	10.52						
	11/22/89#	NLPH	7.05	10.51						
	12/11/89	NLPH	6.83	10.93	29,000	1,100	310	330	1,500	
	02/13/90#	NLPH	6.70	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 # (TCC)	Sampling Date	SUBJ < >	DTW feet >	Elev. > <	TPHg < >	B	T	E	X
						parts per billion >			
MW-3 cont. (17.56)	03/07/90#	NM	NM	—					
	03/13/90	NLPH	5.53	11.93	38,000	12,000	15,000	2,500	12,000
	04/18/90#	NLPH	5.25	11.30					
	05/23/90#	NLPH	5.42	11.14					
	06/14/90	NLPH	5.19	11.37	38,000	9,100	7,200	2,900	12,000
	08/21/90#	NLPH	7.01	10.55					
	09/19/90	NLPH	7.23	10.23	22,000	4,200	300	1,400	3,400
	12/17/90	NLPH	5.56	10.20	20,000	3,100	4,100	390	2,700
	01/31/91#	NLPH	5.39	11.17					
	02/25/91#	NLPH	5.39	11.17					
	03/19/91	NLPH	5.57	11.99	120,000	11,000	55,000	5,600	28,000
	04/22/91#	NLPH	5.42	12.14					
	05/17/91#	NLPH	5.73	11.23					
	07/24/91	NLPH	5.72	10.34	48,000	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	—	12,000	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	3,000	2,100	3,000
	05/13/92#	NLPH	5.33	11.73					
	06/24/92#	NLPH	5.50	11.06					
	07/16/92	NLPH	5.58	10.33	14,000	1,500	1,000	1,000	2,500
	08/19/92#	NLPH	7.00	10.56					
	09/24/92	NLPH	7.23	10.23	4,700	790	97	540	540
	02/05/93	NLPH	4.34	12.72	26,000	2,500	4,300	1,700	5,300
	04/30/93	NLPH	5.59	11.37	9,600	1,000	470	1,100	1,300
	05/14/93#	NLPH	6.52	11.04					
	07/15/93	NLPH	7.51	10.05	4,500	250	72	540	650
	10/21/93#	NM	7.35	9.71					
	11/16/93	NLPH	8.29	9.27	470	47	12	47	77
	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	5.23	11.33	4,300	190	190	300	460

See notes on page 11 of 11.

0322MQUE.FIN 10007720

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 # (FOC)	Sampling Date	SUBJ <	DTW feet >	Elev. >	TPHg <	S parts per billion	T parts per billion	M parts per billion	X parts per billion
MW-7	01/09/90	NM	NM	—	17,000	330	130	330	1,300
(17.12)	02/13/90#	NLPH	4.38	12.14					480
	03/13/90	NLPH	4.34	12.12	16,000	360	270	33	
	05/23/90#	NLPH	3.37	11.25				75	320
	06/14/90	NLPH	3.55	11.57	14,000	1,200	2,300		1,700
	09/19/90	NLPH	6.79	10.23	16,000	2,300	95	2,500	
	12/17/90	NLPH	6.15	10.97	75,000	2,600	7,000	3,300	14,000
	01/31/91#	NLPH	6.34	10.48					
	02/25/91#	NLPH	6.30	11.32					
	03/19/91	NLPH	4.96	12.16	44,000	1,300	740	3,400	3,500
	04/22/91#	NLPH	4.92	12.30					
	05/17/91#	NLPH	5.18	11.24					
	07/24/91	NLPH	6.22	10.30	13,000	1,300	160	2,700	1,000
	09/10/91#	NLPH	6.71	10.41					
	09/23/91#	NLPH	6.34	10.23					
	10/21/91#	NLPH	7.00	10.12					
	10/22/91	—	—	—	10,000	390	25	1,300	430
	11/18/91#	NLPH	6.56	10.55					
	12/11/91#	NLPH	6.52	10.44					
	01/21/92	NLPH	6.39	11.15	23,000	2,200	3,000	1,300	3,100
	02/20/92#	NLPH	4.36	12.76					
	03/19/92#	NLPH	4.22	12.90					
	04/24/92	NLPH	4.34	12.23	25,000	1,400	220	2,100	2,500
	05/13/92#	NLPH	5.24	11.38					
	06/24/92#	NLPH	6.04	11.08					
	07/16/92	NLPH	6.19	10.93	8,700	470	45	370	36
	08/19/92#	NLPH	6.55	10.57					
	09/24/92	NLPH	6.33	10.29	9,200	360	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	11.33	13,000	240	35	710	320
	05/14/93#	NLPH	5.91	11.21					
	07/15/93	NLPH	7.07	10.05	6,900	200	30	500	48
	10/21/93#	NM	7.55	9.57					
	11/16/93	NLPH	7.35	9.27	7,400	300	35	480	120
	11/30/93#	NM	7.56	9.46					
	12/17/93#	NM	6.75	10.37					
	01/31/94#	NM	6.22	10.30					
	02/24-25/94	NLPH	5.32	11.50	7,200	470	120	400	320

