Ultramar

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ENVIRONMENTAL PROJECT QUARTERLY STATUS REPORT

DATE REPORT SUBMITTED: August 26, 1991
QUARTER ENDING: June 30, 1991

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.

SUMMARY OF THIS QUARTER'S ACTIVITIES:

Submitted workplan for additional assessment May 1991. Performed second quarter monitoring on May 14, 1991. In addition to the analysis for TPH and BTEX, the sample from MW-3 was also analyzed for TDS, nitrates, and general inorganics.

RESULT OF QUARTERLY MONITORING:

Monitoring data indicates that the benzene concentration increased in MW-1 from 750 ppb to 1,000 ppb, in MW-2 from 2,100 ppb to 2,200 ppb, in MW-3 from 220 ppb to 370 ppb, in MW-4 from 4,600 ppb to 7,300 ppb, and in MW-5 from 1,500 ppb to 3,800 ppb. Laboratory data also indicates a concentration of 530 ppm TDS, 31 ppb arsenic, 440 ppb barium, 70 ppb chromium, and 5.1 ppb mercury. Fluoride, nitrates, cadmium, lead, silver, and selenium were not detected.

PROPOSED ACTIVITY OR WORK FOR NEXT QUARTER:

ACTIVITY	ESTIMATED COMPLETION DATE
Perform shallow ground water water study	September 15, 1991
Drill additional wells installation	September 30, 1991
Perform pump test	September 30, 1991

QUARTERLY GROUND-WATER SAMPLING REPORT
FIRST QUARTER 1991
BEACON STATION 720
1088 MARINA BOULEVARD
SAN LEANDRO, CALIFORNIA

March 14, 1991

For

Ultramar Inc.
525 West Third Street
Hanford, California 93232

Prepared By

Du Pont Environmental Remediation Services
7068 Koll Center Parkway, Suite 401
Pleasanton, California 94566

March 14, 1991

Job No. 90-Q15-153

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DU PONT ENVIRONMENTAL REMEDIATION SERVICES
7068 Koll Center Parkway, Suite 401
Pleasanton, CA 94566
(415) 462-7772
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March 14, 1991
Job No. 90-Q15-153

Ultramar Inc.
525 West Third Street
Hanford, California 93232

ATTENTION: Mr. Terrence A. Fox
Environmental Specialist II

SUBJECT: Quarterly Ground-Water Sampling Report
First Quarter 1991
Beacon Station 720
1088 Marina Boulevard
San Leandro, California

Dear Mr. Fox:

INTRODUCTION

This report presents the results of the quarterly ground-water sampling which was conducted at Beacon Station 720 located at 1088 Marina Boulevard, San Leandro, California (see the Location Map, Figure 1), **on February 7, 1991.** The purpose of this sampling program is to monitor and evaluate the extent of hydrocarbon contamination in the ground water at the subject property.

SUMMARY

A summary of data regarding ground-water levels for the first quarter of 1991 is presented in Table A. In general, ground-water levels have risen approximately 0.7 foot since the last quarterly sampling. The **ground-water gradient for this quarter is generally directed towards the southwest** at a magnitude of approximately 0.002 foot per foot (see the Ground-Water Gradient Map, Figure 2). Chemical analytical results indicate concentrations of petroleum hydrocarbons continue to be maximum in the area of MW-2 and MW-4 (see Table B and Appendix A). Figure 3 presents interpretive isopleths of benzene concentrations within the ground water for the site. **This site was scheduled for second quarter sampling by DERS during May 1991. However, based on Ultramar's letter dated January 21, 1991, DERS will not longer be conducting ground-water sampling at this site.** Therefore, this will be the last

quarterly ground-water sampling report from DERS.

DERS recommends that this monthly report be submitted to the following agencies:

REGIONAL WATER QUALITY CONTROL BOARD
San Francisco Bay Region
1111 Jackson Street, Room 6040
Oakland, California 94607
ATTENTION: Mr. Steven Ritchie

ALAMEDA COUNTY HEALTH CARE SERVICES
Hazardous Materials Health Care Services
470 27th Street, 3rd Floor
Oakland, California 94612
ATTENTION: Mr. Rafat A. Shahid, Chief

