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

ENVIRONMENTAL PROJECT QUARTERLY STATUS REPORT

DATE REPORT SUBMITTED: October 1, 1992

QUARTER ENDING: June 30, 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 site. 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 from the borings drilled for the wells and water samples collected from the wells determined the presence of gasoline range hydrocarbons in the soil near the soil/ground-water interface and the in ground water. The analysis also determined that the up-gradient well (MW-3) contains gasoline range 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 June 4, 1992.





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

RESULT OF QUARTERLY MONITORING:

Ground-water elevations measured in the wells have decreased approximately 1.0 foot since the first quarter 1992 sampling event. Analytical results indicate that dissolved concentrations of hydrocarbon constituents remain elevated.

PROPOSED ACTIVITY OR WORK FOR NEXT QUARTER:

The next sampling event was performed in September, 1992.



AEGIS ENVIRONMENTAL, INGO

1050 Melody Lane, Suite 160, Roseville, CA 95678

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

September 8, 1992

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

Subject:

Second Quarter Monitoring Letter Report, June 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 second quarter groundwater monitoring conducted by Aegis on June 4, 1992, at this site, and groundwater monitoring conducted by Alton Geoscience at the former Chevron service station site (former Chevron site) located northeast of the former Beacon 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 former Beacon site currently is 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 former Beacon site. Details of the former Beacon and former Chevron site's facilities, including monitoring wells, are shown on Figure 2.

91-212C.QMR

GROUNDWATER MONITORING

Groundwater Measurements

On June 4, 1992, Aegis personnel collected measurements of the depth to groundwater in monitoring wells MW-1, MW-2, and MW-3 on the former Beacon site, and Alton Geoscience personnel collected measurements of the depth to groundwater in monitoring wells C-1 through C-7 on the former Chevron site. Depth to water ranged from 21.81 to 23.40 feet below grade at the former Beacon site, and ranged from 15.04 to 19.81 feet below grade at the former Chevron site. On the basis of the June 4, 1992, measurements at both sites, groundwater is estimated to flow to the southwest (Figure 3) at an average gradient of approximately 0.01 ft/ft.

On June 4, 1992, Aegis and Chevron personnel surveyed both site's monitoring wells and itied them into the same bench mark.

Current and previous groundwater levels are summarized in Table 1 Beacon site and Table 2 for the former Chevron site. All groundwater elevation measurements at the former Beacon site 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 June 4, 1992, Aegis personnel collected groundwater samples from monitoring wells MW-1, MW-2, and MW-3, and Alton Geoscience collected groundwater samples from monitoring wells C-1 through C-7. The samples collected by Aegis were collected according to the Aegis SOP included as Attachment 1, and delivered under chain-ofcustody to Environmental Lab Systems, Inc., of San Luis Obispo, California, a statecertified analytical laboratory. The samples collected by Alton Geoscience were delivered under chain-of-custody to Superior Precision Analytical, Inc., of Martinez, California, a state-certified analytical laboratory. The Aegis samples were analyzed for concentrations of total (volatile) petroleum hydrocarbons (TPH), as gasoline, by modified EPA Method 8015/purge-and-trap, benzene, toluene, ethylbenzene, and total xylenes (BTEX) by EPA Method 602, and TPH, as diesel, by modified EPA Method 8015/extraction. The Alton Geoscience samples were analyzed for concentrations of TPH, as gasoline, by EPA Method 8015/purge-and-trap and BTEX by EPA Method 8020. The former Beacon site analytical results are summarized in Table 3, and the former Chevron site's are summarized in Table 4. The analytical reports and chain-of-custody forms for both sites are included in Attachment 2.

- 2 -

RECOMMENDATIONS

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 Environmental Health 80 Swan Way, Room 350 Oakland, California 94621

Mr. Todd Pearson Alton Geoscience 5870 Stoneridge Drive, Suite 6 Pleasanton, California 94588 Mr. Rich Hiett San Francisco Bay Region Water Quality Control Board 2101 Webster Street, Suite 500 Oakland, California 94612

REMARKS/SIGNATURES

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 engineer, registered with the State of California, whose signature appears below.

