

# Ultramar

Ultramar Inc.  
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January 16, 1991

Mr. Steven Ritchie  
San Francisco Bay Region  
Regional Water Quality Control Board  
1800 Harrison Street, Suite 700  
Oakland, CA 94612

**SUBJECT: QUARTERLY GROUND-WATER SAMPLING REPORT FOR BEACON STATION NO. 720, 1088 MARINA BLVD., SAN LEANDRO, CALIFORNIA**

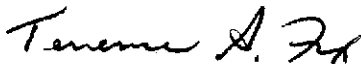
Dear Mr. Ritchie:

Enclosed is a copy of the fourth quarter Ground-Water Sampling Report for the above-referenced site prepared by Du Pont Environmental Remediation Services.

Please call if you have any questions regarding the information included in this report.

Sincerely,

ULTRAMAR INC.



Terrence A. Fox  
Environmental Specialist II

Enclosure: Ground-Water Sampling Report, Fourth Quarter 1990

cc w/encl: Mr. Rafat A. Shahid  
Chief Hazardous Materials Division  
Alameda County Health Care Services  
470 27th Street, Third Floor  
Oakland, CA 94612



A Member of the Ultramar Group of Companies

**BEACON**  
#1 Quality and Service

QUARTERLY GROUND-WATER SAMPLING REPORT  
FOURTH QUARTER 1990  
BEACON STATION 720  
1088 MARINA BOULEVARD  
SAN LEANDRO, CALIFORNIA

*Dec. 28, 1990*

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

December 28, 1990

Job No. 90-Q14-153

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DU PONT ENVIRONMENTAL REMEDIATION SERVICES  
7068 Koll Center Parkway, Suite 401  
Pleasanton, CA 94566  
(415) 462-7772  
Fax: (415) 462-7944

December 28, 1990  
Job No. 90-Q14-153

Ultramar Inc.  
525 West Third Street  
Hanford, California 93232

ATTENTION: Mr. Terrence A. Fox  
Environmental Specialist II

SUBJECT: Quarterly Ground-Water Sampling Report  
Fourth Quarter 1990  
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 November 26, 1990. 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 fourth quarter of 1990 is presented in Table A. In general, ground-water levels have dropped approximately 0.3 foot since the last quarterly sampling. The ground-water gradient for this quarter is generally directed towards the west at a magnitude of approximately 0.0018 foot per foot (see the Ground-Water Gradient Map, Figure 2). Chemical analytical results indicate concentrations of benzene dissolved in ground water are maximum in the area of 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 is scheduled for first quarter sampling during February 1991.

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

**REGIONAL WATER QUALITY CONTROL BOARD**

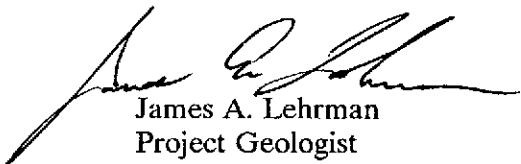
San Francisco Bay Region  
1111 Jackson Street, Room 6040  
Oakland, California 94607  
ATTENTION: Mr. Steven Ritchie

**ALAMEDA COUNTY HEALTH CARE SERVICES**

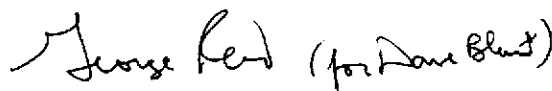
Hazardous Materials Health Care Services  
470 27th Street, 3rd Floor  
Oakland, California 94612  
ATTENTION: Mr. Rafat A. Shahid, Chief

Have a safe day,

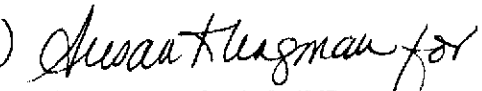
**DU PONT ENVIRONMENTAL REMEDIATION SERVICES**