Have a safe day,

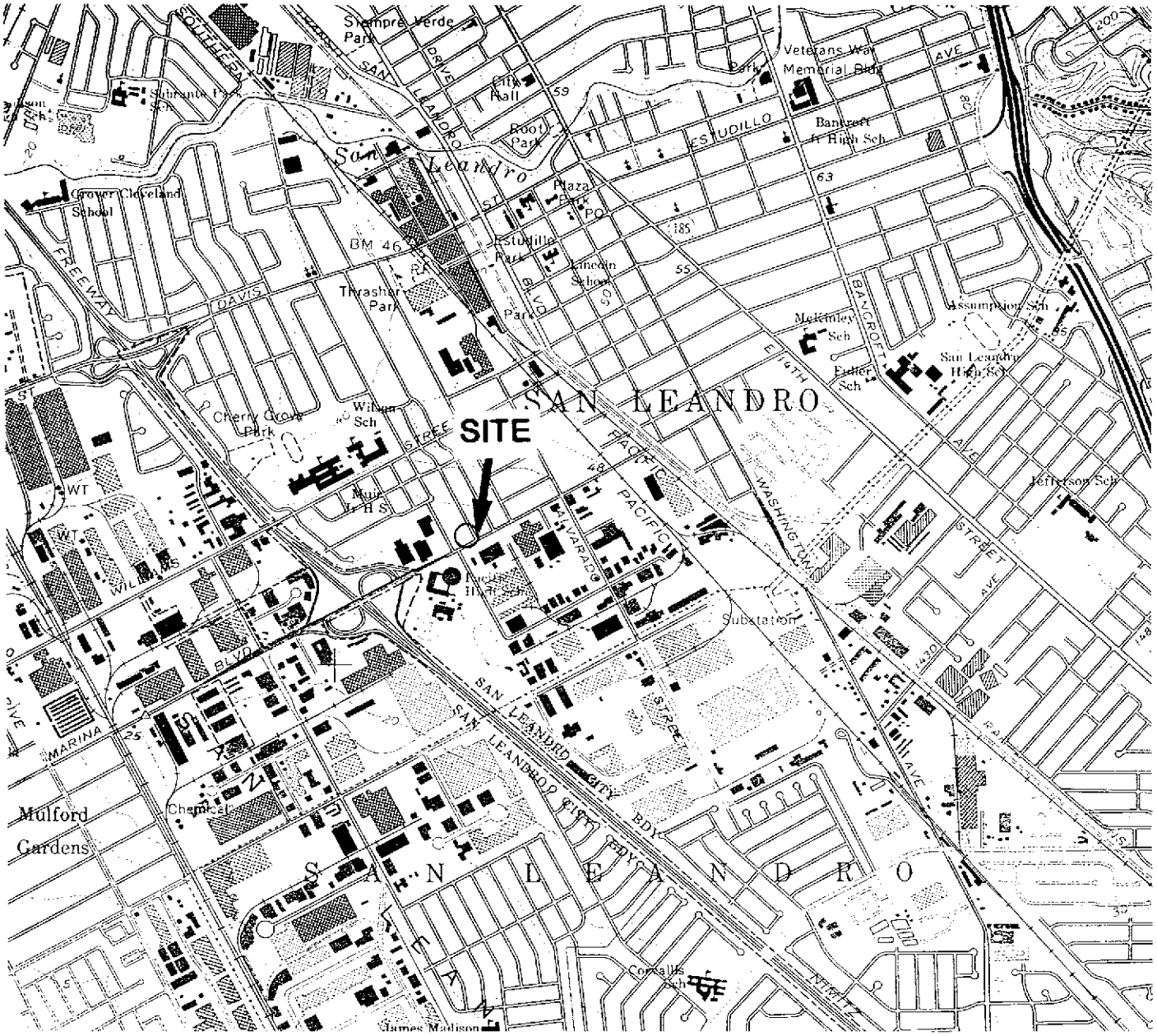
DU PONT ENVIRONMENTAL REMEDIATION SERVICES

