received

Ultramar

ALCO HAZMAT

94 MAY -5 PM 4:18

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

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

May 3, 1994

Mr. Scott O. Seery, CHMM
Senior Hazardous Materials Specialist
Alameda County Health Care Services
80 Swan Way, Room 200
Oakland, CA 94621

SUBJECT: FORMER BEACON STATION NO. 574, 22315 REDWOOD ROAD, CASTRO VALLEY, CALIFORNIA

Dear Mr. Seery:

Enclosed is a copy of the First Quarter 1994 Groundwater Monitoring Report for the above-referenced Ultramar facility prepared by Fugro West, Inc. Also included with the report is a copy of the Quarterly Status report describing the work performed this quarter and the work anticipated to be conducted in the next quarter.

Please do not hesitate to call if you have any questions about this project at (209) 583-5571.

Sincerely,

ULTRAMAR INC.

Kenneth R. Earnest
Environmental Specialist II
Marketing Environmental Department

Enclosure: First Quarter 1994 Groundwater Monitoring Report
Quarterly Status Report

cc w/encl: Mr. Rich Hiett, San Francisco Bay Region, RWQCB

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ENVIRONMENTAL PROJECT QUARTERLY STATUS REPORT

DATE REPORT SUBMITTED: May 3, 1994
QUARTER ENDING: March 31, 1994

FORMER SERVICE STATION NO.: 574
ADDRESS: 22315 Redwood Road, Castro Valley, CA
COUNTY: Alameda
ULTRAMAR CONTACT: Kenneth R. Earnest **TEL. NO:** 209-583-5571

BACKGROUND:

On May 5, 1987, five underground storage tanks (two gasoline, two diesel and one waste oil) were excavated and removed from the site. Soil samples were collected from beneath the tanks and analyzed for hydrocarbon constituents. Based on preliminary analytical data related to the collected soil samples, it was determined that elevated levels of gasoline and diesel were present in the soil beneath the former fuel tanks. Soil was overexcavated from beneath the former fuel tanks. Soil samples were collected after the over-excavation and confirmed that the addition excavation was successful.

During March 1991, three ground-water monitoring wells were installed on-site. Laboratory analysis of soil samples obtained from the borings for the installation of the monitoring wells indicated that the soil near the soil/water interface exhibited gasoline range hydrocarbons.

Quarterly monitoring was initiated during the fourth quarter 1991.

Installed five new groundwater monitoring wells in May of 1993. With the installation of these new wells the site is fully defined.

SUMMARY OF THIS QUARTER'S ACTIVITIES:

Performed fourth quarter monitoring on March 1, 1994.

Conducted a soil gas survey/performance test, aquifer pump test and air sparging test during first quarter 1994.

RESULT OF QUARTERLY MONITORING:

Results indicate that since the previous sampling event benzene and TPH-g concentrations in MW-1, MW-2 and MW-3 have decreased. Benzene concentrations in MW-4, MW-5, MW-6, MW-7 and MW-8 have remained not detected since installation.

PROPOSED ACTIVITY OR WORK FOR NEXT QUARTER:

ACTIVITY	ESTIMATED COMPLETION DATE
Second quarter monitoring	May 1994

FUGRO WEST, INC.

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

April 11, 1994

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

Subject: **First Quarter 1994 Groundwater Monitoring Report**
Beacon Station #574
22315 Redwood Road, Castro Valley, California

Dear Mr. Earnest:

This report documents the results of quarterly groundwater monitoring conducted on March 1, 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 southwest (Figure 2) at a gradient of <0.01 ft/ft. Groundwater levels have increased an average of 0.83 feet compared to the last monitoring event.

FUGRO

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-4, MW-5, MW-6, MW-7, and MW-8. Concentrations decreased in wells MW-1, MW-2, and MW-3 compared to prior sampling.

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

Mr. Scott Seery
Senior Hazardous Materials Specialist
Alameda County Health Agency
Division of Hazardous Materials
Department of Environmental Health
80 Swan Way, Room 350
Oakland, California 94621

Mr. Rich Hiett
San Francisco Bay Regional Water Quality Control Board
2101 Webster Street, Suite 500
Oakland, California 94612

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

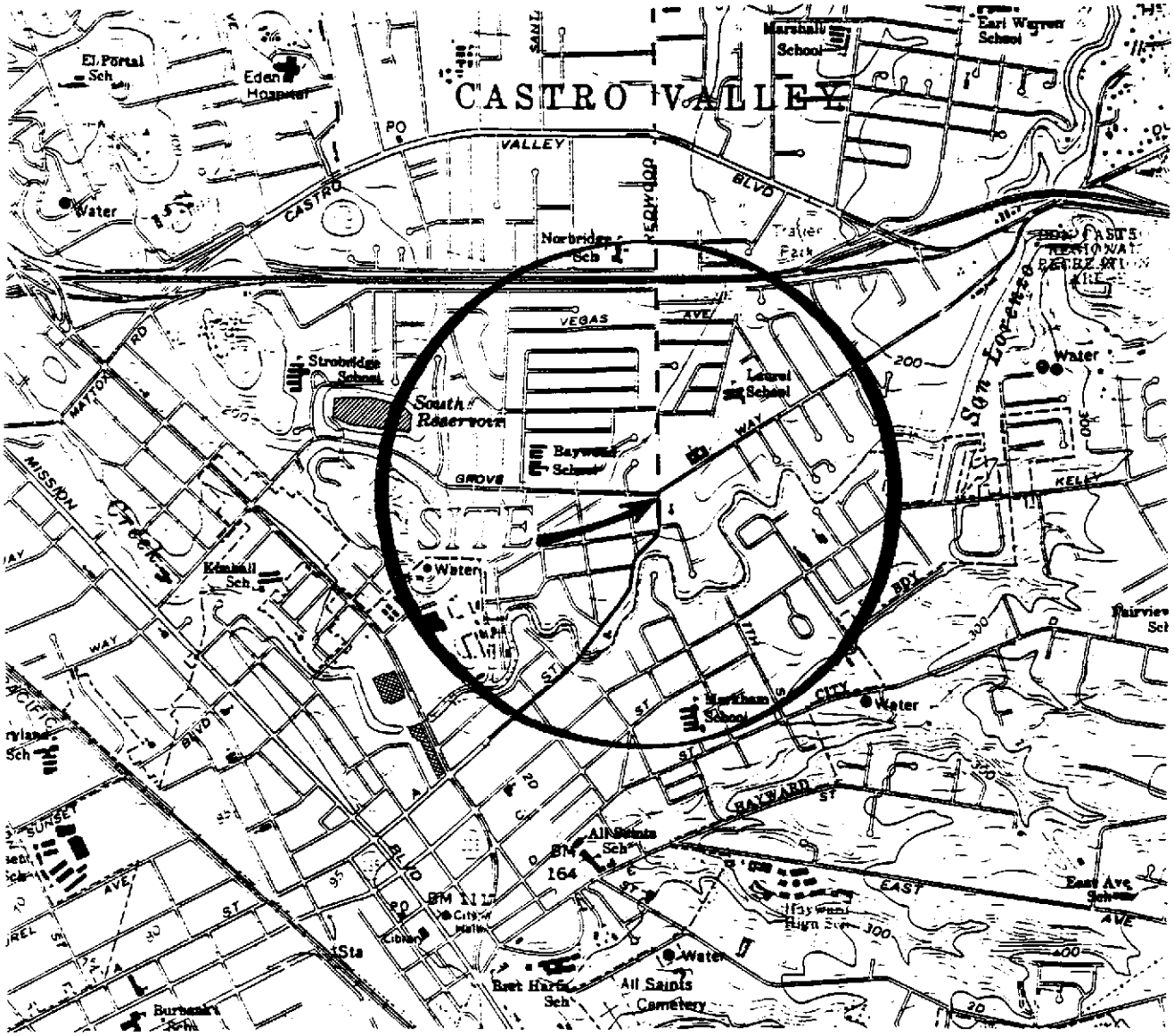
Owen M. Kittredge
Registered Geologist
CRG No. 5853

