Ultramar

ALCO
HAZMAT

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

94 APR 32 PM 12: 23

Telecopy: 209-584-6113 Credit & Wholesale
209-583-3330 Administrative
209-583-3302 Information Services
209-583-3358 Accounting

ENVIRONMENTAL PROJECT QUARTERLY STATUS REPORT

DATE REPORT SUBMITTED: April 27, 1994
QUARTER ENDING: March 31, 1994

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 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.

SUMMARY OF THIS QUARTER'S ACTIVITIES:

Performed quarterly monitoring on March 18, 1994. Preparing a Problem Assessment Report/Remedial Action Plan.

RESULT OF QUARTERLY MONITORING:

Monitoring data indicates that the benzene concentration remained not detected in MW-6 and MW-7. The benzene concentration decreased in MW-1 from 1,000 ppb to 320 ppb and in MW-3 from 130 ppb to 32 ppb. Benzene concentrations increased in MW-2 from 1,500 ppb to 1,600 ppb, in MW-4 from 6,900 ppb to 17,000 ppb, in MW-5 from 3,600 ppb to 8,200 ppb, and in MW-8 from 240 ppb to 1,600 ppb.

PROPOSED ACTIVITY OR WORK FOR NEXT QUARTER:

ACTIVITY	ESTIMATED COMPLETION DATE
Continue quarterly monitoring program.	
Submit a PAR/RAP.	May 14, 1994

FUGRO WEST, INC.

ALCO
HAZMAT
R32 PM12:23

1050 Melody Lane, Suite 160
Roseville, California 95678
Tel: (916) 782-2110
FAX: (916) 786-7830

April 18, 1994

Mr. Terrence Fox
Environmental Specialist
Ultramar Inc.
525 West Third Street
Hanford, California 93232-0466

Subject: **First Quarter 1994 Groundwater Monitoring Report**
Beacon Station #720
1088 Marina Boulevard, San Leandro, California

Dear Mr. Fox:

This report documents the results of quarterly groundwater monitoring conducted on March 18, 1994, at the subject site (Figure 1). The monitoring, conducted by Doulos Environmental, included measurements of depth to groundwater, subjective analysis for free product, groundwater purging and collection of groundwater samples. All field activities pertaining to events in this report were conducted according to the Ultramar Field Procedures included in the Attachments.

GROUNDWATER ELEVATIONS

Prior to purging, Doulos Environmental personnel collected depth to groundwater measurements. Groundwater level data from March 1992 to date are summarized in Table 1. Historic groundwater levels are presented as an Attachment. On the basis of the current measurements, groundwater flows to the ~~southeast~~ WEST (Figure 2) at a gradient of <0.01 ft/ft. Groundwater levels have increased an average of 1.05 feet compared to the last monitoring event.

GROUNDWATER SAMPLING AND ANALYSES

Groundwater samples were collected from eight wells. All samples were analyzed for concentrations of:

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

Analytical results from March 1992 to date are summarized in Table 2. Historic analytical data is presented as an Attachment. Figure 3 is a distribution map of benzene in groundwater based on the current data. The laboratory report and chain-of-custody form for the current sampling event are attached. Benzene concentrations remain nondetectable in wells MW-6 and MW-7. Concentrations decreased in wells MW-1 and MW-3 and increased in wells MW-2, MW-4, MW-5, and MW-8 compared to prior sampling.

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

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 shall be at such parties' sole risk. This report was prepared under the review and supervision of the professional geologist/engineer, registered with the State of California, whose signature appears below.

If you have any questions or comments, please contact us at (916) 782-2110.

Sincerely,

FUGRO WEST, INC.

