Ultramar

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

June 25, 1992

Mr. Scott Seary Department of Environmental Health Hazardous Materials Program 80 Swan Way Rm 200 Oakland CA 94621

SUBJECT:

BEACON SERVICE STATION NO. 574, 22315 REDWOOD ROAD, CASTRO

VALLEY, CALIFORNIA

Dear Mr. Seary:

Enclosed for your review and files is a copy of our consultant's FIRST QUARTER MONITORING LETTER REPORT, MARCH 1992, for the above-referenced Ultramar facility.

Please do not hesitate to call if you have any questions regarding this information.

Sincerely,

ULTRAMAR INC.

Randall K. Stephenson

Environmental Specialist II

Randau K. Stephenson

Marketing Environmental

RKS/jj

Enclosure:

Aegis Report dated May 14, 1992

cc w/enc.:

Mr. Rich Hiett

CRWQCB - San Francisco Bay Region

2101 Webster St Ste 500

Oakland CA 94612



BEAC⇔N #1 Quality and Service

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ENVIRONMENTAL PROJECT QUARTERLY STATUS REPORT

DATE REPORT SUBMITTED: May 14, 1992 QUARTER ENDING: March 31, 1992

SERVICE STATION NO.: Former 574

ADDRESS: 22315 Redwood Road, Castro Valley, CA

COUNTY: Alameda

ULTRAMAR CONTACT: Randall K. Stephenson

TEL. NO: 209-583-3324

BACKGROUND:

On May 5, 1987, five underground storage tanks (two gasoline, two diesel, and one waste oil) were excavated and removed from the Soil samples were collected from beneath the tank sites and analyzed for selected hydrocarbons. Based on preliminary analytical data related to the soil samples, it was determined that elevated levels of gasoline and diesel hydrocarbons were present in the bottom of the fuel tank area. Soil was excavated from the fuel tank area. Analysis of confirmation samples collected from the fuel tank area indicates that the additional excavation was successful in removing the soil containing the elevated levels of hydrocarbons as detected in the original samples.

During March, 1991, three on-site ground-water monitoring wells were installed. Laboratory analyses of soil samples obtained the borings drilled for the wells and water samples collected from the wells determined the presence of gasoline hydrocarbons in the soil near the soil/ground-water interface and the in ground water. The analysis also determined well (MW-3) contains gasoline range that the up-gradient hydrocarbons indicating an off-site source.

Quarterly monitoring of the wells began during the fourth quarter of 1991.

SUMMARY OF THIS QUARTER'S ACTIVITIES:

Ground-water sampling of all the wells was conducted by Aegis Environmental, Inc., on March 27, 1992.





Beacon Station No. 574 Castro Valley, CA Quarterly Monitoring Report First Qtr. 1992

RESULT OF QUARTERLY MONITORING:

Ground-water elevations measured in the wells have increased approximately 1.6 to 2.5 feet since the fourth quarter 1991 sampling event. Analytical results indicate that dissolved concentrations of hydrocarbon constituents remain elevated.

PROPOSED ACTIVITY OR WORK FOR NEXT QUARTER:

The nest sampling event is scheduled June, 1992.



perious 7/2/12 45

AEGIS ENVIRONMENTAL, INC.

1050 Melody Lane, Suite 160, Roseville, CA 95678

916 • 782-2110 / 916 • 969-2110 / FAX 916 • 786-7830

May 14, 1992

Mr. Randall Stephenson Environmental Specialist II Ultramar Inc. 525 West Third Street Hanford, California 93232-0466

Subject:

First Quarter Monitoring Letter Report, March 1992

Beacon Station #574

22315 Redwood Road, Castro Valley, California

Dear Mr. Stephenson:

INTRODUCTION

Aegis Environmental, Inc. (Aegis), has been authorized by Ultramar Inc. (Ultramar), to conduct groundwater monitoring at the former Beacon service station site, #574, located at 22315 Redwood Road, Castro Valley, Alameda County, California (site). This letter report documents the first quarter groundwater monitoring conducted by Aegis on March 27, 1992, at this site (Figure 1). This letter report is based, in part, on information obtained by Aegis from Ultramar, and is subject to modification as newly acquired information may warrant.