Sincerely,

AEGIS ENVIRONMENTAL, INC.

at wright

John Giorgi Staff Geologist

Pat Wright

Registered Geologist

CRG No. 529

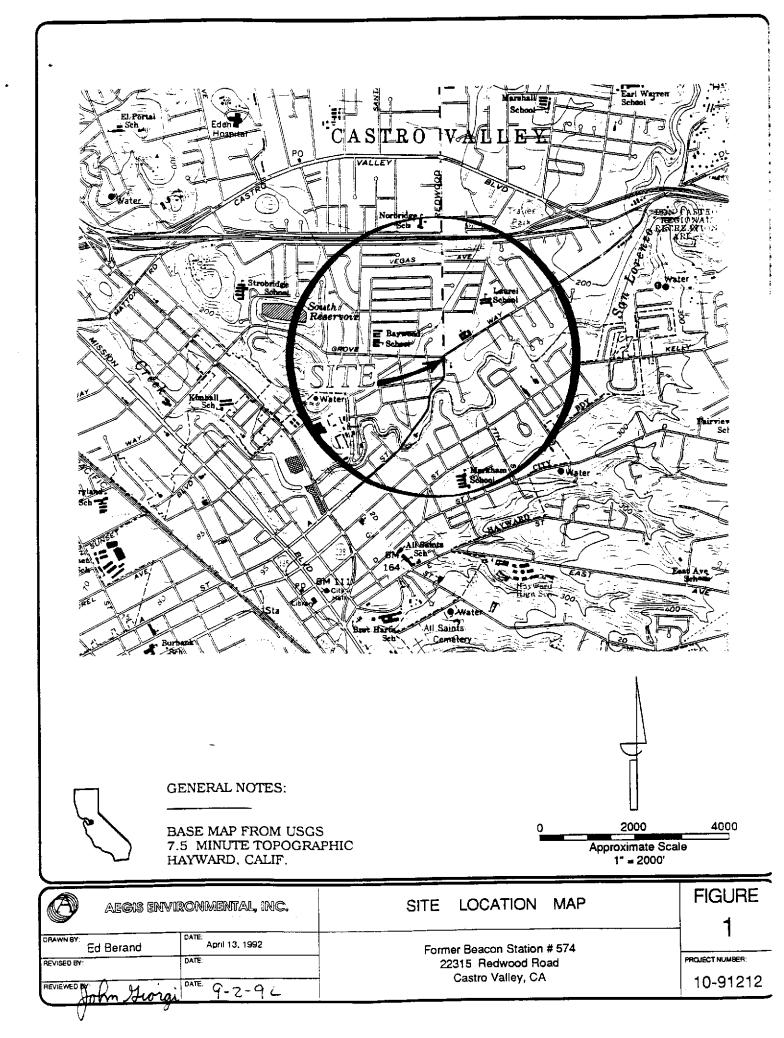
Date

JG/PW/law



FIGURES:	FIGURE 1 SITE LOCATION MAP
	FIGURE 2 SITE MAP
	FIGURE 3 POTENTIOMETRIC SURFACE MAP
	FIGURE 4 ISOCONCENTRATION MAP OF BENZENE IN GROUNDWATER
TABLES:	TABLE 1
	TABLE 2 LIQUID LEVEL DATA - FORMER CHEVRON STATION
	TABLE 3 ANALYTICAL RESULTS: GROUNDWATER - FORMER BEACON STATION
	TABLE 4 ANALYTICAL RESULTS: GROUNDWATER - FORMER CHEVRON STATION
ATTACHMENTS:	ATTACHMENT 1 STANDARD OPERATING PROCEDURES
	ATTACHMENT 2 ANALYTICAL LABORATORY REPORTS AND CHAIN-OF-CUSTODY FORM