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 < >	B	T	E	X
						parts per billion			
MW-8 (16.33)	05/14/93	NLPH	6.34	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	6.33	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	9.35					
	01/31/94#	NM	6.13	10.20					
02/24-25/94	NLPH	6.30	10.53	<50	<0.5	<0.5	<0.5	<0.5	
MW-9 (15.32)	05/14/93	NLPH	6.51	9.01	<50	<0.5	<1.0	<0.5	<0.5
	07/15/93	NLPH	6.79	8.93	<50	<0.5	<0.5	<0.5	<0.5
	10/21/93#	NM	6.97	8.55					
	11/16/93	NLPH	7.12	8.50	<50	<0.5	<0.5	<0.5	<0.5
	11/30/93	-	6.98	8.54	-	-	-	-	-
	12/17/93#	NM	6.73	8.37					
	01/31/94#	NM	6.71	8.91					
02/24-25/94	NLPH	6.45	8.17	<50	<0.5	<0.5	<0.5	<0.5	
MW-10 (16.79)	05/14/93	NLPH	6.91	9.38	97	<0.5	<0.5	9.3	11
	07/15/93	NLPH	7.47	9.32	160	<0.5	<0.5	15	19
	10/21/93#	NM	7.57	9.12					
	11/16/93	NLPH	8.17	8.52	<50	<0.5	<0.5	<0.5	<0.5
	11/30/93	-	7.96	8.33	-	-	-	-	-
	12/17/93#	NM	7.25	9.54					
	01/31/94#	NM	6.56	10.13					
02/24-25/94	NLPH	6.53	10.25	230	<0.5	<0.5	12	7.0	
EW-1 (16.22)	10/21/93#	NM	6.57	9.55					
	12/17/93#	NM	10.09	6.13					
	01/31/94#	NM	5.38	10.34					
	02/24-25/94	NLPH	6.53	10.34	1,000	140	4.5	15	120
EW-2 (16.05)	10/21/93#	NM	6.71	9.54					
	12/17/93#	NM	14.95	1.10					
	01/31/94#	NM	6.25	10.70					
	02/24-25/94	LPH	14.30	1.75	3,200	1,200	390	63	470
EW-3 (16.02)	10/21/93#	NM	6.55	9.47					
	12/17/93#	NM	15.55	0.37					
	01/31/94#	NM	5.34	10.58					
	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.

0311MCLUE.FIN/170077.20

TABLE 1
 CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA

Exxon Service Station No. 7-3104

1725 Park Street
 Alameda, California

(Page 10 of 11)

Well ID # (TOC)	Sampling Date	SUBJ < >	DTW feet	Elev. < >	TPHg < >	B	T	E	X
						parts per billion			
2W-4 (16.51)	10/21/93#	NM	5.13	9.48					
	12/17/93#	NM	14.50	1.01					
	01/31/94#	NM	5.08	10.53					
	02/24-25/94	LPH	14.38	0.73	4,500	1,300	140	13	450
2W-5 (16.51)	10/21/93#	NM	5.77	9.74					
	12/17/93#	NM	14.30	2.37					
	01/31/94#	NM	5.34	10.27					
	02/24-25/94	NLPH	11.35	4.56	1,000	140	45	3.4	190
Field	12/11/89	--	--	--	<50	0.38	0.95	0.32	1.7
Blanks	12/17/90	--	--	--	<50	<0.5	<0.5	<0.5	<0.5
	03/19/91	--	--	--	<50	<0.5	<0.5	<0.5	<0.5
	07/24/91	--	--	--	<50	<0.5	<0.5	<0.5	<0.5
	10/22/91	--	--	--	<50	<0.5	<0.5	<0.5	<0.5
	01/21/92	--	--	--	<50	<0.5	<0.5	<0.5	<0.5
	07/16/92	--	--	--	<50	<0.5	<0.5	<0.5	<0.5
	Travel	06/14/90	--	--	--	<50	<0.5	<0.5	<0.5
Blanks	09/19/90	--	--	--	<50	0.3	<0.5	0.5	1.0
	04/24/92	--	--	--	<50	<0.5	<0.5	<0.5	<0.5
	09/24/92	--	--	--	230	<0.5	<0.5	<0.5	<0.5
	Maximum Contaminant Levels (MCLs) (DHS)					1.0	--	500	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. 7-0104