Sheila R. Richgels
Report Coordinator

Owen M. Kittredge
Registered Geologist
CRG No. 5853

REGISTERED GEOLOGIST
OWEN M. KITTREDGE
No. 5853
Exp. 11/30/95
STATE OF CALIFORNIA

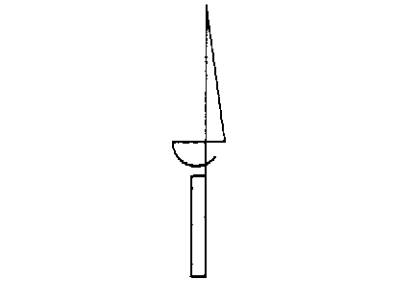
4/18/94
Date

SRR/OMK/srr

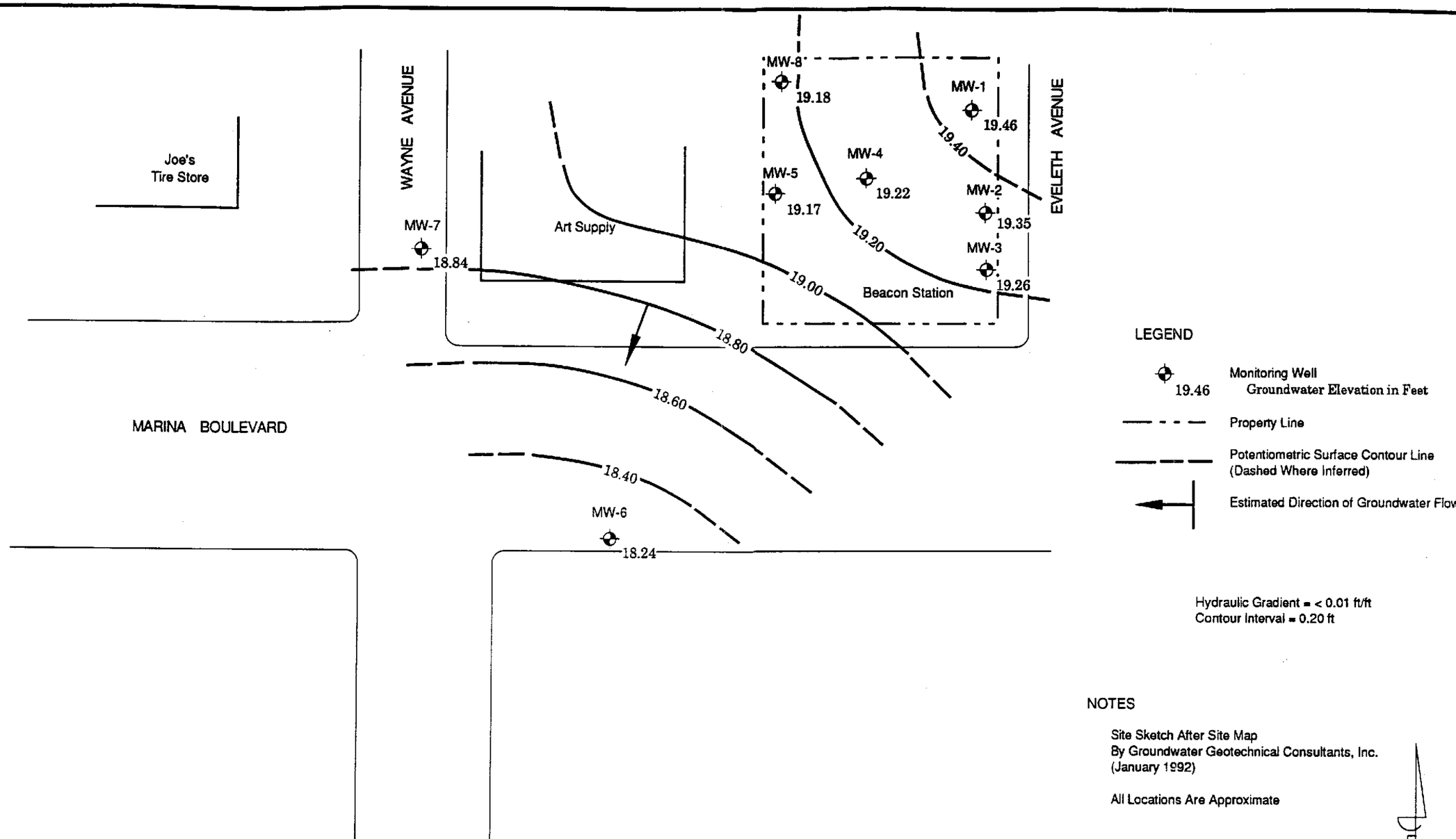
Attachments

GENERAL NOTES:

BASE MAP FROM USGS
7.5 MINUTE TOPOGRAPHIC
SAN LEANDRO, CA



AEGIS ENVIRONMENTAL, INC.		SITE LOCATION MAP	FIGURE 1
DRAWN BY:	DATE:	Beacon #720 1088 Marina Boulevard San Leandro, CA	PROJECT NUMBER: 92-702
REVISED BY:	DATE:		
REVIEWED BY:	DATE:		



LEGEND

19.46 Monitoring Well
Groundwater Elevation in Feet

Property Line

Potentiometric Surface Contour Line
(Dashed Where Inferred)

Estimated Direction of Groundwater Flow

Hydraulic Gradient = < 0.01 ft/ft
Contour Interval = 0.20 ft

NOTES

Site Sketch After Site Map
By Groundwater Geotechnical Consultants, Inc.
(January 1992)

All Locations Are Approximate

0 50 100
Approximate Scale In Feet

AEGIS ENVIRONMENTAL

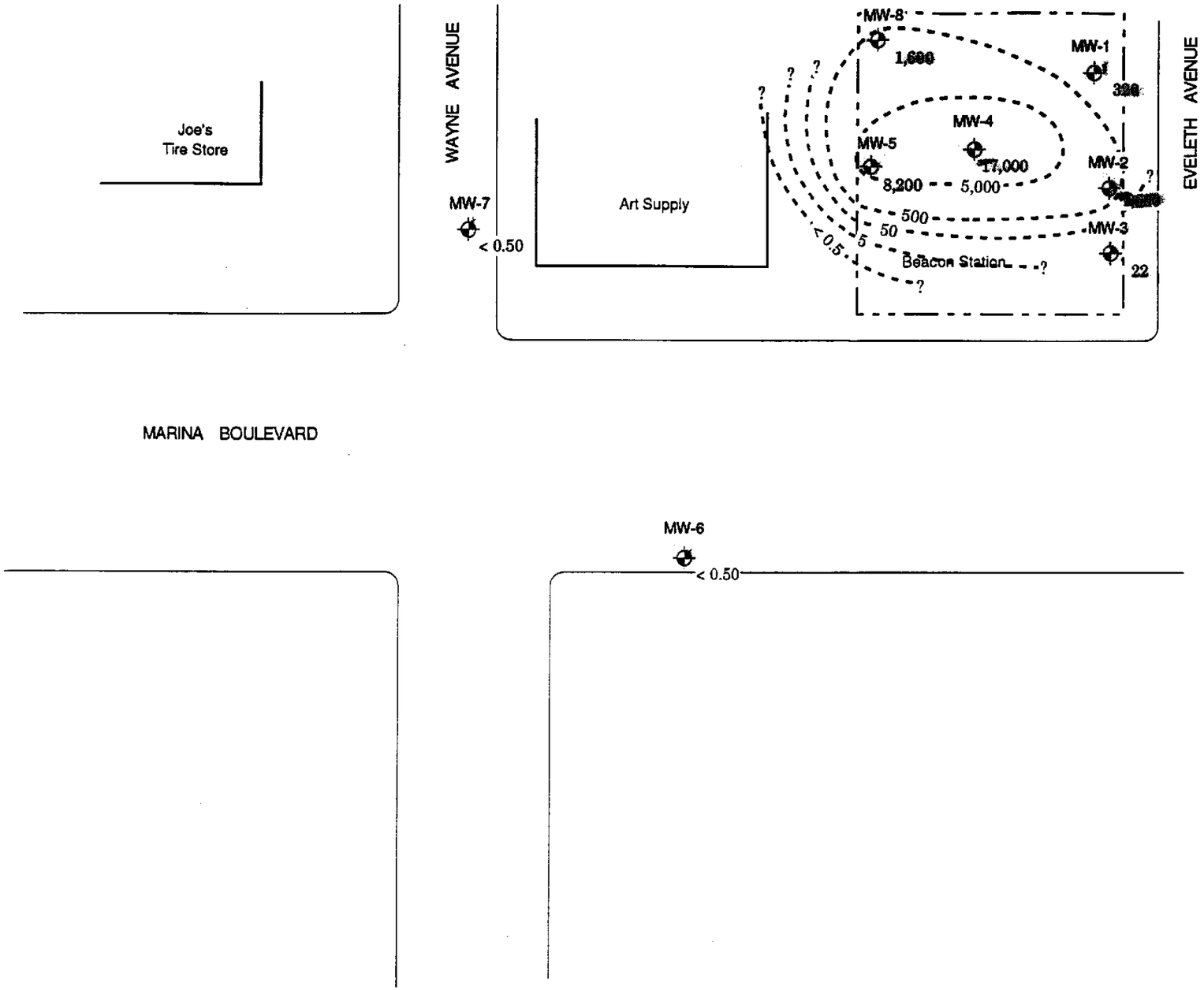
DRAWN BY: D. Hada	DATE: April 8, 1994
REVISED BY:	DATE:
REVIEWED BY:	DATE:

POTENTIOMETRIC SURFACE MAP
March 18, 1994

Beacon Station #720
1088 Marina Boulevard
San Leandro, CA

FIGURE
2

PROJECT NUMBER:
92-702



LEGEND

320 Monitoring Well
Benzene Concentration (parts-per-billion)

Property Line

Inferred Iso-Concentration Limits

< 0.50 Below Indicated Detection Limit

Contour Interval = Exponential

NOTES

Site Sketch After Site Map
By Groundwater Geotechnical Consultants, Inc.
(January 1992)

All Locations Are Approximate

0 50 100
Approximate Scale In Feet

AEGIS ENVIRONMENTAL

DRAWN BY: D. Hada	DATE: April 8, 1994
REVISED BY:	DATE:
REVIEWED BY:	DATE:

DISTRIBUTION MAP OF BENZENE
IN GROUNDWATER March 18, 1994

Beacon Station #720
1088 Marina Boulevard
San Leandro, CA

FIGURE
3

PROJECT NUMBER:
92-702

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

Monitoring Well	Date	Reference Elevation (top of casing)[1]	Depth to Groundwater[1]	Groundwater 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	
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	
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	
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	
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	

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

Fugro
94-720/March 1994

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

Monitoring Well	Date	Reference Elevation (top of casing)[1]	Depth to Groundwater[1]	Groundwater Elevation[2]	Well Depth	Comments
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	
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	
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	

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

TABLE 2
ANALYTICAL RESULTS: GROUNDWATER
BEACON STATION #720
1068 MARINA BOULEVARD, SAN LEANDRO, CALIFORNIA
(All results in parts-per-billion)

Monitoring Well	Date Collected	Total Petroleum Hydrocarbons	Aromatic Volatile Organics			
		Gasoline	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
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
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
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
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

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

TABLE 2
ANALYTICAL RESULTS: GROUNDWATER
BEACON STATION #720
1068 MARINA BOULEVARD, SAN LEANDRO, CALIFORNIA
(All results in parts-per-billion)

Monitoring Well	Date Collected	Total Petroleum Hydrocarbons	Aromatic Volatile Organics			
		Gasoline	Benzene	Toluene	Ethyl-benzene	Total Xylenes
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
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
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

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

ULTRAMAR FIELD PROCEDURES

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

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 are monitored. The well is sufficiently purged when: the four casing volumes have been removed; the temperature, pH, and conductivity 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 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 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 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 will 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 bailing, a final free product thickness measurement will be taken and a ground water sample will not be collected.

Samples are stored in 40-milliliter vials so that air passage through the sample is minimized (to prevent volatilizing 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. A Chain-of-Custody form is completed to ensure sample integrity. Ground water samples are transported to a state-certified laboratory and analyzed within the EPA-specified holding times for the requested analyses.

TABLE 1

GROUNDWATER ELEVATIONS
Page 1 of 5

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
Page 5 of 5

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

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
Page 2 of 5

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)

March 30, 1994
Sample Log 8952

Sheila Richgels
Aegis Environmental Consultants, Inc.
1050 Melody Lane, Suite 160
Roseville, CA 95678

RECEIVED
MAR 31 1994

Subject: Analytical Results for 8 Water Samples
Identified as: Project # 94-720-01 (Beacon 7207
Received: 03/22/94

Dear Ms. Richgels:

Analysis of the sample(s) referenced above has been completed. This report is written to confirm results communicated on March 30, 1994 and describes procedures used to analyze the samples.

Sample(s) were received in 40-milliliter glass vials sealed with TFE lined septae and plastic screw-caps. Each sample was transported and received under documented chain of custody and stored at 4 degrees C until analysis was performed.

Sample(s) were analyzed using the following method(s):

"BTEX" (EPA Method 602/Purge-and-Trap)
"TPH as Gasoline" (Modified EPA Method 8015/Purge-and-Trap)

Please refer to the following table(s) for summarized analytical results and contact us at 916-753-9500 if you have questions regarding procedures or results. The chain-of-custody document is enclosed.

Approved by:

Mitra Sarkhosh
Senior Chemist

Sample Log 8952
8952-1

Sample: MW-1

From : Project # 94-720-01 (Beacon 720)
Sampled : 03/18/94
Dilution : 1:10 QC Batch : 4074d
Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
Benzene	(5.0)	320
Toluene	(5.0)	160
Ethylbenzene	(5.0)	830
Total Xylenes	(5.0)	2900
TPH as Gasoline	(500)	9500
Surrogate Recovery		96 %

Date Analyzed 03-24-94
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Mitra Barkhosh
Senior Chemist

Sample Log 8952

Sample: MW-2

From : Project # 94-720-01 (Beacon 720)
Sampled : 03/18/94
Dilution : 1:10 **QC Batch : 4074d**
Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
Benzene	(5.0)	1600
Toluene	(5.0)	790
Ethylbenzene	(5.0)	1100
Total Xylenes	(5.0)	3700
TPH as Gasoline	(500)	14000
Surrogate Recovery		97 %

Date Analyzed: 03-24-94
Column : 0.53mm ID X 30m DB5MX (J&W Scientific)