--



Former Waste Oil Tank

⊕ C-5

Former Chevron Service Station 2416 Grove Way Castro Valley, CA

<u>-4</u> •

λY

Foi S

LEGEND

- C

Monitoring Well

ielta Environmental
Geoscience
ipproximate

O 50 100

Approximate Scale
1" = 50'

SITE VICINITY MAP

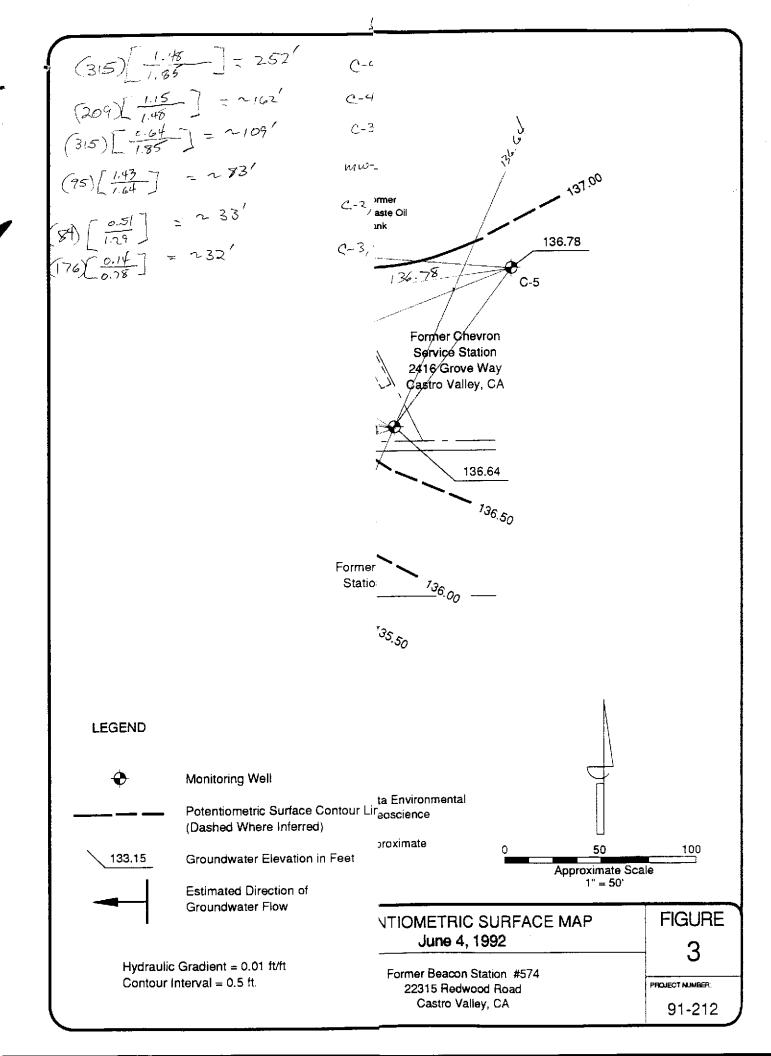
FIGURE

2

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

PROJECT NUMBER

91-212

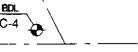


/AY

Former Waste Oil



Former Chevron Service Station 2416 Grove Way Castro Valley, CA



LEGEND



Monitoring Well

BDL

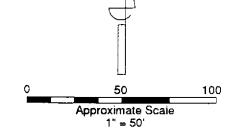
Below Detection Limits

36

Benzene in parts per billion

Delta Environmental 1 Geoscience

Approximate



O-CONCENTRATION MAP OF **ENZENE IN GROUNDWATER**

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

FIGURE

4

PROJECT NUMBER

91-212

TABLE 1
WATER LEVEL DATA - FORMER BEACON STATION

FORMER 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 06/04/92	156.55	22.43 22.37 24.09 22.43 23.40	134.12 134.18 132.46 134.12 133.15
MW-2	03/26/91 04/01/91 11/22/91 03/27/92 06/04/92	155.17	20.91 20.82 22.54 20.82 21.81	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 22.34	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.