James A. Lehrman
Project Geologist

David J. Blunt
Registered Geologist, RG 4516

Robert A. Katin, PE, REA
Project Manager

JAL/DJB/RAK:ct

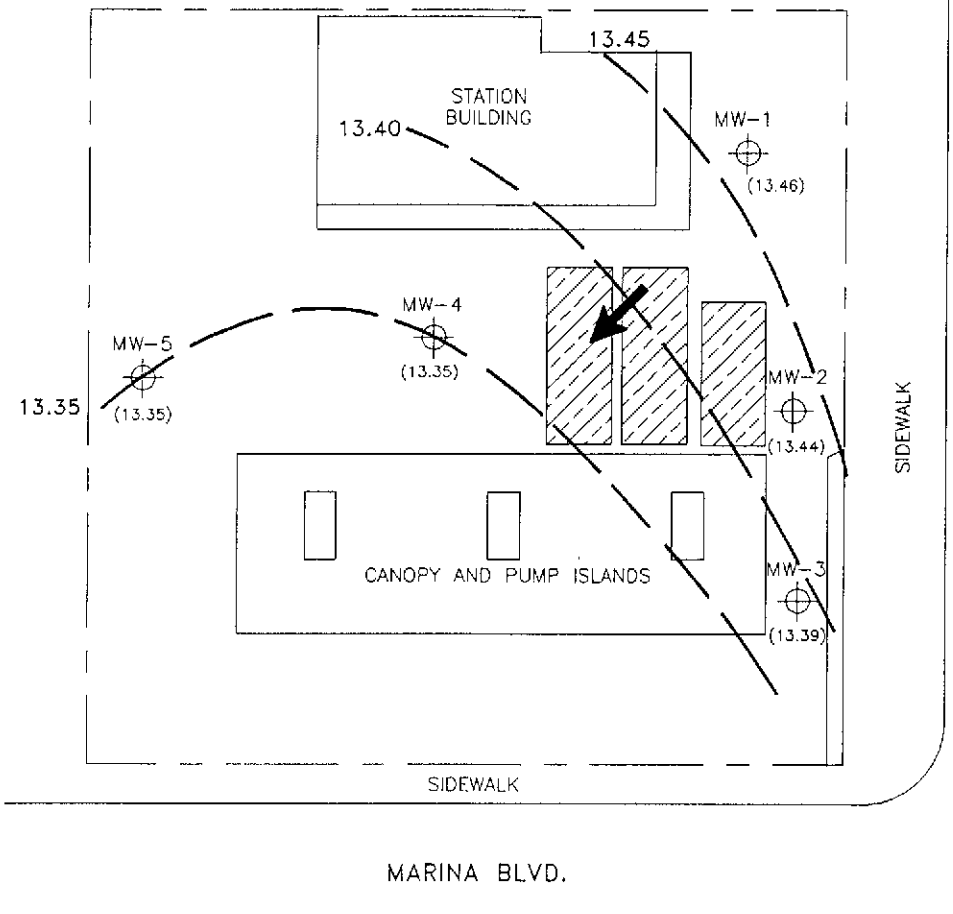


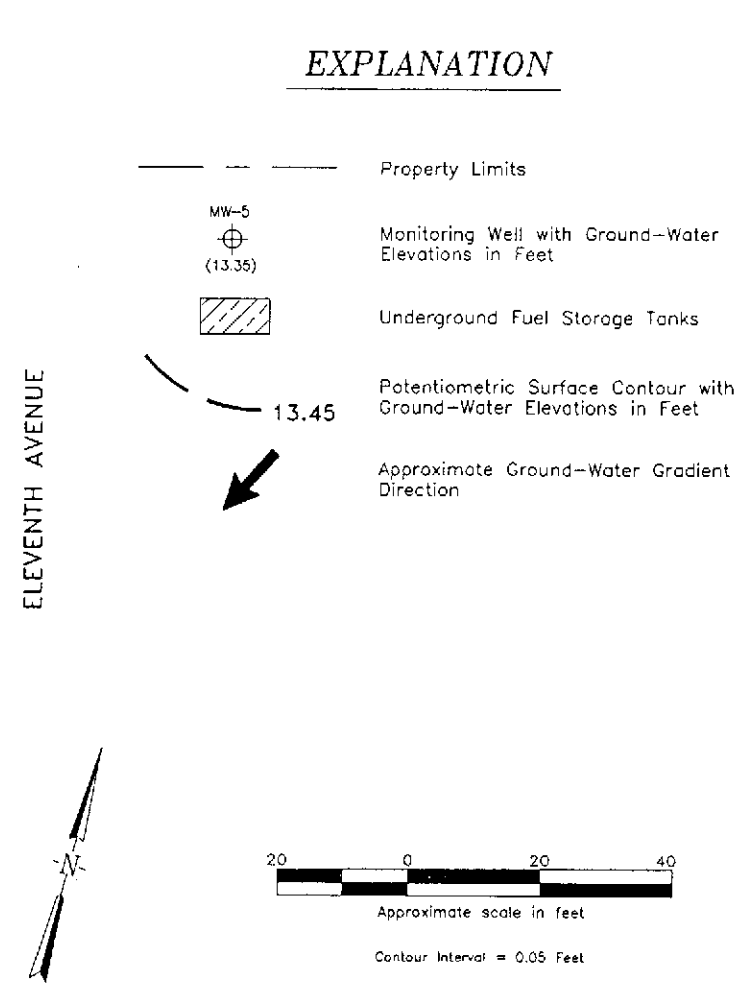
LOCATION MAP

Beacon Station 720
1088 Marina Boulevard
San Leandro, California

BASE: A portion of the San Leandro USGS 7.5 minute quadrangle dated 1959 (photorevised 1980), at a scale of 1:24,000.

Figure 1





NOTE:
Potentiometric contours are based on water level measurements obtained from Monitoring Wells MW-1 through MW-5 sampled on February 7, 1991.

NO.	REVISIONS	BY	DATE
1	FOR ULTRAMAR	CPB	10-11-90
0	INITIAL ISSUE TO CONOCO	ACC	2-22-89

DU PONT

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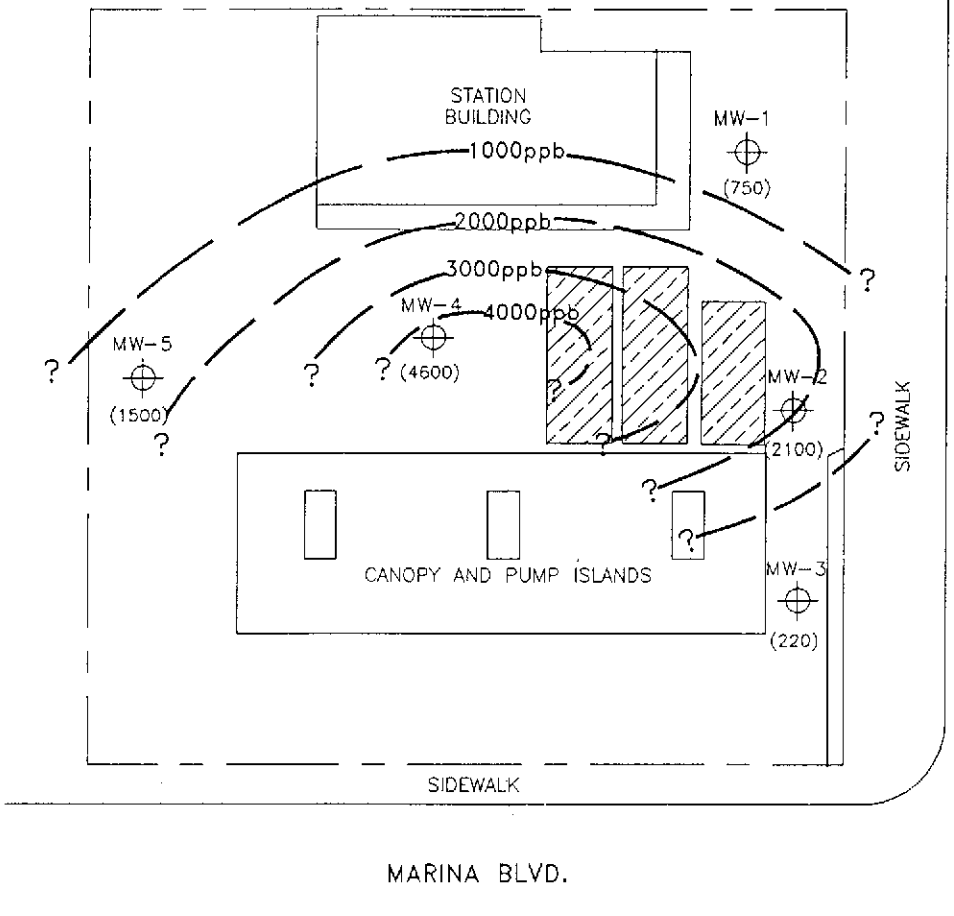
GROUND-WATER GRADIENT MAP