James A. Lehrman  
Project Geologist

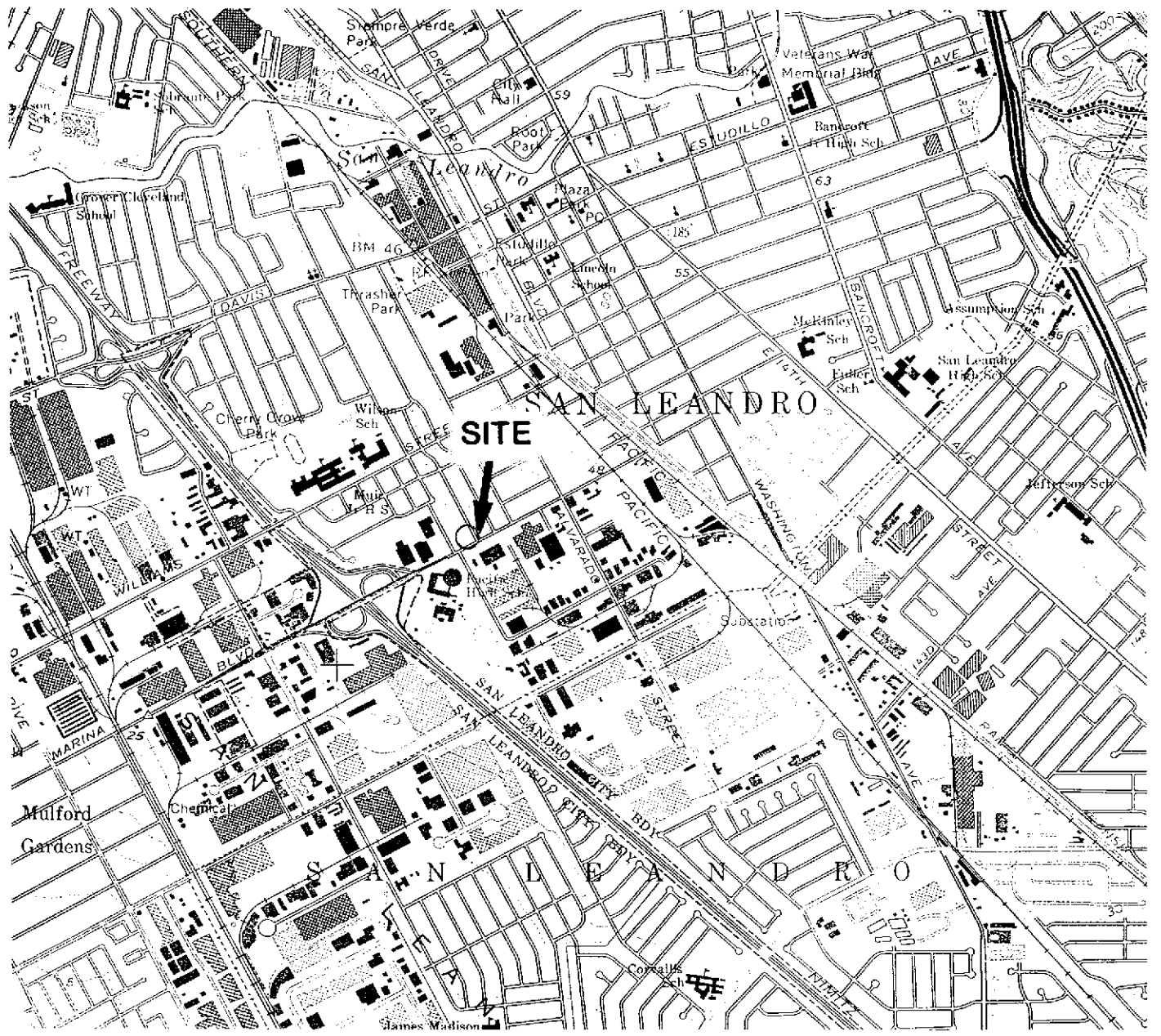


David J. Blunt  
Registered Geologist, RG 4516



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**

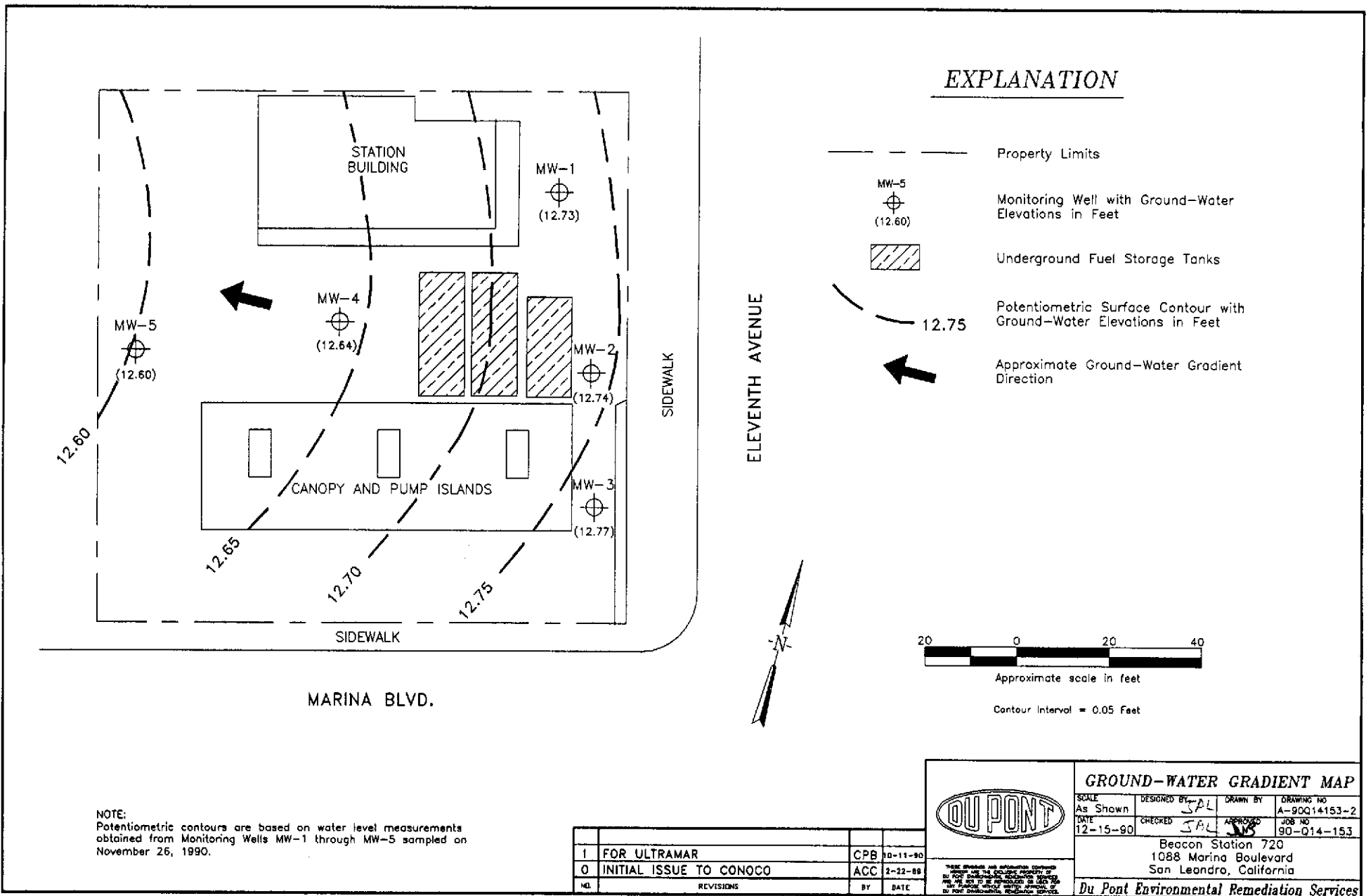


Figure 2

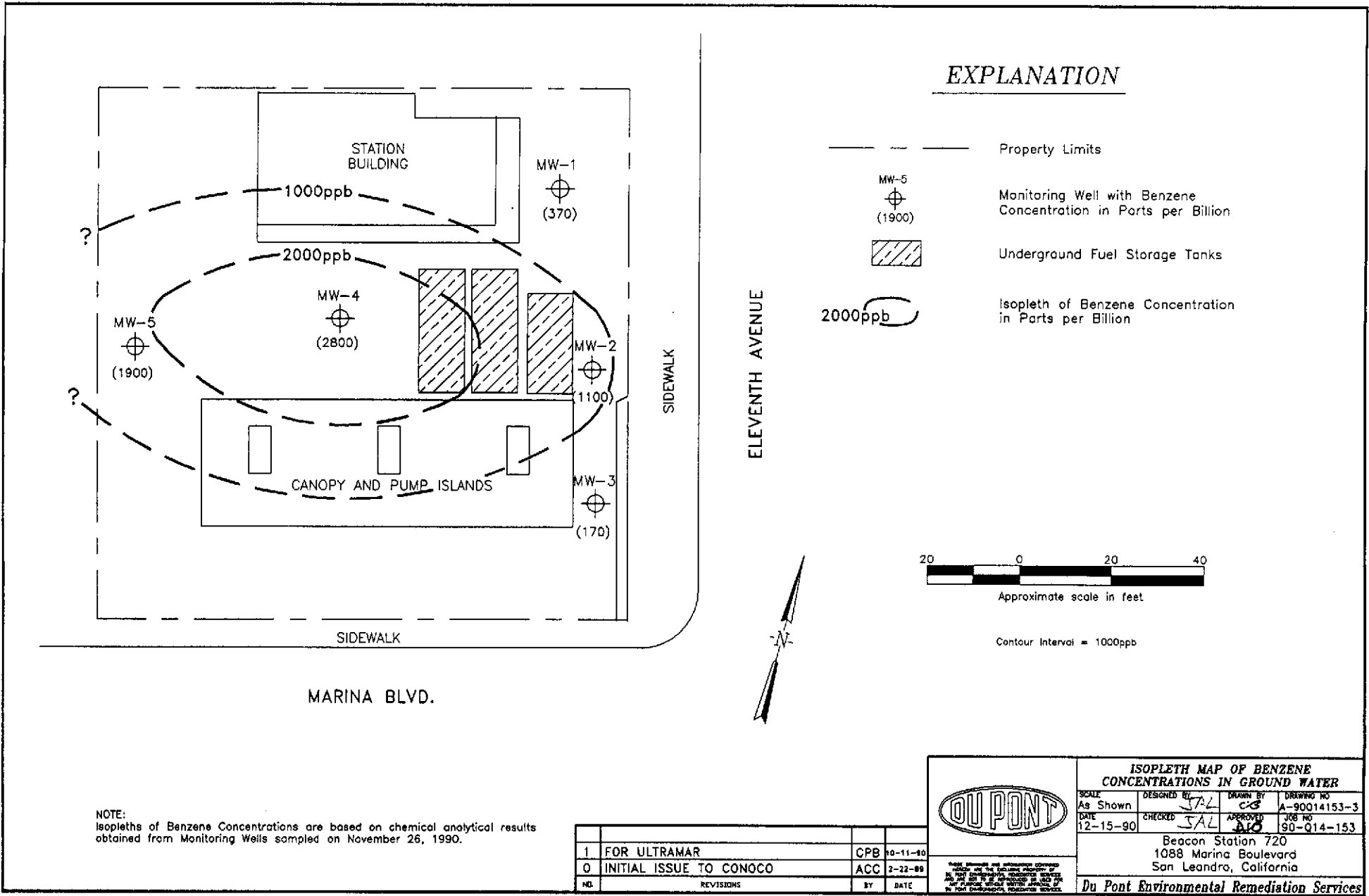


Figure 3



## 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		
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		
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		

**TABLE A**  
(continued)  
**GROUND-WATER POTENTIOMETRIC ELEVATIONS**

<i>Beacon Station 720 1088 Marina Boulevard San Leandro, California</i>					
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		
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		

**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	
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	
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	

**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	
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	

**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 November 26, 1990. 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) 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

Attention: Mr. John Lehrman  
DuPont Environmental Remediation  
7068 Koll Center Parkway #401  
Pleasanton, CA 94566  
Project: AGS 19505-L, Proj #90-Q14-153  
Station #720, San Leandro

Date Sampled: 11-26-90  
Date Received: 11-27-90  
BTEX Analyzed: 11-30-90  
TPHg Analyzed: 11-30-90  
TPHd Analyzed: NR  
Matrix: Water

1020lab.frm

	Benzene	Toluene	Ethyl- benzene	Total Xylenes	TPHg	TPHd
	<u>ppb</u>	<u>ppb</u>	<u>ppb</u>	<u>ppb</u>	<u>ppb</u>	<u>ppb</u>
Detection Limit:	0.5	0.5	0.5	0.5	50	100