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

4/11/94
Date

SRR/OMK/srr

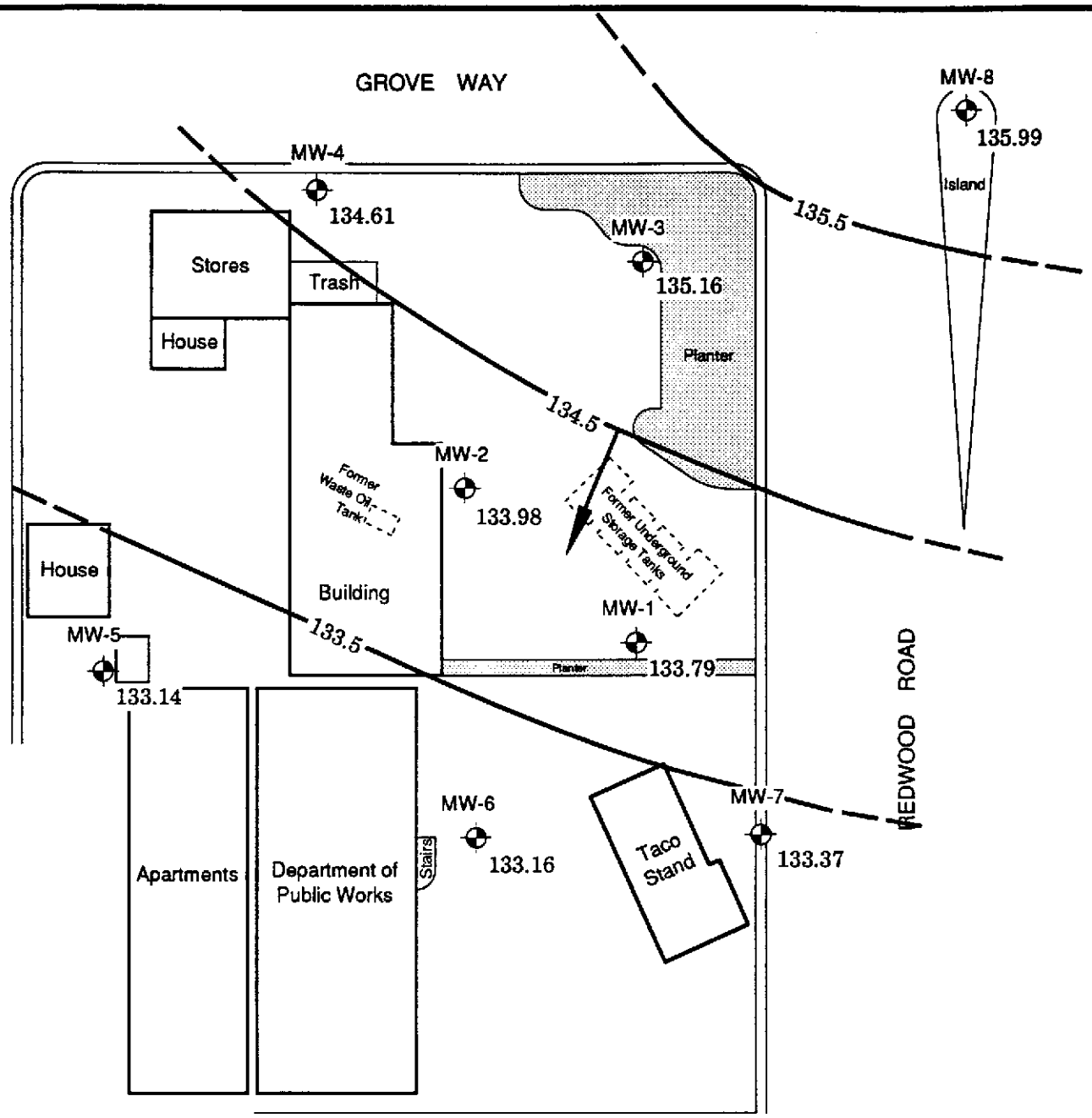
Attachments



GENERAL NOTES:

BASE MAP FROM USGS
7.5 MINUTE TOPOGRAPHIC
HAYWARD, CALIF.

AEGIS ENVIRONMENTAL, INC.		SITE LOCATION MAP	FIGURE 1
DRAWN BY: Ed Berand	DATE: April 13, 1992	Former Beacon Station # 574 22315 Redwood Road Castro Valley, CA	
REVISED BY:	DATE:		PROJECT NUMBER: 10-91212
REVIEWED BY: John Giorgi	DATE: April 15, 1992		



LEGEND

133.79 — Monitoring Well, Groundwater Elevation in Feet

Potentiometric Surface Contour Line (Dashed Where Inferred)

Estimated Direction of Groundwater Flow

NOTES

Site Sketch After Site Map

By Acton • Mickelson • van Dam, Inc.

All locations Are Approximate

0 50 100

Approximate Scale In Feet

Hydraulic Gradient = < 0.01 ft/ft

Contour Interval = 1.0 ft

AEGIS ENVIRONMENTAL

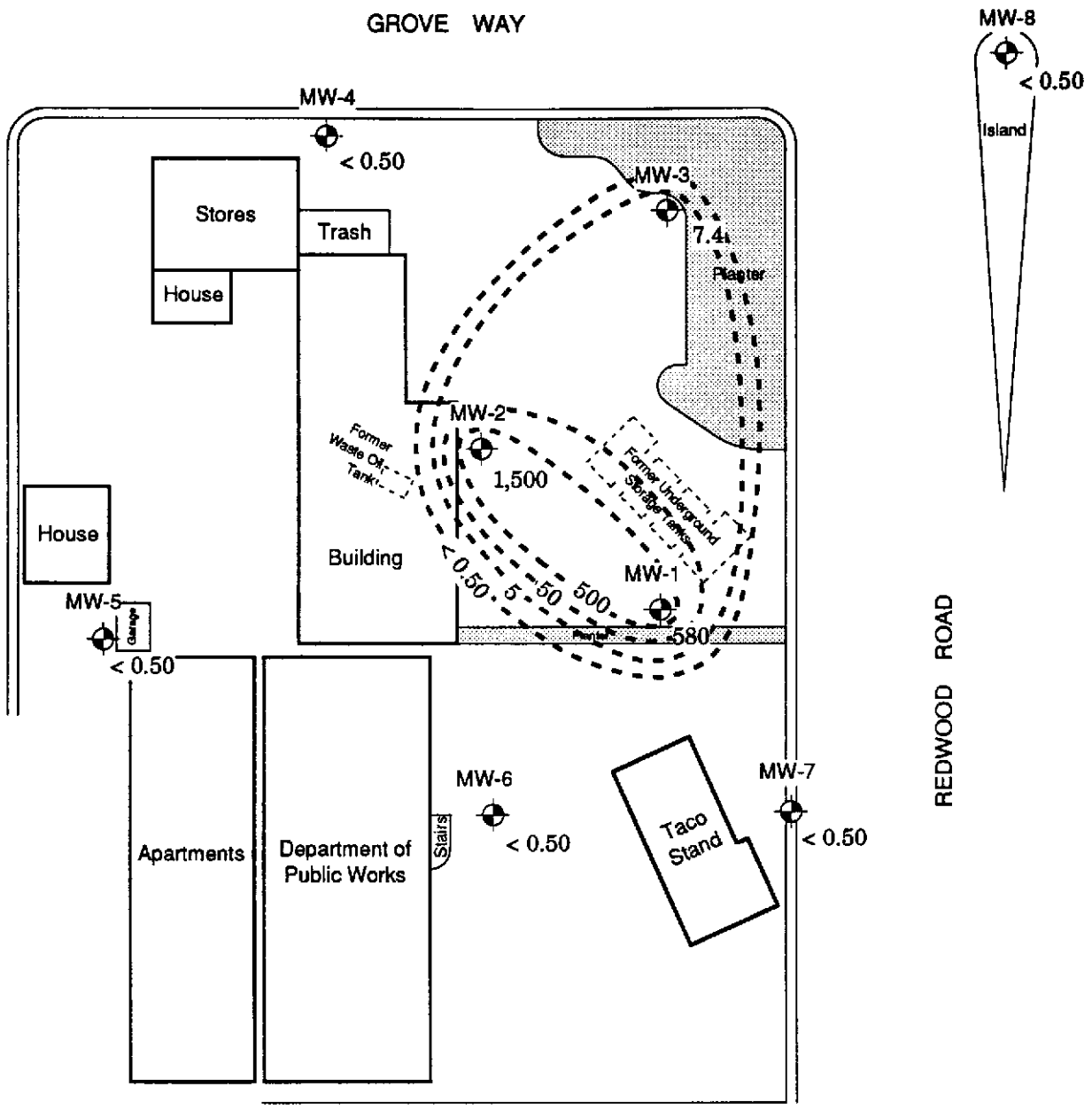
POTENTIOMETRIC SURFACE MAP
March 1, 1994