SCALE	DESIGNED BY	DRAWN BY	DRAWING NO
As Shown	JAL	ACC	A-90015153-2
DATE	CHECKED	APPROVED	JOB NO
2-28-90	JAL	DJB	90-015-153

Beacon Station 720
1088 Marina Boulevard
San Leandro, California

Du Pont Environmental Remediation Services

Figure 2



EXPLANATION

Property Limits

MW-5 (1500) — Monitoring Well with Benzene Concentration in Parts per Billion

Underground Fuel Storage Tanks

4000ppb — Isopleth of Benzene Concentration in Parts per Billion

N

20 0 20 40

Approximate scale in feet

Contour Interval = 1000ppb

NOTE:
Isopleths of Benzene Concentrations are based on chemical analytical results obtained from Monitoring Wells sampled on February 7, 1991.

NO.	REVISIONS	BY	DATE
1	FOR ULTRAMAR	CPB	10-11-90
0	INITIAL ISSUE TO CONOCO	ACC	2-22-89

DU PONT

ISOPLETH MAP OF BENZENE CONCENTRATIONS IN GROUND WATER

SCALE	DESIGNED BY	DRAWN BY	DRAWING NO
As Shown	JAL	ACC	A-90015153-3
DATE	CHECKED	APPROVED	JOB NO
2-28-90	JAL	SS	90-Q15-153

Beacon Station 720
1068 Marina Boulevard
San Leandro, California

Du Pont Environmental Remediation Services

Figure 3

TABLE A

GROUND-WATER POTENTIOMETRIC ELEVATIONS

Beacon Station 720
1088 Marina Boulevard
San Leandro, California

WELL ID	DATE SAMPLED	TOP OF CASING ELEVATION (feet)	DEPTH TO GROUND WATER (feet)	GROUND-WATER ELEVATION (feet)	GROUND-WATER ELEVATION CHANGE (feet)
MW-1	23-Jun-87	29.89	14.79	15.10	
	06-Jul-87		14.93	14.96	-0.14
	06-Aug-87		14.22	15.67	0.71
	04-Nov-87		15.74	14.15	-1.52
	02-Feb-88		13.99	15.90	1.75
	02-May-88		14.99	14.90	-1.00
	21-Nov-88		13.03	16.86	1.96
	14-Feb-89		15.86	14.03	-2.83
	02-May-89		14.77	15.12	1.09
	10-Aug-89		16.35	13.54	-1.58
	08-Nov-89		16.46	13.43	-0.11
	20-Feb-90		15.58	14.31	0.88
	18-May-90		16.40	13.49	-0.82
	15-Sep-90		16.83	13.06	-0.43
	26-Nov-90		17.16	12.73	-0.33
	07-Feb-91		16.43	13.46	0.73
MW-2	23-Jun-87	29.57	14.51	15.06	
	06-Jul-87		14.63	14.94	-0.12
	06-Aug-87		14.95	14.62	-0.32
	04-Nov-87		15.45	14.12	-0.50
	02-Feb-88		13.74	15.83	1.71
	02-May-88		14.63	14.94	-0.89
	21-Nov-88		12.99	16.58	1.64
	14-Feb-89		15.66	13.91	-2.67
	02-May-89		14.56	15.01	1.10
	10-Aug-89		16.22	13.35	-1.66
	08-Nov-89		16.19	13.38	0.03
	20-Feb-90		15.34	14.23	0.85
	18-May-90		16.20	13.37	-0.86
	15-Sep-90		16.52	13.05	-0.32
	26-Nov-90		16.83	12.74	-0.31
	07-Feb-91		16.13	13.44	0.70
MW-3	23-Jun-87	29.13	14.13	15.00	
	06-Jul-87		14.24	14.89	-0.11
	06-Aug-87		14.52	14.61	-0.28
	04-Nov-87		15.09	14.04	-0.57
	02-Feb-88		13.37	15.76	1.72
	02-May-88		14.22	14.91	-0.85
	21-Nov-88		13.01	16.12	1.21
	14-Feb-89		15.22	13.91	-2.21
	02-May-89		14.16	14.97	1.06
	10-Aug-89		15.61	13.52	-1.45
	08-Nov-89		15.75	13.38	-0.14
	20-Feb-90		14.95	14.18	0.80
	18-May-90		15.79	13.34	-0.84
	15-Sep-90		16.07	13.06	-0.28
	26-Nov-90		16.36	12.77	-0.29
	07-Feb-91		15.74	13.39	0.62

