

EXXON COMPANY, U.S.A.

P.O. BOX 4032 . CONCORD, CA 94524-2032

ENVIRONMENTAL ENGINEERING

MARLA D. GUENSLER

SENIOR ENVIRONMENTAL ENGINEER

(510) 246-8776

(510) 246-8798 FAX

October 12, 1994

2003
HAZMAT
9:08 OCT 13 PM 4:11

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

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

Dear Ms. Shin:

Attached for your review and comment is a report entitled **Quarterly Ground Water Monitoring Report and Remediation Status, Third Quarter 1994** for the above referenced site. This report, prepared by Delta Environmental Consultants, Inc., (Delta) of Rancho Cordova, California, details the results of the September 1994 ground water monitoring and sampling event.

Please note that due to the recent file transfer to a different Exxon consultant, that the system did not operate in the third quarter 1994.

Please contact me at (510) 246-8776 if you have any questions or comments.

Sincerely,



Marla D. Guensler
Senior Environmental Engineer

MDG/mdg

enclosure: Delta Quarterly Report dated October 5, 1994

cc: w/attachment:

Mr. Richard Hiatt - San Francisco Bay RWQCB

Mr. Todd Galati - Delta

- ① How much petroleum hydrocarbons have been removed?
- ② Has air sparge & vapor extraction been performed?
- ③ Why is system down.



3330 Data Drive
Suite 100
Rancho Cordova, CA 95670
916/638-2085
FAX: 916/638-8385

October 5, 1994

Ms. Marla Guensler
Exxon Company, U.S.A.
Post Office Box 4032
Concord, California 94524-2032

Subject: *Quarterly Ground Water Monitoring Report and Remediation Status, Third Quarter 1994*
Exxon Retail 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 at Exxon Retail Station No. 7-0104, located at 1725 Park Street, Alameda, California. This letter report presents the results of quarterly ground water monitoring and sampling conducted on September 12, 1994. The location of the site is shown in Figure 1 and site features are illustrated in Figure 2. All work conducted at the site by Delta was performed in accordance with the field methods and procedures described in Enclosure A.

Ground Water Table Elevations, Flow Direction, and Hydraulic Gradient

Ground water was present in each of the ten existing monitoring wells and the five extraction wells at the site on September 12, 1994, at depths ranging from 5.69 to 7.12 feet below the top of the well casings. Ground water table levels for September 12, 1994 are presented in Table 1. Ground water table measurements collected by previous consultants (June 7, 1988 through February 25, 1994) are presented in Enclosure B.

A water table elevation map constructed from the ground water table measurements recorded on September 12, 1994, is included as Figure 3. The water table contours illustrated in Figure 3 indicate that the ground water flow direction was toward the east with a hydraulic gradient of approximately 0.01.

Subjective Analysis

A black sheen was present in extraction well EW-2 during the September 12, 1994, site visit.

Analytical Results

Ground water samples collected from each of the monitoring wells on September 12, 1994, were submitted to a California-certified laboratory for analysis of benzene, toluene, ethylbenzene, total xylene, and total petroleum hydrocarbons as gasoline. The laboratory analyses for the September 12, 1994 sampling event are presented in Table 2, and a summary of analytical test results

Ms. Marla Guensler
Exxon Company, U.S.A.
October 5, 1994
Page 2

for ground water samples collected by previous consultants (June 7, 1988 through February 25, 1994) are included in Enclosure B. A dissolved benzene concentration map based on analytical results for ground water samples collected on September 12, 1994, is included as Figure 4. Copies of the laboratory analytical reports are presented in Enclosure C.

Ground Water Remediation System Status

The ground water remediation system present at the site was not in operation during the third quarter. Cumulative analytical results of water samples from the remediation system are included in Enclosure D.

Future Work

The next quarterly monitoring event for this site is scheduled for November 1994. Delta will evaluate the past performance of the ground water system and will propose modifications to the system to improve the remediation systems effectiveness.

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.

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

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

Ms. Juliatt Shin
Alameda County Department of Environmental Health
Hazardous Material Division
80 Swan Way, Room 200
Oakland, California 94621

Mr. Safa Toma
East Bay Municipal Utility District
Post Office Box 24055
Oakland, California 94621

Ms. Marla Guensler
Exxon Company, U.S.A.
October 5, 1994
Page 3

If you have any questions regarding this project, please contact Todd M. Galati at (916) 638-2085.

Sincerely,

DELTA ENVIRONMENTAL CONSULTANTS, INC.

William Deaton For

Richard D. Munsch
Staff Engineer

Todd M. Galati

Todd M. Galati
Project Manager

James R. Brownell

James R. Brownell, R.G.
California Registered Geologist No. 5078

RDM (LRP362.SJH)
Enclosures



TABLE 1
GROUND WATER LEVEL DATA

Exxon Retail 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 ^b or Sheen
MW-2	09/12/94	16.67	6.71	9.96	No LPH or Sheen
MW-3	09/12/94	17.11	6.58	10.53	No LPH or Sheen
MW-4	09/12/94	17.34	6.80	10.54	No LPH or Sheen
MW-5	09/12/94	16.71	7.12	9.59	No LPH or Sheen
MW-6	09/12/94	17.56	6.88	10.68	No LPH or Sheen
MW-7	09/12/94	17.12	6.43	10.69	No LPH or Sheen
MW-8	09/12/94	16.33	6.42	9.91	No LPH or Sheen
MW-9	09/12/94	15.62	6.84	8.78	No LPH or Sheen
MW-10	09/12/94	16.79	7.04	9.75	No LPH or Sheen
EW-1	09/12/94	16.22	6.13	10.09	No LPH or Sheen
EW-2	09/12/94	16.05	6.09	9.96	Sheen
EW-3	09/12/94	16.02	6.12	9.9	No LPH or Sheen
EW-4	09/12/94	16.61	5.69	10.92	No LPH or Sheen
EW-5	09/12/94	16.51	6.30	10.21	No LPH or Sheen

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

^b Liquid-phase petroleum hydrocarbons.

