Ultramar

Ultramar, Inc.
P.O. Box 466
525 W. Third Street
Hanford, CA 93232-0466
(209) 582-0241

Telecopy: 209-585-5685 Credit
209-583-3330 Administrative
209-583-3302 Information Services
209-583-3358 Accounting

February 18, 1998

Mr. Scott Seery
Department of Environmental Health
Alameda County Health Care Agency
1131 Harbor Parkway, Room 250
Alameda, CA 94502-6577

SUBJECT: BEACON STATION NO. 720, 1088 MARINA BLVD., SAN LEANDRO, CALIFORNIA

Dear Mr. Seery:

Enclosed is a copy of the ***Fourth Quarter 1997 Groundwater Monitoring Report*** for the above-referenced Ultramar facility. Also included is a copy of the Quarterly Status Report.

Please call if you have any questions.

Sincerely,

ULTRAMAR INC.

Terrence A. Fox
Senior Project Manager
Marketing Environmental Department

Enclosure

cc: Mr. Richard Munsch, Delta Environmental Consultants

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ENVIRONMENTAL PROJECT QUARTERLY STATUS REPORT

DATE REPORT SUBMITTED: February 18, 1998
QUARTER ENDING: December 31, 1997

SERVICE STATION NO.: 720
ADDRESS: 1088 Marina Blvd., San Leandro, CA
COUNTY: Alameda

ULTRAMAR CONTACT: Terrence A. Fox **TEL. NO:** 209-583-5545

BACKGROUND:

In January 1987, three underground gasoline storage tanks and one waste oil tank were excavated and removed from two tank cavities. Samples collected from beneath the former tanks indicated that hydrocarbons were present in the soil. In March 1987, five monitoring wells (MW-1 through MW-5) were installed by Conoco. Hydrocarbons were detected in soil and ground-water samples collected from the wells with the highest concentrations being detected in the area of MW-4. In July 1987, four soil borings were drilled in the vicinity of MW-4 to further characterize the soil contamination in that area. TPH concentrations above 100 ppm were detected in each boring. The site has been on a monitoring program since June 1987.

In July 1990, the site was purchased by Ultramar Inc. from Conoco. The monitoring program has continued.

In August 1991, perform shallow ground water study as screening tool to locate wells.

In October 1991, installed three additional wells to further define the extent of the dissolved hydrocarbon plume.

In October 1993, performed a ground-water pump test, a vapor extraction test, and a air sparging test.

In May 1994, submitted Problem Assessment Report/Remedial Action Plan.

In December 1994, installed one additional monitoring well, six air sparging points, and one vapor extraction well.

In June 1997, began operation of vapor extraction system.

In July 1997, the ground water recovery system and the air sparging system began operation.

SUMMARY OF THIS QUARTER'S ACTIVITIES:

Performed quarterly monitoring on December 13, 1997. Continued to operate the remediation system.

RESULT OF QUARTERLY MONITORING:

Monitoring data indicates that the benzene concentrations were not detected in MW-6 and MW-7. The benzene concentrations were detected in MW-1, MW-2, MW-3, MW-4, MW-5, MW-8, and MW-9.

The ground water extraction system has processed approximately 153,370 gallons of water. Approximately 1,685 pounds of hydrocarbons have been removed by the vapor extraction system.

PROPOSED ACTIVITY OR WORK FOR NEXT QUARTER:

ACTIVITY	ESTIMATED COMPLETION DATE
Continue quarterly monitoring program.	
Continue operation of the remediation system.	

El Dorado Environmental, Inc.

2221 Goldorado Trail, El Dorado, California 95623

(916) 626-3898
Fax (916) 626-3899

February 14, 1998

Mr. Terrence Fox
Senior Project Manager
Ultramar Inc.
525 West Third Street
Hanford, California 93230

Subject: **Fourth Quarter 1997 Ground Water Monitoring Report**
Beacon Station #720
1088 Marina Boulevard, San Leandro, California

Dear Mr. Fox:

El Dorado Environmental, Inc. (EDE) has prepared this report to document the results of quarterly ground water monitoring conducted on December 13, 1997 at the subject site (Figure 1). The monitoring, conducted by Doulos Environmental (Doulos), included measurements of depth to ground water, subjective analysis for the presence or absence of free product, ground water purging and collection of ground water samples. Doulos reports that all field activities were conducted in accordance with the Ultramar Field Procedures described in Attachment A.

GROUND WATER ELEVATIONS

Prior to purging, Doulos collected depth to ground water measurements. Copies of Doulos' field data sheets are contained in Attachment B. Ground water elevation data collected since March 1992 are summarized in Table 1. Historical ground water elevation data are presented in Attachment C. On the basis of the current measurements, ground water flows toward monitoring well MW-9 (Figure 2). The gradient of ground water flow is less than 0.01 foot per foot. Ground water elevations increased an average of 0.98 feet in monitoring wells MW-1 through MW-7 and MW-9 and decreased 0.07 feet in monitoring well MW-8 compared to the last monitoring event.

GROUND WATER SAMPLING AND ANALYSES

Ground water samples were collected from nine monitoring wells. All samples were analyzed for concentrations of:

- TPH, as gasoline, by modified EPA Method 8015.
- BTEX by EPA Method 602.
- MTBE by EPA Method 602.

Analytical results collected since March 1992 are summarized in Table 2. Historical analytical data are presented in Attachment D. Figure 3 illustrates the inferred distribution of benzene in ground water based on the current data. The laboratory report and chain-of-custody form for the current sampling event are contained in Attachment E. Benzene was not present at detectable concentrations in ground water samples collected from monitoring wells MW-6 and MW-7. Concentrations of benzene decreased in ground water samples collected from monitoring wells MW-1, MW-3, MW-5, and MW-9 and increased in the samples collected from monitoring wells MW-2, MW-4, and MW-8 compared to prior sampling.

A copy of this quarterly monitoring report should be forwarded to:

Mr. Rafat Shahid
Division of Hazardous Materials
Alameda County Health Care Services
80 Swan Way, Room 200
Oakland, California 94621

The interpretations and/or conclusions that may be contained within this report represent our professional opinions. These opinions are based on currently available information. Other than this, no warranty is implied or intended. This report has been prepared solely for the use of Ultramar Inc. Any reliance on this report by third parties will be at such parties' sole risk.

If you have any questions or comments, please contact us at (916) 626-3898.

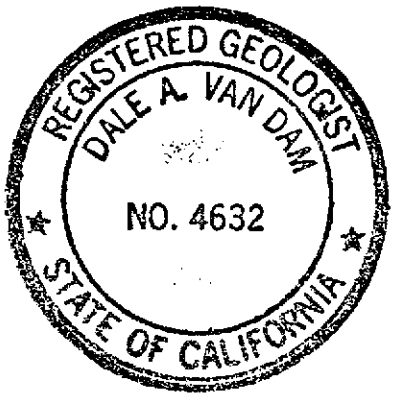
Regards,

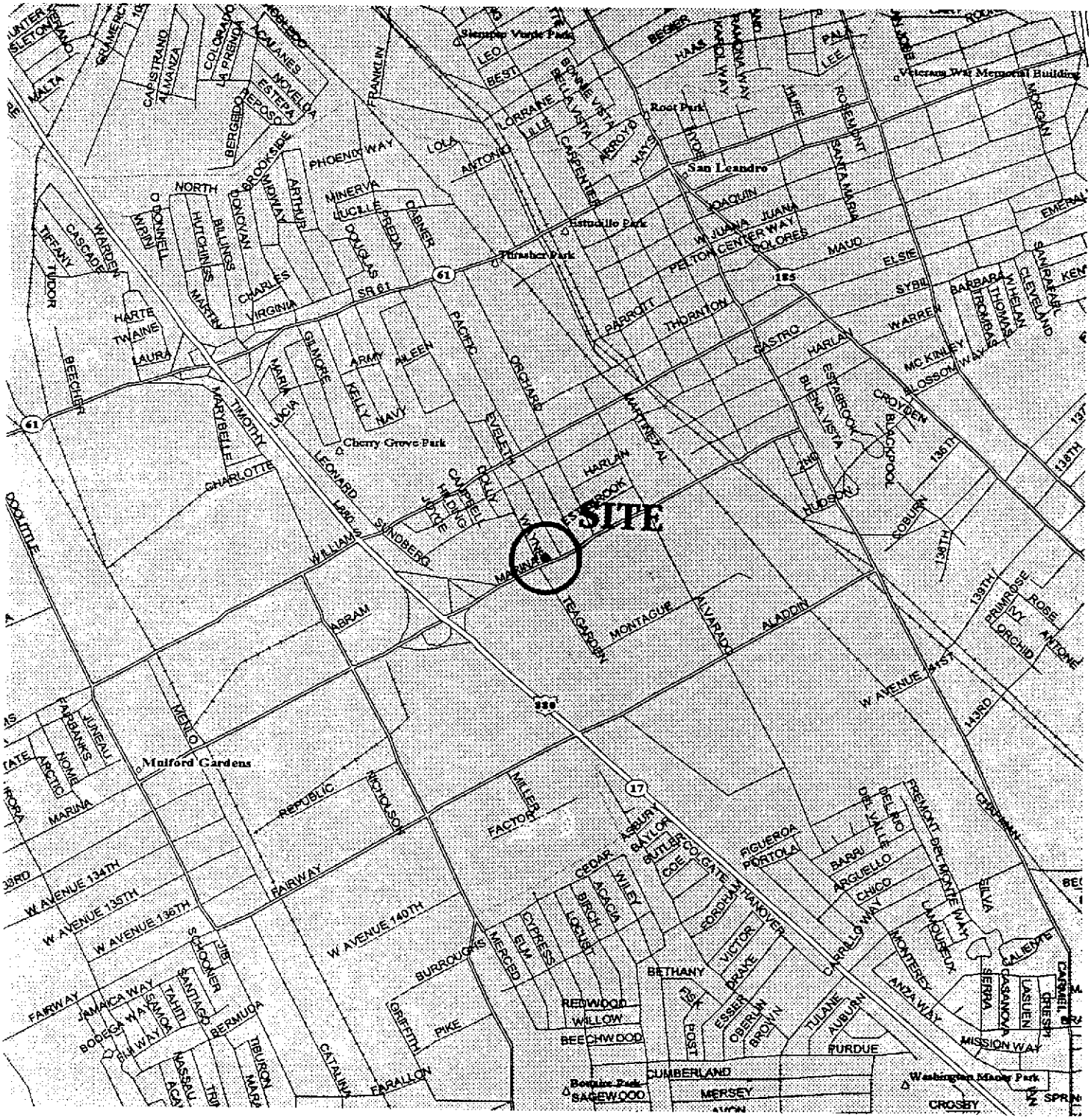
EL DORADO ENVIRONMENTAL, INC.