FIGURE 2

DRAWN BY:	DATE:
D. Hada	March 16, 1994
REVISED BY:	DATE:
REVIEWED BY:	DATE:

Former Beacon Station # 574
22315 Redwood Road
Castro Valley, CA

PROJECT NUMBER: 92-779



LEGEND

- Monitoring Well
- 580 Benzene Concentration (parts-per-billion)
- Inferred Iso-Concentration Limits
- < 0.50 Below Indicated Detection Limit

NOTES

Site Sketch After Site Map

By Acton • Mickelson • van Dam, Inc.

All locations Are Approximate

0 50 100

Approximate Scale In Feet

Contour Interval = Exponential

AEGIS ENVIRONMENTAL

DRAWN BY: D. Hada	DATE: March 16, 1994
REVISED BY:	DATE:
REVIEWED BY:	DATE:

DISTRIBUTION MAP OF BENZENE IN GROUNDWATER March 1, 1994

Former Beacon Station # 574
22315 Redwood Road
Castro Valley, CA

FIGURE 3

PROJECT NUMBER: 92-779

TABLE 1
WATER LEVEL DATA
BEACON STATION #574
22315 REDWOOD ROAD, CASTRO VALLEY, 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	03/27/92	156.55	22.43	134.12	—	
	06/04/92		23.40	133.15	—	
	09/23/92		24.07	132.48	—	
	11/12/92		24.16	132.39	29.33	
	02/02/93		21.87	134.68	29.80	
	05/07/93		22.58	133.97	29.84	
	05/18/93		22.66	133.89	—	
	08/11/93		23.41	133.14	29.81	
	11/05/93		24.09	132.46	29.81	
	03/01/94		22.76	133.79	29.85	
MW-2	03/27/92	155.17	20.82	134.35	—	
	06/04/92		21.81	133.36	—	
	09/23/92		22.45	132.72	—	
	11/12/92		22.60	132.57	29.71	
	02/02/93		20.28	134.89	29.73	
	05/07/93		20.97	134.20	29.73	
	05/18/93		21.06	134.11	—	
	08/11/93		21.85	133.32	29.70	
	11/05/93		22.32	132.85	29.70	
	03/01/94		21.19	133.98	29.68	
MW-3	03/27/92	157.13	21.46	135.67	—	
	06/04/92		22.34	134.79	—	
	09/23/92		22.84	134.29	—	
	11/12/92		23.04	134.09	29.55	
	02/02/93		21.03	136.10	29.45	
	05/07/93		21.59	135.54	29.53	
	05/18/93		21.73	135.40	—	
	08/11/93		22.31	134.82	29.41	
	11/05/93		22.85	134.28	29.41	
	03/01/94		21.97	135.16	29.55	
MW-4	05/18/93	151.96	17.55	134.41	—	
	08/11/93		17.50	134.46	28.43	
	11/05/93		15.84	136.12	28.43	
	03/01/94		17.35	134.61	28.11	
MW-5	05/18/93	148.68	15.72	132.96	—	
	08/11/93		16.42	132.26	25.43	
	11/05/93		16.92	131.76	25.43	
	03/01/94		15.54	133.14	25.00	
MW-6	05/18/93	153.96	20.80	133.16	—	
	08/11/93		21.64	132.32	31.15	
	11/05/93		22.11	131.85	31.15	
	03/01/94		20.80	133.16	29.96	
MW-7	05/18/93	156.09	22.64	133.45	—	
	08/11/93		23.25	132.84	30.75	
	11/05/93		23.93	132.16	30.75	
	03/01/94		22.72	133.37	30.11	
MW-8	05/18/93	158.04	21.55	136.49	—	
	08/11/93		22.43	135.61	34.82	
	11/05/93		23.00	135.04	34.82	
	03/01/94		22.05	135.99	34.04	

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.

Fugro
94-574/February 1994

TABLE 2
ANALYTICAL RESULTS: GROUNDWATER
BEACON STATION #574
22315 REDWOOD ROAD, CASTRO VALLEY, CALIFORNIA
(All results in parts-per-billion)

Monitoring Well	Date Collected	Total Petroleum Hydrocarbons			Aromatic Volatile Organics			
		Gasoline	Diesel	Motor Oil	Benzene	Toluene	Ethyl-benzene	Total Xylenes
MW-1	03/27/92	1,600	<50	<50	760	900	230	1,100
	06/04/92	2,600	<800	NA	270	57	230	440
	09/23/92	3,400	NA	NA	480	430	110	550
	11/12/92	2,700	NA	NA	5.8	<5.0	140	340
	02/02/93	8,500	NA	NA	760	770	250	1,200
	05/07/93	7,700	NA	NA	970	630	280	1,500
	08/11/93	11,000	NA	NA	1,400	1,000	260	1,600
	11/05/93	36,000	NA	NA	6,200	4,700	1,400	7,100
	03/01/94	3,800	NA	NA	580	490	110	620
MW-2	03/27/92	18,000	<50	<50	2,400	2,300	870	3,300
	06/04/92	14,000	<5,000	NA	1,900	1,700	580	2,300
	09/23/92	22,000	NA	NA	2,100	1,500	760	2,900
	11/12/92	20,000	NA	NA	2,400	860	540	3,500
	02/02/93	24,000	NA	NA	2,700	1,900	590	2,600
	05/07/93	19,000	NA	NA	1,800	1,300	460	2,600
	08/11/93	23,000	NA	NA	2,300	1,500	550	2,300
	11/05/93	30,000	NA	NA	3,100	2,900	860	3,700
	03/01/94	15,000	NA	NA	1,500	490	280	1,800
MW-3	03/27/92	160	<50	<50	9.2	4.8	10	23
	06/04/92	120	<50	NA	7.5	2.7	0.5	15
	09/23/92	220	NA	NA	8.3	4.3	6.2	19
	11/12/92	230	NA	NA	12	5.5	7.7	19
	02/02/93	86	NA	NA	2.4	0.71	2.7	6.2
	05/07/93	140	NA	NA	2.6	1.2	3.9	8.4
	08/11/93	490	NA	NA	15	8.1	14	37
	11/05/93	820	NA	NA	45	24	34	93
	03/01/94	410	NA	NA	7.4	2.2	5.6	10
MW-4	05/18/93	<50	NA	NA	<0.5	<0.5	<0.5	<0.5
	08/11/93	<50	NA	NA	<0.5	<0.5	<0.5	<0.5
	11/05/93	<50	NA	NA	<0.5	<0.5	<0.5	<0.5
	03/01/94	<50	NA	NA	<0.5	<0.5	<0.5	<0.5
MW-5	05/18/93	<50	NA	NA	<0.5	<0.5	<0.5	<0.5
	08/11/93	<50	NA	NA	<0.5	<0.5	<0.5	<0.5
	11/05/93	<50	NA	NA	<0.5	<0.5	<0.5	<0.5
	03/01/94	<50	NA	NA	<0.5	<0.5	<0.5	<0.5
MW-6	05/18/93	170	NA	NA	<0.5	<0.5	<0.5	<0.5
	08/11/93	78	NA	NA	<0.5	<0.5	<0.5	<0.5
	11/05/93	170	NA	NA	<0.5	<0.5	<0.5	0.62
	03/01/94	210	NA	NA	<0.5	<0.5	<0.5	<0.5
MW-7	05/18/93	<50	NA	NA	<0.5	<0.5	<0.5	<0.5
	08/11/93	<50	NA	NA	<0.5	<0.5	<0.5	<0.5
	11/05/93	<50	NA	NA	<0.5	<0.5	<0.5	<0.5
	03/01/94	69	NA	NA	<0.5	<0.5	<0.5	<0.5
MW-8	05/18/93	<50	NA	NA	<0.5	<0.5	<0.5	<0.5
	08/11/93	<50	NA	NA	<0.5	<0.5	<0.5	<0.5
	11/05/93	<50	NA	NA	<0.5	<0.5	<0.5	<0.5
	03/01/94	<50	NA	NA	<0.5	<0.5	<0.5	<0.5

NOTES: < = Below indicated detection limit.
NS = Not sampled.
NA = Not analyzed.