SITE DESCRIPTION

The site currently has a strip shopping center occupied by a 7-Eleven store, Lee's Donuts, Redwood Cleaners, Pizza Express, and Rob's Video. There are no longer underground storage tanks at the site. Details of the site's facilities, including monitoring wells, are shown on Figure 2.

91-2128 QM8

GROUNDWATER MONITORING

Groundwater Measurements

On March 27, 1992, Aegis personnel collected measurements of the depth to groundwater in monitoring wells MW-1, MW-2, and MW-3. Depth to water ranged from 20.82 to 22.43 feet below grade. On the basis of the March 27, 1992, measurements, groundwater is estimated to flow to the southwest (Figure 3) at an average gradient of approximately 0.02 ft/ft.

Current and previous groundwater levels are summarized in Table 1. All groundwater elevation measurements were made from the referenced wellhead elevations, measured to the nearest 0.01 foot, and conducted according to the Aegis standard operating procedures (SOP) included in Attachment 1.

Groundwater Sampling and Analyses

On March 27, 1992, Aegis personnel collected groundwater samples from monitoring wells MW-1, MW-2, and MW-3. The samples were collected according to the Aegis SOP included as Attachment 1, and delivered under chain-of-custody to WEST Analytical of Davis, California, a state-certified analytical laboratory. The samples were analyzed for concentrations of: a) total (volatile) petroleum hydrocarbons (TPH), as gasoline, by modified EPA Method 8015/purge-and-trap; and b) benzene, toluene, ethylbenzene, and total xylenes by EPA Method 602; and TPH, as diesel and motor oil, by modified EPA Method 8015/extraction. The analytical results are summarized in Table 2. The analytical reports and chain-of-custody form are included in Attachment 2.

RECOMMENDATION

It is recommended that copies of this letter report be forwarded to the following agencies:

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

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

REMARKS/SIGNATURES

Further evaluation is being conducted regarding this site and the former Chevron site located on the northeast corner of Grove Way and Redwood Road. This evaluation is needed due to the presence of product in the upgradient well (MW-3) located on site?

Quarterly sampling has been coordinated with Alton Geoscience (Chevron's consultant) to occur in June 1992. Aegis personnel will survey all seven of Chevron's wells and "tie" them into Ultramar's three wells at this time.

The interpretations and/or conclusions contained in this letter report represent our professional opinions. These opinions are based on currently available information and were developed in accordance with currently accepted geologic, hydrogeologic, and engineering practices at this time and for this specific site. Other than this, no warranty is implied or intended.

This letter report has been prepared solely for the use of Ultramar Inc. Any reliance on this letter report be third parties shall be at such parties' sole risk. The work described herein was performed under the direct supervision of the professional geologist, registered with the State of California, whose signature appears below.

Sincerely,

AEGIS ENVIRONMENTAL, INC.

John Giorai

Staff Geologist

Pat Wright

Registered Geologist

CRG No. 529

JG/PW/law



FIGURES:	FIGURE 1 SITE LOCATION MAP
	FIGURE 2 SITE MAP
	FIGURE 3 POTENTIOMETRIC SURFACE MAP
TABLES:	TABLE 1 WATER LEVEL DATA
	TABLE 2 ANALYTICAL RESULTS: GROUNDWATER
ATTACHMENTS:	ATTACHMENT 1 STANDARD OPERATING PROCEDURES
	ATTACHMENT 2 ANALYTICAL LABORATORY REPORTS AND CHAIN-OF-CUSTODY FORM