TABLE 2 LIQUID LEVEL DATA - FORMER BEACON STATION

FORMER CHEVRON SERVICE STATION 2416 GROVE WAY, CASTRO VALLEY, CALIFORNIA (All measurements in feet)

Cherison		57	* Cherry		
mpict	Groundwater Elevation ²	Depth to Groundwater ¹	Reference Elevation (top of casing) ¹	Date Collected	Monitoring Well
136.44	135.99	17.10	153.09 /53.36	06/04/92	C-1
136.80	137.29	15.04	152.33 ভারে	06/04/92	C-2
136.34	136.00	17.79	153.79 <i>154.</i> 1 ³	06/04/92	C-3
13708	136.64	18.92	155.56 166.00	06/04/92	C-4
136 98	136.78	16.40	153.18 <i>#</i> 3 🕸	06/04/92	C-5
135783	135.49	17.01	152.50	06/04/92	C-6

154.97 155 34

NOTES:

C-7

06/04/92

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

19.81

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

what is ment by "precions consultant?"

135.16

* elevation information from July 10,1992

Alton Gersciences Ttreport, under July 20,1992

Chevion cover.

TABLE 3

ANALYTICAL RESULTS: GROUNDWATER - FORMER BEACON STATION

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

Sample ID	Date Collected	Total Petroleum Hydrocarbons		А	Aromatic Volatile Organics		s	
		Gasoline	Diesel	Motor Oil	Benzene	Toluene	Ethyl- benzene	Total Xylenes
MW-1	04/01/91	4.900	<100		340	570	76	460
	11/22/91	5,300	<50	<50	4.9	1,600	370	2,300
	03/27/92	5,600	<50	<50	760	900	230	1,100
	06/04/92	2,600	<800		270	57	230	440
MW-2	04/01/91	10,000	<100		650.	640	150	960
	11/22/91	11,000	<50	<50	51	1,900	770	3,200
	03/27/92	18,000	<50	<50	2,403	2,300	870	3,300
	06/04/92	14,800	<5,000		1,900	1,700	580	2,300
MW-3	04/01/91	3,100	<100		3 71	91	37	420
and the many of	11/22/91	470	<50	<50	te	6.3	11	36
	03/27/92	160	<50	<50	92	4.8	10	23
	06/04/92	120	<50		715	2.7	0.5	15
MW-3D	06/04/92	100	<50		77	2.8	0.6	18

NOTES: < = Below the indicated detection limits labeled in the analytical laboratory results report.

--- = Not analyzed.

D = Duplicate sample.

TABLE 4

ANALYTICAL RESULTS: GROUNDWATER - FORMER CHEVRON STATION

FORMER CHEVRON SERVICE STATION 2416 GROVE WAY, CASTRO VALLEY, CALIFORNIA

(All results in parts-per-billion)

Sample ID	Total Petroleum Hydrocarbons	Ar	omatic Vola	atile Organio	S
	Gasoline	Benzene	Toluene	Ethyl- benzene	Total Xylenes
C-1	FP				
C-2	1,500	< 0.5	180	420	188
C-3	80	36	0.6	0.5	0.0
C-4	< 50	< 0.5	< 0.5	< 0.5	0.7
C-5	< 50	< 0.5	< 0.5	< 0.5	< 0.5
C-6	< 50	< 0.5	<0.5	< 0.5	< 0.5
C-7	250°	< 0.5	<0.5	< 0.5	< 0.5

NOTES:

- = Below the indicated detection limit labelled in the analytical laboratory results reports.
 - Not analyzed due to a product sheen.
- * = Gasoline range concentration showed only a single peak on the chromatogram.

The information contained in this table was provided by Alton Geoscience with approval from Chevron Corporation.

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-casing or top-of-box (i.e., wellhead vault) point, the probe cord (or halyard) is marked and a 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 necessary in 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 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 indicates floating hydrocarbons. In this case, the probe is slowly raised until 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

Environmental Lab Systems, Inc.