TABLE 2

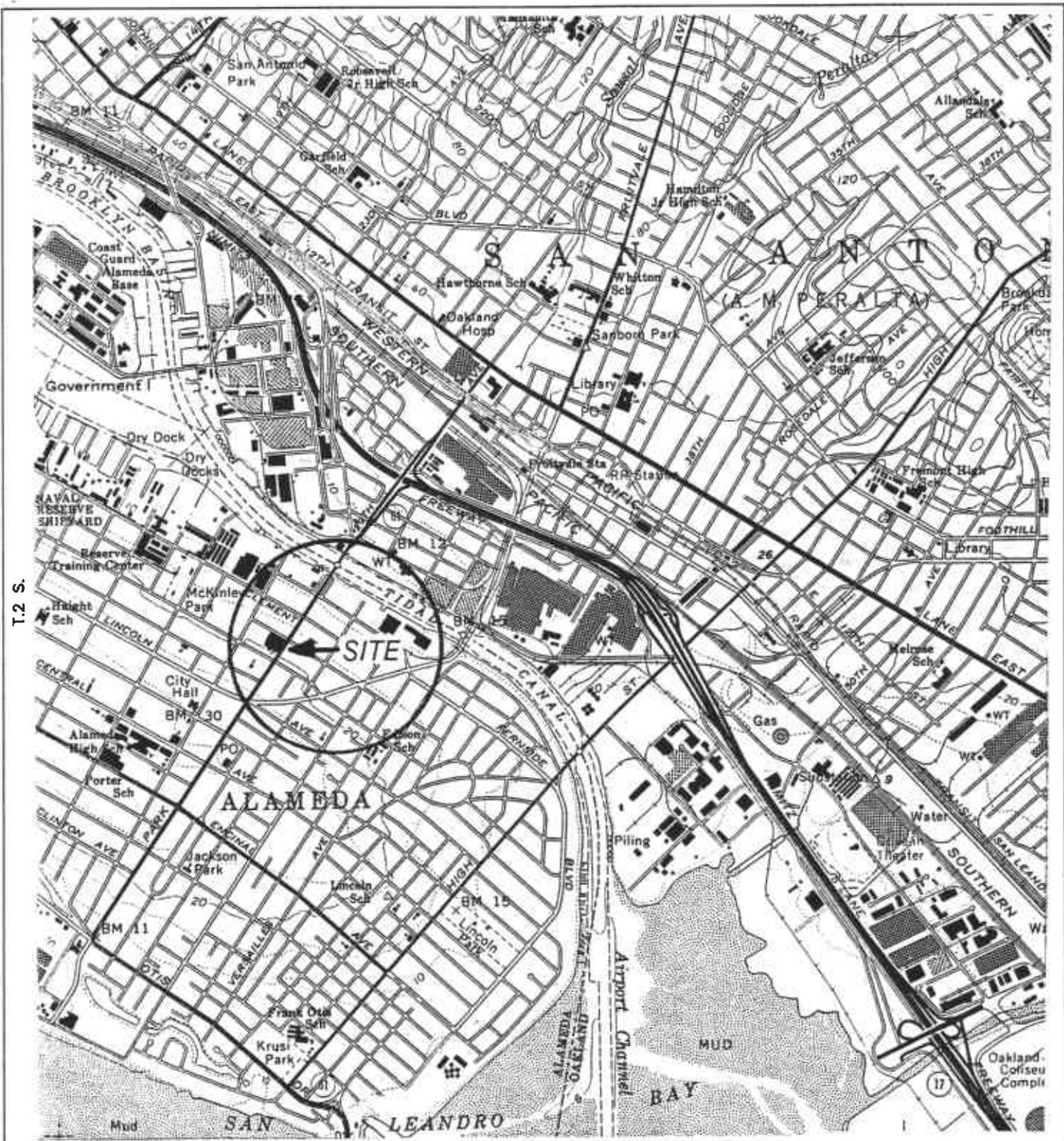
GROUND WATER SAMPLE RESULTS

Concentrations in parts per billion (ppb)

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

Monitoring Well	Date	Benzene	Toluene	Ethyl-benzene	Xylenes	TPH ^a as gasoline
MW-1	09/12/94	200	1.9	210	6.6	1,600
MW-2	09/12/94	4,400	120	1,700	2,100	31,000
MW-3	09/12/94	580	8.0	340	100	3,100
MW-4	09/12/94	900	57	310	490	5,200
MW-5	09/12/94	2,300	17	320	230	10,000
MW-6	09/12/94	150	4.4	170	85	1,500
MW-7	09/12/94	490	50	280	70	6,000
MW-8	09/12/94	<0.5	<0.5	<0.5	<0.5	<50
MW-9	09/12/94	<0.5	<0.5	<0.5	<0.5	<50
MW-10	09/12/94	<0.5	<0.5	1.6	<0.5	71
EW-1	09/12/94	40	<0.5	10	5.4	400
EW-2	09/12/94	2,000	79	180	290	8,800
EW-3	09/12/94	44	5.9	12	31	300
EW-4	09/12/94	1,700	12	210	77	4,000
EW-5	09/12/94	26	1.7	11	12	180

^a Total petroleum hydrocarbons.