Dale A. van Dam, R.G.
Hydrogeologist

DavD/davd

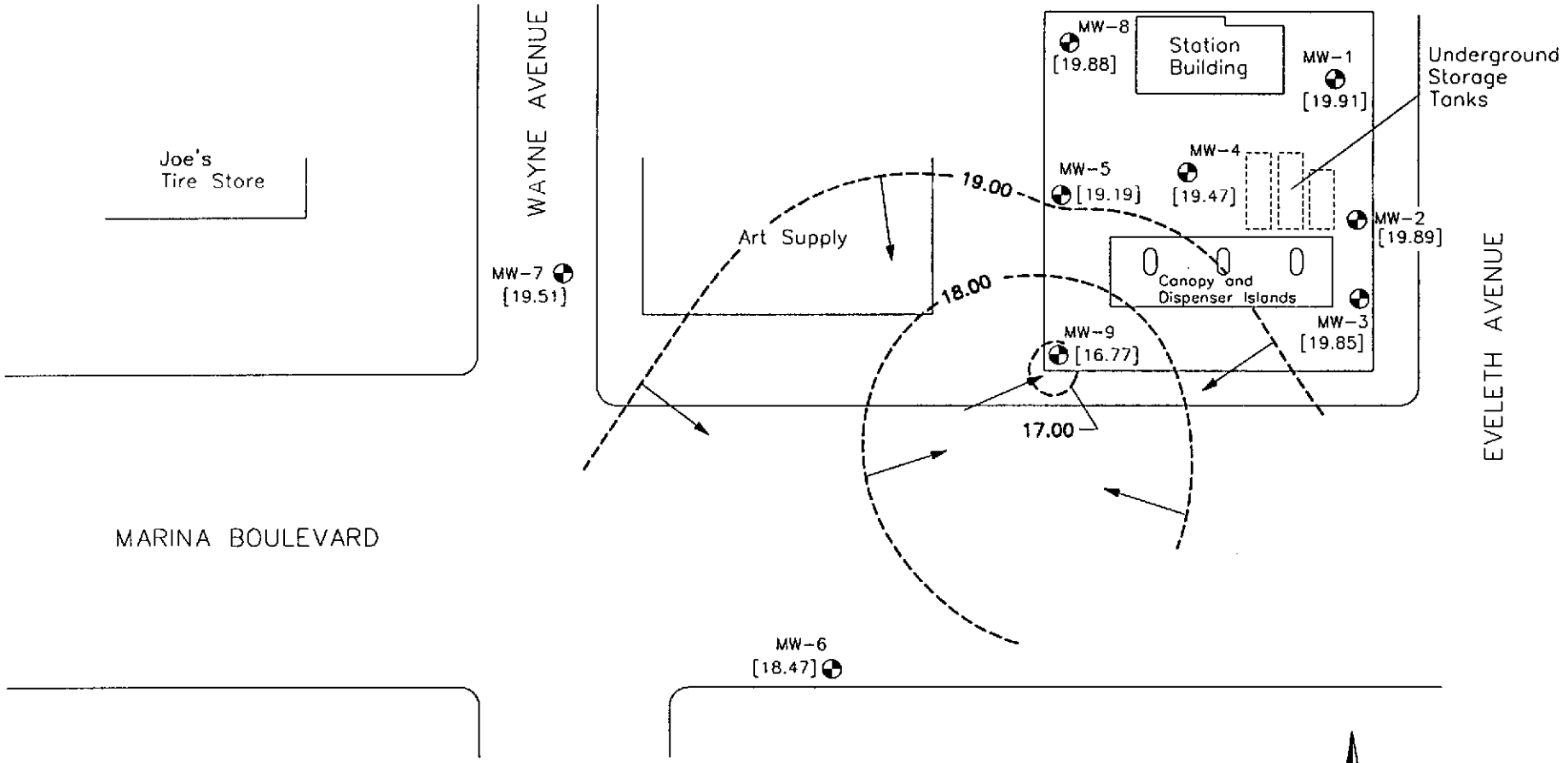
Attachments





SOURCE: STREET ATLAS U.S.A., DELORME MAPPING, 1994

SITE LOCATION MAP	FIGURE 1
BEACON STATION #720 1088 MARINA BOULEVARD SAN LEANDRO, CALIFORNIA	PROJECT NUMBER: U061.01
	DRAWN BY: D.A.V.D.
EL DORADO ENVIRONMENTAL, INC.	CHECKED BY:



EXPLANATION

MW-1 — Monitoring Well Location

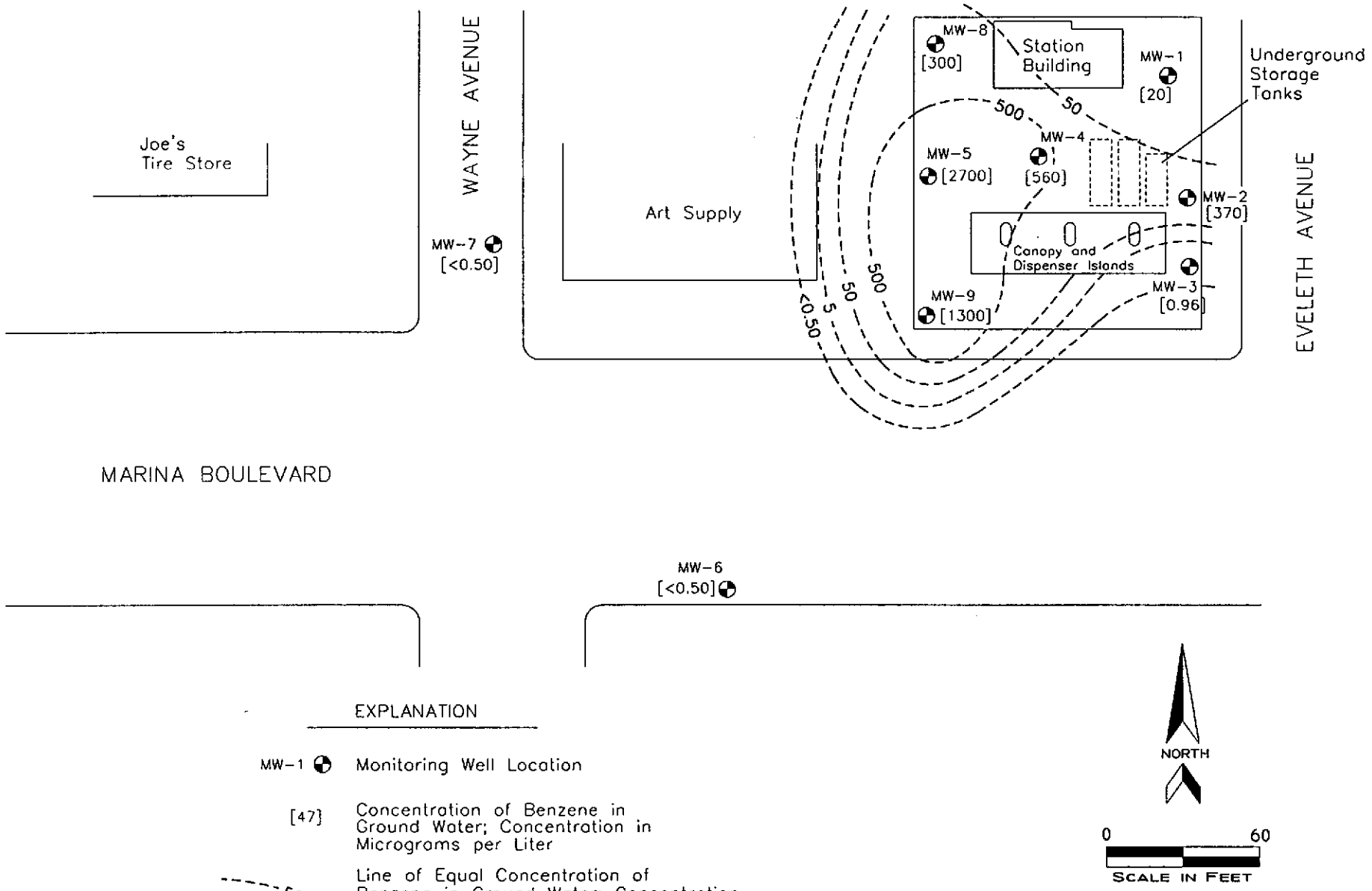
[19.91] — Elevation of Ground Water Measured in Feet; Datum is Mean Sea Level

19.00 — Line of Equal Elevation of Ground Water Measured in Feet; Datum is Mean Sea Level

Inferred Direction of Ground Water Flow

SOURCE: FIGURE MODIFIED FROM DRAWING PROVIDED BY FUGRO WEST, INC.

GROUND WATER CONTOUR MAP, DECEMBER 13, 1997	FIGURE 2
BEACON STATION #720 1088 MARINA BOULEVARD SAN LEANDRO, CALIFORNIA	PROJECT NUMBER: U061.01 DRAWN BY: D.A.
EL DORADO ENVIRONMENTAL, INC.	CHECKED BY: DVD



SOURCE: FIGURE MODIFIED FROM DRAWING PROVIDED BY FUGRO WEST, INC.

DISSOLVED BENZENE DISTRIBUTION MAP, DECEMBER 13, 1997	FIGURE 3
BEACON STATION #720 1088 MARINA BOULEVARD SAN LEANDRO, CALIFORNIA	PROJECT NUMBER: U061.01 DRAWN BY: D.A.
EL DORADO ENVIRONMENTAL, INC.	CHECKED BY: DVL

TABLE 1
GROUND WATER ELEVATION DATA
BEACON STATION #720
1088 MARINA BOULEVARD, SAN LEANDRO, CALIFORNIA
(Measurements in feet)

Monitoring Well	Date	Reference Elevation (top of casing)[1]	Depth to Ground Water[1]	Ground Water Elevation[2]	Well Depth	Comments
MW-1	03/30/92	33.10	13.58	19.52	---	
	07/01/92		14.80	18.30	---	
	09/30/92		16.12	16.98	---	
	11/19/92		16.34	16.76	27.76	
	02/03/93		12.61	20.49	27.72	
	05/25/93		13.12	19.98	27.70	
	09/22/93		14.18	18.92	27.73	
	12/21/93		14.36	18.74	27.70	
	03/18/94		13.64	19.46	27.67	
	06/15/94		14.30	18.80	27.69	
	09/14/94		15.18	17.92	27.66	
	12/19/94		13.79	19.31	27.70	
	12/21/95		13.86	19.24	---	
	03/07/95		12.74	20.36	29.51	
	06/08/95		12.95	20.15	29.54	
	09/22/95		13.94	19.16	29.54	
	12/27/95		13.57	19.53	29.92	
	03/26/96		12.13	20.97	29.90	
	06/13/96		13.10	20.00	17.02	
	09/10/96		14.08	19.02	17.03	
	12/05/96		13.41	19.69	17.05	
	03/10/97		12.70	20.40	17.04	
	06/12/97		13.68	19.42	17.04	
	08/19/97		14.31	18.79	17.01	
	12/13/97		13.19	19.91	17.01	
MW-2	03/30/92	32.80	13.32	19.48	---	
	07/01/92		14.42	18.38	---	
	09/30/92		15.78	17.02	---	
	11/19/92		15.99	16.81	24.56	
	02/03/93		12.31	20.49	25.37	
	05/25/93		12.97	19.83	25.31	
	09/22/93		14.32	18.48	25.34	
	12/21/93		14.52	18.28	25.31	
	03/18/94		13.45	19.35	25.49	
	06/15/94		14.07	18.73	25.50	
	09/14/94		14.96	17.84	25.50	
	12/19/94		13.64	19.16	25.52	
	12/21/95		13.71	19.09	—	
	03/07/95		12.54	20.26	25.87	
	06/08/95		12.81	19.99	25.86	
	09/22/95		13.66	19.14	25.80	
	12/27/95		13.42	19.38	25.83	
	03/26/96		12.05	20.75	25.83	
	06/13/96		12.79	20.01	26.39	
	09/10/96		13.73	19.07	26.43	
	12/05/96		13.29	19.51	26.45	
	03/10/97		12.42	20.38	26.48	
	06/12/97		13.18	19.62	26.50	
	08/19/97		13.94	18.86	26.52	
	12/13/97		12.91	19.89	19.02	

NOTES:
1 = Measurement and reference elevation taken from notch/mark on top north side of well casing.
2 = Elevation referenced to mean sea level.
Well Depth = Measurement from top of casing to bottom of well.
— = Not measured.
* = Well paved over.

TABLE 1
GROUND WATER ELEVATION DATA
BEACON STATION #720
1088 MARINA BOULEVARD, SAN LEANDRO, CALIFORNIA
(Measurements in feet)

Monitoring Well	Date	Reference Elevation (top of casing)[1]	Depth to Ground Water[1]	Ground Water Elevation[2]	Well Depth	Comments
MW-3	03/30/92	32.30	12.96	19.34	---	
	07/01/92		14.00	18.30	---	
	09/30/92		15.36	16.94	---	
	11/19/92		15.57	16.73	24.45	
	02/03/93		11.96	20.34	24.54	
	05/25/93		14.12	18.18	24.50	
	09/22/93		13.88	18.42	24.50	
	12/21/93		14.12	18.18	24.50	
	03/18/94		13.04	19.26	24.57	
	06/15/94		13.65	18.65	24.78	
	09/14/94		14.54	17.76	24.59	
	12/19/94		13.28	19.02	24.71	
	12/21/95		13.30	19.00	---	
	03/07/95		12.26	20.04	26.03	
	06/08/95		12.42	19.88	26.02	
	09/22/95		13.25	19.05	26.00	
	12/27/95		13.04	19.26	26.00	
	03/26/96		11.62	20.68	26.01	
	06/13/96		12.61	19.69	28.45	
	09/10/96		13.49	18.81	28.42	
	12/05/96		13.07	19.23	28.42	
	03/10/97		12.23	20.07	28.41	
	06/12/97		12.94	19.36	28.44	
	08/19/97		12.85	19.45	28.45	
	12/13/97		12.45	19.85	28.43	
MW-4	03/30/92	32.90	13.60	19.30	---	
	07/01/92		15.72	17.18	---	
	09/30/92		16.04	16.86	---	
	11/19/92		16.21	16.69	26.92	
	02/03/93		12.70	20.20	27.00	
	05/25/93		12.97	19.93	26.88	
	09/22/93		14.51	18.39	26.90	
	12/21/93		14.75	18.15	26.90	
	03/18/94		13.68	19.22	27.24	
	06/15/94		14.37	18.53	28.54	
	09/14/94		15.23	17.67	27.25	
	12/19/94		13.93	18.97	28.61	
	12/21/95		13.99	18.91	---	
	03/07/95		12.86	20.04	28.64	
	06/08/95		13.10	19.80	28.68	
	09/22/95		13.98	18.92	28.71	
	12/27/95		13.74	19.16	28.71	
	03/26/96		12.30	20.60	28.70	
	06/13/96		13.18	19.72	27.86	
	09/10/96		14.22	18.68	27.40	
	12/05/96		13.65	19.25	27.40	
	03/10/97		12.79	20.11	27.42	
	06/12/97		13.51	19.39	27.40	
	08/19/97		14.29	18.61	27.40	
	12/13/97		13.43	19.47	27.43	

NOTES:
1 = Measurement and reference elevation taken from notch/mark on top north side of well casing.
2 = Elevation referenced to mean sea level.
Well Depth = Measurement from top of casing to bottom of well.
--- = Not measured.
* = Well paved over.