Nitra Sarkhosh
Senior Chemist

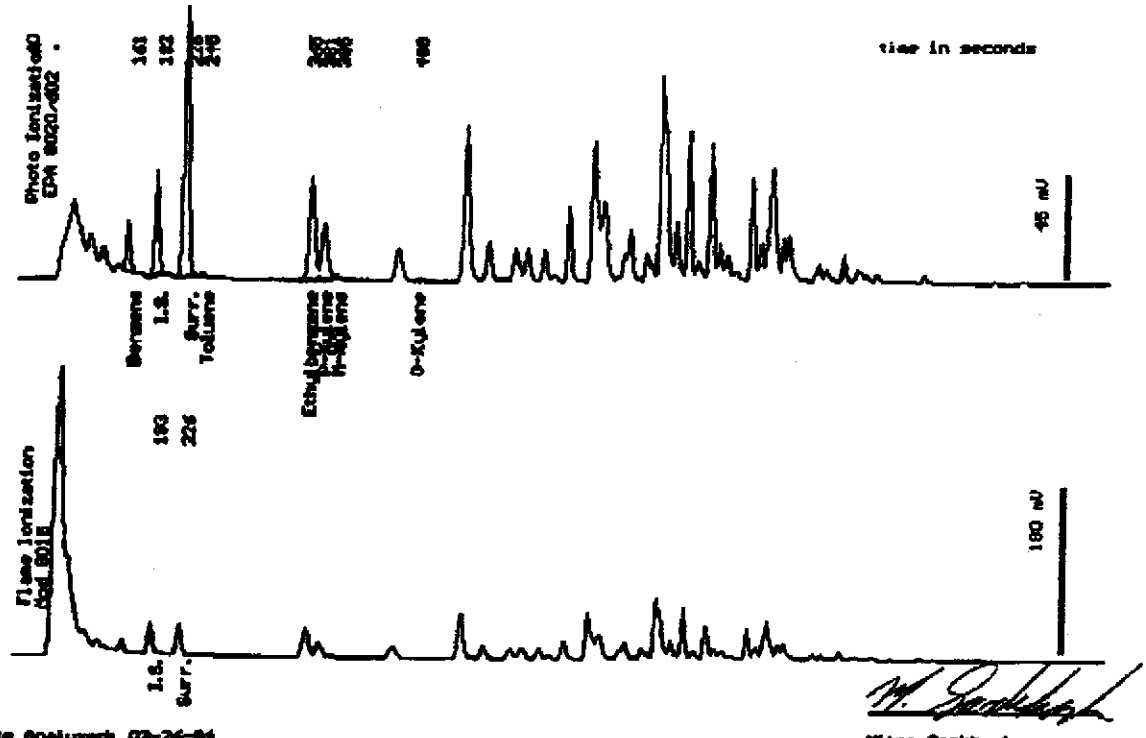
Sample Log 8952

8952-3

Sample: MW-3

From : Project # 94-720-01 (Beacon 720)
Sampled : 03/18/94
Dilution : 1:3 QC Batch : 4074f
Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
Benzene	(1.3)	22
Toluene	(1.3)	1.3
Ethylbenzene	(1.3)	78
Total Xylenes	(1.3)	41
TPH as Gasoline	(130)	3100
Surrogate Recovery		98 %



Date Analyzed 03-26-94
Column : 0.53mm ID X 30m DB6 (J&W Scientific)

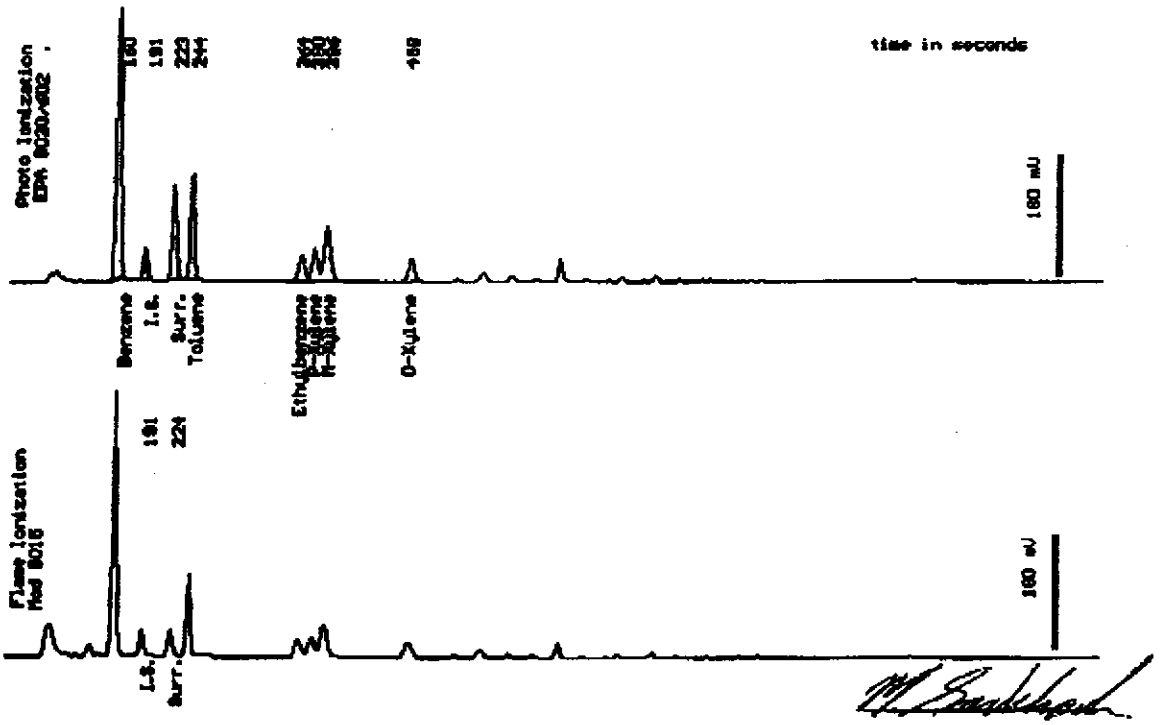
Mitra Serkhosh
Senior Chemist

Sample Log 8952

Sample: MW-4

From : Project # 94-720-01 (Beacon 720)
Sampled : 03/18/94
Dilution : 1:100 QC Batch : 4074f
Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
Benzene	(50)	17000
Toluene	(50)	6300
Ethylbenzene	(50)	2500
Total Xylenes	(50)	10000
TPH as Gasoline	(5000)	58000
Surrogate Recovery		99 %