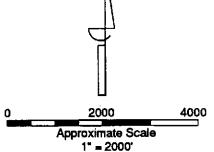
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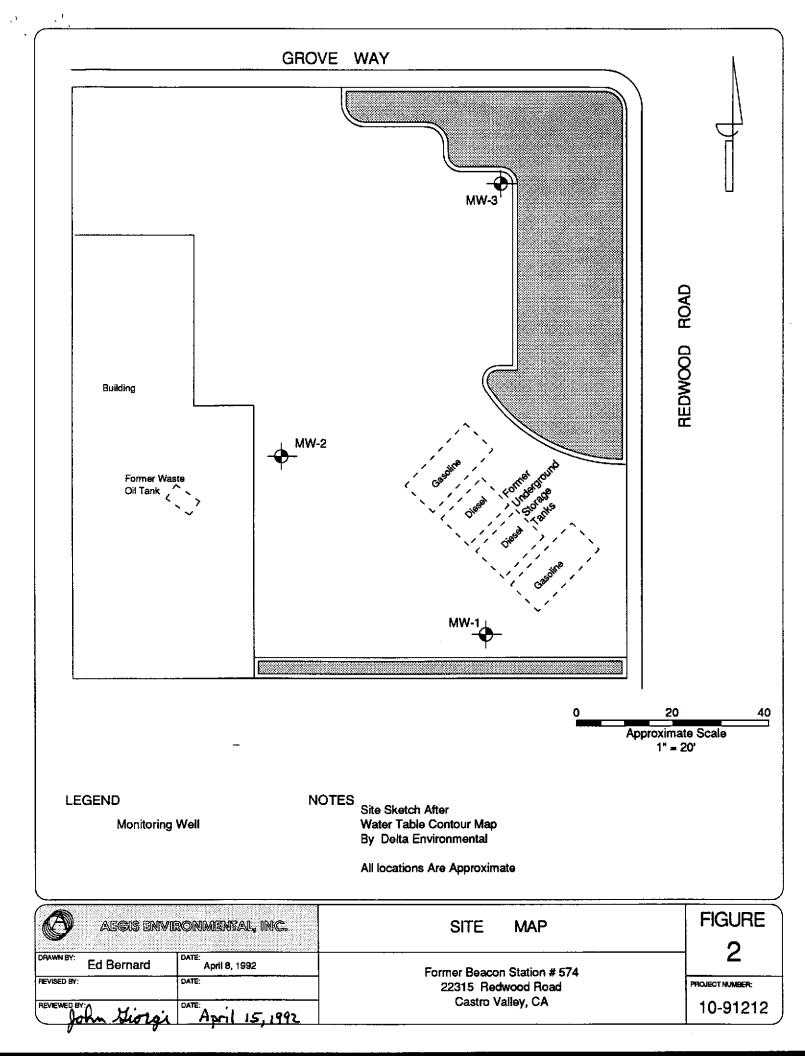


GENERAL NOTES:

BASE MAP FROM USGS 7.5 MINUTE TOPOGRAPHIC HAYWARD, CALIF.



AEGIS EN	ivironmental, inc.	SITE LOCATION MAP	FIGURE
DRAWN 8Y: Ed Berand	DATE: April 13, 1992	Former Beacon Station # 574	
REVISED BY: DATE:		22315 Redwood Road	PROJECT NUMBER:
REVIEWEDBY: DATE: April 15, 1992		Castro Valley, CA	10-91212