#### SAMPLE

#### Laboratory Identification

720-MW3 W1011370	170	8.4	86	120	1400	NR
720-MWA W1011367	ND	ND	ND	ND	ND	NR

ppb = parts per billion =  $\mu\text{g/L}$  = 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

December 8, 1990

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

Attention: Mr. John Lehrman  
DuPont Environmental Remediation  
7068 Koll Center Parkway #401  
Pleasanton, CA 94566  
Project: AGS 19505-L, Proj #90-Q14-153  
Station #720, San Leandro

Date Sampled: 11-26-90  
Date Received: 11-27-90  
BTEX Analyzed: 11-30-90  
TPHg Analyzed: 11-30-90  
TPHd Analyzed: NR  
Matrix: Water

1020lab.frm

	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

720-MW1 W1011363	370	59	150	370	3000	NR
720-MW5 W1011372	1900	280	260	800	8500	NR

ppb = parts per billion =  $\mu\text{g/L}$  = micrograms per liter.

ND = Not detected. Compound(s) may be present at concentrations below the detection limit.

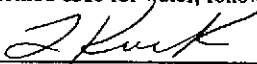
NR = Analysis not requested.

#### 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

December 8, 1990

\_\_\_\_\_  
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

Attention: Mr. John Lehrman  
DuPont Environmental Remediation  
7068 Koll Center Parkway #401  
Pleasanton, CA 94566  
Project: AGS 19505-L, Proj #90-Q14-153  
Station #720, San Leandro

Date Sampled: 11-26-90  
Date Received: 11-27-90  
BTEX Analyzed: 11-30-90  
TPHg Analyzed: 11-30-90  
TPHd Analyzed: NR  
Matrix: Water

1020lab.frm

	Benzene	Toluene	Ethyl- benzene	Total Xylenes	TPHg	TPHd
	<u>ppb</u>	<u>ppb</u>	<u>ppb</u>	<u>ppb</u>	<u>ppb</u>	<u>ppb</u>
Detection Limit:	25	25	25	25	2500	100

#### SAMPLE

#### Laboratory Identification

720-MW2 W1011369	1100	880	700	3800	28000	NR
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ppb = parts per billion =  $\mu\text{g/L}$  = 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.

  
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Laboratory Representative

December 8, 1990

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Date Reported

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BTEX Analyzed: 11-30-90  
TPHg Analyzed: 11-30-90  
TPHd Analyzed: NR  
Matrix: Water

1020lab.frm

	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

720-MW4 W1011371	2800	810	650	2600	19000	NR
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ppb = parts per billion =  $\mu\text{g/L}$  = 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

December 8, 1990

Date Reported

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**Ultramar Inc.**  
**CHAIN OF CUSTODY REPORT**

**BEACON**

Beacon Station No. <b>720</b>		Sampler (Print Name) <b>Bill Bassett</b>			ANALYSES					Date <b>11/26/90</b>	Form No. / of / <b>1</b>	
Project No. <b>90-Q14-153</b>		Sampler (Signature) <i>Bill Bassett</i>			BTEX	TPH (gasoline)	TPH (diesel)	Collected, labeled, sealed	VOA bottle pres. w/ HCl	Stored in wet ice at 4°C	No. of Containers	REMARKS <b>Normal TAT</b>
Project Location <b>San Leandro</b>		Affiliation <b>Du Pont Environmental</b>										
Sample No./Identification	Date	Time	Lab No.									
<b>MW-3</b>	<b>11/26/90</b>	<b>1:14 PM</b>		✓	✓		✓	✓	✓		<b>2</b>	
<b>MW-1</b>	↓	<b>1:50 PM</b>		✓	✓		✓	✓	✓		<b>2</b>	
<b>MW-2</b>		<b>2:27 PM</b>		✓	✓		✓	✓	✓		<b>2</b>	
<b>MW-5</b>		<b>3:15 PM</b>		✓	✓		✓	✓	✓		<b>2</b>	
<b>MW-4</b>		<b>3:55 PM</b>		✓	✓		✓	✓	✓		<b>2</b>	
<b>MW-A</b>		<b>4:05 PM</b>		✓	✓		✓	✓	✓		<b>2</b>	
Relinquished by: (Signature/Affiliation) <i>Bill Bassett</i> / <b>DERS</b>		Date <b>11/27/90</b>	Time <b>5:45 PM</b>	Received by: (Signature/Affiliation)					Date	Time		
Relinquished by: (Signature/Affiliation)		Date	Time	Received by: (Signature/Affiliation)					Date	Time		
Relinquished by: (Signature/Affiliation)		Date	Time	Received by: (Signature/Affiliation) <i>Glenn Dembroff</i>					Date <b>11/27/90</b>	Time <b>5:45</b>		
Report To: <b>Du Pont Environmental Remediation Services</b> <b>Jim Lehrman</b>				Bill to: <b>ULTRAMAR INC.</b> 525 West Third Street Hanford, CA 93230 Attention: <u><b>Glenn Dembroff</b></u>								