TABLE 1
GROUND WATER ELEVATION DATA
BEACON STATION #720
1088 MARINA BOULEVARD, SAN LEANDRO, CALIFORNIA
(Measurements in feet)

Monitoring Well	Date	Reference Elevation (top of casing)[1]	Depth to Ground Water[1]	Ground Water Elevation[2]	Well Depth	Comments
MW-5	03/30/92	32.70	13.48	19.22	---	
	07/01/92		14.58	18.12	---	
	09/30/92		15.82	16.88	---	
	11/19/92		16.00	16.70	27.56	
	02/03/93		12.40	20.30	27.61	
	05/25/93		13.01	19.69	27.61	
	09/22/93		14.37	18.33	27.64	
	12/21/93		14.58	18.12	27.01	
	03/18/94		13.53	19.17	28.70	
	06/15/94		14.18	18.52	28.74	
	09/14/94		15.07	17.63	28.70	
	12/19/94		13.74	18.96	28.76	
	12/21/95		13.84	18.86	---	
	03/07/95		12.73	19.97	28.88	
	06/08/95		12.99	19.71	28.87	
	09/22/95		13.83	18.87	28.85	
	12/27/95		13.59	19.11	28.85	
	03/26/96		12.20	20.50	28.84	
	06/13/96		12.98	19.72	28.84	
	09/10/96		13.96	18.74	28.87	
	12/05/96		13.36	19.34	28.87	
	03/10/97		12.74	19.96	28.86	
	06/12/97		13.06	19.64	28.83	
	08/19/97		14.21	18.49	28.82	
	12/13/97		13.51	19.19	28.85	
MW-6	03/30/92	30.40	12.62	17.78	---	
	07/01/92		12.70	17.70	---	
	09/30/92		13.40	17.00	---	
	11/19/92		13.59	16.81	15.10	
	02/03/93		12.43	17.97	15.01	
	05/25/93		---	---	---	*
	10/11/93		12.82	17.58	15.10	
	12/21/93		13.06	17.34	15.10	
	03/18/94		12.16	18.24	15.16	
	06/15/94		12.59	17.81	15.17	
	09/14/94		12.86	17.54	14.97	
	12/19/94		12.48	17.92	15.19	
	12/21/95		11.61	18.79	—	
	03/07/95		12.37	18.03	14.98	
	06/08/95		11.14	19.26	15.00	
	09/22/95		12.44	17.96	15.00	
	12/27/95		12.21	18.19	14.98	
	03/26/96		12.26	18.14	14.97	
	06/13/96		12.55	17.85	14.98	
	09/10/96		12.31	18.09	15.01	
	12/05/96		12.22	18.18	15.00	
	03/10/97		12.19	18.21	15.01	
	06/12/97		12.28	18.12	14.97	
	08/19/97		12.30	18.10	14.98	
	12/13/97		11.93	18.47	14.93	

NOTES:
1 = Measurement and reference elevation taken from notch/mark on top north side of well casing.
2 = Elevation referenced to mean sea level.
Well Depth = Measurement from top of casing to bottom of well.
— = Not measured.
* = Well paved over.

TABLE 1
GROUND WATER ELEVATION DATA
BEACON STATION #720
1088 MARINA BOULEVARD, SAN LEANDRO, CALIFORNIA
(Measurements in feet)

Monitoring Well	Date	Reference Elevation (top of casing)[1]	Depth to Ground Water[1]	Ground Water Elevation[2]	Well Depth	Comments
MW-7	03/30/92	31.20	12.34	18.86	---	
	07/01/92		15.54	15.66	---	
	09/30/92		14.64	16.56	---	
	11/19/92		14.80	16.40	25.10	
	02/03/93		11.36	19.84	25.02	
	05/25/93		---	---	---	*
	09/22/93		13.18	18.02	25.01	
	12/21/93		13.42	17.78	25.02	
	03/18/94		12.36	18.84	25.13	
	06/15/94		13.01	18.19	25.21	
	09/14/94		13.88	17.32	25.13	
	12/19/94		12.61	18.59	25.23	
	12/21/95		12.38	18.82	---	
	03/07/95		11.56	19.64	25.22	
	06/08/95		11.82	19.38	25.20	
	09/22/95		12.67	18.53	25.23	
	12/27/95		12.34	18.86	25.23	
	03/26/96		11.03	20.17	25.21	
	06/13/96		11.76	19.44	25.20	
	09/10/96		12.71	18.49	24.56	
	12/05/96		12.32	18.88	24.56	
	03/10/97		11.38	19.82	24.53	
	06/12/97		12.28	18.92	24.52	
	08/19/97		12.92	18.28	24.52	
	12/13/97		11.69	19.51	24.50	
MW-8	03/30/92	33.80	14.66	19.14	---	
	07/01/92		15.74	18.06	---	
	09/30/92		17.00	16.80	---	
	11/19/92		17.01	16.79	29.75	
	02/03/93		13.83	19.97	29.88	
	05/25/93		13.01	20.79	29.86	
	09/22/93		15.81	17.99	24.52	
	12/21/93		16.05	17.75	29.86	
	03/18/94		14.62	19.18	29.87	
	06/15/94		15.29	18.51	30.07	
	09/14/94		16.22	17.58	29.87	
	12/19/94		14.81	18.99	30.05	
	12/21/95		14.89	18.91	---	
	03/07/95		13.75	20.05	29.94	
	06/08/95		13.98	19.82	29.93	
	09/22/95		14.92	18.88	29.95	
	12/27/95		14.61	19.19	29.92	
	03/26/96		13.09	20.71	29.73	
	06/13/96		13.81	19.99	27.92	
	09/10/96		14.80	19.00	27.95	
	12/05/96		14.05	19.75	27.96	
	03/10/97		13.40	20.40	27.98	
	06/12/97		14.31	19.49	27.95	
	08/19/97		13.85	19.95	27.94	
	12/13/97		13.92	19.88	27.93	

NOTES:
1 = Measurement and reference elevation taken from notch/mark on top north side of well casing.
2 = Elevation referenced to mean sea level.
Well Depth = Measurement from top of casing to bottom of well.
--- = Not measured.
* = Well paved over.

TABLE 1
GROUND WATER ELEVATION DATA
BEACON STATION #720
1088 MARINA BOULEVARD, SAN LEANDRO, CALIFORNIA
(Measurements in feet)

Monitoring Well	Date	Reference Elevation (top of casing)[1]	Depth to Ground Water[1]	Ground Water Elevation[2]	Well Depth	Comments
MW-9	12/21/95	32.56	13.76	18.80	—	
	03/07/95		12.79	19.77	24.71	
	06/08/95		12.96	19.60	24.70	
	09/22/95		13.73	18.83	24.72	
	12/27/95		13.53	19.03	24.71	
	03/26/96		12.27	20.29	24.70	
	06/13/96		12.84	19.72	24.53	
	09/10/96		13.49	19.07	24.58	
	12/05/96		13.18	19.38	24.60	
	03/10/97		12.25	20.31	24.66	
	06/12/97		12.70	19.86	24.66	
	08/19/97		17.89	14.67	24.68	
	12/13/97		15.79	16.77	24.68	

NOTES:
1 = Measurement and reference elevation taken from notch/mark on top north side of well casing.
2 = Elevation referenced to mean sea level.
Well Depth = Measurement from top of casing to bottom of well.
--- = Not measured.
* = Well paved over.

TABLE 2
GROUND WATER ANALYTICAL RESULTS
BEACON STATION #720
1088 MARINA BOULEVARD, SAN LEANDRO, CALIFORNIA
(All results in micrograms per Liter)

Monitoring Well	Date Collected	Total Petroleum Hydrocarbons	Aromatic Volatile Organics				
		Gasoline	MTBE[1]	Benzene	Toluene	Ethyl-benzene	Total Xylenes
MW-1	03/30/92	27,000		630	550	540	1,900
	07/01/92	55,000		840	1,000	830	3,600
	09/30/92	6,400		150	95	120	470
	11/19/92	1,300		90	11	50	87
	02/03/93	53,000		750	560	950	5,700
	05/25/93	9,400		200	86	470	1,500
	09/22/93	41,000		1,000	510	850	1,100
	12/21/93	41,000		1,000	490	2,700	13,000
	03/18/94	9,500		320	160	830	2,900
	06/15/94	8,000		310	80	990	2,300
	09/14/94	3,600		130	31	390	630
	12/19/94	17,000		350	150	1,500	5,200
	03/07/95	12,000		180	62	1,200	3,200
	06/08/95	6,300		76	8.0	560	860
	09/22/95	12,000		140	55	1,500	2,500
	12/27/95	3,900		60	13	480	870
	03/26/96	6,400		42	4.9	560	600
	06/13/96	9,600	<50	86	39	1,100	1,700
	09/10/96	16,000	<50	65	35	1,500	2,700
	12/05/96	6,400	<25	25	11	570	930
	03/10/97	15,000	<50	42	<5.0	1,400	1,500
	06/12/97	16,000	<100	33	34	1,100	1,700
	08/19/97	17,000	<100	47	14	1,300	2,200
	12/13/97	5,800	<100	20	35	360	470
MW-2	03/30/92	52,000		2,300	1,700	940	3,300
	07/01/92	130,000		3,500	2,900	1,900	7,900
	09/30/92	24,000		890	350	500	1,700
	11/19/92	32,000		1,900	1,700	870	3,400
	02/03/93	64,000		1,900	2,200	860	4,100
	05/25/93	34,000		3,300	1,500	1,300	5,900
	09/22/93	8,000		640	150	270	2,000
	12/21/93	18,000		1,500	410	1,300	5,000
	03/18/94	14,000		1,600	790	1,100	3,700
	06/15/94	13,000		1,600	580	1,200	4,100
	09/14/94	20,000		1,600	560	1,800	6,400
	12/19/94	19,000		1,700	750	1,600	5,800
	03/07/95	17,000		1,900	980	1,300	5,100
	06/08/95	19,000		2,100	740	1,500	4,900
	09/22/95	12,000		840	170	1,100	3,400
	12/27/95	16,000		1,100	540	1,400	5,100
	03/26/96	11,000		930	520	970	3,000
	06/13/96	11,000	1,200	1,800	1,400	1,500	4,500
	09/10/96	19,000	1,100	1,600	600	1,600	5,000
	12/05/96	12,000	180	650	180	1,000	2,800
	03/10/97	6,800	69	430	95	590	1,800
	06/12/97	20,000	100	610	140	1,500	4,300
	08/19/97	3,600	<100	250	10	250	250
	12/13/97	8,300	75	370	150	450	1,600

NOTES: < = Below indicated detection limit.
ND = Reported as "nondetect" by previous consultant.
NS = Not sampled.