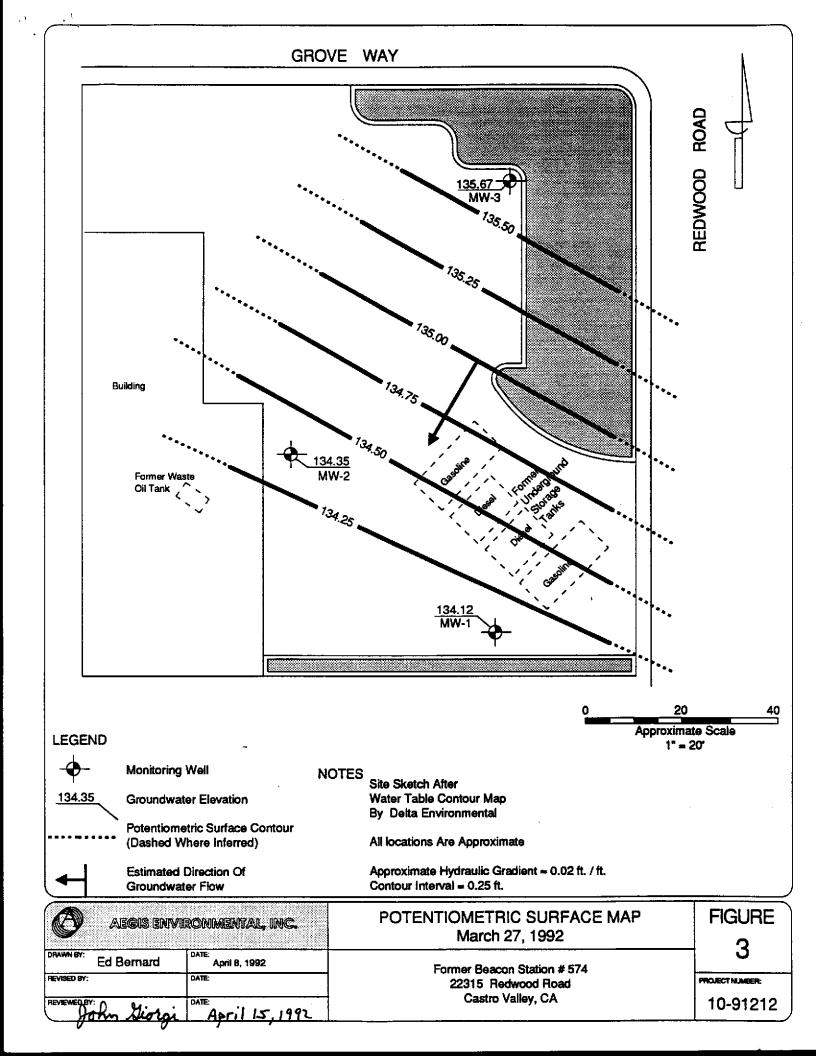


TABLE 1 WATER LEVEL DATA

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
MW-1	03/26/91 04/01/91 11/22/91 03/27/92	156.55	22.43 22.37 24.09 22.43	134.12 134.18 132.46 134.12
MW-2	03/26/91 04/01/91 11/22/91 03/27/92	155.17	20.91 20.82 22.54 20.82	134.26 134.35 132.63 134.35
MW-3	03/26/91 04/01/91 11/22/91 03/27/92	157.13	21.62 21.55 23.98 21.46	135.51 135.58 133.15 135.67

NOTES:

 Measurement and reference elevation taken from notch/mark on top north side of well casing.

= Elevation referenced to mean sea level and obtained from previous consultant.

NA = Not available. NM = Not measured.

Well Depth = Measurement from top of casing to bottom of well.

TABLE 2
ANALYTICAL RESULTS: GROUNDWATER

BEACON STATION #574 22315REDWOOD ROAD, CASTRO VALLEY, CALIFORNIA (All results in parts-per-billion)

Sample ID	Date Collected	Total Petro	leum Hydr	ocarbons	Aromatic Volatile Organics						
		Gasoline	Diesel	Motor Oil	Benzene	Toluene	Ethyl- benzene	Total Xylenes			
MW-1	04/01/91 11/22/91 03/27/93	4,100 5,300 5,600	<100 <50 <50	 <50 <50	340 - 4.9 760 - 37€	570 1,600 900	76 370 230	460 2,300 1,100			
MW-2	04/01/91 11/22/91 03/27/97	10,000 11,000 18,000	<100 <50 <50	 <50 <50	650 51 2,400 /∮ <i>€</i> ○	640 1,900 2,300	150 770 870	960 3,200 3,300			
MW-3	04/01/91 11/22/91 03/27/91	3,100 470 160	<100 <50 <50	 <50 <50	41 10 9.2	91 6.3 4.8	37 11 10	420 36 23			

NOTES:

Below detection limits per "Tri-Regional Board Staff Recommendations for Preliminary Evaluation and Investigation of Underground Tank Sites" (August 10, 1990) Practical Quantitation Reporting Limits. (PQL for BTEX = 0.5 ppb, TPH, as gasoline and diesel = 50 ppb.

--- = Not analyzed.