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.

#574

TABLE 2

WATER LEVEL DATA
(measurements in feet)

Monitoring Well	Date	Reference Elevation (top of casing)	Depth to Ground Water	Ground Water Elevation
MW-1	04-01-91	156.55	22.37	134.18
	03-27-92		22.43	134.12
	06-04-92		23.40	133.15
	09-23-92		24.07	132.48
	11-12-92		24.16	132.39
	02-02-93		21.87	134.68
	05-18-93		22.66	133.89
MW-2	04-01-91	155.17	20.82	134.25
	03-27-92		20.82	134.35
	06-04-92		21.81	133.36
	09-23-92		22.45	132.72
	11-12-92		22.60	132.57
	02-02-93		20.28	134.89
	05-18-93		21.06	134.11
MW-3	04-01-91	157.13	21.55	135.58
	03-27-92		21.46	135.67
	06-04-92		22.34	134.79
	09-23-92		22.84	134.29
	11-12-92		23.03	134.09
	02-02-93		21.03	136.10
	05-18-93		21.73	135.40
MW-4	05-18-93	151.96	17.55	134.41
MW-5	05-18-93	148.68	15.72	132.96
MW-6	05-18-93	153.96	20.80	133.16
MW-7	05-18-93	156.09	22.64	133.45
MW-8	05-18-93	158.04	21.55	136.49

TABLE 3

GROUND WATER ANALYTICAL RESULTS
(concentrations in parts per billion)

Monitoring Well	Date Collected	Total Petroleum Hydrocarbons			Aromatic Volatile Organics			
		Gasoline	Diesel	Motor Oil	Benzene	Toluene	Ethylbenzene	Total Xylenes
MW-1	04-01-91	4,100	<100	-	140	570	76	460
	03-27-92	5,600	<50	<50	760	900	230	1,100
	06-04-92	2,600	<800	-	270	57	230	440
	09-23-92	3,400	-	-	480	430	110	550
	11-12-92	2,700	-	-	5.8	<5.0	140	340
	02-02-93	8,500	-	-	760	770	250	1,200
	05-07-93	7,700	-	-	970	630	280	1,500
MW-2	04-01-91	10,000	<100	-	650	640	150	960
	03-27-92	18,000	<50	<50	2,400	2,300	870	3,300
	06-04-92	14,000	<5,000	-	1,900	1,700	580	2,300
	09-23-92	22,000	-	-	2,100	1,500	760	2,900
	11-12-92	29,000	-	-	2,400	860	540	3,500
	02-02-93	24,000	-	-	2,700	1,900	590	2,600
	05-07-93	19,000	-	-	1,800	1,300	460	2,600
MW-3	04-01-91	3,100	<100	-	41	91	37	420
	03-27-92	160	<50	<50	9.2	4.8	10	23
	06-04-92	120	<50	-	7.5	2.7	0.5	15
	09-23-92	220	-	-	8.3	4.3	6.2	19
	11-12-92	230	-	-	12	5.5	7.7	19
	02-02-93	86	-	-	2.4	0.71	2.7	6.2
	05-07-93	140	-	-	2.6	1.2	3.9	8.4
MW-4	05-18-93	<50	-	-	<0.50	<0.50	<0.50	<0.50
MW-5	05-18-93	<50	-	-	<0.50	<0.50	<0.50	<0.50
MW-6	05-18-93	170	-	-	<0.50	<0.50	<0.50	<0.50
MW-7	05-18-93	<50	-	-	<0.50	<0.50	<0.50	<0.50
MW-8	05-18-93	<50	-	-	<0.50	<0.50	<0.50	<0.50

Note: Dash (-) indicates that the sample was not analyzed for this constituent.

March 8, 1994
Sample Log 8797

RECEIVED
MAR 09 1994

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

Subject: Analytical Results for 8 Water Samples
Identified as: Project # 94-574-01 (Former Beacon 574)
Received: 03/04/94

Dear Ms. Richgels:

Analysis of the sample(s) referenced above has been completed. This report is written to confirm results communicated on March 8, 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:

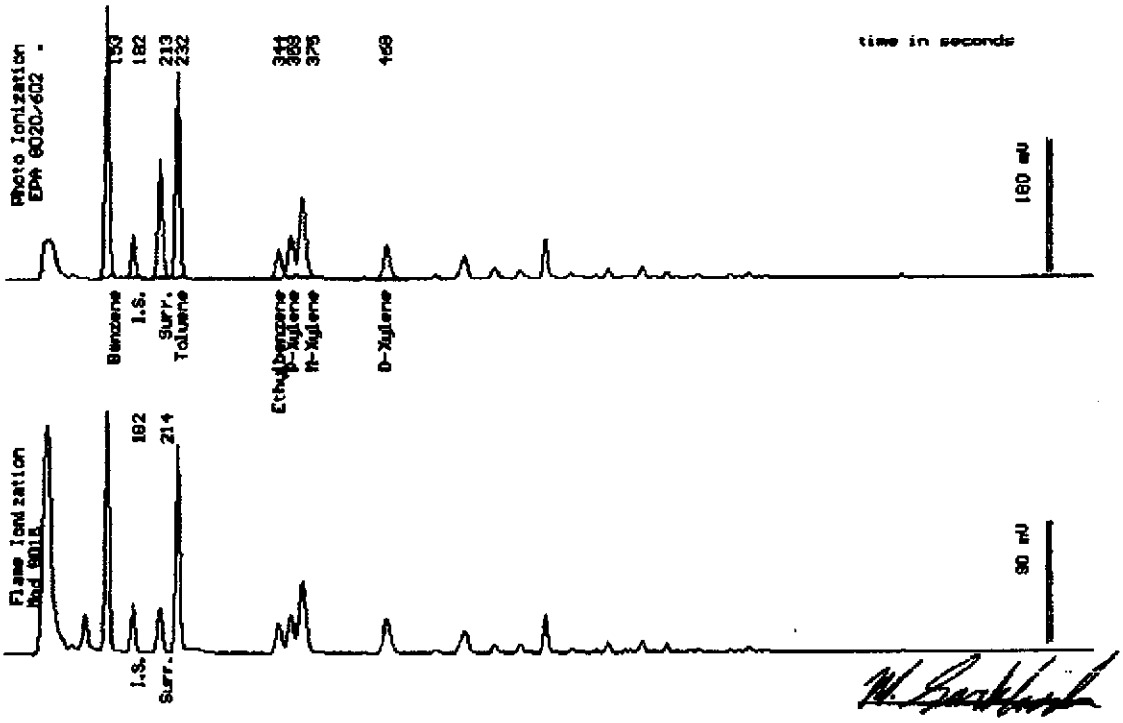
Joel Kiff
Senior Chemist

Sample Log 8797
8797-1

Sample: MW-1

From : Project # 94-574-01 (Former Beacon 574)
Sampled : 03/01/94
Dilution : 1:5 QC Batch : 4070B
Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
Benzene	(2.5)	580
Toluene	(2.5)	490
Ethylbenzene	(2.5)	110
Total Xylenes	(2.5)	620
TPH as Gasoline	(250)	3800
Surrogate Recovery		96 %



Date Analyzed: 03-07-94
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Mitra Sarkhosh
Senior Chemist