TABLE A
(continued)
GROUND-WATER POTENTIOMETRIC ELEVATIONS

Beacon Station 720
1088 Marina Boulevard
San Leandro, California

WELL ID	DATE SAMPLED	TOP OF CASING ELEVATION (feet)	DEPTH TO GROUND WATER (feet)	GROUND-WATER ELEVATION (feet)	GROUND-WATER ELEVATION CHANGE (feet)
MW-4	23-Jun-87	29.72	14.77	14.95	14.95
	06-Jul-87		14.91	14.81	-0.14
	06-Aug-87		15.19	14.53	-0.28
	04-Nov-87		15.72	14.00	-0.53
	02-Feb-88		14.03	15.69	1.69
	02-May-88		14.89	14.83	-0.86
	21-Nov-88		12.88	16.84	2.01
	14-Feb-89		15.83	13.89	-2.95
	02-May-89		14.75	14.97	1.08
	10-Aug-89		16.30	13.42	-1.55
	08-Nov-89		16.29	13.43	0.01
	20-Feb-90		15.62	14.10	0.67
	18-May-90		16.34	13.38	-0.72
	15-Sep-90		16.79	12.93	-0.45
	26-Nov-90		17.08	12.64	-0.29
	07-Feb-91		16.37	13.35	0.71
MW-5	23-Jun-87	29.55	14.63	14.92	
	06-Jul-87		14.79	14.76	-0.16
	06-Aug-87		15.07	14.48	-0.28
	04-Nov-87		15.61	13.94	-0.54
	02-Feb-88		13.84	15.71	1.77
	02-May-88		14.77	14.78	-0.93
	21-Nov-88		12.84	16.71	1.93
	14-Feb-89		15.72	13.83	-2.88
	02-May-89		14.68	14.87	1.04
	10-Aug-89		16.03	13.52	-1.35
	08-Nov-89		16.33	13.22	-0.30
	20-Feb-90		15.44	14.11	0.89
	18-May-90		16.22	13.33	-0.78
	15-Sep-90		16.65	12.90	-0.43
	26-Nov-90		16.95	12.60	-0.30
	07-Feb-91		16.20	13.35	0.75

NOTES: 1) All elevations surveyed to an arbitrary datum.
2) Elevations and depths are given in feet.

TABLE B

SUMMARY OF GROUND-WATER ANALYTICAL RESULTS

Beacon Station 720
1088 Marina Boulevard
San Leandro, California

WELL ID	DATE SAMPLED	BENZENE (ug/L)	ETHYL BENZENE (ug/L)	TOLUENE (ug/L)	XYLENES (ug/L)	TPHg (ug/L)	COMMENTS
MW-1	16-Apr-87	2,313	664.1	3,770	3,331	17,276	
	23-Jun-87	1,887	466.7	2,141	1,652	26,027	
	06-Jul-87	778.2	133.2	943.7	422.1	3,938	
	06-Aug-87	1,270	288.7	1,576	873.7	6,079	
	04-Nov-87	1,700	720	4,000	2,200	15,000	
	02-Feb-88	1,500	230	1,700	740	14,000	
	02-May-88	3,500	4,900	700	2,700	33,000	
	21-Nov-88	2,200	2,800	560	2,200	15,000	
	14-Feb-89	1,700	340	1,700	1,500	12,000	Odor
	02-May-89	1,500	510	2,400	2,400	18,000	Odor, Slight Sheen
	10-Aug-89	1,400	360	1,500	1,600	10,000	Odor
	08-Nov-89	920	190	470	360	7,200	Odor
	20-Feb-90	810	270	540	800	3,300	
	18-May-90	1,900	560	500	1,600	5,600	
	15-Sep-90	320	150	110	520	5,200	Odor
	26-Nov-90	370	150	59	370	3,000	Odor
	07-Feb-91	750	480	570	1,800	14,000	
MW-2	16-Apr-87	3,131	1,067	4,239	4,608	17,920	
	23-Jun-87	2,188	1,047	2,622	4,699	49,354	
	06-Jul-87	1,575	457	1,729	1,702	8,676	
	06-Aug-87	2,623	702	3,722	2,882	14,376	
	04-Nov-87	2,200	900	4,100	3,500	19,000	
	02-Feb-88	6,200	1,000	6,500	4,000	54,000	
	02-May-88	6,800	7,100	1,300	5,400	53,000	
	21-Nov-88	--	--	--	--	--	Free Product
	14-Feb-89	6,900	1,100	4,300	5,200	48,000	Film of Free Product
	02-May-89	6,100	2,100	8,800	16,000	110,000	Odor, Sheen
	10-Aug-89	4,200	1,000	2,900	5,800	39,000	Odor, Sheen
	08-Nov-89	3,700	740	1,500	2,200	45,000	Odor, Heavy Sheen
	20-Feb-90	5,000	1,600	8,200	11,000	60,000	
	18-May-90	6,200	1,300	1,900	610	19,000	
	15-Sep-90	1,400	660	820	3,000	27,000	Odor,Sheen
	26-Nov-90	1,100	700	880	3,800	28,000	Odor,Sheen
	07-Feb-91	2,100	1,300	1,900	6,200	**63,000**	**Odor,Sheen**
MW-3	16-Apr-87	1,371	472.3	2,438	2,617	9,967	
	23-Jun-87	646.2	320.9	822.9	1,280	16,824	
	06-Jul-87	340.3	116.5	384.2	420.2	3,395	
	06-Aug-87	441.9	118.2	436.3	417.3	3,107	
	04-Nov-87	320	74	280	250	2,600	
	02-Feb-88	2,200	500	2,300	2,300	44,000	
	02-May-88	1,600	840	450	1,700	14,000	
	21-Nov-88	1,200	560	220	810	8,100	
	14-Feb-89	1,500	220	220	500	5,500	Odor
	02-May-89	910	530	310	1,900	13,000	Odor
	10-Aug-89	750	190	10	210	2,700	Odor
	08-Nov-89	370	90	ND(20)	58	2,400	Odor
	20-Feb-90	1,200	810	77	460	3,700	
	18-May-90	980	330	ND(50)	250	2,300	
	15-Sep-90	240	150	36	230	4,700	Odor
	26-Nov-90	170	86	8.4	120	1,400	Odor
	07-Feb-91	220	120	20	230	2,900	