91-212

Project Number:

REPORT OF ANALYTICAL RESULTS

1086-1

06/04/92

06/06/92

Aqueous

Client: Tom Landweir
Aegis Environmental
1050 Melody Lane, #160
Roseville, CA 95678

Lab Number:
Collected:
Received:
Received:
Matrix:

Project: Beacon Station # 574 Sample Description:

MW-1

Analyzed: 06/06/92 Method: EPA 8260

Method: Collected by: Rodney Moore RESULT** PQL* CONSTITUENT ug/L ug/L 270. 8. Benzene 57. 8. Toluene 230. 8. Ethylbenzene 440. 8. **Xylenes** 101 Percent Surrogate Recovery TOTAL PETROLEUM HYDROCARBONS 2600. 800. Gasoline ND 800. Diesel #2 30 BTX as a Percent of Fuel

Environmental Lab Systems, Inc. is certified by CA Department of Health Services: Laboratory #1717

Submitted by,

ENVIRONMENTAL LAB SYSTEMS, INC.

John MacMurphey

Laboratory Director

MSD #1 C:1086-1.xls JMM/sn/jmm/rr

^{*}PQL - Practical Quantitation Limit

^{**}Results listed as ND would have been reported if present at or above the listed PQL.

Client: Tom Landweir
Aegis Environmental
1050 Melody Lane, #160
Roseville, CA 95678

 Lab Number:
 1086-2

 Collected:
 06/04/92

 Received:
 06/06/92

 Matrix:
 Aqueous

Project:

Beacon Station # 574

Project Number:

91-212

Collected by:

Rodney Moore

Sample Description:

MW-2

Analyzed: Method:

06/06/92

EPA 8260

CONSTITUENT	PQL*	RESULT**
	ug/L	ug/L
Benzene	50.	1900.
Toluene	50.	1700.
Ethylbenzene	50.	580.
Xylenes	50.	2300.
Percent Surrogate Recovery		98
TOTAL PETROLEUM HYDROCARBONS		
Gasoline	5000.	14000.
Diesel #2	5000.	ND
BTX as a Percent of Fuel		42

Environmental Lab Systems, Inc. is certified by CA Department of Health Services: Laboratory #1717

Submitted by,

ENVIRONMENTAL LAB SYSTEMS, INC.

MSD #1 C:1086-2.xis JMM/sn/jmm/rr

John MacMurphey Laboratory Director

^{*}PQL - Practical Quantitation Limit

^{**}Results listed as ND would have been reported if present at or above the listed PQL.

Client: Tom Landweir
Aegis Environmental
1050 Melody Lane, #160
Roseville, CA 95678

 Lab Number:
 1086-3

 Collected:
 06/04/92

 Received:
 06/06/92

 Matrix:
 Aqueous

Project: Beacon Station # 574

Project Number: Collected by: 91-212

by: Rodney Moore

Sample Description	Description:	mple	Sa
--------------------	--------------	------	----

MW-3

Analyzed: Method: 06/06/92 EPA 8260

CONSTITUENT	PQL*	RESULT**
	ug/L	ug/L
Benzene	0.5	7.5
Toluene	0.5	2.7
Ethylbenzene	0.5	0.5
Xylenes	0.5	15.
Percent Surrogate Recovery		102
TOTAL PETROLEUM HYDROCARBONS		
Gasoline	50.	120.
Diesel #2	50.	ND

Environmental Lab Systems, Inc. is certified by CA Department of Health Services: Laboratory #1717

Submitted by,

ENVIRONMENTAL LAB SYSTEMS, INC.

MSD #1 C:1086-3.xis JMM/sn/jmm/rr

John MacMurphey Laboratory Director

John Man Mighe

^{*}PQL - Practical Quantitation Limit

^{**}Results listed as ND would have been reported if present at or above the listed PQL.