TABLE 2
GROUND WATER ANALYTICAL RESULTS
BEACON STATION #720
1088 MARINA BOULEVARD, SAN LEANDRO, CALIFORNIA
(All results in micrograms per Liter)

Monitoring Well	Date Collected	Total Petroleum Hydrocarbons	Aromatic Volatile Organics				
		Gasoline	MTBE[1]	Benzene	Toluene	Ethyl-benzene	Total Xylenes
MW-3	03/30/92	21,000		560	50	630	980
	07/01/92	13,000		150	20	22	300
	09/30/92	4,500		53	2.6	84	96
	11/19/92	4,700		73	6.2	140	120
	02/03/93	23,000		220	40	430	740
	05/25/93	9,900		120	26	370	520
	09/22/93	10,000		370	71	320	640
	12/21/93	7,800		130	8.5	430	380
	03/18/94	3,100		22	1.3	78	41
	06/15/94	1,700		8.6	1.4	22	15
	09/14/94	1,400		3.8	<1.3	13	18
	12/19/94	3,800		70	1.7	140	110
	03/07/95	2,200		9.4	<1.3	30	21
	06/08/95	1,700		5.8	<1.3	2.3	14
	09/22/95	1,200		<1.3	<1.3	1.3	<1.3
	12/27/95	1,300		2.4	<1.3	3.3	3.6
	03/26/96	1,200		4.3	<1.3	4.2	2.0
	06/13/96	1,300	28	5.1	<0.50	21	6.5
	09/10/96	810	<5.0	1.4	4.8	1.6	2.1
	12/05/96	590	<5.0	<0.50	3.2	0.79	0.52
	03/10/97	650	<5.0	0.73	3.8	2.4	1.6
	06/12/97	710	<5.0	<0.50	3.5	2.9	3.6
	08/19/97	1,400	13	2.2	0.58	11	34
	12/13/97	810	<5.0	0.96	<0.50	0.54	1.8
MW-4	03/30/92	76,000		8,000	4,400	730	2,500
	07/01/92	95,000		6,900	2,200	70	880
	09/30/92	58,000		7,100	1,500	650	2,700
	11/19/92	33,000		5,500	840	400	1,400
	02/03/93	130,000		8,200	6,700	940	4,400
	05/25/93	63,000		16,000	6,600	1,700	8,100
	09/22/93	23,000		6,900	940	150	3,000
	12/21/93	28,000		6,900	1,900	1,100	5,500
	03/18/94	58,000		17,000	6,300	2,500	10,000
	06/15/94	59,000		20,000	4,900	2,500	9,100
	09/14/94	73,000		22,000	6,800	2,700	10,000
	12/19/94	67,000		20,000	8,300	2,300	9,100
	03/07/95	57,000		19,000	7,900	2,200	8,700
	06/08/95	61,000		17,000	6,300	2,700	9,000
	09/22/95	37,000		12,000	2,200	1,400	3,500
	12/27/95	39,000		12,000	6,000	1,800	5,800
	03/26/96	31,000		9,600	3,700	2,300	6,200
	06/13/96	240	89	64	0.93	1.8	2.7
	09/10/96	91,000	2,900	13,000	20,000	3,200	16,000
	12/05/96	16,000	1,200	3,700	3,100	580	2,800
	03/10/97	630	530	91	<0.50	<0.50	0.80
	06/12/97	36,000	1,100	4,600	5,300	1,200	5,500
	08/19/97	12,000	390	420	88	61	520
	12/13/97	4,800	360	560	740	130	1,100

NOTES: < = Below indicated detection limit.
ND = Reported as "nondetect" by previous consultant.
NS = Not sampled.

TABLE 2
GROUND WATER ANALYTICAL RESULTS
BEACON STATION #720
1088 MARINA BOULEVARD, SAN LEANDRO, CALIFORNIA
(All results in micrograms per Liter)

Monitoring Well	Date Collected	Total Petroleum Hydrocarbons	Aromatic Volatile Organics				
		Gasoline	MTBE[1]	Benzene	Toluene	Ethyl-benzene	Total Xylenes
MW-5	03/30/92	29,000		2,600	980	390	1,100
	07/01/92	52,000		2,400	1,000	5,200	2,000
	09/30/92	32,000		1,800	780	370	1,700
	11/19/92	7,800		1,000	280	120	370
	02/03/93	74,000		3,500	3,000	780	3,200
	05/25/93	57,000		7,900	4,700	1,900	7,800
	09/22/93	52,000		7,600	2,400	1,200	8,800
	12/21/93	23,000		3,600	1,200	970	3,600
	03/18/94	47,000		8,200	5,000	1,400	6,100
	06/15/94	28,000		7,900	4,000	1,200	5,200
	09/14/94	32,000		8,000	5,100	1,400	5,600
	12/19/94	29,000		7,000	3,400	1,200	5,200
	03/07/95	36,000		9,800	5,800	1,800	7,800
	06/08/95	33,000		7,700	3,800	1,500	6,200
	09/22/95	39,000		9,500	3,800	1,900	7,000
	12/27/95	42,000		9,700	5,000	2,200	8,800
	03/26/96	37,000		9,800	4,900	2,300	8,800
	06/13/96	18,000	1,400	5,500	2,200	1,500	5,300
	09/10/96	22,000	860	5,600	1,400	1,100	3,500
	12/05/96	24,000	650	5,100	2,500	1,400	4,700
	03/10/97	28,000	760	6,800	2,700	1,300	5,700
	06/12/97	49,000	700	7,500	3,200	2,300	9,200
	08/19/97	24,000	1,600	4,700	990	1,400	4,500
	12/13/97	18,000	360	2,700	760	630	4,200
MW-6	03/30/92	73		2.1	1.1	ND	0.6
	07/01/92	ND		ND	ND	ND	ND
	09/30/92	ND		0.73	ND	ND	0.58
	11/19/92	96		1.5	<0.5	<0.5	0.9
	02/03/93	73		0.6	<0.5	<0.5	<0.5
	05/25/93	NS		NS	NS	NS	NS
	10/11/93	<50		<0.5	<0.5	<0.5	<0.5
	12/21/93	<50		<0.5	<0.5	<0.5	<0.5
	03/18/94	<50		<0.5	<0.5	<0.5	<0.5
	06/15/94	<50		<0.5	<0.5	<0.5	<0.5
	09/14/94	<50		<0.5	<0.5	<0.5	<0.5
	12/19/94	<50		<0.5	<0.5	<0.5	<0.5
	03/07/95	<50		<0.5	<0.5	<0.5	<0.5
	06/08/95	<50		<0.5	<0.5	<0.5	<0.5
	09/22/95	<50		<0.50	<0.50	<0.50	<0.50
	12/27/95	<50		<0.50	<0.50	<0.50	<0.50
	03/26/96	<50		<0.50	<0.50	<0.50	<0.50
	06/13/96	<50	<5.0	<0.50	<0.50	<0.50	<0.50
	09/10/96	<50	<5.0	<0.50	<0.50	<0.50	<0.50
	12/05/96	<50	<5.0	<0.50	<0.50	<0.50	<0.50
	03/10/97	<50	<5.0	<0.50	<0.50	<0.50	<0.50
	06/12/97	<50	<5.0	<0.50	<0.50	<0.50	<0.50
	08/19/97	<50	<5.0	<0.50	<0.50	<0.50	<0.50
	12/13/97	<50	<5.0	<0.50	<0.50	<0.50	<0.50

NOTES: < = Below indicated detection limit.
ND = Reported as "nondetect" by previous consultant.
NS = Not sampled.

TABLE 2
GROUND WATER ANALYTICAL RESULTS
BEACON STATION #720
1088 MARINA BOULEVARD, SAN LEANDRO, CALIFORNIA
(All results in micrograms per Liter)

Monitoring Well	Date Collected	Total Petroleum Hydrocarbons	Aromatic Volatile Organics				
		Gasoline	MTBE[1]	Benzene	Toluene	Ethyl-benzene	Total Xylenes
MW-7	03/30/92	ND		ND	ND	ND	ND
	07/01/92	ND		ND	ND	ND	ND
	09/30/92	ND		ND	ND	ND	ND
	11/19/92	<50		<0.5	<0.5	<0.5	<0.5
	02/03/93	<50		<0.5	<0.5	<0.5	<0.5
	05/25/93	NS		NS	NS	NS	NS
	09/22/93	<50		0.51	0.82	<0.5	0.81
	12/21/93	<50		<0.5	<0.5	<0.5	<0.5
	03/18/94	<50		<0.5	<0.5	<0.5	<0.5
	06/15/94	<50		<0.5	<0.5	<0.5	<0.5
	09/14/94	<50		<0.5	<0.5	<0.5	<0.5
	12/19/94	<50		<0.5	<0.5	<0.5	<0.5
	03/07/95	<50		<0.5	<0.5	<0.5	<0.5
	06/08/95	<50		<0.5	<0.5	<0.5	<0.5
	09/22/95	<50		<0.50	<0.50	<0.50	<0.50
	12/27/95	<50		<0.50	<0.50	<0.50	<0.50
	03/26/96	<50		<0.50	<0.50	<0.50	<0.50
	06/13/96	<50	<5.0	<0.50	<0.50	<0.50	<0.50
	09/10/96	<50	<5.0	<0.50	<0.50	<0.50	<0.50
	12/05/96	<50	<5.0	<0.50	<0.50	<0.50	<0.50
	03/07/97	<50	<5.0	<0.50	<0.50	<0.50	<0.50
	06/12/97	<50	<5.0	<0.50	<0.50	<0.50	<0.50
	08/19/97	<50	<5.0	<0.50	<0.50	<0.50	<0.50
	12/13/97	<50	<5.0	<0.50	<0.50	<0.50	<0.50
MW-8	03/30/92	3,000		1,700	880	970	1,900
	07/01/92	72,000		1,800	550	520	2,200
	09/30/92	12,000		680	140	140	560
	11/19/92	9,600		530	310	130	560
	02/03/93	44,000		1,500	1,300	490	2,300
	05/25/93	7,400		580	160	170	480
	09/22/93	2,400		490	45	37	140
	12/21/93	1,400		240	7.5	<2.5	82
	03/18/94	8,600		1,600	680	470	1,900
	06/15/94	4,800		980	380	260	1,200
	09/14/94	6,600		1,200	280	330	1,100
	12/19/94	8,400		1,800	390	500	2,000
	03/07/95	7,400		1,400	370	440	2,000
	06/08/95	6,000		790	220	290	1,400
	09/22/95	4,100		750	93	230	860
	12/27/95	5,400		860	140	350	1,400
	03/26/96	1,700		180	27	100	370
	06/13/96	2,400	42	500	67	220	850
	09/10/96	7,000	<50	1,300	100	410	1,600
	12/05/96	6,300	<50	1,100	78	410	1,600
	03/07/97	6,500	<130	840	67	330	1,500
	06/12/97	7,500	<50	1,000	79	390	1,400
	08/19/97	1,100	<20	170	14	38	220
	12/13/97	4,100	24	300	29	190	860

NOTES: < = Below indicated detection limit.
ND = Reported as "nondetect" by previous consultant.
NS = Not sampled.

TABLE 2
GROUND WATER ANALYTICAL RESULTS
BEACON STATION #720
1088 MARINA BOULEVARD, SAN LEANDRO, CALIFORNIA
(All results in micrograms per Liter)

Monitoring Well	Date Collected	Total Petroleum Hydrocarbons	Aromatic Volatile Organics				
		Gasoline	MTBE[1]	Benzene	Toluene	Ethyl-benzene	Total Xylenes
MW-9	12/20/94	16,000		2,500	1,400	690	2,800
	03/07/95	5,200		1,600	250	320	520
	06/08/95	4,900		1,000	98	300	200
	09/22/95	4,000		1,100	82	190	200
	12/27/95	2,800		960	100	200	250
	03/26/96	1,600		380	44	96	110
	06/13/96	1,800	750	540	71	140	180
	09/10/96	2,400	810	860	70	190	210
	12/05/96	5,500	960	2,100	420	380	720
	03/07/97	4,200	720	1,300	170	260	440
	06/12/97	11,000	1,000	2,500	490	560	1,300
	08/19/97	42,000	<1,000	7,700	3,500	2,000	8,300
	12/13/97	13,000	710	1,300	280	960	3,100

NOTES: < = Below indicated detection limit.
ND = Reported as "nondetect" by previous consultant.
NS = Not sampled.

ATTACHMENT A

ULTRAMAR FIELD PROCEDURES

ATTACHMENT A - ULTRAMAR FIELD PROCEDURES

The following section describes procedures used by field personnel in the performance of ground water sampling at Ultramar Inc. sites.

Ground Water Level and Total Depth Determination

A water level indicator is lowered down the well and a measurement of the depth to water from an established reference point on the casing is taken. The indicator probe is used to sound the bottom of the well and a measurement of the total depth of the well is taken. Both the water level and total depth measurements are taken to the nearest 0.01-foot.