1725 Park Street

Alameda, California

(Page 11 of 11)

Well ID # (TOC)	Sampling Date	SUBJ < feet >	DTW feet	Elev. < feet >	TPHg < parts per billion >	B	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 * 0.9)) where PT is the product thickness
- TPHg = Total petroleum hydrocarbons as gasoline analyzed using EPA method 8030/8015
- BTEX = Benzene, Toluene, Ethylbenzene, and total Xylenes analyzed using EPA method 8030/8020
- 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 D

Laboratory Analytical Report



**Sequoia
Analytical**

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

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

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

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

Delta Environmental Consultants
3164 Gold Camp Dr., Suite 200
Rancho Cordova, CA 95670
Attention: Richard Munsch

Client Project ID: Exxon #7-0104, Alameda, CA
Sample Matrix: Water
Analysis Method: EPA 5030/8020, DHS Luft
First Sample #: 702-0012

Sampled: Jan 31, 1997
Received: Feb 3, 1997
Reported: Feb 13, 1997

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit µg/L	Sample I.D. 702-0012 MW-10	Sample I.D. 702-0013 MW-11	Sample I.D. 702-0014 MW-5	Sample I.D. 702-0015 MW-2	Sample I.D. 702-0016 MW-6	Sample I.D. 702-0017 MW-4
Purgeable Hydrocarbons	50	N.D.	23,000	10,000	28,000	7,000	6,500
Benzene	0.50	N.D.	170	2,400	2,400	190	1,200
Toluene	0.50	N.D.	2,500	66	630	1,000	28
Ethyl Benzene	0.50	N.D.	940	430	1,500	380	490
Total Xylenes	0.50	N.D.	4,300	140	3,300	1,400	130
Chromatogram Pattern:		--	Gasoline C6-C12	Gasoline C6-C12	Gasoline C6-C12	Gasoline C6-C12	Gasoline C6-C12

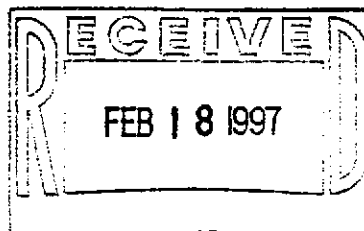
Quality Control Data

Report Limit Multiplication Factor:	1.0	100	100	100	200	40
Date Analyzed:	02/04/97	02/05/97	02/05/97	02/05/97	02/05/97	02/05/97
Instrument Identification:	GCHP-2	GCHP-2	GCHP-2	GCHP-2	GCHP-2	GCHP-2
Surrogate Recovery, %: (QC Limits = 60-140%)	102	99	101	104	103	103

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected at or above the reporting limit.

SEQUOIA ANALYTICAL, ELAP #1624

Linda C. Schneider
Linda C. Schneider
Project Manager/Sacramento Laboratory





Sequoia Analytical

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

Delta Environmental Consultants 3164 Gold Camp Dr., Suite 200 Rancho Cordova, CA 95670 Attention: Richard Munsch	Client Project ID: Exxon #7-0104, Alameda, CA Sample Matrix: Water Analysis Method: EPA 5030/8020, DHS Luft First Sample #: 702-0018	Sampled: Jan 31, 1997 Received: Feb 3, 1997 Reported: Feb 13, 1997
---	---	--

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit µg/L	Sample I.D. 702-0018 MW-7	Sample I.D. 702-0019 MW-1
Purgeable Hydrocarbons	50	3,800	7,600
Benzene	0.50	300	420
Toluene	0.50	18	33
Ethyl Benzene	0.50	48	1,400
Total Xylenes	0.50	37	480

Chromatogram Pattern: Weathered Gasoline C6-C12 Weathered Gasoline C6-C12

Quality Control Data

Report Limit Multiplication Factor:	10	40
Date Analyzed:	02/07/97	02/07/97
Instrument Identification:	GCHP-2	GCHP-2
Surrogate Recovery, %: (QC Limits = 60-140%)	92	96

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
 Analytes reported as N.D. were not detected at or above the reporting limit.