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



QUADRANGLE LOCATION



SCALE 1 : 24,000

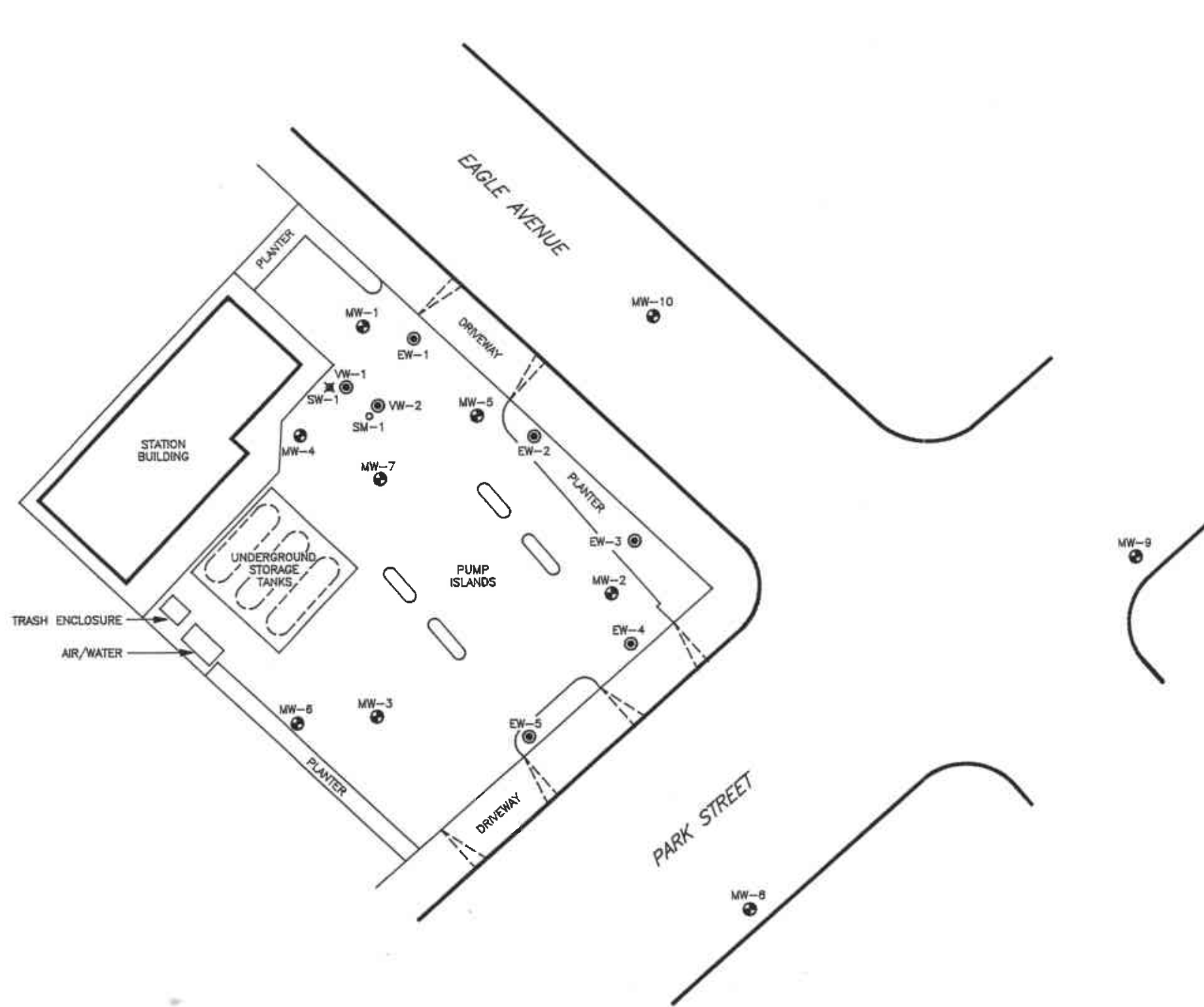
R.3 W.

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] 10/16/94

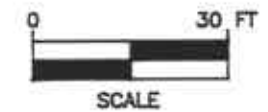


Delta
 Environmental
 Consultants, Inc.