=

ATTACHMENT 1 STANDARD OPERATING PROCEDURES

AEGIS ENVIRONMENTAL, INC. STANDARD OPERATING PROCEDURES RE: SAMPLE IDENTIFICATION AND CHAIN-OF-CUSTODY PROCEDURES SOP-4

Sample identification and chain-of-custody procedures ensure sample integrity, and document sample possession from the time of collection to its ultimate disposal. Each sample container submitted for analysis is labeled to identify the job number, date, time of sample collection, a sample number unique to the sample, any in-field measurements made, sampling methodology, name(s) of on site personnel and any other pertinent field observations also recorded on the field excavation or boring log.

Chain-of-custody forms are used to record possession of the sample from time of collection to its arrival at the laboratory. During shipment, the person with custody of the samples will relinquish them to the next person by signing the chain-of-custody form(s) and noting the date and time. The sample-control officer at the laboratory will verify sample integrity, correct preservation, confirm collection in the proper container(s) and ensure adequate volume for analysis.

If these conditions are met, the samples will be assigned unique laboratory log numbers for identification throughout analysis and reporting. The log numbers will be recorded on the chain-of-custody forms and in the legally-required log book maintained in the laboratory. The sample description, date received, client's name, and any other relevant information will also be recorded.

AEGIS ENVIRONMENTAL, INC. STANDARD OPERATING PROCEDURES RE: LABORATORY ANALYTICAL QUALITY ASSURANCE AND CONTROL SOP-5

In addition to routine instrument calibration, replicates, spikes, blanks, spiked blanks, and certified reference materials are routinely analyzed at methods specific frequencies to monitor precision and bias. Additional components of the laboratory Quality Assurance/Quality Control program include:

- 1. Participation in state and federal laboratory accreditation/certification programs;
- 2. Participation in both U.S. EPA Performance Evaluation studies (WS and WP studies) and inter-laboratory performance evaluation programs;
- 3. Standard operating procedures describing routine and period instrument maintenance:
- 4. "Out-of-Control"/Corrective Action documentation procedures; and,
- 5. Multi-level review of raw data and client reports.

AEGIS ENVIRONMENTAL, INC. STANDARD OPERATING PROCEDURE RE: GROUNDWATER PURGING AND SAMPLING SOP-7

Prior to water sampling, each well is purged by evacuating a minimum of three well-bore volumes of groundwater. When required, purging will continue until either the discharge water temperature, conductivity or pH stabilize, a maximum of ten well-bore volumes of groundwater have been recovered or the well is bailed dry. When practical, the groundwater sample should be taken when the water level in the well recovers to at least 80 percent of its static level.

The sampling equipment consists of either a Teflon bailer, PVC bailer, or stainless steel bladder pump with a Teflon bladder. If the sampling system is dedicated to the well, then the bailer is usually Teflon, but the bladder pump is PVC with a polypropylene bladder. In general and depending on the intended laboratory analysis, 40-milliliter glass, volatile organic analyzer (VOA) vials, with Teflon septa, are used as sample containers.

The groundwater sample is decanted into each VOA vial in such a manner that there is no meniscus at the top of the vial. A cap is quickly secured to the top of the vial. The vial is then inverted and gently tapped to see if air bubbles are present. If none are present, the vial is labeled and refrigerated for delivery, under strict chain-of-custody, to the analytical laboratory. Label information should include a unique sample identification number, job identification number, date, time, type of analysis requested, and the sampler's name.

For quality control purposes, a duplicate water sample is collected from each well. This sample is put on hold at the laboratory. When required, a trip blank is prepared at the laboratory and placed in the transport cooler. It is labeled similar to the well samples, remains in the cooler during transport, and is analyzed by the laboratory along with the groundwater samples. In addition, a field blank may be prepared in the field when sampling equipment is not dedicated. The field blank is prepared after a pump or bailer has been either steam-cleaned or properly washed, prior to use in the next well, and is analyzed along with the other samples. The field blank analysis demonstrates the effectiveness of the in-field cleaning procedures to prevent cross-contamination.

To minimize the potential for cross-contamination between wells, all well development and water sampling equipment not dedicated to a well is either steam-cleaned or properly washed between use. As a second precautionary measure, wells are sampled in order of least to highest concentrations as established by available previous analyses.