SEQUOIA ANALYTICAL, ELAP #1624

Linda C. Schneider
 Linda C. Schneider
 Project Manager/Sacramento Laboratory



Sequoia Analytical

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

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

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

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

Delta Environmental Consultants 3164 Gold Camp Dr., Suite 200 Rancho Cordova, CA 95670 Attention: Richard Munsch	Client Project ID: Exxon #7-0104, Alameda, CA Sample Matrix: Water Analysis Method: EPA 5030/8020 Modified First Sample #: 702-0012	Sampled: Jan 31, 1997 Received: Feb 3, 1997 Reported: Feb 13, 1997
---	--	--

METHYL TERTIARY BUTYL ETHER (MTBE)

Analyte	Reporting Limit µg/L	Sample I.D. 702-0012 MW-10	Sample I.D. 702-0016 MW-6	Sample I.D. 702-0017 MW-4	Sample I.D. 702-0018 MW-7	Sample I.D. 702-0019 MW-1
MTBE	5.0	10	770	40,000	45,000	N.D.

Quality Control Data

Report Limit Multiplication Factor:	1.0	200	2,000	2,000	40*
Date Analyzed:	02/04/97	02/05/97	02/07/97	02/07/97	02/07/97
Instrument Identification:	GCHP-2	GCHP-2	GCHP-2	GCHP-2	GCHP-2
Surrogate Recovery: (QC Limits = 60-140%)	102	103	95	102	96

Analytes reported as N.D. were not detected at or above the reporting limit.

SEQUOIA ANALYTICAL, ELAP #1624

Linda C. Schneider
Linda C. Schneider
Project Manager/Sacramento Laboratory



**Sequoia
Analytical**

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

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

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

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

Delta Environmental Consultants 3164 Gold Camp Dr., Suite 200 Rancho Cordova, CA 95670 Attention: Richard Munsch	Client Project ID: Exxon #7-0104, Alameda, CA Sample Descript: Water, MW-11 Analysis Method: EPA 8260 Lab Number: 702-0013	Sampled: Jan 31, 1997 Received: Feb 3, 1997 Analyzed: Feb 5, 1997 Reported: Feb 13, 1997
---	---	---

METHYL TERTIARY BUTYL ETHER (MTBE), EPA 8260

Analyte	Reporting Limit µg/L	Sample Results µg/L
Methyl Tertiary Butyl Ether (MTBE).....	5.0	310

SEQUOIA ANALYTICAL, ELAP #1624

Linda C. Schneider
Linda C. Schneider
Project Manager/Sacramento Laboratory



**Sequoia
Analytical**

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

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

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

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

Delta Environmental Consultants 3164 Gold Camp Dr., Suite 200 Rancho Cordova, CA 95670 Attention: Richard Munsch	Client Project ID: Exxon #7-0104, Alameda, CA Sample Descript: Water, MW-5 Analysis Method: EPA 8260 Lab Number: 702-0014	Sampled: Jan 31, 1997 Received: Feb 3, 1997 Analyzed: Feb 12, 1997 Reported: Feb 13, 1997
---	--	--

METHYL TERTIARY BUTYL ETHER (MTBE), EPA 8260

Analyte	Reporting Limit µg/L	Sample Results µg/L
Methyl Tertiary Butyl Ether (MTBE).....	2,500	34,000

SEQUOIA ANALYTICAL, ELAP #1624

Linda C. Schreider
Linda C. Schreider
Project Manager/Sacramento Laboratory



**Sequoia
Analytical**

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

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

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

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

Delta Environmental Consultants 3164 Gold Camp Dr., Suite 200 Rancho Cordova, CA 95670 Attention: Richard Munsch	Client Project ID: Exxon #7-0104, Alameda, CA Sample Descript: Water, MW-2 Analysis Method: EPA 8260 Lab Number: 702-0015	Sampled: Jan 31, 1997 Received: Feb 3, 1997 Analyzed: Feb 5, 1997 Reported: Feb 13, 1997
---	--	---