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



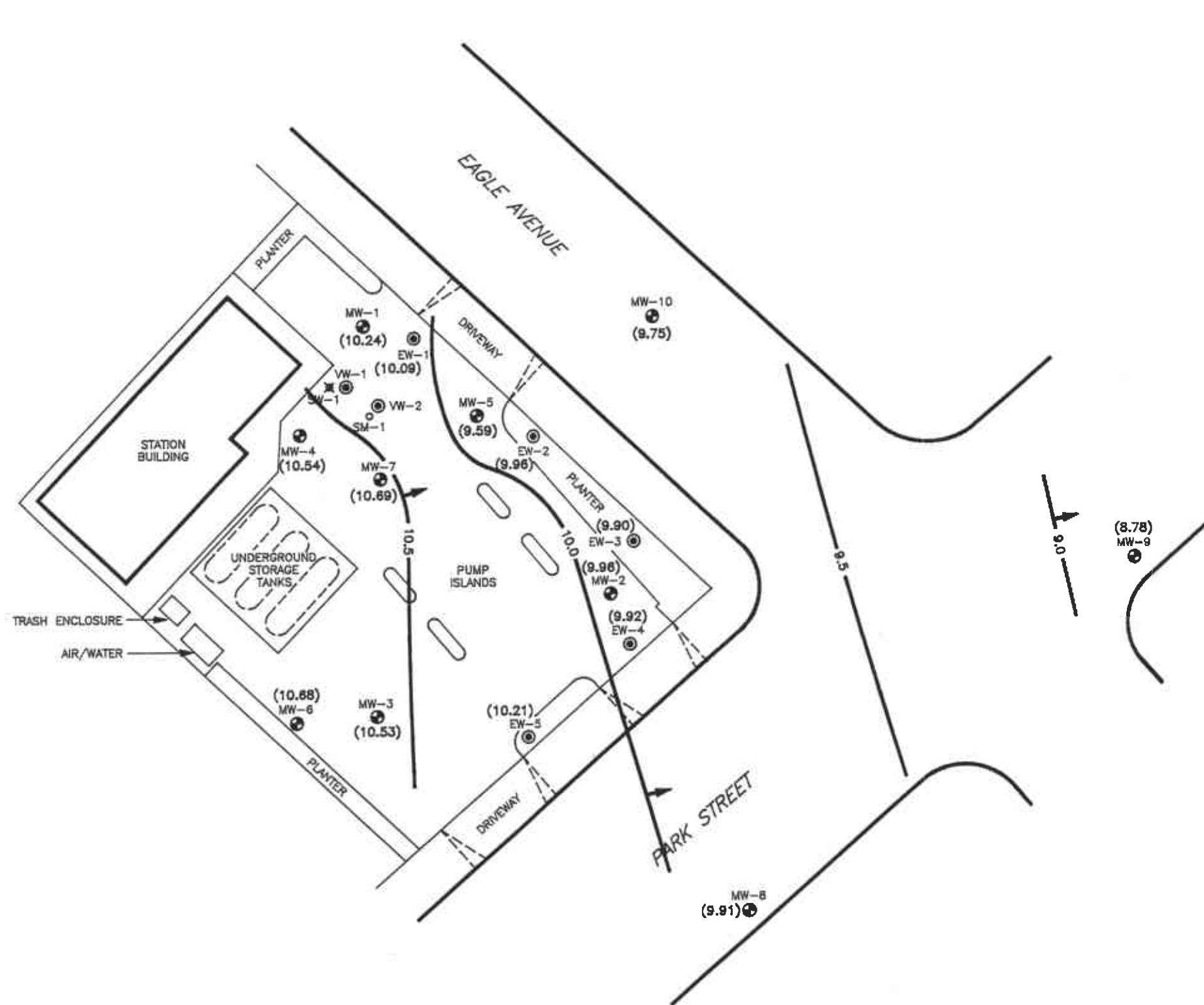
NOTE:

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

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

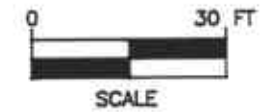
PROJECT NO. D094-832	DRAWN BY L.H. 9/22/94
FILE NO. 94-832-1	PREPARED BY TMG
REVISION NO. 1	REVIEWED BY 10/5/94





LEGEND:

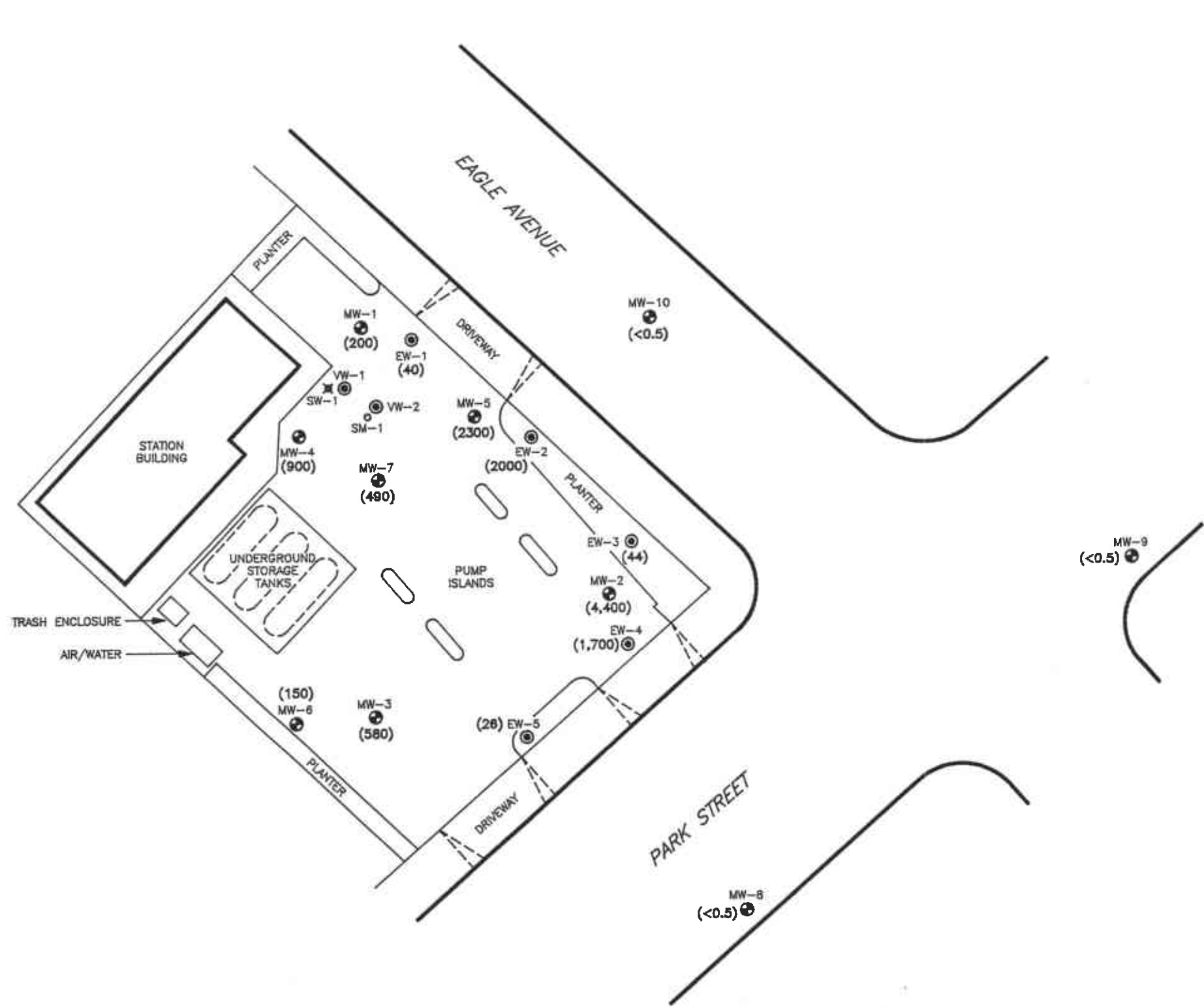
- ⊙ EW-1 RECOVERY WELL LOCATION
- ⊙ VW-1 VAPOR EXTRACTION WELL LOCATION
- ⊠ SW-1 AIR SPARGING WELL LOCATION
- SM-1 SPARGE MONITORING WELL LOCATION
- ⊙ MW-1 MONITORING WELL LOCATION
- (10.24) GROUND WATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL (MSL)
- 10.0 - WATER TABLE CONTOUR IN FEET ABOVE MSL
- GROUND WATER FLOW DIRECTION