Client: Tom Landweir
Aegis Environmental
1050 Melody Lane, #160
Roseville, CA 95678

Lab Number: 1086-3 Duplicate
Collected: 06/04/92
Received: 06/06/92
Matrix: Aqueous

Project:

Beacon Station # 574

Project Number:

91-212

Collected by:

Rodney Moore

Sample Description:

MW-3

Analyzed: Method:

06/06/92

EPA 8260

CONSTITUENT	PQL*	RESULT**
	ug/L	ug/L
Benzene	0.5	7.7
Toluene	0.5	2.8
thylbenzene	0.5	0.6
Kylenes	0.5	18.
Percent Surrogate Recovery		98
OTAL PETROLEUM HYDROCARBONS		
Gasoline	50.	130.
	50.	ND
Diesel #2		

Environmental Lab Systems, Inc. is certified by CA Department of Health Services: Laboratory #1717

Submitted by,

ENVIRONMENTAL LAB SYSTEMS, INC.

MSD #1 C:1086-3d.xls JMM/sn/jmm/rr

John MacMurphey Laboratory Director

John Man Mughey

^{*}PQL - Practical Quantitation Limit

^{**}Results listed as ND would have been reported if present at or above the listed PQL.

Environmental Lab Systems, Inc.

QUALITY ASSURANCE REPORT - SPIKE RESULTS

Client:

Environmental Lab Systems, Inc. 3485 Sacramento Drive, Suite E San Luis Obispo, CA 93401

QS 06/06/92 Lab Number: Collected: Received: Soil Matrix:

Project:

Project Number: Collected by:

Sample Description:

Quality Assurance Spike

Analyzed:

06/06/92

EPA 8260 Method:

CONSTITUENT	Amount Expected mg/kg	Amount Recovered mg/kg	Percent Recovery
Benzene	6.6	6.6	100
Toluene	26.8	24.5	91
Ethylbenzene	5.0	4.9	98
Xylenes	31.4	28.4	90
Percent Surrogate Recovery			99
TOTAL PETROLEUM HYDROCARBONS			
Gasoline	180.	174.	97
BTX as a Percent of Fuel	36%	34%	

Environmental Lab Systems, Inc. is certified by CA Department of Health Services: Laboratory #1717 NS - Not Spiked

MSD #1 C:QS0606g2.xls

JMM/sn/jmm/rr

Submitted by, **ENVIRONMENTAL LAB SYSTEMS, INC.**

John MacMurphey

Laboratory Director

Client:

Environmental Lab Systems, Inc. 3485 Sacramento Drive, Suite E San Luis Obispo, CA 93401

Lab Number: QSD 06/06/92 Collected:

Received: Matrix:

Soil

Project:

Project Number: Collected by:

Sample Description:

Quality Assurance Spike Duplicate

Analyzed:

06/06/92

Anaryzed:	00/00/32
Method:	EPA 8260

CONSTITUENT	Amount Spiked	Amount Recovered	Percent	Relative Percent
	mg/kg	mg/kg	Recovery	Difference*
Benzene	6.6	6.2	94	6
Toluene	26.8	22.8	85	7
Ethylbenzene	5.0	4.6	92	6
Xylenes	31.4	27.1	86	5
Percent Surrogate Recovery			99	
TOTAL PETROLEUM HYDROCAR	BONS			
Gasoline	180.	166.	92	5
BTX as a Percent of Fuel	36%	34%		

Environmental Lab Systems, Inc. is certified by CA Department of Health Services: Laboratory #1717

NS - Not Spiked

MSD #1 C:Q\$0606g2.xls JMM/sn/jmm/rr

Submitted by,

ENVIRONMENTAL LAB SYSTEMS, INC.

John MacMurphey

Laboratory Director

^{*}Relative Percent Difference of the spike and spike duplicate

Environmental Lab Systems, Inc.