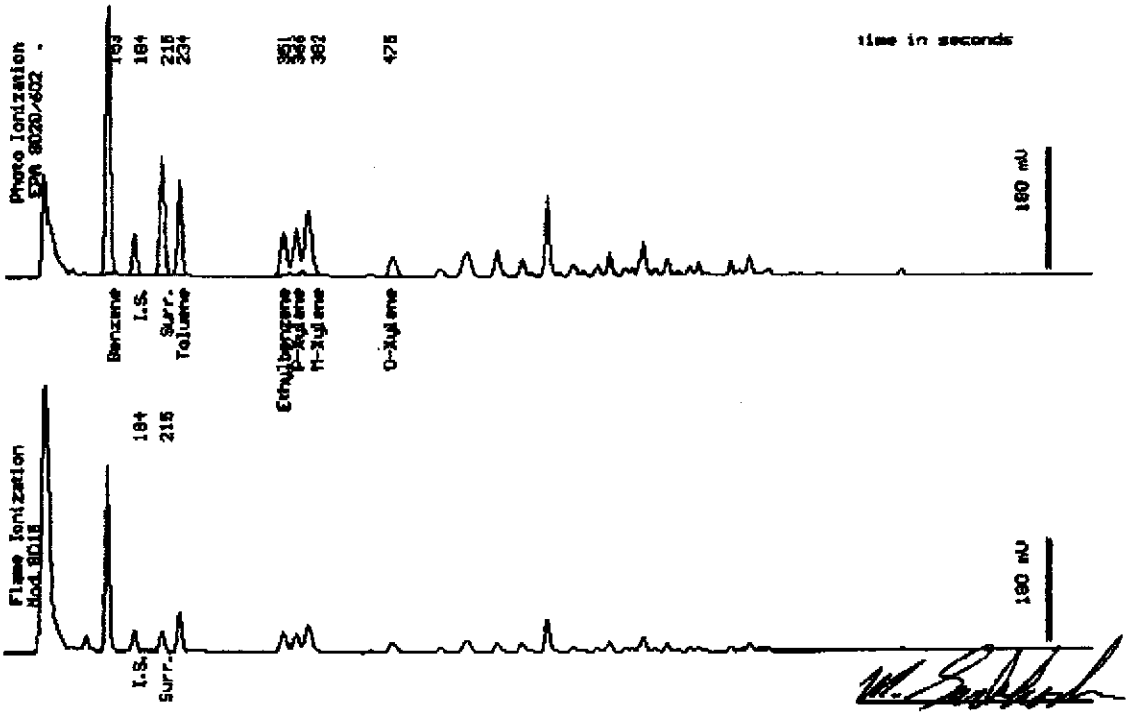
Sample Log 8797

8797-2

Sample: MW-2

From : Project # 94-574-01 (Former Beacon 574)
Sampled : 03/01/94
Dilution : 1:10 QC Batch : 4070B
Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
Benzene	(5.0)	1500
Toluene	(5.0)	490
Ethylbenzene	(5.0)	350
Total Xylenes	(5.0)	1000
TPH as Gasoline	(500)	13000
Surrogate Recovery		101 %



Date Analyzed 03-07-94
Column : 0.53mm ID X 30m DB-WAX (J&W Scientific)

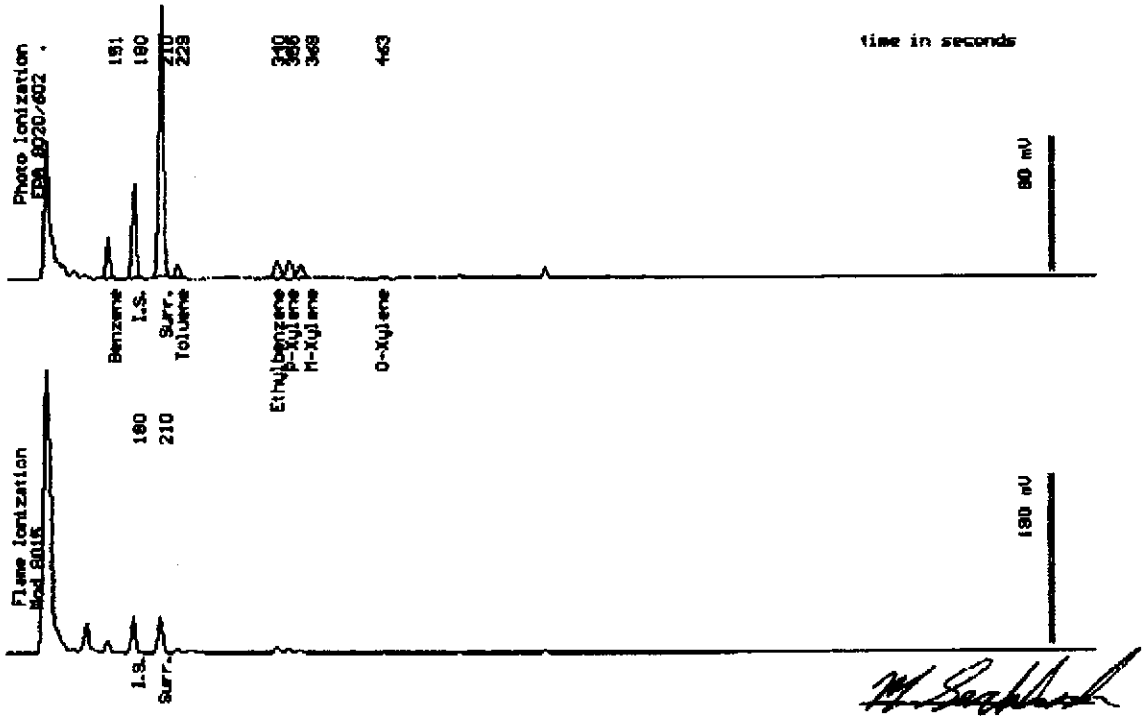
Mitra Sarkhosh
Senior Chemist

Sample Log 8797
8797-3

Sample: MW-3

From : Project # 94-574-01 (Former Beacon 574)
Sampled : 03/01/94
Dilution : 1:1 QC Batch : 4070B
Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
Benzene	(.50)	7.4
Toluene	(.50)	2.7
Ethylbenzene	(.50)	5.6
Total Xylenes	(.50)	10
TPH as Gasoline	(50)	410
Surrogate Recovery		96 %