Visual Analysis of Ground Water

Prior to purging and sampling ground water monitoring wells, a water sample is collected from each well for subjective analysis. The visual analysis involves gently lowering a clean, disposable, polyethylene bailer to approximately one-half the bailer length past the water table interface. The bailer is then retrieved, and the sample contained within the bailer is examined for floating product or the appearance of a petroleum product sheen. If measurable free product is noted in the bailer, a water/product interface probe is used to determine the thickness of the free product to the nearest 0.01-foot. The thickness of free product is determined by subtracting the depth to product from the depth to water.

Monitoring Well Purging and Sampling

Monitoring wells are purged by removing approximately four casing volumes of water from the well using a clean disposable bailer or electrical submersible purge pump. Purge volumes are calculated prior to purging. During purging, the temperature, pH, and electric conductivity of the purge water are monitored. The well is considered to be sufficiently purged when: The four casing volumes have been removed; the temperature, pH. and conductivity values have stabilized to within 10% of the initial readings; and the ground water being removed is relatively free of suspended solids. After purging, ground water levels are allowed to stabilize to within 80% of the initial water level reading. A water sample is then collected from each well with a clean, disposable polyethylene bailer. If the well is bailed or pumped dry prior to removing the minimum volume of water, the ground water is allowed to recharge. If the well has recharged to within 80% of the initial depth to water reading within two hours, the well will continue to be purged until the minimum volume of water has been removed. If the well has not recharged to at least 80% of the initial depth to water reading within two hours, the well is considered to contain formational water and a ground water sample is collected. Ground water removed from the well is stored in 55-gallon drums at the site and labeled pending disposal.

In wells where free product is detected, the wells will be bailed to remove the free product. An estimate of the volume of product and water well be recorded. If the free product thickness is reduced to the point where a measurable thickness is no longer present in the well, a ground water sample will be collected. If free product persists throughout the purging process, a final free product thickness measurement will be taken and a ground water sample will not be collected.

Ground water samples are stored in 40-milliliter vials so that air passage through the sample is minimized (to prevent volatilization of the sample). The vial is tilted and filled slowly until an upward convex meniscus forms over the mouth of the vial. The Teflon™ side of the septum (in cap) is then placed against the meniscus, and the cap is screwed on tightly. The sample is then inverted and the bottle is tapped lightly to check for air bubbles. If an air bubble is present in the vial, the cap is removed and more sample is transferred from the bailer. The vial is then resealed and rechecked for air bubbles. The sample is then appropriately labeled and stored on ice from the time of collection through the time of delivery to the laboratory. The Chain-of-Custody form is completed to ensure sample integrity. Ground water samples are transported to a state-certified laboratory and analyzed within the U.S. Environmental Protection Agency-specified hold times for the specified analytes.

ATTACHMENT B

DOULOS ENVIRONMENTAL FIELD DATA SHEETS

DOULOS ENVIRONMENTAL COMPANY
GROUNDWATER/LIQUID LEVEL DATA
(measurements in feet)

Project Address: Beacon #720, 1088 Marina Blvd. Date: 12-13-97

San Leandro, CA Project No.: 94-720-01

Recorded by: Hal Hansen

Well No	Time	Well Elev. TOC	Depth to Gr. Water	Measured Total Depth	Gr. Water Elevation	Depth to Product	Product Thickness	Comments
MW-1	224		13.19	17.01				no odor no sheen
MW-2	220		12.91	19.82				no odor no sheen
MW-3	216		12.45	28.43				under vacuum slight odor no sheen
MW-4	228		13.43	27.43				petroleum odor no sheen
MW-5	209		13.51	28.85				Petroleum odor no sheen
MW-6	203		11.93	14.93				no odor no sheen
MW-7	200		11.69	24.50				no odor no sheen
MW-8	206		13.92	27.93				slight odor no sheen
MW-9	213		15.79	24.68				under vacuum petroleum odor no sheen

Notes: 11.69

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DOULOS ENVIRONMENTAL COMPANY SAMPLING INFORMATION SHEET

Client: Ultramar Sampling Date: 12-13-97

Site: Beacon #720 Project No.: 94-720-01

1088 Marina Boulevard Well Designation: MW-1

San Leandro, CA

Is setup of traffic control devices required? (NO) YES time:_____ hours
Is there standing water in well box? (NO) YES Above TOC Below TOC
Is top of casing cut level? NO (YES) If no, see remarks
Is well cap sealed and locked? NO (YES) If no, see remarks
Height of well casing riser (in inches): 4
Well cover type: 8" UV_____ 12" UV_____ 12" EMCO_____ 8" BK_____
12" BK_____ 12" DWP_____ 12" CNI X 36" CNI_____ Other_____
General condition of wellhead assembly: Excellent (Good) Fair Poor

Purging Equipment: _____2" disposable bailer _____Submersible pump
_____2" PVC bailer _____Dedicated bailer
_____4" PVC bailer X Centrifugal pump

Sampled with: Disposable bailer: X Teflon bailer:_____

Well Diameter: 2" X 4"____ 6"____ 8"____

Purge Vol. Multiplier: 0.16 0.65 1.47 2.61 gal/ft.

Initial Measurement
Time: 22 4
Depth of well: 17.07
Depth to water: 13.19

Recharge Measurement
Time: 421
Depth to water: 13.22

Calculated purge: 2.4 gal
Actual purge: 3.4

Start purge: 413 Sampling time: 422

Time	Temp.	E.C.	pH	Turbidity	Volume
414	709	1725	730	———	1
415	682	1405	721	———	2
415	681	1182	724	———	3
41C	680	1174	720	———	4

Sample appearance: clear Lock: dolphin

Equipment replaced: (Check all that apply) Note condition of replaced item
2" Locking Cap:_____ Lock #3753:_____ 7/32 Allenhead:_____
4" Locking Cap:_____ Lock-Dolphin:_____ 9/16 Bolt:_____
6" Locking Cap:_____ Pinned Allenhead (DWP):_____

Remarks: DO 3 PPA

Signature: Karl Kamer

DOULOS ENVIRONMENTAL COMPANY SAMPLING INFORMATION SHEET

Client: Ultramar Sampling Date: 12-13-97

Site: Beacon #720 Project No.: 94-720-01

1088 Marina Boulevard Well Designation: MW-2

San Leandro, CA

Is setup of traffic control devices required? (NO) YES time:_____ hours
Is there standing water in well box? (NO) YES Above TOC Below TOC
Is top of casing cut level? NO (YES) If no, see remarks
Is well cap sealed and locked? NO (YES) If no, see remarks
Height of well casing riser (in inches): 3
Well cover type: 8" UV_____ 12" UV_____ 12" EMCO_____ 8" BK_____
12" BK_____ 12" DWP_____ 12" CNI_____ 36" CNI_____ Other 12" Davis
General condition of wellhead assembly: Excellent (Good) Fair Poor

Purging Equipment: _____2" disposable bailer _____Submersible pump
_____2" PVC bailer _____Dedicated bailer
_____4" PVC bailer ___X___Centrifugal pump

Sampled with: Disposable bailer: X Teflon bailer:_____

Well Diameter: 2" X 4"____ 6"____ 8"____

Purge Vol. Multiplier: 0.16 0.65 1.47 2.61 gal/ft.

Initial Measurement: Time: 220 Depth of well: 19.62 Depth to water: 12.91

Recharge Measurement: Time: 355 Depth to water: 1304

Calculated purge: 43 gal Actual purge: 44 gal

Start purge: 347 Sampling time: 356

Time	Temp.	E.C.	pH	Turbidity	Volume
348	736	1314	756	—	1
349	730	1287	730	—	2
349	~~736~~	1214	731	—	3
350	703	1183	728	—	4

Sample appearance: clear Lock: dolphin

Equipment replaced: (Check all that apply) Note condition of replaced item
2" Locking Cap:_____ Lock #3753:_____ 7/32 Allenhead:_____
4" Locking Cap:_____ Lock-Dolphin:_____ 9/16 Bolt:_____
6" Locking Cap:_____ Pinned Allenhead (DWP):_____

Remarks: DO 5 PPM

Signature: [signature]

DOULOS ENVIRONMENTAL COMPANY SAMPLING INFORMATION SHEET

Client: Ultramar Sampling Date: 12-13-97

Site: Beacon #720 Project No.: 94-720-01

1088 Marina Boulevard Well Designation: MW-3

San Leandro, CA

Is setup of traffic control devices required? (NO) YES time:_____ hours
Is there standing water in well box? (NO) YES Above TOC Below TOC
Is top of casing cut level? NO (YES) If no, see remarks
Is well cap sealed and locked? NO (YES) If no, see remarks
Height of well casing riser (in inches): 3
Well cover type: 8" UV_____ 12" UV_____ 12" EMCO_____ 8" BK_____
12" BK_____ 12" DWP_____ 12" CNI X 36" CNI_____ Other_____
General condition of wellhead assembly: Excellent (Good) Fair Poor

Purging Equipment:
_____2" disposable bailer
_____2" PVC bailer
_____4" PVC bailer
_____Submersible pump
_____Dedicated bailer
X Centrifugal pump

Sampled with: Disposable bailer: X Teflon bailer:_____

Well Diameter: 2" X 4"____ 6"____ 8"____

Purge Vol. Multiplier: 0.16 0.65 1.47 2.61 gal/ft.

Initial Measurement
Time: 216
Depth of well: 28.43
Depth to water: 12.45

Recharge Measurement
Time: 407
Depth to water: 1405

Calculated purge: 10.2 gal
Actual purge: 10.2 gal

Start purge: 360 Sampling time: 408

Time	Temp.	E.C.	pH	Turbidity	Volume
403	70.6	1330	733	—	1
404	69.2	1282	731	—	2
404	69.1	1250	721	—	3
405	68.8	1243	720	—	4

Sample appearance: clear Lock: Dolphin

Equipment replaced: (Check all that apply) Note condition of replaced item
2" Locking Cap:_____ Lock #3753:_____ 7/32 Allenhead:_____
4" Locking Cap:_____ Lock-Dolphin:_____ 9/16 Bolt:_____
6" Locking Cap:_____ Pinned Allenhead (DWP):_____

Remarks: DO 3 PPM

Signature: [signature]

DOULOS ENVIRONMENTAL COMPANY SAMPLING INFORMATION SHEET

Client: Ultramar Sampling Date: 12-13-97

Site: Beacon #720 Project No.: 94-720-01

1088 Marina Boulevard Well Designation: MW-4

San Leandro, CA

Is setup of traffic control devices required? (NO) YES time:_____ hours
Is there standing water in well box? (NO) YES Above TOC Below TOC
Is top of casing cut level? NO (YES) If no, see remarks
Is well cap sealed and locked? (NO) YES If no, see remarks
Height of well casing riser (in inches): _____
Well cover type: 8" UV_____ 12" UV_____ 12" EMCO_____ 8" BK_____
12" BK_____ 12" DWP_____ 12" CNI X 36" CNI_____ Other_____
General condition of wellhead assembly: Excellent (Good) Fair Poor

Purging Equipment: _____2" disposable bailer _____Submersible pump
_____2" PVC bailer _____Dedicated bailer
_____4" PVC bailer X Centrifugal pump
X tubing

Sampled with: Disposable bailer:_____ Teflon bailer:_____

Well Diameter: 2" X 4"____ 6"____ 8"____

Purge Vol. Multiplier: 0.16 0.65 1.47 2.61 gal/ft.