QUALITY ASSURANCE REPORT - BLANK RESULTS

Client:

Environmental Lab Systems, Inc. 3485 Sacramento Drive, Suite E San Luis Obispo, CA 93401

Lab Number:

BLK 06/06/92

Collected:

Received:

Matrix:

Aqueous

Project:

Project Number: Collected by:

Sample Description:

Instrument Blank

Analyzed:

06/06/92

Method:

EPA 8260

PQL* ug/L 0.5 0.5 0.5 0.5 0.5	RESULT** ug/L ND ND ND ND ND ND
0.5 0.5	ND ND
0.5	ND
0.5	ND
	94
50.	ND
50.	ND
	N/A

Environmental Lab Systems, Inc. is certified by CA Department of Health Services: Laboratory #1717

Submitted by,

ENVIRONMENTAL LAB SYSTEMS, INC.

John MacMurphey

Laboratory Director

John Mac Must

MSD #1 C:blk0606f.xls JMM/sn/jmm/rr

^{*}PQL - Practical Quantitation Limit

^{**}Results listed as ND would have been reported if present at or above the listed PQL.



Ultramar Inc.CHAIN OF CUSTODY REPORT

Beacon Station No.	Sampler (Print Name)				ANALYSES				T	6-4-17	Form No	7		
# 5/4	RODNEL-MENTE				\vdash		INAL	YSES	\top	\rightarrow	LABS	7 01	<u> </u>	
Project No. 91.212	Sampler (Signature)								- 1		erial i	(a A		
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Project Location 7 7 3/5 Reaction Reaction	Affiliation								ᅙ	SA21/112	OBISA	10		
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Sample No./Identification	Da	ıte	Tir		Lab No.	BTE	TPH (gasoline)				2	REMAR		
MW-1	6-4	32	1.0	5 Pm	1086-1	14	y y	- 1			9	Shuboro -	1.7	<u> </u>
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Relinquished by: (Signature/Affiliation)	.	Date	Time	Rècei	ed by: (Signati	iře/ <i>P</i>	Milia	tion)					Date	Time
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Report TOM CARDWELL HI	60	AEL	is		525 West 1 Hanford, C	i niro A 90	ı ətr 3230	eet Ø.	. 4	<i>y</i> .		41 \		
MOSCUITE CA 95618		巨利	•		Hanford, C Attention:	-		KA	101	<u>>(</u>	<u>(</u>	/kg11 50.4		
WHITE: Return to Client with Report	YELLC	W: Lab	oratory (Сору	PINK: Orig	inato	r Co	ру					32-6	9003 1790 -^`



Post-It" brand fax transmittal	9-1526	
TOWN CORNERS	From ODD FADSON	7-1 J2U
co. A2615	Alton Genslience	
Dept. (CO)	Phone # 5/0-734-8/36	
Fax /	570-734-8420	. 21_

Je/

Alton Geoscience Attn: TODD PEARSON ; 31-0563 Reported 06/19/92

TOTAL PETROLEUM HYDROCARBONS

Lab #	Sample Identification	Sampled	Analyzed Matrix
85962-1	TB-LB	06/04/92	06/18/92 Water
85962-2	RIN	06/04/92	06/18/92 Water
85962-3	C-6	06/04/92	06/18/92 Water
85962-4	C-7	06/04/92	06/18/92 Water
85962-5	C-5	06/04/92	06/18/92 Water
85962-6	C-4	06/04/92	06/18/92 Water
85962-7	C-3	06/04/92	06/18/92 Water
85962-8	C-2	06/04/92	06/18/92 Water

RESULTS OF ANALYSIS

Laboratory Number:	85962- 1	85962- 2	85962- 3	85962- 4	85962- 5
		 ND<50	ND<50	250 *	ND<50
Gasoline:	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5
Benzene:	ND<0.5		ND<0.5	ND<0.5	ND<0.5
roluenė:	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
Ethyl Benzene: Xylenes:	ND<0.5 ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
Concentration:	ug/L	ug/L	ug/L	ug/L	ug/L
Laboratory Number:	85962- 6	85962- 7	85962- 8		
	ND/EA	80	1500		
Gasoline:	ND<50	3 6	ND<0.5		
Benzene:	ND<0.5	0.6	180		
Toluene:	ND<0.5	0.5	42		
Ethyl Benzene: Xylenes:	ND<0.5	0.7	130		
Concentration:	ug/L	ug/L	ug/L		

^{*} Gasoline range concentration. Only a single peak was observed in the chromatogram.