Date Analyzed: 03-07-94
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

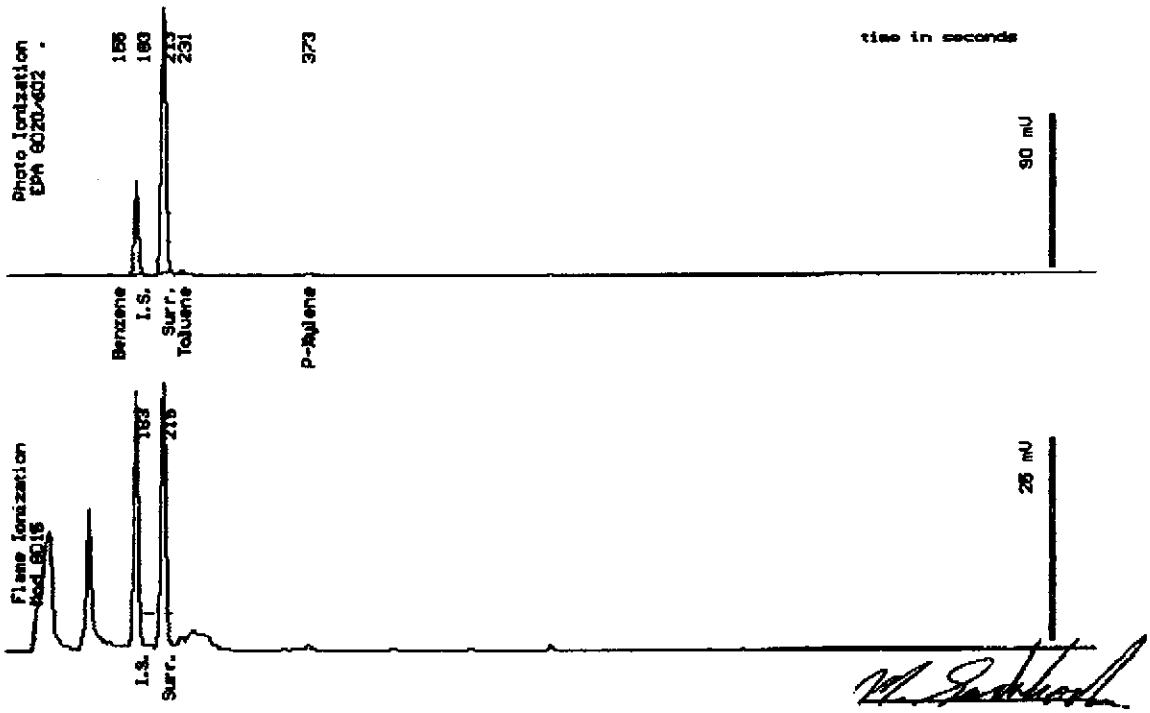
Mitra Sarkhosh
Senior Chemist

Sample Log 8797
8797-4

Sample: MW-4

From : Project # 94-574-01 (Former Beacon 574)
Sampled : 03/01/94
Dilution : 1:1 QC Batch : 4070B
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		105 %



Date Analyzed 03-07-94
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Mitra Sarkhosh
Senior Chemist

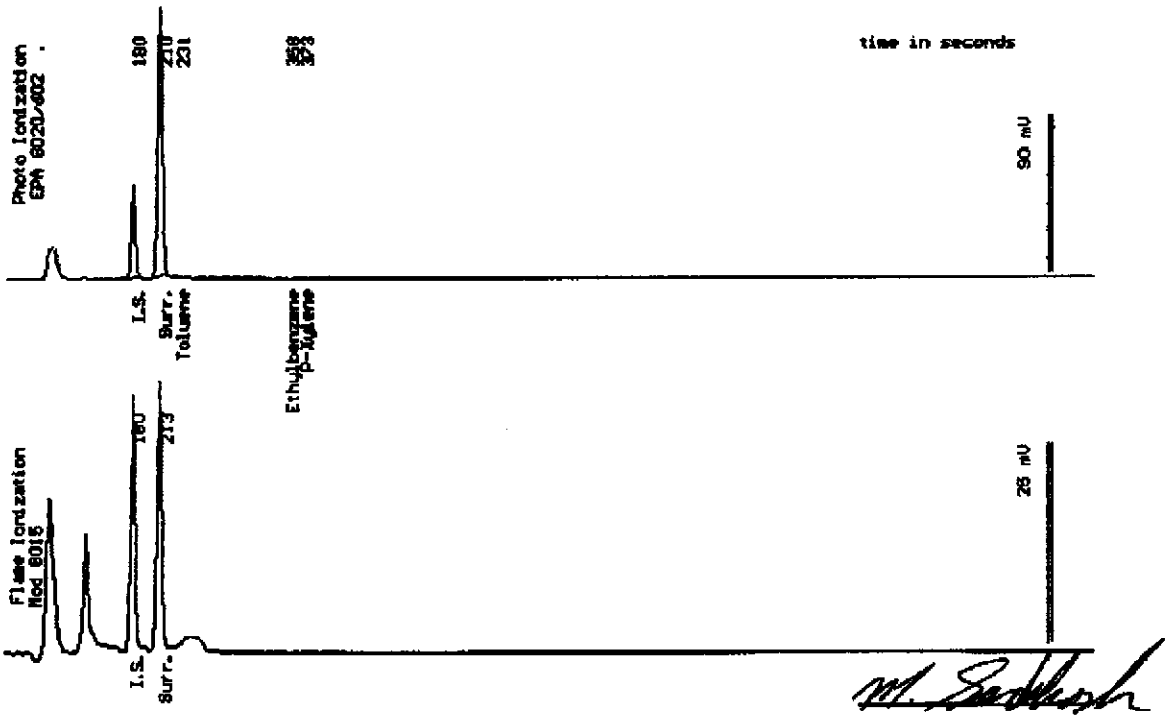
Sample Log 8797

8797-5

Sample: MW-5

From : Project # 94-574-01 (Former Beacon 574)
Sampled : 03/01/94
Dilution : 1:1 QC Batch : 4070B
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		106 %



Date Analyzed 03-07-94
Column : 0.53mm ID x 30m DBWAX (J&W Scientific)

Mitra Gerkhosh
Senior Chemist

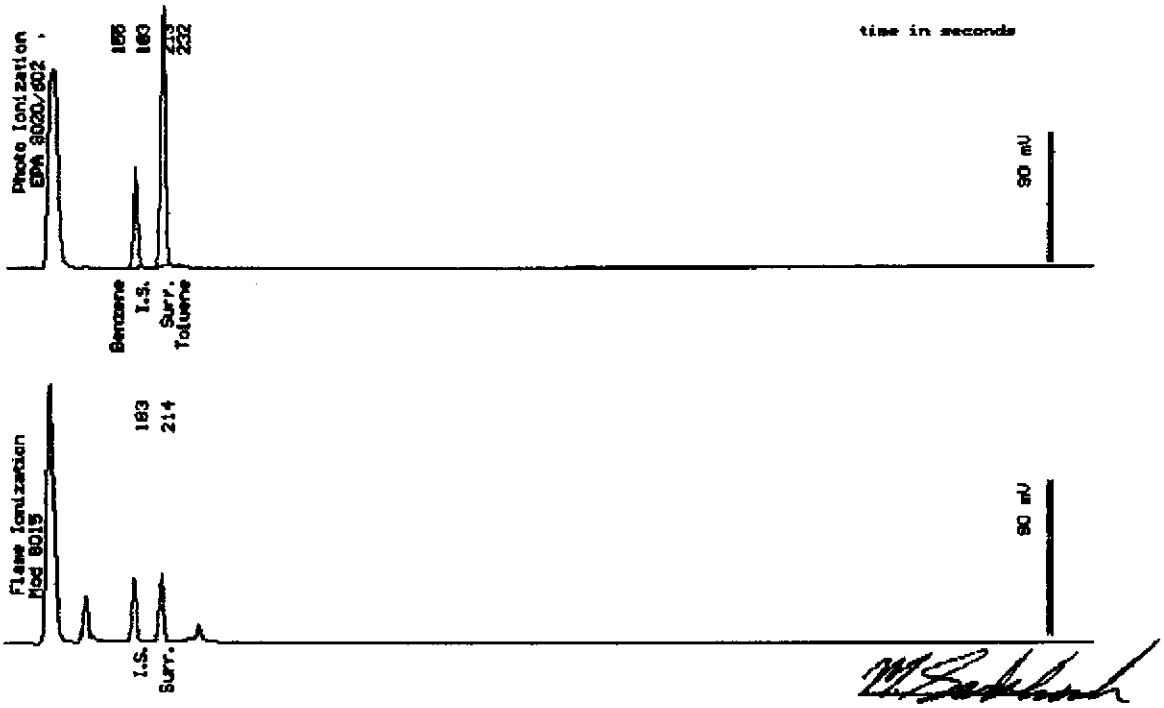
Sample Log 8797

8797-6

Sample: **MW-6**

From : Project # 94-574-01 (Former Beacon 574)
Sampled : 03/01/94
Dilution : 1:1 QC Batch : 4070B
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)	210
Surrogate Recovery		96 %