Date Analyzed 03-24-94
Column : 0.53mm ID X 30m DB5 (J&W Scientific)

Mitra Sarkhosh
Senior Chemist

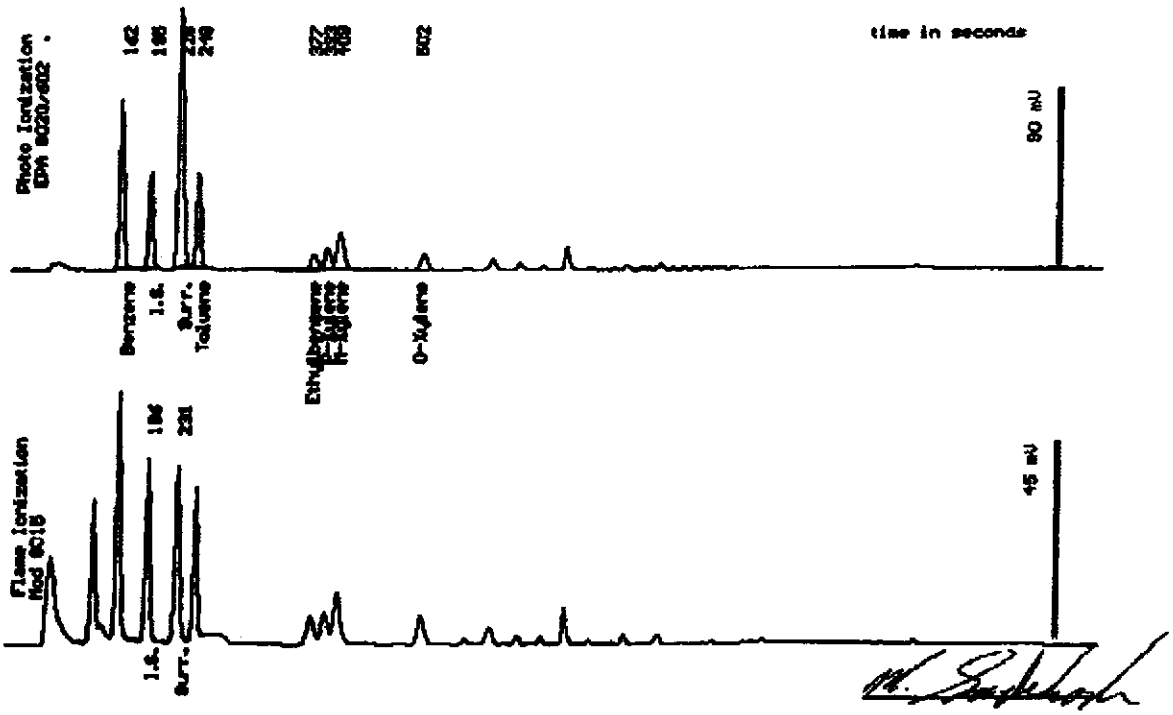
Sample Log 8952

8952-5

Sample: MW-5

From : Project # 94-720-01 (Beacon 720)
Sampled : 03/18/94
Dilution : 1:250 QC Batch : 4075d
Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
Benzene	(130)	8200
Toluene	(130)	5000
Ethylbenzene	(130)	1400
Total Xylenes	(130)	6100
TPH as Gasoline	(13000)	47000
Surrogate Recovery		97 %