NOTE:

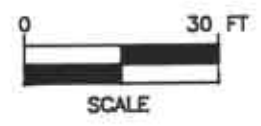
BASE MAP ADAPTED FROM RESNA FIGURE. SITE DIMENSIONS AND FACILITY LOCATIONS NOT VERIFIED.

<p>FIGURE 3 WATER TABLE CONTOUR MAP - 9/12/94 EXXON STATION NO 7-0104 1725 PARK STREET ALAMEDA, CA.</p>		
PROJECT NO. D094-832	DRAWN BY L.H. 9/27/94	<p>Delta Environmental Consultants, Inc.</p>
FILE NO. 94-832-1	PREPARED BY RDM	
REVISION NO. 1	REVIEWED BY 10/12/94	



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
- (200) DISSOLVED BENZENE CONCENTRATION IN GROUND WATER IN PARTS PER BILLION



NOTE:

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

FIGURE 4
DISSOLVED BENZENE CONCENTRATION MAP
 9/12/94
 EXXON STATION NO 7-0104
 1725 PARK STREET
 ALAMEDA, CA.

PROJECT NO. DOB4-832	DRAWN BY L.H. 9/28/94
FILE NO. 94-832-1	PREPARED BY RDM
REVISION NO. 1	REVIEWED BY <i>[Signature]</i> 10/5/94

Delta Environmental Consultants, Inc.

FIELD METHODS AND PROCEDURES

1.0 GROUND WATER AND LIQUID-PHASE HYDROCARBON DEPTH DETERMINATION

A water/hydrocarbon interface probe was used to determine 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 analysis. 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 or bailer until pH, temperature, and conductivity of the purge water had stabilized and a minimum of three to four well volumes of water had been removed. Ground water removed from the wells was discharged into the ground water 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. Purge water will be collected from the storage barrels in a vacuum truck and transported to an appropriate facility for treatment and/or disposal.

ENCLOSURE B

Previous Ground Water Level Data and Analytical Results

TABLE 1
 CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA

Exxon Service Station No. 7-0104

1725 Park Street
 Alameda, California

(Page 1 of 11)

Well ID # (TOC)	Sampling Date	SUBJ < >	DTW feet >	Elev. >	TPHg < >	B	T	E	X
						parts per billion >			
MW-1	06/07/88	NM	NM	—	27,000	5,000	77	1,100	2,700
(17.35)	06/10/88#	NLPH	6.35	11.00					
	01/17/89	NLPH	5.81	11.54	6,800	2,000	91	800	1,600
	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	1,600	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 < >	parts per billion >			
						B	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			1.4	72	17
	11/16/93	NLPH	8.69	8.66	840	18			
	11/30/93#	NM	8.38	8.69					
	12/17/93#	NM	7.42	9.93					
	01/31/93#	NM	6.37	10.98	810	15	9.0	98	58
	02/24-25/94	NLPH	6.23	10.84					
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	580	280	570	220
	10/20/89#	NLPH	6.87	9.80					
	11/22/89#	NLPH	6.80	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	3,800	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	9.85					
	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 < >	B	T	E	X
						parts per billion >			
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
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	680
09/18/89		NLPH	6.65	10.46	12,000	680	170	350	860
10/20/89#		NLPH	6.88	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 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	T	E	X
						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	12.26					
	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	1,800	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	180	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 # (TOC)	Sampling Date	SUBJ < >	DTW feet >	Elev.	TPHg < >	B	T	E	X
						parts per billion >			
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	6.85	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	260	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	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

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Well ID # (TOC)	Sampling Date	SUBJ < >	DTW feet >	Elev.	TPHg < >	B	T parts per billion >	E	X
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
	02/05/93b#	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	11.86					

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	T	E	X	parts per billion >									
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										
	04/18/90#	NLPH	6.26	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		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	---		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	4.86	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	10.88		14,000	1,600	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	640										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	6.62	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. 7-0104
 1725 Park Street
 Alameda, California
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Weil ID # (TOC)	Sampling Date	SUBJ < >	DTW feet	Elev. >	TPHg <	B	T parts per billion	E	X
MW-7	01/09/90	NM	NM	—	17,000	380	180	330	1,300
(17.12)	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	2,600	7,000	3,300	14,000
	01/31/91#	NLPH	6.64	10.48					
	02/25/91#	NLPH	5.80	11.32					
	03/19/91	NLPH	4.96	12.16	44,000	1,600	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	25	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	11.83	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	48
	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	T	E	X
						parts per billion >			
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