Page 1 of 2

Certified Laboratories

Superior Precision Analytical, Inc.

825 Arnold Drive, Suite 114 • Martinez, California 94553 • (510) 229-1512 / fax (510) 229-1526

CERTIFICATE OF ANALYSIS

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS

Page 2 of 2 QA/QC INFORMATION SET: 85962

NA = ANALYSIS NOT REQUESTED ND = ANALYSIS NOT DETECTED ABOVE QUANTITATION LIMIT

ug/L = parts per billion (ppb)

OIL AND GREASE ANALYSIS By Standard Methods Method 5520F: Minimum Detection Limit in Water: 5000ug/L

Modified EPA SW-846 Method 8015 for Extractable Hydrocarbons: Minimum Quantitation Limit for Diesel in Water: 50ug/L

EPA SW-846 Method 8015/5030 Total Purgable Petroleum Hydrocarbons: Minimum Quantitation Limit for Gasoline in Water: 50ug/L

EPA SW-846 Method 8020/BTXE
Minimum Quantitation Limit in Water: 0.5ug/L

ANALYTE	SPIKE LEVEL	MS/MSD RECOVERY	RPD	CONTROL LIMIT
Gasoline: Benzene: Toluene: Ethyl Benzene: Xylenes:	200 ng	95/95	0	70-130
	200 ng	99/100	2	70-130
	200 ng	95/97	2	70-130
	200 ng	100/102	2	70-130
	200 ng	90/93	4	70-130

Richard Srna, Ph.D.

Laboratory Director

☐ Yes Chain-of-Custody-Record Fax copy of Lab Report and COC to Chevron Contact: 区 No 85962 KEN LAN 9-2960 Chevron Contact (Name) ... Cherron Facility Humber FORTY MANNE 2416 Grove WAY, CASNO VALLEY 510-842-9500 (Phone)____ Consultant Project Humber ALTON GEOSCIENCE SAL Chevron U.S.A. Inc. Loboratory Name ... 2512110 P.O. BOX 5004 Laboratory Release Number ... MIN 5870 STONEFILE Dr., STE. G. PGA SANTON San Ramon, CA 94583 ANDREW RLOCK Samples Collected by (Name). 6-4-92 Ovola Elk FAX (415)842-9591 Told Pearson Project Contact (Name) Collection Date (Phone) 5(0 - 734-8134 (Fex Humber) 510 - 734-8420 Signoture ... DO NOT BILL for TB-LB Analyses To Be Performed Constants Recrets Purpeable Adocurban (8010) Purpeable Aramotto (8020) Purpeable Organica (8240) ₹5 *****0 MEX + TPH 645 (8020 + 8015) (8015) (8015) Oil and Green (3620) Yes NOTE SAMPLE 1325 HCL 78-LB DATE AND 1325 RIN HCL MAX holding C-6 330 HCL TIME. 1344 HCL Please initial 1357 HCL Samples Stoled in ice × HCL 1416 Appropriate containers Stimples preserved X 6-3 1452 HCL VDA's without hoodspoo 1542 HCL c-2 Comments: Turn Around Time (Circle Chelce) Received By (Signature) Date/Time Organization Organization Date/Time 6/12/22 13/8 ALTON 6-12-92/210 7: Jane Ex ... Dole/Time Received By (Signature) Octo/Time Organization Organization (elimpulation By (Signature) 647 131 1-10-10-A Block Recieved For Laboratory by (Signature) Data/Time 6/12/97 Date/Time Relinquished By (Signeture) Organization 6/12/92