METHYL TERTIARY BUTYL ETHER (MTBE), EPA 8260

Analyte	Reporting Limit µg/L	Sample Results µg/L
Methyl Tertiary Butyl Ether (MTBE).....	500	8,000

SEQUOIA ANALYTICAL, ELAP #1624

Linda C. Schneider
Linda C. Schneider
Project Manager/Sacramento Laboratory





Delta Environmental Consultants
3164 Gold Camp Dr., Suite 200
Rancho Cordova, CA 95670
Attention: Richard Munsch

Client Project ID: Exxon #7-0104, Alameda, CA
Matrix: Water

QC Sample Group 7020012-19

Reported: Feb 13, 1997

QUALITY CONTROL DATA REPORT

ANALYTE	Ethyl-			
	Benzene	Toluene	Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	B. Williams	B. Williams	B. Williams	B. Williams
Concentration				
Spiked:	10 ug/L	10 ug/L	10 ug/L	30 ug/L
LCS Batch#:	LCS020497	LCS020497	LCS020497	LCS020497
Date Prepared:	02/04/97	02/04/97	02/04/97	02/04/97
Date Analyzed:	02/04/97	02/04/97	02/04/97	02/04/97
Instrument I.D.#:	GCHP-2	GCHP-2	GCHP-2	GCHP-2
LCS %				
Recovery:	106	108	109	108
Control Limits:	70-130	70-130	70-130	70-130

MS/MSD				
Batch #:	7011163	7011163	7011163	7011163
Date Prepared:	02/04/97	02/04/97	02/04/97	02/04/97
Date Analyzed:	02/04/97	02/04/97	02/04/97	02/04/97
Instrument I.D.#:	GCHP-2	GCHP-2	GCHP-2	GCHP-2
Matrix Spike				
% Recovery:	102	104	104	105
Matrix Spike				
Duplicate %				
Recovery:	98	101	100	97
Relative %				
Difference:	4.0	2.9	3.9	7.9

SEQUOIA ANALYTICAL

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 LCS % recovery data is used for validation of sample batch results. Due to matrix effects, the QC limits for MS/MSD's are advisory only and are not used to accept or reject batch results.

Linda C. Schneider
Linda C. Schneider
Project Manager/Sacramento Laboratory



Sequoia Analytical

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

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

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

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

Delta Environmental Consultants
3164 Gold Camp Dr., Suite 200
Rancho Cordova, CA 95670
Attention: Richard Munsch

Client Project ID: Exxon #7-0104, Alameda, CA
Matrix: Water

QC Sample Group 7020012-19

Reported: Feb 13, 1997

QUALITY CONTROL DATA REPORT

ANALYTE	Ethyl-			
	Benzene	Toluene	Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	B. Williams	B. Williams	B. Williams	B. Williams
Concentration Spiked:	10 ug/L	10 ug/L	10 ug/L	30 ug/L
LCS Batch#:	LCS020597	LCS020597	LCS020597	LCS020597
Date Prepared:	02/05/97	02/05/97	02/05/97	02/05/97
Date Analyzed:	02/05/97	02/05/97	02/05/97	02/05/97
Instrument I.D.#:	GCHP-2	GCHP-2	GCHP-2	GCHP-2
LCS % Recovery:	100	101	102	102
Control Limits:	70-130	70-130	70-130	70-130

MS/MSD Batch #:	7020014	7020014	7020014	7020014
Date Prepared:	02/05/97	02/05/97	02/05/97	02/05/97
Date Analyzed:	02/05/97	02/05/97	02/05/97	02/05/97
Instrument I.D.#:	GCHP-2	GCHP-2	GCHP-2	GCHP-2
Matrix Spike % Recovery:	104	95	96	96
Matrix Spike Duplicate % Recovery:	102	97	98	98
Relative % Difference:	1.9	2.1	2.1	2.1

SEQUOIA ANALYTICAL

Linda C. Schneider
Linda C. Schneider
Project Manager/Sacramento Laboratory

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 LCS % recovery data is used for validation of sample batch results. Due to matrix effects, the QC limits for MS/MSD's are advisory only and are not used to accept or reject batch results.