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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	T	E	X
					parts per billion				
EW-4 (15.61)	10/21/93#	NM	6.13	9.48					
	12/17/93#	NM	14.60	1.01					
	01/31/94#	NM	5.08	10.53					
	02/24-25/94	LPH	14.88	0.73	4,600	1,900	140	13	450
EW-5 (16.51)	10/21/93#	NM	6.77	9.74					
	12/17/93#	NM	14.20	2.31					
	01/31/94#	NM	5.64	10.87					
	02/24-25/94	NLPH	11.95	4.56	1,000	140	45	3.4	190
Field Blanks	12/11/89	--	--	--	<50	0.88	0.95	0.62	1.7
	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 Blanks	06/14/90	--	--	--	<50	<0.5	<0.5	<0.5	<0.5
	09/19/90	--	--	--	<50	0.8	<0.5	0.6	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	--	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. 7-0104

1725 Park Street

Alameda, California

(Page 11 of 11)

Well ID # (TOC)	Sampling Date	SUBJ < feet >	DTW Elev.	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 * 0.8)] 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

Ground Water Sample Analytical Results Collected September 12, 1994



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710. Phone (510) 486-0900

ANALYTICAL REPORT

Prepared for:

Delta Environmental Consultants, Inc
3330 Data Drive
Rancho Cordova, CA 95670

Date: 19-SEP-94
Lab Job Number: 117400
Project ID: D094-832
Location: Alameda

Reviewed by:

Cynthia E. Shley

Reviewed by:

Kerby B

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LABORATORY NUMBER: 117400
 CLIENT: DELTA ENVIRONMENTAL CONSULTANTS
 PROJECT ID: D094-832
 LOCATION: ALAMEDA
 STORE NUMBER: 7-0104

DATE SAMPLED: 09/12/94
 DATE RECEIVED: 09/12/94
 DATE ANALYZED: 09/18/94
 DATE REPORTED: 09/19/94

Total Volatile Hydrocarbons with BTXE in Aqueous Solutions
 TVH by California DOHS Method/LUFT Manual October 1989
 BTXE by EPA 5030/8020

LAB ID	SAMPLE ID	TVH AS GASOLINE (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	ETHYL BENZENE (ug/L)	TOTAL XYLENES (ug/L)
117400-1	MW-1	1,600*	200	1.9	210	6.6
117400-2	MW-2	31,000*	4,400	120	1,700	2,100
117400-6	MW-6	1,500*	150	4.4	170	85
117400-8	MW-8	ND(50)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
117400-9	MW-9	ND(50)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
117400-10	MW-10	71*	ND(0.5)	ND(0.5)	1.6	ND(0.5)
117400-11	EW-1	400	40	ND(0.5)	10	5.4
117400-13	EW-3	300	44	5.9	12	31
117400-14	EW-4	4,000*	1,700	12	210	77
117400-15	EW-5	180	26	1.7	11	12
117400-METHOD BLANK		ND(50)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)

* Sample chromatogram does not match the gasoline standard pattern.

ND = Not detected at or above reporting limit; Reporting limit indicated in parentheses.

QA/QC SUMMARY

RPD, %

5

RECOVERY, %

72



LABORATORY NUMBER: 117400
 CLIENT: DELTA ENVIRONMENTAL CONSULTANTS
 PROJECT ID: D094-832
 LOCATION: ALAMEDA
 STORE NUMBER: 7-0104

DATE SAMPLED: 09/12/94
 DATE RECEIVED: 09/12/94
 DATE ANALYZED: 09/19/94
 DATE REPORTED: 09/19/94

Total Volatile Hydrocarbons with BTXE in Aqueous Solutions
 TVH by California DOHS Method/LUFT Manual October 1989
 BTXE by EPA 5030/8020

LAB ID	SAMPLE ID	TVH AS GASOLINE (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	ETHYL BENZENE (ug/L)	TOTAL XYLENES (ug/L)
117400-3	MW-3	3,100*	580	8.0	240	100
117400-4	MW-4	5,200	900	57	310	490
117400-5	MW-5	10,000*	2,300	17	320	230
117400-7	MW-7	6,000*	490	50	280	70
117400-12	EW-2	8,800*	2,000	79	180	290
117400-16	EFFLUENT	ND(50)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
117400-METHOD	BLANK	ND(50)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)

* Sample chromatogram does not match the gasoline standard pattern.

ND = Not detected at or above reporting limit; Reporting limit indicated in parentheses.

QA/QC SUMMARY

RPD, %

5

RECOVERY, %

72



VERBAL ADDITIONS/CANCELLATIONS TO ANALYSIS
REQUEST SHEET

Client: Delta Date: 9/13/94

Requested By: Reed Brantley Time: 8:45 AM _____ PM

Recorded By: (Signature)

Current Lab ID (Previous Lab ID)	Client ID	Circle Matrix	Specify add or cancel	Analysis	Due Date
117400-01W ()	EFFLUENT	water soil waste oil other	ADD	TVH BTX E	9/ 194
()		water soil waste oil other			
()		water soil waste oil other			
()		water soil waste oil other			
()		water soil waste oil other			
()		water soil waste oil other			



117400

EXXON COMPANY, U.S.A

P.O. Box 2180, Houston, TX 77002-7428
CHAIN OF CUSTODY

Berkeley, CA, 2323 6th St., 94710
(510)486-0900

Irvine, CA 2496 Da Vinci, Rd. 92714
(714)262-9700

Curtis & Tompkins, Ltd.