Initial Measurement
Time: 1228
Depth of well: 27.43
Depth to water: 13.43

Recharge Measurement
Time: 342
Depth to water: 13.82

Calculated purge: 9 gal
Actual purge: 10

Start purge: 334 Sampling time: 343

Time	Temp.	E.C.	pH	Turbidity	Volume
335	703	1382	721	———	1
336	682	1304	704	———	2
336	680	1262	692	———	3
337	680	1271	691	———	4

Sample appearance: clear Lock: ok

Equipment replaced: (Check all that apply) Note condition of replaced item
2" Locking Cap:_____ Lock #3753:_____ 7/32 Allenhead:_____
4" Locking Cap:_____ Lock-Dolphin:_____ 9/16 Bolt:_____
6" Locking Cap:_____ Pinned Allenhead (DWP):_____

Remarks: 00 4 PPM

Signature: [signature]

DOULOS ENVIRONMENTAL COMPANY SAMPLING INFORMATION SHEET

Client: Ultramar Sampling Date: 12-13-97

Site: Beacon #720 Project No.: 94-720-01

1088 Marina Boulevard Well Designation: MW-5

San Leandro, CA

Is setup of traffic control devices required? (NO) YES time:_____ hours
Is there standing water in well box? (NO) YES Above TOC Below TOC
Is top of casing cut level? NO (YES) If no, see remarks
Is well cap sealed and locked? (NO) YES If no, see remarks
Height of well casing riser (in inches): 4
Well cover type: 8" UV_____ 12" UV_____ 12" EMCO_____ 8" BK_____
12" BK_____ 12" DWP_____ 12" CNI X 36" CNI_____ Other_____
General condition of wellhead assembly: Excellent (Good) Fair Poor

Purging Equipment: _____2" disposable bailer _____Submersible pump
_____2" PVC bailer _____Dedicated bailer
_____4" PVC bailer X Centrifugal pump tubing

Sampled with: Disposable bailer:_____ Teflon bailer:_____

Well Diameter: 2" X 4"____ 6"____ 8"____

Purge Vol. Multiplier: 0.16 0.65 1.47 2.61 gal/ft.

Initial Measurement
Time: 209
Depth of well: 19.85
Depth to water: 13.51

Recharge Measurement
Time: 321
Depth to water: 13.63

Calculated purge: 9.8 gal
Actual purge: 9.8 gal

Start purge: 316 Sampling time: 322

Time	Temp.	E.C.	pH	Turbidity	Volume
317	70.3	1330	7.53	———	1
318	68.4	1325	7.10	———	2
318	68.1	1307	7.02	———	3
319	68.5	1253	6.95	———	4

Sample appearance: clear Lock: none

Equipment replaced: (Check all that apply) Note condition of replaced item
2" Locking Cap:_____ Lock #3753:_____ 7/32 Allenhead:_____
4" Locking Cap:_____ Lock-Dolphin:_____ 9/16 Bolt:_____
6" Locking Cap:_____ Pinned Allenhead (DWP):_____

Remarks: Pump in well
DO 5 PPM

Signature: Karl Glanzer

DOULOS ENVIRONMENTAL COMPANY SAMPLING INFORMATION SHEET

Client: Ultramar Sampling Date: 12-13-97

Site: Beacon #720 Project No.: 94-720-01

1088 Marina Boulevard Well Designation: MW-6

San Leandro, CA

Is setup of traffic control devices required? (NO) YES time: _____ hours
Is there standing water in well box? (NO) YES Above TOC Below TOC
Is top of casing cut level? NO (YES) If no, see remarks
Is well cap sealed and locked? NO (YES) If no, see remarks
Height of well casing riser (in inches): 6
Well cover type: 8" UV_____ 12" UV_____ 12" EMCO_____ 8" BK_____
12" BK_____ 12" DWP_____ 12" CNI_____ 36" CNI_____ Other 12" Bolted
General condition of wellhead assembly: Excellent (Good) Fair Poor

Purging Equipment:
_____ 2" disposable bailer
_____ 2" PVC bailer
_____ 4" PVC bailer
_____ Submersible pump
_____ Dedicated bailer
X Centrifugal pump

Sampled with: Disposable bailer: X Teflon bailer: _____

Well Diameter: 2" X 4"____ 6"____ 8"____

Purge Vol. Multiplier: 0.16 0.65 1.47 2.61 gal/ft.

Initial Measurement
Time: 203
Depth of well: 14.93
Depth to water: 11.93

Recharge Measurement
Time: 340
Depth to water: 12.30

Calculated purge: 1.9 gal
Actual purge: 1.9 n

Start purge: 253 Sampling time: 341

Time	Temp.	E.C.	pH	Turbidity	Volume
254	736	1136	737		1
254	731	1207	731		2
255	706	1076	720		3
300	704	1054	704		4

Purged

Sample appearance: clear Lock: dolphin

Equipment replaced: (Check all that apply) Note condition of replaced item
2" Locking Cap:_____ Lock #3753:_____ 7/32 Allenhead:_____
4" Locking Cap:_____ Lock-Dolphin:_____ 9/16 Bolt:_____
6" Locking Cap:_____ Pinned Allenhead (DWP):_____

Remarks: DO 3 PPM

Signature: Karl Hansen

DOULOS ENVIRONMENTAL COMPANY SAMPLING INFORMATION SHEET

Client: Ultramar Sampling Date: 12-13-97

Site: Beacon #720 Project No.: 94-720-01

1088 Marina Boulevard Well Designation: MW-7

San Leandro, CA

Is setup of traffic control devices required? (NO) YES time:_____ hours
Is there standing water in well box? (NO) YES Above TOC Below TOC
Is top of casing cut level? NO (YES) If no, see remarks
Is well cap sealed and locked? NO (YES) If no, see remarks
Height of well casing riser (in inches): 6
Well cover type: 8" UV_____ 12" UV_____ 12" EMCO_____ 8" BK_____
12" BK_____ 12" DWP_____ 12" CNI_____ 36" CNI_____ Other 12" Posset
General condition of wellhead assembly: Excellent (Good) Fair Poor

Purging Equipment:
_____2" disposable bailer
_____2" PVC bailer
_____4" PVC bailer
_____Submersible pump
_____Dedicated bailer
_X_Centrifugal pump

Sampled with: Disposable bailer: X Teflon bailer:_____

Well Diameter: 2" X 4"___ 6"___ 8"___

Purge Vol. Multiplier: 0.16 0.65 1.47 2.61 gal/ft.

Initial Measurement
Time: 200
Depth of well: 24.50
Depth to water: 11.69

Recharge Measurement
Time: 247
Depth to water: 11.83

Calculated purge: 8.2 gal
Actual purge: 8.2 "

Start purge: 240 Sampling time: 248

Time	Temp.	E.C.	pH	Turbidity	Volume
241	70.3	1342	7.64	~~~	1
242	69.4	1283	7.35	~~~	2
242	69.3	1208	7.30	~~~	3
243	69.8	1183	7.31	~~~	4

Sample appearance: clear Lock: dolphin

Equipment replaced: (Check all that apply) Note condition of replaced item
2" Locking Cap:_____ Lock #3753:_____ 7/32 Allenhead:_____
4" Locking Cap:_____ Lock-Dolphin:_____ 9/16 Bolt:_____
6" Locking Cap:_____ Pinned Allenhead (DWP):_____

Remarks: DO 0.5 PPM

Signature: Hal Hansen

DOULOS ENVIRONMENTAL COMPANY SAMPLING INFORMATION SHEET

Client: Ultramar Sampling Date: 12-13-97

Site: Beacon #720 Project No.: 94-720-01

1088 Marina Boulevard Well Designation: MW-8

San Leandro, CA

Is setup of traffic control devices required? (NO) YES time:_____ hours
Is there standing water in well box? (NO) YES Above TOC Below TOC
Is top of casing cut level? NO (YES) If no, see remarks
Is well cap sealed and locked? NO (YES) If no, see remarks
Height of well casing riser (in inches): 5
Well cover type: 8" UV_____ 12" UV_____ 12" EMCO_____ 8" BK_____
12" BK_____ 12" DWP_____ 12" CNI X 36" CNI_____ Other_____
General condition of wellhead assembly: Excellent (Good) Fair Poor

Purging Equipment:
_____2" disposable bailer
_____2" PVC bailer
_____4" PVC bailer
_____Submersible pump
_____Dedicated bailer
X Centrifugal pump

Sampled with: Disposable bailer: X Teflon bailer:_____

Well Diameter: 2" X 4"_____ 6"_____ 8"_____

Purge Vol. Multiplier: 0.16 0.65 1.47 2.61 gal/ft.

Initial Measurement
Time: 1206
Depth of well: 17.93
Depth to water: 13.92

Recharge Measurement
Time: 311
Depth to water: 13.83

Calculated purge: 9 gal
Actual purge: 9.0

Start purge: 304 Sampling time: 312

Time	Temp.	E.C.	pH	Turbidity	Volume
305	7140	1182	736		1
306	682	1176	731		2
306	680	1077	728		3
307	685	1071	724		4

Sample appearance: clear Lock: dolphin

Equipment replaced: (Check all that apply) Note condition of replaced item
2" Locking Cap:_____ Lock #3753:_____ 7/32 Allenhead:_____
4" Locking Cap:_____ Lock-Dolphin:_____ 9/16 Bolt:_____
6" Locking Cap:_____ Pinned Allenhead (DWP):_____

Remarks: DO 1 PPM

Signature: Karl Kamar

DOULOS ENVIRONMENTAL COMPANY SAMPLING INFORMATION SHEET

Client: Ultramar Sampling Date: 12-18-97

Site: Beacon #720 Project No.: 94-720-01

1088 Marina Boulevard Well Designation: MW-9

San Leandro, CA

Is setup of traffic control devices required? (NO) YES time:_____ hours
Is there standing water in well box? (NO) YES Above TOC Below TOC
Is top of casing cut level? NO (YES) If no, see remarks
Is well cap sealed and locked? (NO) YES If no, see remarks
Height of well casing riser (in inches): 3
Well cover type: 8" UV_____ 12" UV_____ 12" EMCO_____ 8" BK_____
12" BK_____ 12" DWP_____ 12" CNI X 36" CNI_____ Other_____
General condition of wellhead assembly: Excellent (Good) Fair Poor

Purging Equipment: _____2" disposable bailer _X_ Submersible pump
_____2" PVC bailer _____Dedicated bailer
_____4" PVC bailer _____Centrifugal pump
sample pump

Sampled with: Disposable bailer:_____ Teflon bailer:_____

Well Diameter: 2"____ 4" X 6"____ 8"____

Purge Vol. Multiplier: 0.16 0.65 1.47 2.61 gal/ft.

Initial Measurement
Time: 1413
Depth of well: 14.68
Depth to water: 15.79

Recharge Measurement
Time: NA
Depth to water: NA

Calculated purge: NA
Actual purge: NA

Start purge:_____ Sampling time: 330

Time	Temp.	E.C.	pH	Turbidity	Volume

Sample appearance: clear Lock: NA

Equipment replaced: (Check all that apply) Note condition of replaced item
2" Locking Cap:_____ Lock #3753:_____ 7/32 Allenhead:_____
4" Locking Cap:_____ Lock-Dolphin:_____ 9/16 Bolt:_____
6" Locking Cap:_____ Pinned Allenhead (DWP):_____

Remarks: under vacuum pump in well - pumping
DO 3 PPM

Signature: [signature]

ATTACHMENT C

HISTORICAL GROUND WATER ELEVATION DATA

TABLE 1

GROUNDWATER ELEVATIONS

Date Sampled	Depth to Groundwater (Feet)	Groundwater Elevation (Feet)
Groundwater Monitoring Well MW-1:		**Elevation of Top of Casing = 29.89 feet**
June 23, 1987	14.79	15.10
July 06, 1987	14.93	14.96
August 06, 1987	14.22	15.67
November 04, 1987	15.74	14.15
February 02, 1988	13.99	15.90
May 02, 1988	14.99	14.90
November 21, 1988	13.03	16.86
February 14, 1989	15.86	14.03
May 02, 1989	14.77	15.12
August 10, 1989	16.35	13.54
November 08, 1989	16.46	13.43
February 20, 1990	15.58	14.31
May 18, 1990	16.40	13.49
September 15, 1990	16.83	13.06
November 26, 1990	17.16	12.73
February 07, 1991	16.43	13.46
May 14, 1991	14.93	14.96
August 16, 1991	16.35	13.54
Groundwater Monitoring Well MW-1:		**New Elevation of Top of Casing = 33.10 feet**
December 24, 1991	17.20	15.90
March 30, 1992	13.58	19.52
Groundwater Monitoring Well MW-2:		**Elevation of Top of Casing = 29.57 feet**
June 23, 1987	14.51	15.06

TABLE 1

GROUNDWATER ELEVATIONS

Date Sampled	Depth to Groundwater (Feet)	Groundwater Elevation (Feet)
July 06, 1987	14.63	14.94
August 06, 1987	14.95	14.62
November 04, 1987	15.45	14.12
February 02, 1988	13.74	15.83
May 02, 1988	14.63	14.94
November 21, 1988	12.99	16.58
February 14, 1989	15.66	13.91
May 02, 1989	14.56	15.01
August 10, 1989	16.22	13.35
November 08, 1989	16.19	13.38
February 20, 1990	15.34	14.23
May 18, 1990	16.20	13.37
September 15, 1990	16.42	13.05
November 26, 1990	16.83	12.74
February 07, 1991	16.13	13.44
May 14, 1991	14.62	14.95
August 16, 1991	16.00	13.57
Groundwater Monitoring Well MW-2:		**New Elevation of Top of Casing = 32.80 feet**
December 24, 1991	16.90	15.90
March 30, 1992	13.32	19.48
Groundwater Monitoring Well MW-3:		**Elevation of Top of Casing = 29.13 feet**
June 23, 1987	14.13	15.00
July 06, 1987	14.24	14.89
August 06, 1987	14.52	14.61
November 04, 19887	15.09	14.04
February 02, 1988	13.37	15.76