Date Analyzed 03-30-94
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

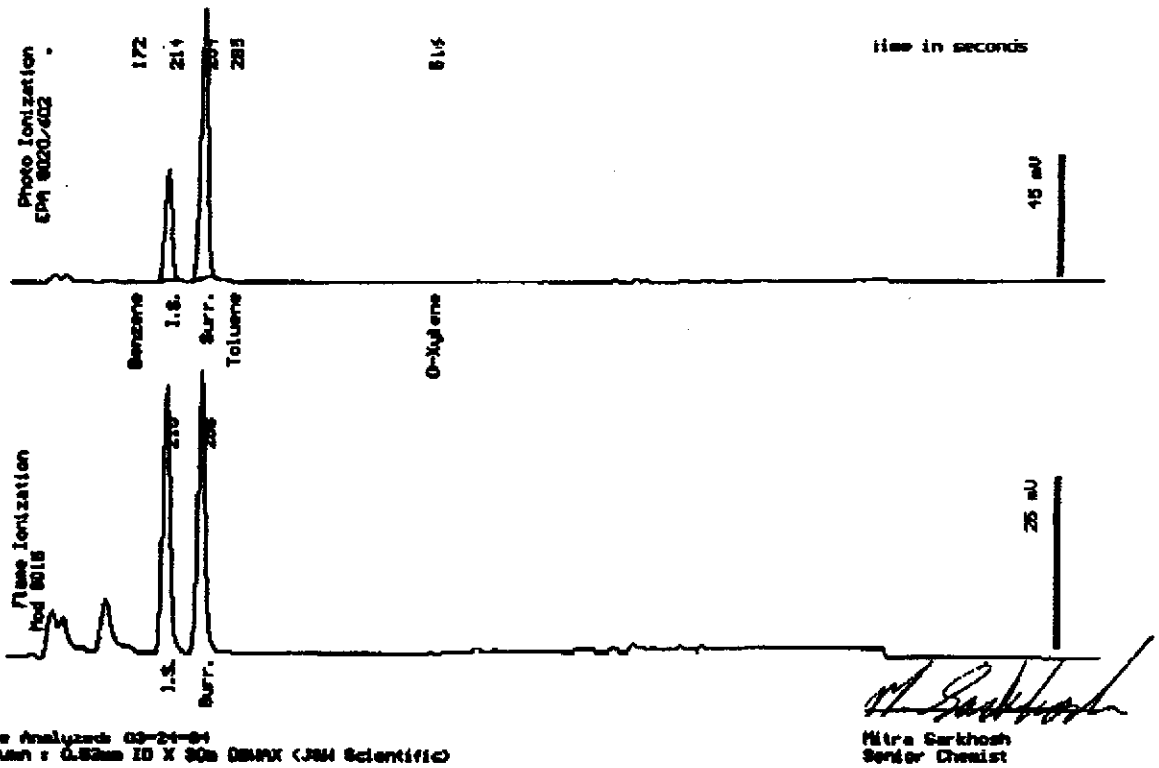
Mitra Sarkhosh
Senior Chemist

Sample Log 8952

Sample: MW-6

From : Project # 94-720-01 (Beacon 720)
Sampled : 03/18/94
Dilution : 1:1 **QC Batch : 2064a**
Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
Benzene	(.50)	<.50
Toluene	(.50)	<.50
Ethylbenzene	(.50)	<.50
Total Xylenes	(.50)	<.50
TPH as Gasoline	(50)	<50
Surrogate Recovery		101 %



Date Analyzed: 03-24-94
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

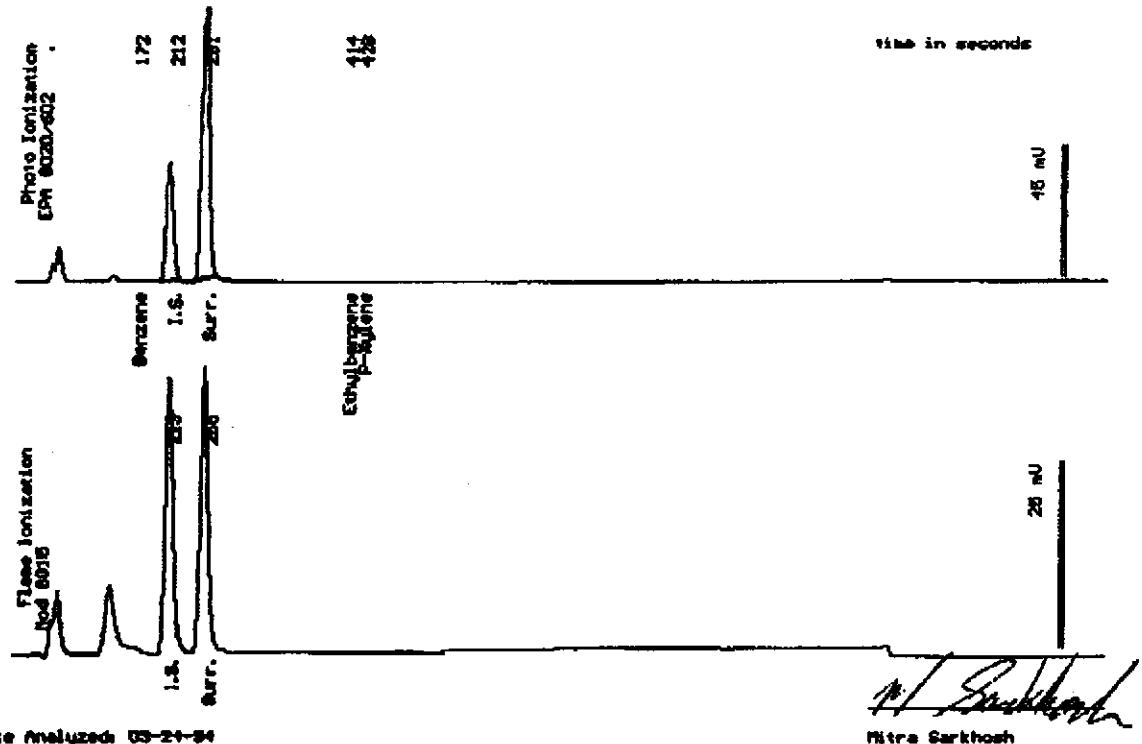
Mitra Sarkhosh
Senior Chemist

Sample Log 8952
8952-7

Sample: MW-7

From : Project # 94-720-01 (Beacon 720)
Sampled : 03/18/94
Dilution : 1:1 **QC Batch : 2064a**
Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
Benzene	(.50)	<.50
Toluene	(.50)	<.50
Ethylbenzene	(.50)	<.50
Total Xylenes	(.50)	<.50
TPH as Gasoline	(50)	<50
Surrogate Recovery		101 %



Date Analyzed 03-24-94
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Mitra Sarkhosh
Senior Chemist