Consultant's Name: Delta Environmental Consultants Page 1 of 2

Address: 3330 Dana Dr., Suite 100, Rancho Cordova Site Location: Alameda

Project #: 7-D104 Consultant Project #: DO94-832

Project Contact: Todd Calati Phone #: (916) 637-2085

EXXON Contact: Marla Gwensler Phone #: _____

Sampled by (print): William Brattain, Paul Zimm Sampler's Signature: William Brattain / Paul Zimm

Shipment Method: Dropoff Air Bill #: _____

Consultant Work Release #: 14432522

Laboratory Work Release #: _____

EXXON RAS #: 7-D104

Sample Description	Collection Date	Collection Time	Matrix Soil/Water/Air	Presv	# of Cont.	C & T Sample #	ANALYSIS REQUIRED			Temperature: _____
							TPII/ GAS/ BTEX/ 8015/ 8020	TPII/ Diesel EPA 8015	TRPII EPA 418.1	
-1 MW-1	9/12/94	1255	W	HCL	3	X				Inbound Seal: Yes No
-2 MW-2		1430				X				Outbound Seal: Yes No
-3 MW-3		1140				X				
-4 MW-4		1325				X				
-5 MW-5		1355				X				
-6 MW-6		1155				X				
-7 MW-7		1335				X				
-8 MW-8		1510				X				
-9 MW-9		1505				X				
-10 MW-10		1445				X				
-11 EW-1	V	1240	V	V	V	X				

Relinquished by/Affiliation	Date	Time	Accepted/Affiliation	Date	Time	Additional comments:
<u>Paul Zimm</u>	<u>9/12/94</u>		<u>Tuan K Morrison C&T</u>	<u>9/12/94</u>	<u>3:45</u>	



117400

EXXON COMPANY, U.S.A

P.O. Box 2180, Houston, TX 77002-7426
CHAIN OF CUSTODY

Berkeley, CA, 2323 6th St., 94710
(510)486-0900

Irvine, CA 2488 Da Vinci Rd. 92714
(714)252-9700

Curtis & Tompkins, Ltd.

Consultant's Name: Delta Environmental Consultants

Address: 3330 Dana Dr., Suite 100, Rancho Cordova, CA Site Location: Alameda

Project #: 7-0104 Consultant Project #: DO94-832 Consultant Work Release #: 19422522

Project Contact: Todd Galati Phone #: (916)638-2085 Laboratory Work Release #:

EXXON Contact: Marla Guenster Phone #: L EXXON RAS #: 7-0104

Sampled by (print): William Bradlain, Paul Zianno Sampler's Signature: William Bradlain / Paul Zianno

Shipment Method: Drop off Air Bill #:

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

ANALYSIS REQUIRED

Sample Description	Collection Date	Collection Time	Matrix Soil/Water/Air	Presv	# of Cont.	C & T Sample #	ANALYSIS REQUIRED			Temperature: _____
							TPH/ GAS/ BTEX/ 8015/ 8020	TPH/ Diesel EPA 8015	TRPH EPA 418.1	
-12 EW-2	9/12/94	1242	W	HCL	3	X				
-13 EW-3		1245				X				
-14 EW-4		1247				X				
-15 EW-5		1250				X				
-16 Effluent	↓	1400	↓	↓	4					X

Relinquished by/Affiliation	Date	Time	Accepted/Affiliation	Date	Time	Additional comments:
<u>Paul Zianno</u>	<u>9/12/94</u>		<u>Teresa K Morris</u>	<u>9/12/94</u>	<u>3:45</u>	

ENCLOSURE D

Remediation System Analytical Results

TABLE 2
CUMULATIVE ANALYTICAL RESULTS OF WATER SAMPLES
FROM THE REMEDIATION SYSTEM
 Exxon Service Station 7-0104
 1725 Park Street
 Alameda, California
 (Page 1 of 6)

Date	Total Discharge	Sample Location	TPHg <	B	T	E	X	VOCs	EOCs	Inorganics	parts per billion	
											>	>
02/16/93	NA	"bioreactor"	660	120	40	25	56	NA	NA	NA		
02/17/93	NA	"bioreactor"	140	23	5.3	2.8	9.3	NA	NA	NA		
02/18/93	NA	"bioreactor"	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA		
02/22/93	0	"influent"	NS	NS	NS	NS	NS	NA	NA	NA		
		"A"	150	16	11	3.7	15	NA	NA	NA		
		"B"	NS	NS	NS	NS	NS	NA	NA	NA		
		"C"	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA		
02/23/93	230	"influent"	NS	NS	NS	NS	NS	NA	NA	NA		
		"A"	110	12	7.4	2.7	14	NA	NA	NA		
		"B"	NS	NS	NS	NS	NS	NA	NA	NA		
		"C"	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA		
02/24/93	4,165	"influent"	4,800	1,000	700	83	50	NA	NA	NA		
		"A"	800	200	110	5.1	80	NA	NA	NA		
		"B"	NS	NS	NS	NS	NS	NA	NA	NA		
		"C"	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA		
02/25/93	10,130	"influent"	3,800	930	820	130	740	NA	NA	NA		
		"A"	300	11	2.9	<0.5	33	NA	NA	NA		
		"B"	NS	NS	NS	NS	NS	NA	NA	NA		
		"C"	NS	NS	NS	NS	NS	NA	NA	NA		

See notes on page 6 of 6

**TABLE 2
 CUMULATIVE ANALYTICAL RESULTS OF WATER SAMPLES
 FROM THE REMEDIATION SYSTEM**

Exxon Service Station 7-0104
 1725 Park Street
 Alameda, California

(Page 2 of 8)

Date	Total Discharge	Sample Location	TPHg <	B	T	E	X	VOCs	EOCs	Inorganics >
			parts per billion							
02/26/93	15,440	None	Not Sampled							
03/04/93	36,240	"influent"	3,600	760	430	45	600	NA	NA	NA
		"A"	170	5.1	2.1	<0.5	20	NA	NA	NA
		"B"	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA
		"C"	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA
03/11/93	80,000	"influent"	3,800	480	390	84	600	NA	NA	NA
		"A"	63	0.5	<0.5	<0.5	0.8	NA	NA	NA
		"B"	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA
		"C"	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA
03/19/93	NR	"influent"	NS	NS	NS	NS	NS	NS	NS	NS
		"A"	4,100	530	420	100	800	NA	NA	NA
		"B"	NS	NS	NS	NS	NS	NS	NS	NS
		"C"	110	0.8	<0.5	<0.5	7.6	NA	NA	NA
03/31/93	184,321	None	Not Sampled							
04/02/93	192,674	None	Not Sampled							
04/05/93	208,161	None	Not Sampled							
04/07/93	214,604	None	Not Sampled							
04/09/93	223,530	None	Not Sampled							