GROUND-WATER MONITORING WELL  
FIELD SAMPLING DATA SHEET

SITE: San Leandro, Marina Blvd JOB # 90-214-153 DATE: 11/26/90

WELL # MW-1  
CASING DIAMETER 2"  
DEPTH TO WATER 17.16'  
TOTAL DEPTH 27.6' *Odor*  
WELL VOLUME 1.8 Gal  
PURGE METHOD hand bail

GALLONS PURGED	pH	Conduc-tivity	Temp. °C
I	7.14	692	19.7
1	7.12	668	19.0
2	7.12	667	19.1
3	7.12	668	19.0
4	7.12	666	19.0

WELL # MW-2  
CASING DIAMETER 2"  
DEPTH TO WATER 16.83' *Odor*  
TOTAL DEPTH 25.7' *sheen*  
WELL VOLUME 1.5 Gal  
PURGE METHOD hand bail

GALLONS PURGED	pH	Conduc-tivity	Temp. °C
I	7.10	717	20.6
1	7.08	727	19.9
2	7.08	756	19.9
3	7.08	669	19.9
4	7.08	701	19.9

WELL # MW-3  
CASING DIAMETER 2" *odor*  
DEPTH TO WATER 16.36'  
TOTAL DEPTH 24.5'  
WELL VOLUME 1.4 Gal  
PURGE METHOD hand bail

GALLONS PURGED	pH	Conduc-tivity	Temp. °C
I	6.79	612	20.7
1	6.93	624	20.4
2	7.00	617	20.2
3	7.03	608	20.2
4	7.04	605	20.2
5	7.05	601	20.3

WELL # MW-4  
CASING DIAMETER 2" *odor*  
DEPTH TO WATER 17.08'  
TOTAL DEPTH 27.0'  
WELL VOLUME 1.7 Gal  
PURGE METHOD hand bail

GALLONS PURGED	pH	Conduc-tivity	Temp. °C
I	7.09	694	19.7
1	7.11	709	19.7
2	7.11	717	19.8
3	7.11	723	19.8
4	7.10	726	19.8

Sampled by: B. Bessett

GROUND-WATER MONITORING WELL  
FIELD SAMPLING DATA SHEET

SITE: San Leandro, Marina JOB # 90-Q14-153

DATE: 11/26/90

WELL # MW-5  
CASING DIAMETER 2"  
DEPTH TO WATER 16.95' Odor  
TOTAL DEPTH 27.7' +  
WELL VOLUME 1.8 Gal Sheen  
PURGE METHOD hand bail

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

GALLONS PURGED	pH	Conduc-tivity	Temp. °C
<u>I</u>	<u>7.05</u>	<u>751</u>	<u>20.4</u>
<u>1</u>	<u>7.03</u>	<u>779</u>	<u>20.1</u>
<u>2</u>	<u>7.03</u>	<u>778</u>	<u>20.0</u>
<u>3</u>	<u>7.04</u>	<u>783</u>	<u>19.7</u>
<u>4</u>	<u>7.04</u>	<u>789</u>	<u>19.6</u>
<u>5</u>	<u>7.05</u>	<u>793</u>	<u>19.6</u>

GALLONS PURGED	pH	Conduc-tivity	Temp.

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

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

GALLONS PURGED	pH	Conduc-tivity	Temp.

GALLONS PURGED	pH	Conduc-tivity	Temp.

Sampled by: B. Bassett