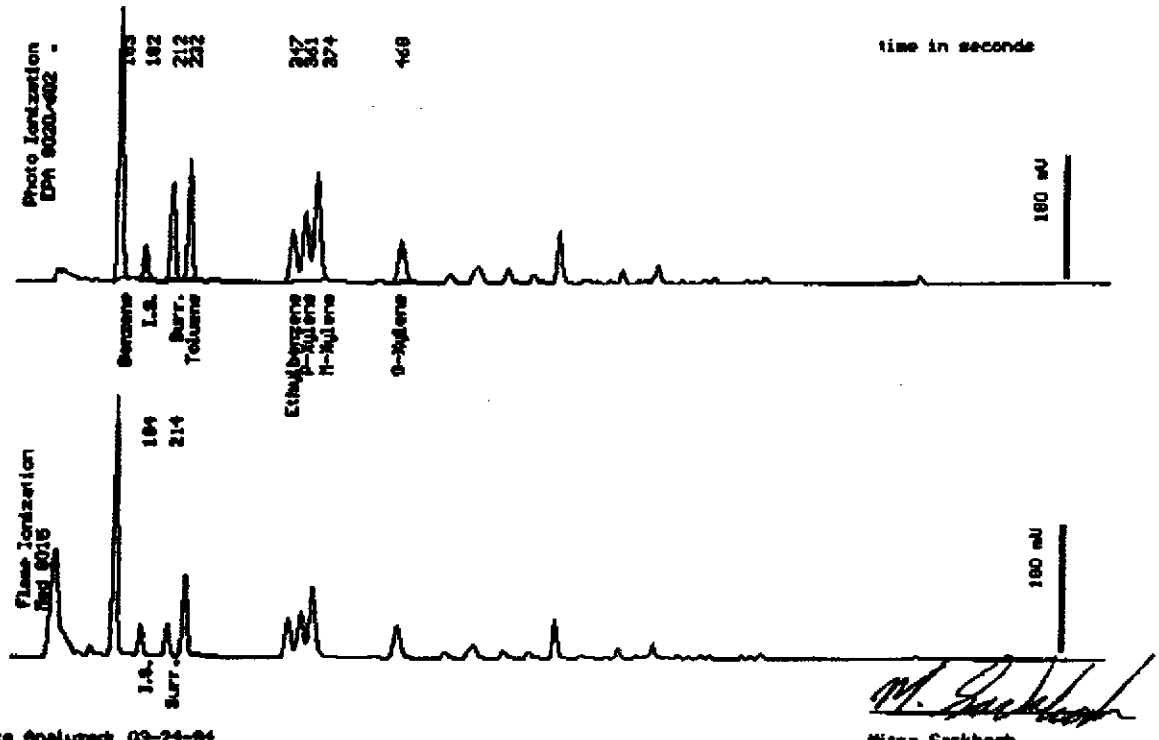
Sample Log 8952

8952-8

Sample: MW-8

From : Project # 94-720-01 (Beacon 720)
Sampled : 03/18/94
Dilution : 1:10 **QC Batch : 4074d**
Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
Benzene	(5.0)	1600
Toluene	(5.0)	680
Ethylbenzene	(5.0)	470
Total Xylenes	(5.0)	1900
TPH as Gasoline	(500)	8600
Surrogate Recovery		96 %



Date Analyzed: 03-24-94
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Nitra Sarkhosh
Senior Chemist

Ultramar Inc.
CHAIN OF CUSTODY REPORT

BEACON

Beacon Station No.	Sampler (Print Name)			ANALYSES				Date	Form No.
720	Hal Hansen							3-21-94	1 of 1
Project No.	Sampler (Signature)								
94-720-01	Hal Hansen								
Project Location	Affiliation								
1088 Marina Blvd. San Leandro, CA	Dames							5 day TAT	
Sample No./Identification	Date	Time	Lab No.	BTEX	TPH (gasoline)	TPH (diesel)	No. of Containers	REMARKS	
MW-1	3-18-94	2:58		X	X		3		
MW-2	3-18-94	3:20							
MW-3	3-18-94	1:50							
MW-4	3-18-94	4:30							
MW-5	3-18-94	4:02							
MW-6	3-18-94	1:30							
MW-7	3-18-94	12:42							
MW-8	3-18-94	2:15							

RECEIVED 93 by WEST date 3/22/94

Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
Dames Env: Hal Hansen	3/22/94	09:45		3/22/94	09:45
Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
	3/22/94	11:45	WEST	3/22/94	11:45

Report To:
Fax - Sheila Richgels
(916) 782-1277

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

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

RECEIVED
MAR 29 1994

Project Address: Beacon 720 Date: 3-18-94
1088 Marina Blvd, San Leandro, Ca Project No.: 94-720-01

Recorded by: Val Hanson

Well No	Time	Well Elev. TOC	Depth to Gr. Water	Measured Total Depth	Gr. Water Elevation	Depth to Product	Product Thickness	Comments
MW-1	227		13.64	27.67		NA		
MW-2	307		13.45	25.49				
MW-3	133		13.04	24.57				
MW-4	413		13.68	27.24				
MW-5	330		13.53	28.70				
MW-6	102		12.16	15.16				
MW-7	1229		12.36	25.13				
MW-8	156		14.62	29.87				

Notes:

DOULOS ENVIRONMENTAL COMPANY — **SAMPLING INFORMATION SHEET**

Client: Ultramar — Sampling Date: 3-18-94

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

1084 Marina Blvd — 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): _____
Well cover type: 8" UV_____ 12" UV_____ 12" EMCO_____ 8" BK_____
12" BK_____ 12" DWP_____ 12" CNI_____ 36" CNI_____ Other 12 Christy
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: Disposal 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: 227 Depth of well: 27.67 Depth to water: 13.64

Recharge Measurement: Time: 253 Depth to water: 13.77

Calculated purge: 9 gal Actual purge: 9.0

Start purge: 246 Sampling time: 254

Time	Temp.	E.C.	pH	Turbidity	Volume
246	68.9	1214	7.94	—	1
247	64.2	1019	7.81	—	2
249	64.1	952	7.75	—	3
250	63.4	913	7.72	—	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: _____

Signature: Kal Kanan

DOULOS ENVIRONMENTAL COMPANY SAMPLING INFORMATION SHEET

Client: Ultramar Sampling Date: 3-16-94

Site: Beacon #2 Project No.: 94-720-01

1086 Marina Blvd 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): 2
Well cover type: 8" UV_____ 12" UV_____ 12" EMCO_____ 8" BK_____
12" BK_____ 12" DWP_____ 12" CNI_____ 36" CNI_____ Other 12" cnst
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: Disposal 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: 307
Depth of well: 15.49
Depth to water: 13.45

Recharge Measurement
Time: 318
Depth to water: 14.21

Calculated purge: 7.7
Actual purge: 7.7

Start purge: 312 Sampling time: 320

Time	Temp.	E.C.	pH	Turbidity	Volume
314	66.3	1051	6.94	—	1
315	66.4	1102	6.82	—	2
315	66.8	1137	6.79	—	3
316	66.9	1145	6.74	—	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: _____

Signature: Karl Hansen

DOULOS ENVIRONMENTAL COMPANY SAMPLING INFORMATION SHEET

Client: Ultramar Sampling Date: 3-18-94

Site: Beacon 120 Project No.: 94-720-01

1088 Marina Blvd 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_____ 36" CNI_____ other 12" rusty
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: Disposal 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: 113
Depth of well: 24.52
Depth to water: 13.04

Recharge Measurement
Time: 145
Depth to water: 14.07

Calculated purge: 7.4 gal
Actual purge: 7.4 gal

Start purge: 139 Sampling time: 150

Time	Temp.	E.C.	pH	Turbidity	Volume
139	67.4	1010	8.24	—	1
140	66.2	992	8.42	—	2
141	66.3	997	8.59	—	3
142	66.3	987	8.69	~	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: _____