Sequoia Analytical

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

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

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

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

Delta Environmental Consultants 3164 Gold Camp Dr., Suite 200 Rancho Cordova, CA 95670 Attention: Richard Munsch	Client Project ID: Exxon #7-0104, Alameda, CA Matrix: Water	QC Sample Group 7020012-19	Reported: Feb 13, 1997
---	--	----------------------------	------------------------

QUALITY CONTROL DATA REPORT

ANALYTE	Ethyl-			
	Benzene	Toluene	Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	B. Williams	B. Williams	B. Williams	B. Williams
Concentration Spiked:	10 ug/L	10 ug/L	10 ug/L	30 ug/L
LCS Batch#:	LCS020797	LCS020797	LCS020797	LCS020797
Date Prepared:	02/07/97	02/07/97	02/07/97	02/07/97
Date Analyzed:	02/07/97	02/07/97	02/07/97	02/07/97
Instrument I.D.#:	GCHP-2	GCHP-2	GCHP-2	GCHP-2
LCS % Recovery:	105	109	110	110
Control Limits:	70-130	70-130	70-130	70-130

MS/MSD				
Batch #:	7020152	7020152	7020152	7020152
Date Prepared:	02/07/97	02/07/97	02/07/97	02/07/97
Date Analyzed:	02/07/97	02/07/97	02/07/97	02/07/97
Instrument I.D.#:	GCHP-2	GCHP-2	GCHP-2	GCHP-2
Matrix Spike % Recovery:	101	102	103	103
Matrix Spike Duplicate % Recovery:	100	102	102	99
Relative % Difference:	1.0	0.0	0.98	4.0

SEQUOIA ANALYTICAL

Linda C. Schneider
Linda C. Schneider
Project Manager/Sacramento Laboratory

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 LCS % recovery data is used for validation of sample batch results. Due to matrix effects, the QC limits for MS/MSD's are advisory only and are not used to accept or reject batch results.



Sequoia Analytical

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

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

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

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

Delta Environmental Consultants
3164 Gold Camp Dr., Suite 200
Rancho Cordova, CA 95670
Attention: Richard Munsch

Client Project ID: Exxon #7-0104, Alameda, CA
Matrix: Water

QC Sample Group 7020012-19

Reported: Feb 13, 1997

QUALITY CONTROL DATA REPORT

ANALYTE:	1,1-Dichloro-ethene	Trichloroethene	Benzene	Toluene	Chloro-benzene
Method:	EPA 8260	EPA 8260	EPA 8260	EPA 8260	EPA 8260
Analyst:	K. Pocan	K. Pocan	K. Pocan	K. Pocan	K. Pocan
Concentration Spiked:	50 mg/L	50 mg/L	50 mg/L	50 mg/L	50 mg/L
LCS Batch#:	LCS020597	LCS020597	LCS020597	LCS020597	LCS020597
Date Prepared:	02/05/97	02/05/97	02/05/97	02/05/97	02/05/97
Date Analyzed:	02/05/97	02/05/97	02/05/97	02/05/97	02/05/97
Instrument I.D.#:	MS-F1	MS-F1	MS-F1	MS-F1	MS-F1
LCS % Recovery:	75	87	92	85	86
Control Limits:	65-135	70-130	70-130	70-130	70-130

MS/MSD Batch #:	7011088	7011088	7011088	7011088	7011088
Date Prepared:	02/05/97	02/05/97	02/05/97	02/05/97	02/05/97
Date Analyzed:	02/05/97	02/05/97	02/05/97	02/05/97	02/05/97
Instrument I.D.#:	MS-F1	MS-F1	MS-F1	MS-F1	MS-F1
Matrix Spike % Recovery:	77	104	108	101	103
Matrix Spike Duplicate % Recovery:	81	106	111	105	107
Relative % Difference:	5.1	1.9	2.7	3.9	3.8

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 LCS % recovery data is used for validation of sample batch results. Due to matrix effects, the QC limits for MS/MSD's are advisory only and are not used to accept or reject batch results.