TABLE 1

GROUNDWATER ELEVATIONS

Date Sampled	Depth to Groundwater (Feet)	Groundwater Elevation (Feet)
May 02, 1988	14.22	14.91
November 21, 1988	13.01	16.12
February 14, 1989	15.22	13.91
May 02, 1989	14.16	14.97
August 10, 1989	15.61	13.52
November 08, 1989	15.75	13.38
February 20, 1990	14.95	14.18
May 18, 1990	15.79	13.34
September 15, 1990	16.07	13.06
November 26, 1990	16.36	12.77
February 07, 1991	15.74	13.39
May 14, 1991	14.19	14.94
August 16, 1991	15.55	13.58
Groundwater Monitoring Well MW-3:		**New Elevation of Top of Casing = 32.30 feet**
December 24, 1991	16.40	15.90
March 30, 1992	12.96	19.34
Groundwater Monitoring Well MW-4:		**Elevation of Top of Casing = 29.72 feet**
June 23, 1987	14.77	14.95
July 06, 1987	14.91	14.81
August 06, 1987	15.19	14.53
November 04, 1987	15.72	14.00
February 02, 1088	14.03	15.69
May 02, 1988	14.89	14.83
November 21, 1988	12.88	16.84
February 14, 1989	15.83	13.89
May 02, 1989	14.75	14.97

TABLE 1

GROUNDWATER ELEVATIONS

Date Sampled	Depth to Groundwater (Feet)	Groundwater Elevation (Feet)
August 10, 1989	16.30	13.42
November 08, 1989	16.29	13.43
February 20, 1990	15.62	14.10
May 18, 1990	16.34	13.38
September 15, 1990	16.79	12.93
November 26, 1990	17.08	12.64
February 07, 1991	16.37	13.35
May 14, 1991	14.87	14.85
August 16, 1991	16.25	13.47
Groundwater Monitoring Well MW-4:		**New Elevation of Top of Casing = 32.90 feet**
December 24, 1991	17.10	15.80
March 30, 1992	13.60	19.30
Groundwater Monitoring Well MW-5:		**Elevation of Top of Casing = 29.55 feet**
June 23, 1987	14.63	14.92
July 06, 1987	14.79	14.76
August 06, 1987	15.07	14.48
November 04, 1987	15.61	13.94
February 02, 1988	13.84	15.71
May 02, 1988	14.77	14.78
November 21, 1988	12.84	16.71
February 14, 1989	15.72	13.83
May 02, 1989	14.68	14.87
August 10, 1989	16.03	13.52
November 08, 1989	16.33	13.22
February 20, 1990	15.44	14.11

TABLE 1

GROUNDWATER ELEVATIONS

Date Sampled	Depth to Groundwater (Feet)	Groundwater Elevation (Feet)
May 18, 1990	16.22	13.33
September 15, 1990	16.65	12.90
November 26, 1990	16.95	12.60
February 07, 1991	16.20	13.35
May 14, 1991	14.72	14.38
August 16, 1991	16.10	13.45
Groundwater Monitoring Well MW-5:		**New Elevation of Top of Casing = 32.70 feet**
December 24, 1991	16.92	15.78
March 30, 1992	13.48	19.22
Groundwater Monitoring Well MW-6:		**Elevation of Top of Casing = 30.40 feet**
December 24, 1991	14.12	16.28
March 30, 1992	12.62	17.78
Groundwater Monitoring Well MW-7:		**Elevation of Top of Casing = 31.20 feet**
December 24, 1991	15.70	15.50
March 30, 1992	12.34	18.86
Groundwater Monitoring Well MW-8:		**Elevation of Top of Casing = 33.80 feet**
December 24, 1991	18.00	15.80
March 30, 1992	14.66	19.14

Notes:
1) All elevations surveyed to an arbitrary datum
2) Elevations and depths are given in feet
3) Groundwater Technology, Inc., made measurements until February 1989
4) Du Pont Environmental Services collected samples from February 1989 through February 1991
5) Environmental Geotechnical Consultants, Inc., made measurements beginning in May 1991

ATTACHMENT D

HISTORICAL GROUND WATER ANALYTICAL DATA

TABLE 2

SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Well No.	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	TPH-G (µg/L)	Comments
MW-1	Apr. 16, 1987	2,313	3,770	664.1	3,331	17,276	
	June 23, 1987	1,887	2,141	466.7	1,652	26,027	
	July 06, 1987	778.2	943.7	133.2	422.1	3,938	
	Aug. 06, 1987	1,270	1,576	288.7	873.7	6,079	
	Nov. 04, 1987	1,700	4,000	720	2,200	15,000	
	Feb. 02, 1988	1,500	1,700	230	740	14,000	
	May 02, 1988	3,500	700	4,900	2,700	33,000	
	Nov. 21, 1988	2,200	560	2,800	2,200	15,000	
	Feb. 14, 1989	1,700	1,700	340	1,500	12,000	Odor
	May 02, 1989	1,500	2,400	510	2,400	18,000	Odor, Slight Sheen
	Aug. 10, 1989	1,400	1,500	360	1,600	10,000	Odor
	Nov. 08, 1989	920	470	190	360	7,200	Odor
	Feb. 20, 1990	810	540	270	800	3,300	
	May 18, 1990	1,900	500	560	1,600	5,600	
	Sep. 15, 1990	320	110	150	520	5,200	Odor
	Nov. 26, 1990	370	59	150	370	3,000	Odor
	Feb. 07, 1991	750	570	480	1,800	14,000	
	May 14, 1991	1,000	1,400	600	2,500	41,000	
	Aug. 16, 1991	310	210	150	480	4,000	Odor
	Dec. 24, 1991	530	95	310	680	11,000	Moderate Odor
	Mar. 30, 1992	630	550	540	1,900	27,000	Odor
MW-2	Apr. 16, 1987	3,131	4,239	1,067	4,608	17,920	
	June 23, 1987	2,188	2,622	1,047	4,699	49,354	
	July 06, 1987	1,575	1,729	457	1,702	8,676	
	Aug. 06, 1987	2,623	3,722	702	2,882	14,376	
	Nov. 04, 1987	2,200	4,100	900	3,500	19,000	

TABLE 2

SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Well No.	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	TPH-G (µg/L)	Comments
MW-2	Feb. 02, 1988	6,200	6,500	1,000	4,000	54,000	
	May 02, 1988	6,800	1,300	7,100	5,400	53,000	
	Nov. 21, 1988	--	--	--	--	--	Free product
	Feb. 14, 1989	6,900	4,300	1,100	5,200	48,000	Film of free product
	May 02, 1989	6,100	8,800	2,100	16,000	111,000	Odor, sheen
	Aug. 10, 1989	4,200	2,900	1,000	5,800	39,000	Odor, sheen
	Nov. 08, 1989	3,700	1,500	740	2,200	45,000	Odor, heavy sheen
	Feb. 20, 1990	5,000	8,200	1,600	11,000	60,000	
	May 18, 1990	6,200	1,900	1,300	610	19,000	
	Sep. 15, 1990	1,400	820	660	3,000	27,000	Odor, sheen
	Nov. 26, 1990	1,100	880	700	3,800	28,000	Odor, sheen
	Feb. 07, 1991	2,100	1,900	1,300	6,200	63,000	Odor, sheen
	May 14, 1991	2,200	2,700	1,100	5,900	100,000	Moderate odor Slight sheen
	Aug. 16, 1991	1800	950	990	3900	32,000	Slight odor, sheen
	Dec. 24, 1991	1,100	550	750	2,700	30,000	Odor, sheen
	Mar. 30, 1992	2,300	1,700	940	3,300	52,000	Odor, sheen
MW-3	Apr. 16, 1987	1,371	2,438	472.3	2,617	9,967	
	June 23, 1987	646.2	822.9	320.9	1,280	16,824	
	July 06, 1987	340.3	384.2	116.5	420.2	3,395	
	Aug. 06, 1987	441.9	436.3	118.2	417.3	3,107	
	Nov. 04, 1987	320	280	74	250	2,600	
	Feb. 02, 1988	2,200	2,300	500	2,300	44,000	
	May 02, 1988	1,600	450	840	1,700	14,000	
	Nov. 21, 1988	1,200	220	560	810	8,100	
	Feb. 14, 1989	1,500	220	220	500	5,500	Odor

TABLE 2

SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Well No.	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	TPH-G (µg/L)	Comments
	Aug. 10, 1989	750	10	190	210	2,700	Odor
	Nov. 08, 1989	370	90	ND	58	2,400	Odor
	Feb. 20, 1990	1,200	810	77	460	3,700	
	May 18, 1990	980	ND	330	250	2,300	
	Sep. 15, 1990	240	36	150	230	4,700	Odor
	Nov. 26, 1990	170	8.4	86	120	1,400	Odor
	Feb. 07, 1991	220	20	120	230	2,900	
	May 14, 1991	370	39	220	820	15,000	
	Aug. 16, 1991	480	50	360	680	7,200	Slight Odor
	Dec. 24, 1991	150	20	100	140	4,900	Slight Odor
	Mar. 30, 1992	560	50	630	980	21,000	Odor
MW-4	Apr. 16, 1987	5,896	3,797	893.9	4,106	19,309	
	June 23, 1987	4,030	1,842	850.0	3,254	31,429	
	July 06, 1987	2,710	1,247	308.2	1,312	8,117	
	Aug. 06, 1987	3,992	1,589	447.9	1,611	10,464	
	Nov. 04, 1987	9,500	17,000	2,800	11,000	55,000	
	Feb. 02, 1988	11,000	7,400	1,400	6,200	47,000	
	May 02, 1988	9,200	1,300	6,100	6,400	58,000	
	Nov. 21, 1988	5,700	1,600	3,100	7,600	48,000	
	Feb. 14, 1989	8,700	2,500	900	3,800	29,000	Odor & sheen
	May 02, 1989	4,800	5,600	1,800	8,800	69,000	Odor, slight sheen
	Aug. 10, 1989	15,000	6,600	1,800	12,000	67,000	Odor, slight sheen
	Nov. 08, 1989	11,000	3,200	1,100	4,400	71,000	Odor, slight sheen
	Feb. 20, 1990	8,100	4,500	930	3,500	19,000	
	May 18, 1990	45,000	12,000	5,000	27,000	100,000	
	Sep. 15, 1990	4,200	1,200	740	3,000	38,000	

TABLE 2

SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Well No.	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	TPH-G (µg/L)	Comments
MW-4	Nov. 26, 1990	2,800	650	810	2,600	19,000	Odor
	Feb. 07, 1991	4,600	1,100	1,600	4,600	41,000	Odor, sheen
	May 14, 1991	7,300	830	3,900	3,600	100,000	Slight odor, sheen
	Aug. 16, 1991	8,000	2,500	1,100	4,000	45,000	Strong odor, sheen
	Dec. 24, 1991	6,000	1,200	1,100	3,700	79,000	Odor, sheen
	Mar. 30, 1992	8,000	4,400	730	2,500	76,000	Odor, sheen
MW-5	Apr. 16 1987	2,267	921.2	3,277	4,536	17,733	
	June 23, 1987	2,239	516.8	953.9	1,587	19,555	
	July 06, 1987	1,335	313.7	799.2	923.9	5,631	
	Aug. 06, 1987	1,890	881.2	576.8	93.4	6,450	
	Nov. 04, 1987	1,300	500	270	640	4,600	
	Feb. 02, 1988	3,100	1,500	550	1,400	24,000	
	May 02, 1988	4,400	490	1,200	1,500	17,000	
	Nov. 21, 1988	5,600	590	870	2,200	19,000	
	Feb. 14, 1989	4,300	810	410	1,300	13,000	Odor
	May 02, 1989	2,900	1,500	690	3,200	24,000	Odor, slight sheen
	Aug. 10, 1989	6,700	2,300	860	4,700	36,000	Odor, slight sheen
	Nov. 08, 1989	5,300	860	460	600	30,000	Odor
	Feb. 20, 1990	1,700	220	120	370	3,400	
	May 18, 1990	18,000	2,000	1,500	5,600	24,000	
	Sep. 15, 1990	2,600	2,200	1,000	4,900	42,000	Odor, sheen
	Nov. 26, 1990	1,900	280	260	800	8,500	Odor, sheen