Date Analyzed 03-07-94
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

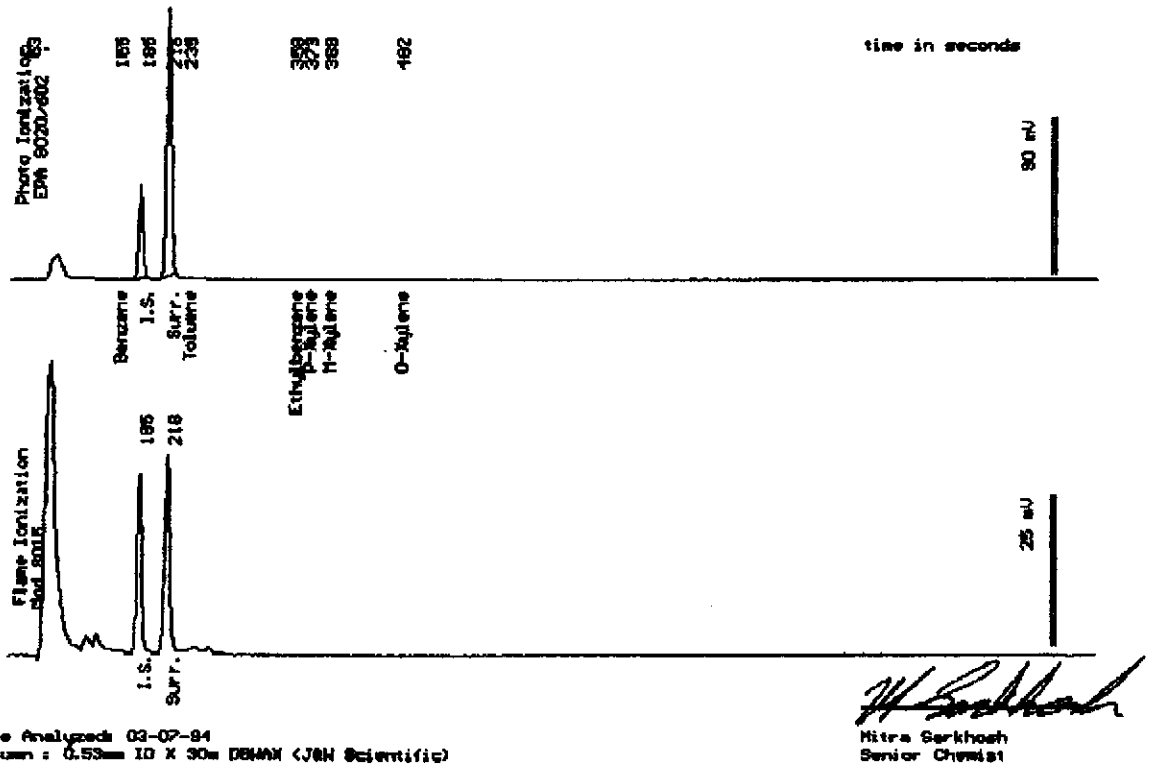
Mitra Gerkhosh
Senior Chemist

Sample Log 8797
8797-7

Sample: MW-7

From : Project # 94-574-01 (Former Beacon 574)
Sampled : 03/01/94
Dilution : 1:1 QC Batch : 4070B
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)	60
Surrogate Recovery		104 %



Date Analyzed 03-07-94
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Mitra Serkhosh
Senior Chemist

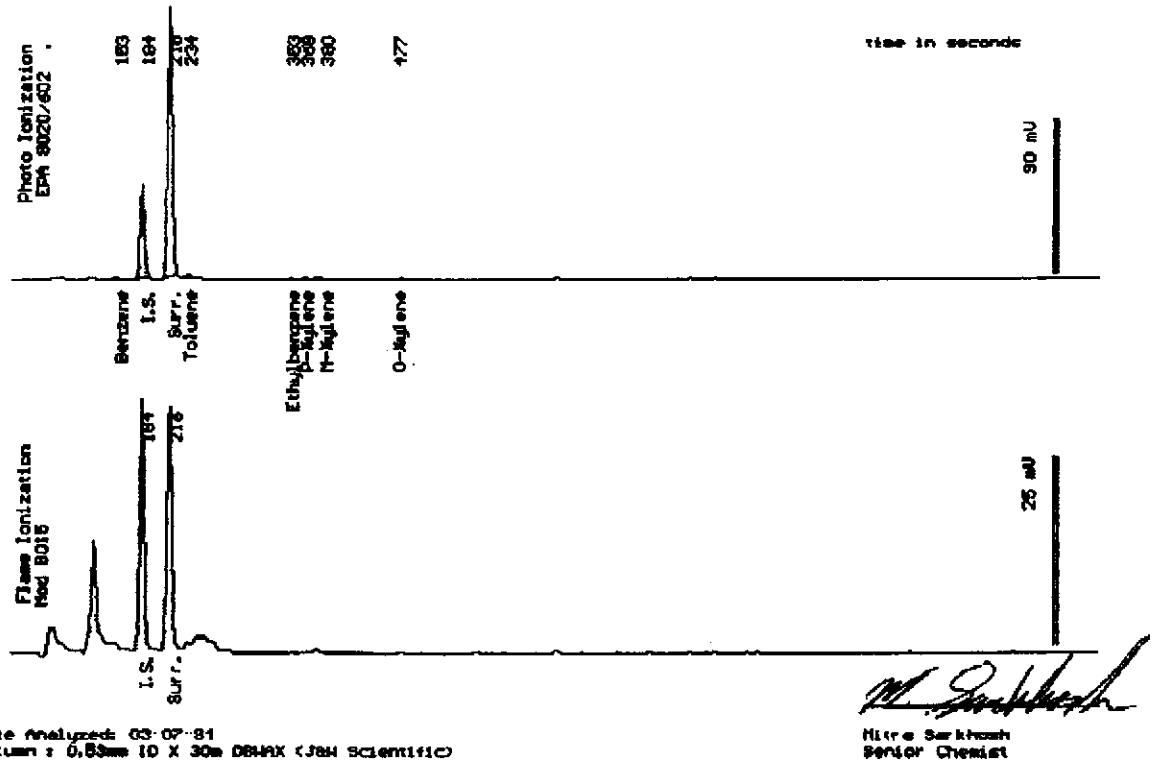
Sample Log 8797

8797-8

Sample: MW-8

From : Project # 94-574-01 (Former Beacon 574)
Sampled : 03/01/94
Dilution : 1:1 QC Batch : 4070B
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		103 %



Date Analyzed: 03-07-94
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Mitra Sarkhosh
Senior Chemist

Ultramar Inc.

CHAIN OF CUSTODY REPORT

BEACON

Beacon Station No. Former Beacon 574	Sampler (Print Name) Hal Hansen			ANALYSES				Date 3-4-94	Form No. 1 of 1
Project No. 94-574-01	Sampler (Signature) Hal Hansen								
Project Location 22315 Redwood Rd, Castro Valley Ca.	Affiliation Dames & Env.			BTEX	TPH (gasoline)	TPH (diesel)	No. of Containers	5 day TAT	
Sample No./Identification	Date	Time	Lab No.					REMARKS	
MW-1	3-1-94	600		X	X		3		
MW-2		450							
MW-3		400							
MW-4		255							
MW-5		1150							
MW-6		1230							
MW-7		115							
MW-8		145							

RECEIVED
Oakland, C.E.S.
date 3/9/94

Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
Hal Hansen Dames & Env.	3/4/94	1040		3/4/94	1040
Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
	3/4/94	1605			
Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
			WEST	3/4/94	1055

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

Bill to: ULTRAMAR INC.
525 West Third Street
Hanford, CA 93230
Attention: Kenneth Earnest

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

32-8008 1/90

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

RECEIVED
MAR 08 1994

Project Address: Tower Beacon 574
2315 Redwood Rd
Castro Valley Ca

Date: 3-1-94

Project No.: 94-574-01

Recorded by:

Well No	Time	Well Elev. TOC	Depth to Gr. Water	Measured Total Depth	Gr. Water Elevation	Depth to Product	Product Thickness	Comments
MW-1	500		22.76	29.85		NA		
MW-2	417		21.19	29.68				
MW-3	328		21.97	29.55				
MW-4	238		17.35	28.11				
MW-5	1124		15.54	25.00				
MW-6	1203	153.96	20.80	29.96	133.16			WL checked twice
MW-7	1250	156.09	22.72	30.11	133.37			
MW-8	126		22.05	34.04				

Notes:

DOULOS ENVIRONMENTAL COMPANY SAMPLING INFORMATION SHEET

Client: Ultramar (former Tosco) Sampling Date: 3-1-94

Site: Beacon 574 Project No.: 94-574-01

22315 Redwood Rd Well Designation: MW-2

Castro Valley 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): 1/2
Well cover type: 8" UV_____ 12" UV X 12" EMCO_____ 8" BK_____
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"____ 4" X 6"____ 8"____

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

Initial Measurement
Time: 417
Depth of well: 29.68
Depth to water: 21.19

Recharge Measurement
Time: 445
Depth to water: 23.81

Calculated purge: 22 gal
Actual purge: 22 gal

Start purge: 425 Sampling time: 450

Time	Temp.	E.C.	pH	Turbidity	Volume
430	72.3	1240	7.01	—	1
435	72.1	1900	7.00	—	2
440	72.4	1910	6.75	—	3
445	72.1	1920	6.72	—	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: Kurt Hanson

DOULOS ENVIRONMENTAL COMPANY SAMPLING INFORMATION SHEET

Client: Ultramar (Tosco) Sampling Date: 3-1-94

Site: Beacon 574 Project No.: 94-574-01

12315 Redwood Rd Well Designation: MW-3

Castro Valley 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): flt
Well cover type: 8" UV____ 12" UV X 12" EMCO____ 8" BK____
12" BK____ 12" DWP____ 12" CNI____ 36" CNI____ Other____
General condition of wellhead assembly: Excellent (Good) Fair Poor

Purging Equipment: ____2" disposable bailer ____Submersible pump
____2" PVC bailer ____Dedicated bailer
____4" PVC bailer X Centrifugal pump

Sampled with: Disposal bailer: X Teflon bailer: ____

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

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

Initial Measurement
Time: 328
Depth of well: 29.85
Depth to water: 21.97

Recharge Measurement
Time: 357
Depth to water: 22.94

Calculated purge: 19.7
Actual purge: 20

Start purge: 338 Sampling time: 400

Time	Temp.	E.C.	pH	Turbidity	Volume
	69.1	1789	7.43	—	1
			7.30	—	2
	72.1	1880	7.19	—	3
	71.9	1450	7.22	—	4

Sample appearance: cloudy 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: 1
6" Locking Cap:____ Pinned Allenhead (DWP):____

Remarks: ____

Signature: Hal Hanson

DOULOS ENVIRONMENTAL COMPANY **SAMPLING INFORMATION SHEET**

Client: Ultramar Former Beacon 5711 Sampling Date: 3-1-94

Site: 22315 Redwood Rd Project No.: 94-5714-01

Castro Valley CA Well Designation: MW-4

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

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

Sampled with: 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: 238 Depth of well: 26.11 Depth to water: 17.35

Recharge Measurement: Time: 252 Depth to water: 16.04

Calculated purge: 6.9 Actual purge: 7 gal

Start purge: 245 Sampling time: 255

Time	Temp.	E.C.	pH	Turbidity	Volume
247				—	1
248	70.2	1317	7.97	—	2
249				—	3
250	70.9	1313	7.86	—	4

Sample appearance: clear Lock: none

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

Remarks: no lock

Signature: Robert Johnson

DOULOS ENVIRONMENTAL COMPANY — **SAMPLING INFORMATION SHEET**

Client: Unocal — Sampling Date: 3-1-94

Site: Beacon 574 (Former) — Project No.: 94-574-01

22315 Redwood Road — Well Designation: MW-5

Castro Valley 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 X 12" UV _____ 12" EMCO _____ 8" BK _____
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: 1124
Depth of well: 25.00
Depth to water: 15.54

Recharge Measurement
Time: 1148
Depth to water: 16.78

Calculated purge: 6.1 gal
Actual purge: 6.1 gal

Start purge: 1134 Sampling time: 1160

Time	Temp.	E.C.	pH	Turbidity	Volume
1135	62.2	1884	11.4	—	1
1135	61.4	1144	9.05	—	2
1137	63.2	1135	8.65	—	3
1139	63.4	1135	8.60	—	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: _____

Signature: Hal Hansen

DOULOS ENVIRONMENTAL COMPANY — **SAMPLING INFORMATION SHEET**

Client: Ultramar — Sampling Date: 3-1-94

Site: Texaco Beacon 574 — Project No.: 94-574-01

22315 Redwood Rd — Well Designation: MW-6

Castro Valley 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): 12
Well cover type: 8" UV X 12" UV ____ 12" EMCO ____ 8" BK ____
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: 1203
Depth of well: 21.96
Depth to water: 20.60

Recharge Measurement
Time: 1228
Depth to water: 21.03

Calculated purge: 6 gal
Actual purge: 6 gal

Start purge: 1210 Sampling time: 1230

Time	Temp.	E.C.	pH	Turbidity	Volume
1215	64.2	1217	8.42	—	1
1221	67.9	1118	8.00	—	2
1224	67.9	1062	7.95	—	3
1226	68.2	1054	7.90	—	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: 1
6" Locking Cap: ____ Pinned Allenhead (DWP): ____

Remarks: ____

Signature: Karl Hansen

DOULOS ENVIRONMENTAL COMPANY — **SAMPLING INFORMATION SHEET**

Client: Ultramar
Site: Beacon 574
22315 Redwood Rd
Castro Valley, Ca

Sampling Date: 3-1-94
Project No.: 94-574-01
Well Designation: MW-7

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): 8
Well cover type: 8" UV X 12" UV_____ 12" EMCO_____ 8" BK_____
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: 1250
Depth of well: 30.11
Depth to water: 22.72

Recharge Measurement
Time: 1113
Depth to water: 22.93

Calculated purge: 4.7
Actual purge: 5.0

Start purge: 12:59 Sampling time: 115

Time	Temp.	E.C.	pH	Turbidity	Volume
109	69.4	1483	7.39	—	1
110	70.2	1434	7.47	—	2
110	70.3	1459	7.32	—	3
111	70.3	1464	737	—	4

Sample appearance: clear Lock: 3753

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: _____

DOULOS ENVIRONMENTAL COMPANY SAMPLING INFORMATION SHEET

Client: Ultramar Sampling Date: 3-1-94

Site: Beacon 574 Project No.: 94-574-01

22315 Redwood Rd Well Designation: MW-8

Castro Valley Ca

Is setup of traffic control devices required? (NO) YES time: _____ hours
Is there standing water in well box? (NO) YES Above TOC Below TOC
Is top of casing cut level? NO (YES) If no, see remarks
Is well cap sealed and locked? (NO) YES If no, see remarks
Height of well casing riser (in inches): 6
Well cover type: 8" UV X 12" UV _____ 12" EMCO _____ 8" BK _____
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: 126
Depth of well: 34.04
Depth to water: 22.05

Recharge Measurement
Time: 143
Depth to water: 22.19

Calculated purge: 2.7
Actual purge: 7.7

Start purge: 135 Sampling time: 145

Time	Temp.	E.C.	pH	Turbidity	Volume
136	72.1	1412	7.95	—	1
137	70.5	1706	7.30	—	2
138	70.3	1710	7.29	—	3
140	70.4	1730	7.28	—	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: Bad fitting on casing unlocked

Signature: Neil Hanson

Ultramar Inc.
CHAIN OF CUSTODY REPORT

BEACON

Beacon Station No. Former Beacon 574	Sampler (Print Name) Hal Hansen	ANALYSES	Date 3-4-94	Form No. 1 of 1
Project No. 94-574-01	Sampler (Signature) Hal Hansen			
Project Location 22315 Redwood Rd, Castro Valley Ca.	Affiliation Denlos Env		5 day TAT	

Sample No./Identification	Date	Time	Lab No.	BTEX	TPH (gasoline)	TPH (diesel)	No. of Containers	REMARKS
MW-1	3-1-94	600		X	X		3	
MW-2		450						
MW-3		400						
MW-4		255						
MW-5		1150						
MW-6		1230						
MW-7		115						
MW-8		145						

Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
Hal Hansen Denlos Env	3/4/94	1030		3/4/94	1030
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 Results to Sheila Richgels (916) 782-1277

Bill to: ULTRAMAR INC.
525 West Third Street
Hanford, CA 93230
Attention: Kenneth Eastvat

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

32-8003 1/90