See notes on page 6 of 6

TABLE 2
CUMULATIVE ANALYTICAL RESULTS OF WATER SAMPLES
FROM THE REMEDIATION SYSTEM
 Exxon Service Station 7-0104
 1725 Park Street
 Alameda, California
 (Page 3 of 6)

Date	Total Discharge	Sample Location	TPHg <					X parts per billion	VOCs	EOCs	Inorganics >
				B	T	E					
04/13/93	238,370	None		Not Sampled							
04/16/93	250,960	None		Not Sampled							
04/30/93	270,400	"influent"	2,700	240	140	35	500	NA	NA	NA	
		"A"	380	31	22	14	81	NA	NA	NA	
		"B"	55	1.3	<0.5	<0.5	2.3	NA	NA	NA	
		"C"	<50	1.5	0.9	<0.5	2.4	NA	NA	NA	
05/11/93	308,640	None		Not Sampled							
05/20/93	346,407	None		Not Sampled							
06/14/93	346,407	"influent"	3,300	540	340	88	730	NA	NA	NA	
		"A"	<50	<0.5	<0.5	<0.5	1.1	NA	NA	NA	
		"B"	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	
		"C"	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	
06/24/93	393,810	None		Not Sampled							
06/29/93	415,739	None		Not Sampled							
07/08/93	455,820	"influent"	1,600	310	24	11	130	NA	NA	NA	
		"A"	110	2.2	0.7	<0.5	1.4	NA	NA	NA	
		"B"	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	
		"C"	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	

See notes on page 6 of 6

**TABLE 2
CUMULATIVE ANALYTICAL RESULTS OF WATER SAMPLES
FROM THE REMEDIATION SYSTEM**

Exxon Service Station 7-0104
1725 Park Street
Alameda, California
(Page 4 of 6)

Date	Total Discharge	Sample Location	TPHg <	B	T	E	X	VOCs	EOCs	Inorganics >
			parts per billion							
08/06/93	569,132	"influent"	2,900	510	180	56	710	NA	NA	NA
		"A"	94	1.9	<0.5	<0.5	1.1	NA	NA	NA
		"B"	61	<0.5	<0.5	<0.5	<0.5	NA	NA	NA
		"C"	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA
09/08/93	675,360	"influent"	2,200	330	51	21	210	NA	NA	NA
		"A"	<50	2.1	<0.5	<0.5	<0.5	NA	NA	NA
		"B"	60	<0.5	<0.5	<0.5	<0.5	NA	NA	NA
		"C"	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA
10/06/93	772,440	"Influent"	5,000	810	56	100	460	NA	NA	NA
		"A"	740	18	1.3	<0.5	39	NA	NA	NA
		"B"	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA
		"C"	390	7.5	0.6	<0.5	18	NA	NA	NA
10/15/93	810,448	"Influent"	2,300	770	38	40	220	NA	NA	NA
		"A"	530	17	3.0	<0.5	33	NA	NA	NA
		"B"	69	0.5	<0.5	<0.5	<0.5	NA	NA	NA
		"C"	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA
11/09/93	851,840	"A"	550	20 (16)	<0.5	<0.5	19 (20)	86 ¹	ND	270 ^a
		"B"	<50	<0.5	<0.5	<0.5	<0.5	ND	ND	180 ^a 100 ^b
		"C"	<50	<0.5	<0.5	<0.5	<0.5	ND	ND	80 ^a

See notes on page 6 of 6

**TABLE 2
CUMULATIVE ANALYTICAL RESULTS OF WATER SAMPLES
FROM THE REMEDIATION SYSTEM**

Exxon Service Station 7-0104
1725 Park Street
Alameda, California
(Page 5 of 6)

Date	Total Discharge	Sample Location	TPHg <	B	T	E	X	VOCs	EOCs	Inorganics
12/09/93	932,928	"A"	1,500	130	350	10	82	NA	NA	NA
		"B"	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA
		"C"	<50	3.6	9.5	<0.5	<0.5	NA	NA	NA
12/22/93	---	"Eff"	190	1.9	1.6	<0.5	10	NA	NA	NA
01/10/94	1,039,530	"A"	340	17 (19)	2.3	<0.5	7.6 (8)	120 ² 7 ³ 120 ¹	ND	6 ^o 330 ^o 300 ^o
		"B1"	120	2.3	<0.5	<0.5	<0.5	NA	NA	NA
		"B2"	61	0.6	<0.5	<0.5	<0.5	NA	NA	NA
		"C"	55	<0.5	<0.5	<0.5	<0.5	ND	ND	220 ^o
		"C"	55	<0.5	<0.5	<0.5	<0.5	ND	ND	220 ^o
02/24/94	1,152,290	"A"	1400	310	22	<0.5	99	NA	NA	NA
		"B1"	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA
		"B2"	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA
		"C"	75	1.3	<0.5	<0.5	<0.5	NA	NA	NA
03/07/94	---	"C"	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA
03/30/94	1,267,720	"A"	190	0.9	0.9	<0.5	<0.5	NA	NA	NA
		"B1"	55	<0.5	<0.5	<0.5	<0.5	NA	NA	NA
		"B2"	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA
		"C"	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA
MCLs	---	---	---	1.0	---	680	1,750	See Notes	See Notes	
DWAL	---	---	---	---	100	---	---	See Notes	See Notes	

See notes on page 6 of 6