TABLE B
(continued)

SUMMARY OF GROUND-WATER ANALYTICAL RESULTS

Beacon Station 720
1088 Marina Boulevard
San Leandro, California

WELL ID	DATE SAMPLED	BENZENE (ug/L)	ETHYL BENZENE (ug/L)	TOLUENE (ug/L)	XYLENES (ug/L)	TPHg (ug/L)	COMMENTS
MW-4	*16-Apr-87*	5,896	893.9	3,797	4,106	19,309	
	23-Jun-87	4,030	850.0	1,842	3,254	31,429	
	06-Jul-87	2,710	308.2	1,247	1,312	8,117	
	06-Aug-87	3,992	447.9	1,589	1,611	10,464	
	04-Nov-87	9,500	2,800	17,000	11,000	55,000	
	02-Feb-88	11,000	1,400	7,400	6,200	47,000	
	02-May-88	9,200	6,100	1,300	6,400	58,000	
	21-Nov-88	5,700	3,100	1,600	7,600	48,000	
	14-Feb-89	8,700	900	2,500	3,800	29,000	*Odor & Sheen*
	02-May-89	4,800	1,800	5,600	8,800	69,000	*Odor, Slight Sheen*
	10-Aug-89	15,000	1,800	6,600	12,000	67,000	*Odor, Slight Sheen*
	08-Nov-89	11,000	1,100	3,200	4,400	71,000	*Odor, Slight Sheen*
	20-Feb-90	8,100	930	4,500	3,500	19,000	
	18-May-90	45,000	5,000	12,000	27,000	100,000	
	15-Sep-90	4,200	740	1,200	3,000	38,000	
	26-Nov-90	2,800	650	810	2,600	19,000	*Odor*
	07-Feb-91	4,600	1,100	1,600	4,600	41,000	*Odor, Sheen*
MW-5	*16-Apr-87*	2,267	921.2	3,277	4,536	17,733	
	23-Jun-87	2,239	516.8	953.9	1,587	19,555	
	06-Jul-87	1,335	313.7	799.2	923.9	5,631	
	06-Aug-87	1,890	576.8	881.2	93.4	6,450	
	04-Nov-87	1,300	270	500	640	4,600	
	02-Feb-88	3,100	550	1,500	1,400	24,000	
	02-May-88	4,400	1,200	490	1,500	17,000	
	21-Nov-88	5,600	870	590	2,200	19,000	
	14-Feb-89	4,300	410	810	1,300	13,000	*Odor*
	02-May-89	2,900	690	1,500	3,200	24,000	*Odor, Slight Sheen*
	10-Aug-89	6,700	860	2,300	4,700	36,000	*Odor, Slight Sheen*
	08-Nov-89	5,300	460	860	600	30,000	*Odor*
	20-Feb-90	1,700	120	220	370	3,400	
	18-May-90	18,000	1,500	2,000	5,600	24,000	
	15-Sep-90	2,600	1,000	2,200	4,900	42,000	*Odor,Sheen*
	26-Nov-90	1,900	260	280	800	8,500	*Odor,Sheen*
	07-Feb-91	1,500	610	1,200	2,700	24,000	*Odor*

NOTES: 1) TPHg = Total Petroleum Hydrocarbons (as gasoline).
2) Odor refers to petroleum hydrocarbon odor.
3) All results are presented in parts per billion.
4) Samples prior to February 1989 taken by Groundwater Technology, Inc.

APPENDIX A

GROUND-WATER SAMPLING PROCEDURES,
LABORATORY TEST RESULTS, AND
CHAIN-OF-CUSTODY FORMS

GROUND-WATER MONITORING AND SAMPLING PROCEDURES

Prior to sampling, the depth to water was measured in all monitoring wells using an electronic immersion probe. All measurements were read to the nearest 0.01 foot. If free product was present, the depth to free product and the depth to water were measured using an interface probe and an observation sample was collected with a clear teflon bailer for confirmation. No analytical samples were collected from monitoring wells containing more than 0.25 inch of free product.

The monitoring wells were sampled on February 7, 1991. Prior to purging, each well was checked with a clear teflon bailer in order to observe the possible presence of floating hydrocarbons. Purging was accomplished using a stainless steel or teflon bailer. The bailer was thoroughly cleaned prior to each sampling using a trisodium phosphate (TSP) solution followed by a 10% methyl alcohol solution, and then rinsed twice with potable water. The wells were purged prior to sampling until pH, conductivity, and temperature values stabilized. Generally, this resulted in the removal of approximately 3 to 5 well volumes of ground water from each well during the purging process. The water obtained from purging was placed in labeled 55-gallon drums and stored on-site. The bailer rope was replaced after each sampling. Samples recovered from each well were decanted into two appropriately prepared and labeled 40-ml volatile organic analysis (VOA) bottles. A travel blank (numbered as MW-A) a was also submitted for quality assurance. One travel blank per site will be analyzed. Duplicate samples will only be analyzed by the laboratory when directed by Du Pont Environmental Remediation Services. The sample bottles were immediately placed in an ice chest and maintained at 4 °C until delivery to a State of California licensed laboratory. Routine chain-of-custody procedures were employed.