SEQUOIA ANALYTICAL

Linda C. Schneider
Linda C. Schneider
Project Manager/Sacramento Laboratory

7020012.DLT <10>





Sequoia Analytical

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

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

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

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

Delta Environmental Consultants
3164 Gold Camp Dr., Suite 200
Rancho Cordova, CA 95670
Attention: Richard Munsch

Client Project ID: Exxon #7-0104, Alameda, CA
Matrix: Water

QC Sample Group 7020012-19

Reported: Feb 13, 1997

QUALITY CONTROL DATA REPORT

ANALYTE:	1,1-Dichloro-ethene	Trichloroethene	Benzene	Toluene	Chloro-benzene
Method:	EPA 8260	EPA 8260	EPA 8260	EPA 8260	EPA 8260
Analyst:	K. Pocan	K. Pocan	K. Pocan	K. Pocan	K. Pocan
Concentration Spiked:	50 mg/L	50 mg/L	50 mg/L	50 mg/L	50 mg/L
LCS Batch#:	LCS021297	LCS021297	LCS021297	LCS021297	LCS021297
Date Prepared:	02/12/97	02/12/97	02/12/97	02/12/97	02/12/97
Date Analyzed:	02/12/97	02/12/97	02/12/97	02/12/97	02/12/97
Instrument I.D.#:	MS-F1	MS-F1	MS-F1	MS-F1	MS-F1
LCS % Recovery:	100	112	112	110	109
Control Limits:	65-135	70-130	70-130	70-130	70-130

MS/MSD Batch #:	7011088	7011088	7011088	7011088	7011088
Date Prepared:	02/05/97	02/05/97	02/05/97	02/05/97	02/05/97
Date Analyzed:	02/05/97	02/05/97	02/05/97	02/05/97	02/05/97
Instrument I.D.#:	MS-F1	MS-F1	MS-F1	MS-F1	MS-F1
Matrix Spike % Recovery:	77	104	108	101	103
Matrix Spike Duplicate % Recovery:	81	106	111	105	107
Relative % Difference:	5.1	1.9	2.7	3.9	3.8

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 LCS % recovery data is used for validation of sample batch results. Due to matrix effects, the QC limits for MS/MSD's are advisory only and are not used to accept or reject batch results.

SEQUOIA ANALYTICAL

Linda C. Schneider
Linda C. Schneider
Project Manager/Sacramento Laboratory





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

Consultant's Name: <u>Delta Environmental Consultants</u>		Site Location: <u>Alameda</u>	
Address: <u>3164 Gold Camp Dr Rancho</u>		Consultant Work Release #: <u>194325-22</u>	
Project #:	Consultant Project #: <u>D094-832</u>	Laboratory Work Release #:	
Project Contact: <u>Munch R.</u>	Phone #: <u>638-2085</u>	EXXON RAS #: <u>7-0104</u>	
EXXON Contact: <u>Marla Guenster</u>	Phone #:		
Sampled by (print): <u>Jay Stoops</u>	Sampler's Signature: <u>[Signature]</u>		
Shipment Method: <u>Sequoia</u>	Air Bill #:		

TAT: <input type="checkbox"/> 24 hr <input type="checkbox"/> 48 hr <input type="checkbox"/> 72 hr <input type="checkbox"/> 96 hr <input checked="" type="checkbox"/> Standard (10 day)							ANALYSIS REQUIRED					Temperature: _____		
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	MTBE 8260	Inbound Seal: Yes No	Outbound Seal: Yes No	
MW-10	1-31-97	1115	H ₂ O	H ₂	3	5702-0012	X			X				
MW-11		0935			4	-0013					X			
MW-5		0950			4	-0014					X			
MW-2		1005			4	-0015					X			
MW-6		1020			3	-0016				X				
MW-4		1040			3	-0017				X				
MW-7		1100			3	-0018				X				
MW-1		1115			3	-0019				X				

RELINQUISHED BY / AFFILIATION	Date	Time	ACCEPTED / AFFILIATION	Date	Time	Additional Comments
<u>[Signature]</u> / Delta	2/3/97	1105	<u>John Yuwell</u> / Sequoia	2/3/97	1105	
<u>John Yuwell</u> / Sequoia	3/3/97	1135	<u>Sandi Hossa</u> / Sequoia	2/3/97	1135	

Pink - Client
Yellow - Sequoia
White - Sequoia