AEGIS ENVIRONMENTAL, INC. STANDARD OPERATING PROCEDURE RE: MEASURING LIQUID LEVELS USING WATER LEVEL OR INTERFACE PROBE SOP-12

Field equipment used for liquid level gauging typically includes the measuring probe (water level or interface), light filter(s), and product bailer(s). The field kit also includes cleaning supplies (buckets, TSP, spray bottles, and deionized water) to be used in cleaning the equipment between wells.

Prior to measurement, the probe tip is lowered into the well until it touches bottom. Using the previously established top of casting point, the probe cord (or halyard) is marked and an measuring tape (graduated in hundredths of a foot) is used to determine the distance between the probe end and the marking on the cord. This measurement is then recorded on the liquid level data sheet as the depth to water (DTW).

When using the interface probe to measure liquid levels, the probe is first electrically grounded to either the metal stove pipe or another metal object nearby. When no ground is available, reproducible measurements can be obtained by clipping the ground lead to the handle of the interface probe case. After grounding the probe, the top of the well casing is fitted with a light filter to insure that sunlight does not interfere with the operation of the probe's optical mechanisms. The probe tip is then lowered into the well and submerged in the groundwater. An oscillating (beeping) tone indicates that the probe is in water. The probe is slowly raised until either the oscillating tone ceases or becomes a steady tone. In either case, this is the depth-to-water indicator and the DTW measurement is made accordingly. The steady tone ceases. This is the depth-to-product (DTP) indicator and the DTP measurement is made accordingly.

The process of lowering and raising the probe must be repeated several times to ensure accurate measurements. The DTW and DTP measurements are recorded on the liquid level data sheet. When floating product is indicated by the probe's response, a product bailer is lowered partially through the product-water interface to confirm the product on the water surface, and as further indication of product thickness, particularly in cases where the product layer is quite thin. This measurement is recorded on the data sheet as product thickness.

In order to avoid cross-contamination of wells during the liquid level measurement process, wells are measured in the order of "clean" to "dirty" (where such information is available). In addition, all measurement equipment is cleaned with TSP solution and thoroughly rinsed with deionized water before use, between measurements in respective wells and at the completion of the day's use.

ATTACHMENT 2

ANALYTICAL LABORATORY REPORTS AND CHAIN-OF-CUSTODY FORM



April 8, 1992 Sample Log 4174

RECEIVED

APR 1 5 1992

Ans d. TEL

Tom Landwehr Aegis Environmental Consultants, Inc. 1050 Melody Lane, Suite 160 Roseville, CA 95678

Subject: Analytical Results for 3 Water Samples

Identified as: Project # 91212 (Beacon # 574, Castro Valley)

Received: 04/01/92

Dear Mr. Landwehr:

Analysis of the sample(s) referenced above has been completed. This report is written to confirm results communicated on April 8, 1992 and describes procedures used to analyze the samples.

Water samples were received in 40-mL glass bottles sealed with TFE septae, and in 1-L glass bottles sealed with TFE-lined caps. Each sample was received under documented chain of custody and stored at 4 degrees C until analysis was performed.

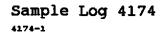
Sample(s) were analyzed using the following method(s):

"BTEX" (EPA Method 602/Purge-and-Trap)
"TPH as Gasoline" (Modified EPA Method 8015/Purge-and-Trap)
"TPH as Diesel, Motor Oil, Jet/Kerosene" (Mod. 8015/Extraction)

Please refer to the following table(s) for summarized analytical results and contact us at 916-757-4650 if you have questions regarding procedures or results. The chain-of-custody document is enclosed.

Approved by:

Joe'l Kiff
Senior Chemist





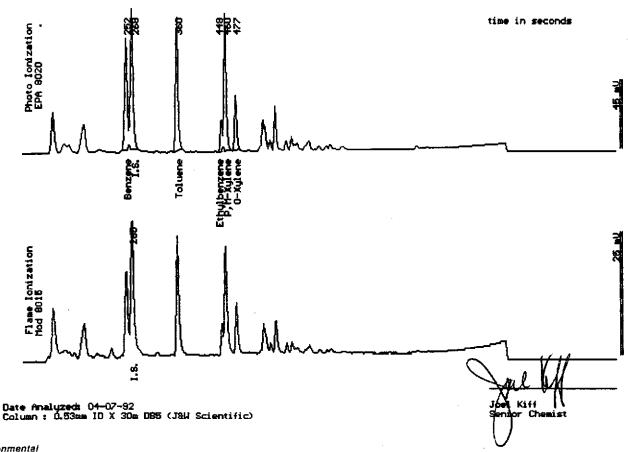
From : Project # 91212 (Beacon # 574, Castro Valley)