APPLIED ANALYTICAL

Environmental Laboratories

42501 Albrae St., Suite 100
Fremont, CA 94538
Bus: (415) 623-0775
Fax: (415) 651-8647

ANALYSIS REPORT

1020lab.frm

Attention:	Mr. Jim Lehrman	Date Sampled:	02-07-91
	Dupont Environmental Remediation	Date Received:	02-08-91
	7068 Koll Center Parkway #401	BTEX Analyzed:	02-14-91
	Pleasanton, CA 94566	TPHg Analyzed:	02-14-91
Project:	AGS 19505-L, Proj #90-Q15-153	TPHd Analyzed:	NR
	Station #720, San Leandro	Matrix:	Water

	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPHg	TPHd
	ppb	ppb	ppb	ppb	ppb	ppb
Detection Limit:	5.0	5.0	5.0	5.0	500	100
SAMPLE Laboratory Identification						
MW-1 W1102127	750	570	480	1800	14000	NR

ppb = parts per billion = µg/L = micrograms per liter.
ND = Not detected. Compound(s) may be present at concentrations below the detection limit.
NR = Analysis not requested.

ANALYTICAL PROCEDURES

BTEX– Benzene, toluene, ethylbenzene, and total xylene isomers (BTEX) are measured by extraction using EPA Method 5030 followed by analysis using EPA Method 8020/602, which utilizes a gas chromatograph (GC) equipped with a photoionization detector (PID) and a flame-ionization detector (FID) in series.

TPHg–Total petroleum hydrocarbons as gasoline (low-to-medium boiling points) are measured by extraction using EPA Method 5030, followed by analysis using modified EPA Method 8015, which utilizes a GC equipped with an FID.

TPHd–Total petroleum hydrocarbons as diesel (high boiling points) are measured by extraction using EPA Method 3550 for soils and EPA Method 3510 for water, followed by modified EPA Method 8015 with direct sample injection into a GC equipped with an FID.

Laboratory Representative

February 15, 1991
Date Reported

APPLIED ANALYTICAL LABORATORY IS CERTIFIED BY THE STATE OF CALIFORNIA DEPARTMENT OF HEALTH SERVICES AS A HAZARDOUS WASTE TESTING LABORATORY (Certification No. 1211)

APPLIED ANALYTICAL

Environmental Laboratories

42501 Albrae St., Suite 100
Fremont, CA 94538
Bus: (415) 623-0775
Fax: (415) 651-8647

ANALYSIS REPORT

1020lab.frm

Attention:	Mr. Jim Lehrman	Date Sampled:	02-07-91
	Dupont Environmental Remediation	Date Received:	02-08-91
	7068 Koll Center Parkway #401	BTEX Analyzed:	02-14-91
	Pleasanton, CA 94566	TPHg Analyzed:	02-14-91
Project:	AGS 19505-L, Proj #90-Q15-153	TPHd Analyzed:	NR
	Station #720, San Leandro	Matrix:	Water

	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPHg	TPHd
	ppb	ppb	ppb	ppb	ppb	ppb
Detection Limit:	10	10	10	10	1000	100
SAMPLE Laboratory Identification						
MW-2 W1102128	2100	1900	1300	6200	63000	NR

ppb = parts per billion = µg/L = micrograms per liter.
ND = Not detected. Compound(s) may be present at concentrations below the detection limit.
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	7068 Koll Center Parkway #401	BTEX Analyzed:	02-14-91
	Pleasanton, CA 94566	TPHg Analyzed:	02-14-91
Project:	AGS 19505-L, Proj #90-Q15-153	TPHd Analyzed:	NR
	Station #720, San Leandro	Matrix:	Water

	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPHg	TPHd
	ppb	ppb	ppb	ppb	ppb	ppb
Detection Limit:	2.5	2.5	2.5	2.5	250	100
SAMPLE Laboratory Identification						
MW-3 W1102126	220	20	120	230	2900	NR

ppb = parts per billion = µg/L = micrograms per liter.
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ANALYTICAL PROCEDURES

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	Dupont Environmental Remediation	Date Received:	02-08-91
	7068 Koll Center Parkway #401	BTEX Analyzed:	02-14-91
	Pleasanton, CA 94566	TPHg Analyzed:	02-14-91
Project:	AGS 19505-L, Proj #90-Q15-153	TPHd Analyzed:	NR
	Station #720, San Leandro	Matrix:	Water

	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPHg	TPHd
	ppb	ppb	ppb	ppb	ppb	ppb
Detection Limit:	25	25	25	25	2500	100
SAMPLE Laboratory Identification						
MW-5 W1102129	1500	1200	610	2700	24000	NR
MW-4 W1102130	4600	1600	1100	4600	41000	NR

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ANALYTICAL PROCEDURES

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	Dupont Environmental Remediation	Date Received:	02-08-91
	7068 Koll Center Parkway #401	BTEX Analyzed:	02-14-91
	Pleasanton, CA 94566	TPHg Analyzed:	02-14-91
Project:	AGS 19505-L, Proj #90-Q15-153	TPHd Analyzed:	NR
	Station #720, San Leandro	Matrix:	Water

	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPHg	TPHd
	ppb	ppb	ppb	ppb	ppb	ppb
Detection Limit:	0.5	0.5	0.5	0.5	0.5	50
SAMPLE Laboratory Identification						
MW-A W1102131	ND	ND	ND	ND	ND	NR

ppb = parts per billion = µg/L = micrograms per liter.
ND = Not detected. Compound(s) may be present at concentrations below the detection limit.
NR = Analysis not requested.