TABLE 2

SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
Page 5 of 5

Well No.	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	TPH-G (µg/L)	Comments
	Feb. 07, 1991	1,500	1,200	610	2,700	24,000	Odor
	May 14, 1991	3,800	4,400	1,400	6,400	120,000	Odor, sheen
	Aug. 16, 1991	4,200	1,900	760	2,900	29,000	Moderate odor, sheen
	Dec. 24, 1991	3,900	1,500	880	3,200	63,000	Odor, sheen
	Mar. 30, 1992	2,600	980	390	1,100	29,000	Odor, sheen
MW-6	Dec. 24, 1991	ND	ND	ND	ND	79	
	Mar. 30, 1992	2.1	1.1	ND	0.6	73	
MW-7	Dec. 24, 1991	ND	ND	ND	ND	ND	
	Mar. 30, 1992	ND	ND	ND	ND	ND	
MW-8	Dec. 24, 1991	1,700	2,400	1,200	6,100	81,000	Odor, sheen
	Mar. 30, 1992	1,700	880	970	1,900	3,000	Odor, sheen

Notes:
1) TPH-G = Total Petroleum Hydrocarbons as gasoline
2) Odor refers to petroleum hydrocarbon odor
3) All results are presented in parts per billion
4) Groundwater Technology, Inc., collected samples prior to February 1989
5) Du Pont Environmental Services collected samples from February 1989 through February 1991
6) Environmental Geotechnical Consultants, Inc. collected samples beginning in May 1991
7) ND = Non Detect
8) See analytical results for detection limits (Appendix B)

ATTACHMENT E

LABORATORY REPORT AND CHAIN-OF-CUSTODY FORM

KIFF ANALYTICAL LLC

Report Number : 10852
Date : 01/06/98

Dale van Dam
El Dorado Environmental
2221 Goldorado Trail
El Dorado, CA 95623

Subject : 9 Water Samples
Project Name : Beacon 720
Project Number : 94-720-01

Dear Mr. van Dam,

Chemical analysis of the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. US EPA protocols for sample storage and preservation were followed.

Kiff Analytical is certified by the State of California (# 2236). If you have any questions regarding procedures or results, please call me at 916-297-4800.

Sincerely,

Joel Kiff

KIFF ANALYTICAL LLC

Report Number : 10852

Date : 01/06/98

Project Name : **Beacon 720**

Project Number : **94-720-01**

Sample : **MW-1** Matrix : Water

Sample Date :12/13/97

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**20**	10	ug/L	EPA 8260B	12/27/97
Toluene	**35**	10	ug/L	EPA 8260B	12/27/97
Ethylbenzene	**360**	10	ug/L	EPA 8260B	12/27/97
Total Xylenes	**470**	10	ug/L	EPA 8260B	12/27/97
Methyl-t-butyl ether	**< 100**	100	ug/L	EPA 8260B	12/27/97
TPH as Gasoline	**5800**	1000	ug/L	EPA 8260B	12/27/97
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	12/27/97
4-Bromofluorobenzene (Surr)	95.5		% Recovery	EPA 8260B	12/27/97

Sample : **MW-2** Matrix : Water

Sample Date :12/13/97

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**370**	5.0	ug/L	EPA 8260B	12/27/97
Toluene	**150**	5.0	ug/L	EPA 8260B	12/27/97
Ethylbenzene	**450**	5.0	ug/L	EPA 8260B	12/27/97
Total Xylenes	**1600**	5.0	ug/L	EPA 8260B	12/27/97
Methyl-t-butyl ether	**75**	50	ug/L	EPA 8260B	12/27/97
TPH as Gasoline	**8300**	500	ug/L	EPA 8260B	12/27/97
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	12/27/97
4-Bromofluorobenzene (Surr)	96.4		% Recovery	EPA 8260B	12/27/97

Approved By: Joel Kiff

720 Olive Drive, Suite D Davis, CA 95616 916-297-4800

KIFF ANALYTICAL LLC

Report Number : 10852
Date : 01/06/98

Project Name : **Beacon 720**
Project Number : **94-720-01**

Sample : **MW-3** Matrix : Water
Sample Date :12/13/97

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**0.96**	0.50	ug/L	EPA 8260B	12/27/97
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	12/27/97
Ethylbenzene	**0.54**	0.50	ug/L	EPA 8260B	12/27/97
Total Xylenes	**1.8**	0.50	ug/L	EPA 8260B	12/27/97
Methyl-t-butyl ether	**< 5.0**	5.0	ug/L	EPA 8260B	12/27/97
TPH as Gasoline	**810**	50	ug/L	EPA 8260B	12/27/97
Toluene - d8 (Surr)	92.2		% Recovery	EPA 8260B	12/27/97
4-Bromofluorobenzene (Surr)	96.8		% Recovery	EPA 8260B	12/27/97

Sample : **MW-4** Matrix : Water
Sample Date :12/13/97

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**560**	10	ug/L	EPA 8260B	12/27/97
Toluene	**740**	10	ug/L	EPA 8260B	12/27/97
Ethylbenzene	**130**	10	ug/L	EPA 8260B	12/27/97
Total Xylenes	**1100**	10	ug/L	EPA 8260B	12/27/97
Methyl-t-butyl ether	**360**	100	ug/L	EPA 8260B	12/27/97
TPH as Gasoline	**4800**	1000	ug/L	EPA 8260B	12/27/97
Toluene - d8 (Surr)	99.3		% Recovery	EPA 8260B	12/27/97
4-Bromofluorobenzene (Surr)	96.5		% Recovery	EPA 8260B	12/27/97

Approved By: Joel Kiff

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KIFF ANALYTICAL LLC

Report Number : 10852

Date : 01/06/98

Project Name : **Beacon 720**

Project Number : **94-720-01**

Sample : **MW-5** Matrix : Water

Sample Date :12/13/97

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**2700**	25	ug/L	EPA 8260B	12/27/97
Toluene	**760**	25	ug/L	EPA 8260B	12/27/97
Ethylbenzene	**630**	25	ug/L	EPA 8260B	12/27/97
Total Xylenes	**4200**	25	ug/L	EPA 8260B	12/27/97
Methyl-t-butyl ether	**360**	250	ug/L	EPA 8260B	12/27/97
TPH as Gasoline	**18000**	2500	ug/L	EPA 8260B	12/27/97
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	12/27/97
4-Bromofluorobenzene (Surr)	93.8		% Recovery	EPA 8260B	12/27/97

Sample : **MW-6** Matrix : Water

Sample Date :12/13/97

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8020	12/27/97
Toluene	**< 0.50**	0.50	ug/L	EPA 8020	12/27/97
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8020	12/27/97
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8020	12/27/97
Methyl-t-butyl ether	**< 5.0**	5.0	ug/L	EPA 8020	12/27/97
TPH as Gasoline	**< 50**	50	ug/L	M EPA 8015	12/27/97
aaa-Trifluorotoluene (8020 Surrogate)	102		% Recovery	EPA 8020	12/27/97
aaa-Trifluorotoluene (Gasoline Surrogate)	97.4		% Recovery	M EPA 8015	12/27/97

Approved By: Joel Kiff

720 Olive Drive, Suite D Davis, CA 95616 916-297-4800

KIFF ANALYTICAL LLC

Report Number : 10852
Date : 01/06/98

Project Name : **Beacon 720**
Project Number : **94-720-01**

Sample : **MW-7** Matrix : Water
Sample Date :12/13/97

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8020	12/27/97
Toluene	**< 0.50**	0.50	ug/L	EPA 8020	12/27/97
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8020	12/27/97
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8020	12/27/97
Methyl-t-butyl ether	**< 5.0**	5.0	ug/L	EPA 8020	12/27/97
TPH as Gasoline	**< 50**	50	ug/L	M EPA 8015	12/27/97
aaa-Trifluorotoluene (8020 Surrogate)	102		% Recovery	EPA 8020	12/27/97
aaa-Trifluorotoluene (Gasoline Surrogate)	96.8		% Recovery	M EPA 8015	12/27/97

Sample : **MW-8** Matrix : Water
Sample Date :12/13/97

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**300**	1.0	ug/L	EPA 8260B	12/27/97
Toluene	**29**	1.0	ug/L	EPA 8260B	12/27/97
Ethylbenzene	**190**	1.0	ug/L	EPA 8260B	12/27/97
Total Xylenes	**860**	1.0	ug/L	EPA 8260B	12/27/97
Methyl-t-butyl ether	**24**	10	ug/L	EPA 8260B	12/27/97
TPH as Gasoline	**4100**	100	ug/L	EPA 8260B	12/27/97
Toluene - d8 (Surr)	103		% Recovery	EPA 8260B	12/27/97
4-Bromofluorobenzene (Surr)	97.8		% Recovery	EPA 8260B	12/27/97

Approved By: Joel Kiff

720 Olive Drive, Suite D Davis, CA 95616 916-297-4800

KIFF ANALYTICAL LLC

Report Number : 10852

Date : 01/06/98

Project Name : **Beacon 720**

Project Number : **94-720-01**

Sample : **MW-9** Matrix : Water

Sample Date :12/13/97

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**1300**	50	ug/L	EPA 8260B	12/27/97
Toluene	**280**	50	ug/L	EPA 8260B	12/27/97
Ethylbenzene	**960**	50	ug/L	EPA 8260B	12/27/97
Total Xylenes	**3100**	50	ug/L	EPA 8260B	12/27/97
Methyl-t-butyl ether	**710**	500	ug/L	EPA 8260B	12/27/97
TPH as Gasoline	**13000**	5000	ug/L	EPA 8260B	12/27/97
Toluene - d8 (Surr)	98.7		% Recovery	EPA 8260B	12/27/97
4-Bromofluorobenzene (Surr)	94.9		% Recovery	EPA 8260B	12/27/97

Approved By: Joel Kiff

720 Olive Drive, Suite D Davis, CA 95616 916-297-4800

Ultramar Inc.
CHAIN OF CUSTODY REPORT 10852

BEACON

Beacon Station No.	Sampler (Print Name)	ANALYSES	Date	Form No.
720	Hal Hansen		12-13-97	1 of 2
Project No.	Sampler (Signature)			Standard TAT
94-720-01	Hal Hansen			
Project Location	Affiliation			
San Leandro	Dames Env.			

Sample No./Identification	Date	Time	Lab No.	BTEX	TPH (gasoline)	TPH (diesel)	No. of Containers	REMARKS
MW-1	12-13-97	422	-01	X	X		2	
MW-2		356	-02					
MW-3		408	-03					
MW-4		343	-04					
MW-5		322	-05					
MW-6		341	-06					
MW-7		248	-07					
MW-8		312	-08					

Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
Hal Hansen Dames Env.	12/16/97	1:32p	Mary Corbit / Kiff	12/16/97	1:32p
Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
Mary Corbit / Kiff	12/16/97	3:45p			

Report To: Dale vanDam

Bill to: ULTRAMAR INC.
525 West Third Street
Hanford, CA 93230
Attention: Terry Fox

WHITE: Return to Client with Report YELLOW: Laboratory Copy PINK: Originator Copy

32-8003 1/90

Ultramar Inc.
CHAIN OF CUSTODY REPORT 10852

BEACON

Beacon Station No.	Sampler (Print Name)			ANALYSES									Date	Form No.
720	Hal Hansen												12-13-97	2 of 2
Project No.	Sampler (Signature)													
94-720-01	Hal Hansen												Standard TAT	
Project Location	Affiliation													
San Leandro	Delta Env.													
Sample No./Identification	Date	Time	Lab No.	BTEX	TPH (gasoline)	TPH (diesel)						No. of Containers	REMARKS	
MW-9	12-13-97	330	-09	X	X							2		

Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
Hal Hansen Delta Env.	12/16/97	1:32p	Mary Corbit / Kiff	12/16/97	1:32p
Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
Mary Corbit / Kiff	12/16/97	3:45p			

Report To: Dale van Dam

Bill to: ULTRAMAR INC.
525 West Third Street
Hanford, CA 93230
Attention: Terry Fox

WHITE: Return to Client with Report YELLOW: Laboratory Copy PINK: Originator Copy

32-8003 1/00