Sampled: 03/27/92

Dilution: 1:50 QC Batch: 6033b

Matrix : Water

Parameter	(MDL) ug/L	Measured Value ug/L
	(MDL) ng/L	**************************************
Benzene	(25)	760
Toluene	(25)	900
Ethylbenzene	(25)	230
Total Xylenes	(25)	1100
TPH as Gasoline	(2500)	5600



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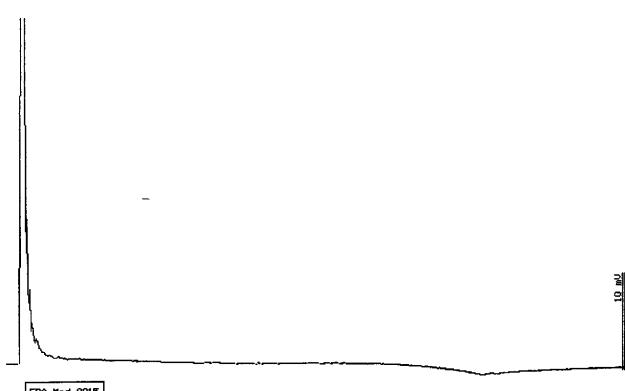
From : Project # 91212 (Beacon # 574, Castro Valley)

Sampled: 03/27/92 Received: 04/01/92 Extracted: 04/01/92

Dilution : 1:1 Matrix : Water

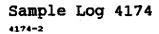
--all concentrations are units of ug/L--

•	Reporting Limit)	Measured Value
TPH as Diesel	(50)	<50
TPH as Motor Oil	\ <i>\</i>	<50



EPA Mod 8015

Date: 04-02-92 Fime: 03:22:17 Column: 0.53mm ID X 15m DB1 (J&W Scientific)



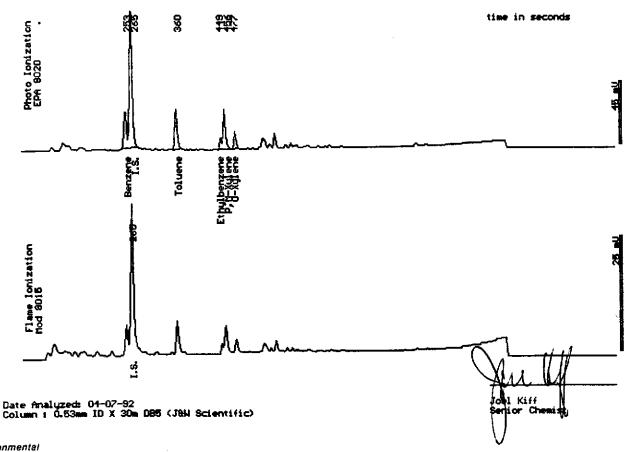


From: Project # 91212 (Beacon # 574, Castro Valley)
Sampled: 03/27/92

Dilution: 1:500 QC Batch: 6033b

Matrix : Water

Parameter	(MDL) ug/L	Measured Value ug/L
Benzene	(250)	2400
Toluene	(250)	2300
Ethylbenzene	(250)	870
Total Xylenes	(250)	3300
TPH as Gasoline	(25000)	18000



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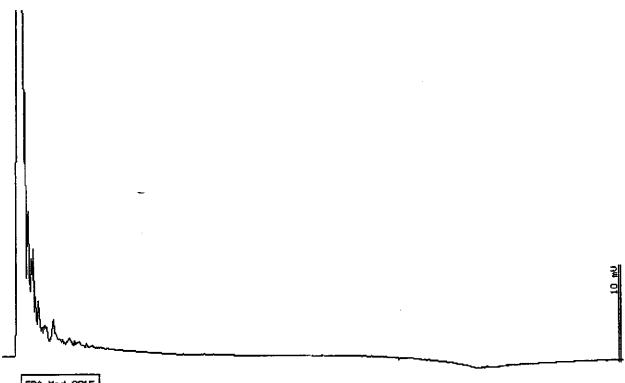
From : Project # 91212 (Beacon # 574, Castro Valley)