ANALYTICAL PROCEDURES

BTEX-- Benzene, toluene, ethylbenzene, and total xylene isomers (BTEX) are measured by extraction using EPA Method 5030 followed by analysis using EPA Method 8020/602, which utilizes a gas chromatograph (GC) equipped with a photoionization detector (PID) and a flame-ionization detector (FID) in series.

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Laboratory Representative

February 15, 1991
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(Certification No. 1211)

Ultramar Inc.

CHAIN OF CUSTODY REPORT

BEACON

Beacon Station No.	Sampler (Print Name)			ANALYSES									Date	Form No.
720	Bill Bassett												2/7/91	1 of 1
Project No.	Sampler (Signature)												Preserved with HCl	
90-Q15-153	Bill Bassett												Stored in wet ice at 4°C	
Project Location	Affiliation													
San Leandro Marina	Du Pont Environmental												Normal TAT	
Sample No./Identification	Date	Time	Lab No.	BTEX	TPH (gasoline)	TPH (diesel)						No. of Containers	REMARKS	
MW-3	2/7/91	9:52 AM		✓	✓							2		
MW-1		10:43 AM		✓	✓							2		
MW-2		11:39 AM		✓	✓							2		
MW-5		1:28 PM		✓	✓							2		
MW-4		2:40 PM		✓	✓							2		
MW-A		2:50 PM		✓	✓							2		

Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
Bill Bassett/DERS	2/8/91	12:00 NOON	Lee Mitchell 627 Express dr	2/8/91	12:00
Lee Mitchell 627 Express dr	2/8/91	12:15	Laura Jordan Ex-IT	2-8-91	1325
Laura Jordan Ex-IT 2-8-91		1445	Anthony Guerra Applied Analytical	2-8-91	3:00

Report To:
Du Pont Environmental Remediation Services
Attn: J. Lehrman

Bill to: ULTRAMAR INC.
525 West Third Street
Hanford, CA 93230
Attention: Glenn Dembroff

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

32-8003 1/90

Du Pont Environmental Remediation Services

GROUND-WATER MONITORING WELL FIELD SAMPLING DATA SHEET

SITE: San Leandro Marina JOB # 90-215-153 DATE: Feb. 7, 1991

WELL # MW-1
CASING DIAMETER 2"
DEPTH TO WATER 16.42'
TOTAL DEPTH 27.9'
WELL VOLUME 1.9 Gal
PURGE METHOD hand bail

GALLONS PURGED	pH	Conductivity	Temp. °C
1	6.73	694	19.5
2	6.78	709	19.3
4	6.78	694	19.3
5	6.76	703	19.2
6	6.78	707	19.2

WELL # MW-2
CASING DIAMETER 2"
DEPTH TO WATER 16.13'
TOTAL DEPTH 25.3'
WELL VOLUME 1.5 Gal
PURGE METHOD hand bail

GALLONS PURGED	pH	Conductivity	Temp. °C
1	6.73	731	19.4
2	6.74	665	19.5
4	6.76	647	19.6
5	6.77	639	19.7
6	6.77	634	19.7

WELL # MW-3
CASING DIAMETER 2"
DEPTH TO WATER 15.74'
TOTAL DEPTH 24.6'
WELL VOLUME 1.5 Gal
PURGE METHOD hand bail

GALLONS PURGED	pH	Conductivity	Temp. °C
1	6.83	657	18.9
2	6.81	692	19.6
4	6.81	557	19.2
5	6.80	563	19.5
6	6.80	574	19.8

WELL # MW-4
CASING DIAMETER 2"
DEPTH TO WATER 16.27'
TOTAL DEPTH 27.0'
WELL VOLUME 1.8 Gal
PURGE METHOD hand bail

GALLONS PURGED	pH	Conductivity	Temp.
1	6.79	550	19.6
2	6.77	577	19.5
4	6.76	661	19.9
5	6.76	651	19.9

Sampled by: B. Bassett

Du Pont Environmental Remediation Services

GROUND–WATER MONITORING WELL FIELD SAMPLING DATA SHEET

SITE: San Leandro, Marina JOB # 90-Q15-153 DATE: Feb. 7, 1991

WELL # MW-5
CASING DIAMETER 2"
DEPTH TO WATER 16.20'
TOTAL DEPTH 27.8'
WELL VOLUME 1.9 Gal
PURGE METHOD hand bail

GALLONS PURGED	pH	Conductivity	Temp.
1	6.74	579	19.8
2	6.73	575	19.8
4	6.73	594	19.8
5	6.73	599	19.8

WELL #
CASING DIAMETER
DEPTH TO WATER
TOTAL DEPTH
WELL VOLUME
PURGE METHOD

GALLONS PURGED	pH	Conductivity	Temp.

WELL #
CASING DIAMETER
DEPTH TO WATER
TOTAL DEPTH
WELL VOLUME
PURGE METHOD

GALLONS PURGED	pH	Conductivity	Temp.

WELL #
CASING DIAMETER
DEPTH TO WATER
TOTAL DEPTH
WELL VOLUME
PURGE METHOD

GALLONS PURGED	pH	Conductivity	Temp.

Sampled by: B. Bissett