Signature: Karl Kanon

DOULOS ENVIRONMENTAL COMPANY **SAMPLING INFORMATION SHEET**

Client: Ultramar Sampling Date: 3-18-94

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

1088 Marina Blvd 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_____ 36" CNI_____ Other 12 CNI w/ lock
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: Disposal bailer: X Teflon bailer: _____

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

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

Initial Measurement
Time: 413
Depth of well: 27.24
Depth to water: 13.68

Recharge Measurement
Time: 425
Depth to water: 14.39

Calculated purge: 8.7
Actual purge: 9.7

Start purge: 418 Sampling time: 430

Time	Temp.	E.C.	pH	Turbidity	Volume
419	68.7	1520	6.82	—	1
420	65.2	1417	6.73	—	2
421	64.7	1381	6.74	—	3
422	64.2	1359	6.71	—	4

Sample appearance: clear Lock: dolphin

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

Remarks: _____

Signature: Abel Hanson

DOULOS ENVIRONMENTAL COMPANY SAMPLING INFORMATION SHEET

Client: Ultramar Sampling Date: 3-18-94

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

1088 Mina Blvd 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): 3
Well cover type: 8" UV_____ 12" UV_____ 12" EMCO_____ 8" BK_____
12" BK_____ 12" DWP_____ 12" CNI_____ 36" CNI_____ Other 12" Cnst
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: Disposal 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: 330
Depth of well: 24.07
Depth to water: 13.53

Recharge Measurement
Time: 400
Depth to water: 14.27

Calculated purge: 9.3 gal
Actual purge: 9.0 gal

Start purge: 336 Sampling time: 402

Time	Temp.	E.C.	pH	Turbidity	Volume
340	64.1	1542	6.97	—	1
345	62.9	1316	6.78	—	2
350	63.1	1287	6.70	—	3
355	62.6	1263	6.64	—	4

Sample appearance: _____ Lock: dolphin

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

Remarks: _____

Signature: Neil Hansen

DOULOS ENVIRONMENTAL COMPANY **SAMPLING INFORMATION SHEET**

Client: Ultramar Sampling Date: 3-18-94

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

1088 Marina Blvd 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 12
Well cover type: 8" UV_____ 12" UV_____ 12" EMCO_____ 8" BK X
12" BK_____ 12" DWP_____ 12" CNI_____ 36" CNI_____ Other_____
General condition of wellhead assembly: Excellent (Good) Fair Poor

Purging Equipment: X 2" disposable bailer _____Submersible pump
_____2" PVC bailer _____Dedicated bailer
_____4" PVC bailer _____Centrifugal pump

Sampled with: Disposal 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: 102 Depth of well: 12.16 Depth to water: 15.16

Recharge Measurement: Time: 128 Depth to water: 12.41

Calculated purge: 1.9 Actual purge: 1.9

Start purge: 107 Sampling time: 130

Time	Temp.	E.C.	pH	Turbidity	Volume
108	67.9	1220	8.79	—	1
108	67.6	1020	8.60	—	2
109	67.6	1010	8.53	—	3
115	67.3	1020	8.53	—	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: _____

Signature: Hal Hansen

DOULOS ENVIRONMENTAL COMPANY SAMPLING INFORMATION SHEET

Client: Ultramar Sampling Date: 3-16-94

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

1088 Marina Blvd 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): 4
Well cover type: 8" UV_____ 12" UV_____ 12" EMCO_____ ~~8~~ 12" BK X
12" BK_____ 12" DWP_____ 12" CNI_____ 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: Disposal 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: 1229
Depth of well: 25.13
Depth to water: 12.38

Recharge Measurement
Time: 1241
Depth to water: 13.62

Calculated purge: 8.2
Actual purge: 8.2

Start purge: 1236 Sampling time: 1242

Time	Temp.	E.C.	pH	Turbidity	Volume
1237	69.2	1240	7.84	—	1
1238	68.1	1210	7.72	—	2
1239	67.9	1200	7.65	—	3
1248	67.6	1170	7.60	—	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: in the middle of the street

Signature: Kal Kanan

DOULOS ENVIRONMENTAL COMPANY — **SAMPLING INFORMATION SHEET**

Client: Ultramar — Sampling Date: 3-18-94

Site: Beacon 720 — Project No.: 94-7201

1088 Marina Blvd — 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): -0-
Well cover type: 8" UV_____ 12" UV_____ 12" EMCO_____ 8" BK_____
12" BK_____ ~~12"~~ 6 DWP X 12" CNI_____ 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: Disposal 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: 156
Depth of well: 29.87
Depth to water: 14.64

Recharge Measurement
Time: 202
Depth to water: 15.04

Calculated purge: 9.8
Actual purge: 9.8

Start purge: 202 Sampling time: 215

Time	Temp.	E.C.	pH	Turbidity	Volume
204	67.2	1241	7.02	—	1
205	64.1	1052	6.84	—	2
207	64.0	1050	6.72	—	3
209	63.9	1047	6.75	—	4

Sample appearance: _____ 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: _____

Signature: Hal Hansen

Ultramar Inc.

CHAIN OF CUSTODY REPORT

BEACON

Beacon Station No.	Sampler (Print Name)	Date	Form No.
720	Hal Hansen	3-31-94	1 of 1
Project No.	**Sampler (Signature)**		
94 720 01	Hal Hansen		
Project Location	**Affiliation**		
1038 Marina Blvd. San Leandro, CA	Dames	5 day TAT	

Sample No./Identification	Date	Time	Lab No.	BTEX	TPH (gasoline)	TPH (diesel)	No. of Containers	REMARKS
MW-1	3-18-94	2:58		X	X		3	
MW-2	3-18-94	3:20						
MW-3	3-18-94	1:50						
MW-4	3-18-94	4:30						
MW-5	3-18-94	4:02						
MW-6	3-18-94	1:30						
MW-7	3-18-94	12:42						
MW-8	3-18-94	2:15						

Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
Dames & Moore Hal Hansen	3/22/94	09:45	Chris Hoover	3/22/94	09:45
Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time

Report To:
Fax · Sheila Richards
(916) 752 1377

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

82-6003 1/90