Sampled: 03/27/92 Received: 04/01/92 Extracted: 04/01/92 Dilution: 1:1

Matrix : Water

--all concentrations are units of ug/L--

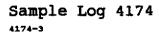
Parameter	(Reporting Limit)	Measured Value
TPH as Diesel	(50)	<50
TPH as Motor Of	il (50)	<50



EPA Mod 8015

Western Environmental Science & Technology 45133 County Road 32B Davis, CA 95616 916 753-9500

Date: 04-02-92 Time: 03:57:44 Column: 0.53mm ID X 15m DB1 (J&W Scientific)



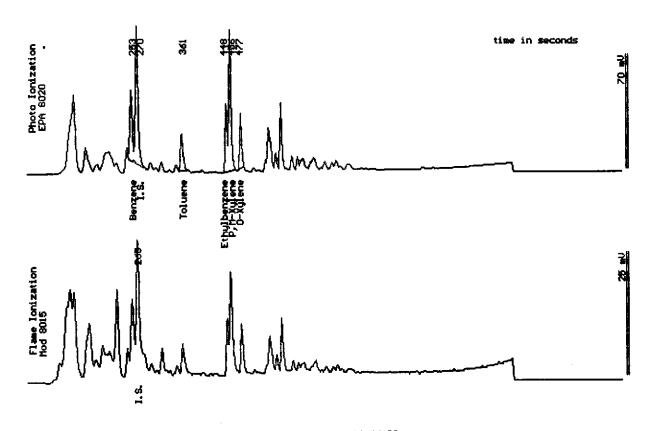


From: Project # 91212 (Beacon # 574, Castro Valley)
Sampled: 03/27/92

Dilution: 1:1 QC Batch : 6033A

Matrix : Water

Parameter	(MDL) ug/L	Measured Value ug/L
Benzene	(.50)	9.2
Toluene	(.50)	4.8
Ethylbenzene	(.50)	10
Total Xylenes	(.50)	23
TPH as Gasoline	(50)	160



Date analyzed: 04-06-92 Column : 0.53mm ID X 30m D85 (J&W Scientific)



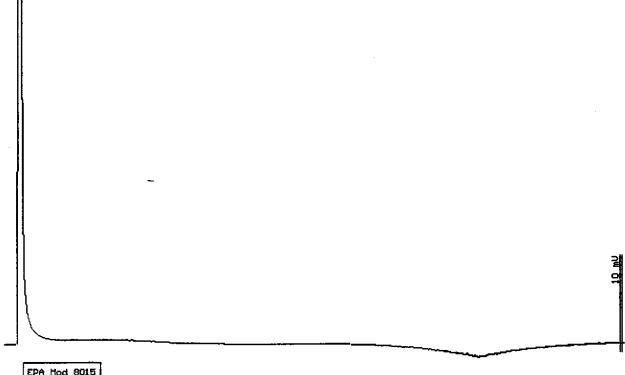
From : Project # 91212 (Beacon # 574, Castro Valley)

Sampled: 03/27/92 Received: 04/01/92 Extracted: 04/01/92 Dilution: 1:1

Matrix : Water

--all concentrations are units of ug/L--

Parameter	(Reporting Limit)	Measured Value
TPH as Diesel TPH as Motor Oi	(50)	<50 <50



EPA Mod 8015



Ultramar Inc.CHAIN OF CUSTODY REPORT

BEACON

Beacon Station No.	Sampl	er (Print	Name)									Date I	Form No),
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REPORT TO TOM LANDWEHR			1	Bill to:	ULTRAMAF									
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ROYVILLE, CA. 95678 (9)	6)782	2-24	D		Hanford, CA Attention:	F		ST	EPH	EV :	<u>>0</u>	h		
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