

# 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: June 15, 1993  
QUARTER ENDING: March 31, 1993

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.

### SUMMARY OF THIS QUARTER'S ACTIVITIES:

Performed first quarter monitoring on February 2, 1993.

### RESULT OF QUARTERLY MONITORING:

Results indicate that since the previous sampling event benzene concentrations in MW-1 and MW-2 have increased. Benzene and TPH-g concentrations in MW-3 have decreased.



PROPOSED ACTIVITY OR WORK FOR NEXT QUARTER:

<u>ACTIVITY</u>	<u>ESTIMATED COMPLETION DATE</u>
Second quarter monitoring	May 1993
Install five ground-water monitoring wells	April 1993

# 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 15, 1993

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 1993 Groundwater Monitoring Report for the above-referenced Ultramar facility prepared by Aegis Environmental, 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 I  
Marketing Environmental Department

Enclosure: First Quarter 1993 Groundwater Monitoring Report  
Quarterly Status Report

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



A Member of the Ultramar Group of Companies

**BEACON**  
#1 Quality and Service



# AEGIS ENVIRONMENTAL, INC.

1050 Melody Lane, Suite 160, Roseville, CA 95678



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

---

April 9, 1993

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

Subject: **First Quarter 1993 Groundwater Monitoring Report**  
Beacon Station #574  
22315 Redwood Road, Castro Valley, California

Dear Mr. Earnest:

Aegis Environmental, Inc. (Aegis), is pleased to provide Ultramar Inc. this report documenting the results of quarterly groundwater monitoring conducted on February 2, 1993, at the subject site (Figure 1). The monitoring included measurements of depths to groundwater in and total depths of three wells (MW-1 through MW-3) located on site (Figure 2). Groundwater samples were collected from all three wells.

## **GROUNDWATER ELEVATIONS**

Aegis personnel collected measurements of the depths to groundwater in all three wells prior to purging and sampling on February 2, 1993. Current groundwater level data, and prior 1992 data only, are summarized in Table 1. Previous groundwater level data are included in Attachment 3. All measurements of depths to groundwater were made to the nearest 0.01 foot from the referenced wellhead (top-of-casing) elevations and conducted according to the Aegis standard operating procedures (SOP) included in Attachment 1. On the basis of the February 2, 1993, measurements, groundwater is estimated to flow to the southwest (Figure 2) at an average gradient of approximately 0.04 ft/ft. In general, groundwater levels have increased approximately 2 feet compared to the November 1992 event.

92-779B.RPT

GEOLOGISTS • ENGINEERS • GROUNDWATER SCIENTISTS

## **GROUNDWATER SAMPLING AND ANALYSES**

Aegis personnel collected groundwater samples from the three wells on February 2, 1993. The samples were collected according to the Aegis SOP included in Attachment 1, and submitted under chain-of-custody to WEST Labs, a state-certified analytical laboratory. All samples were analyzed for concentrations of: a) total petroleum hydrocarbons, as gasoline, by modified EPA Method 8015; and b) benzene, toluene, ethylbenzene, and total xylenes by EPA Method 602. Current analytical results, and prior 1992 analytical results only, are summarized in Table 2. Figure 3 is a distribution map of benzene in groundwater based on the data summarized in Table 2. The analytical laboratory reports and chain-of-custody form are included as Attachment 2. Previous analytical results are included in Attachment 4. Benzene concentrations decreased in well MW-3, but increased in MW-1 and MW-2 compared to the November 1992 event.

Aegis recommends a copy of this quarterly monitoring report be forwarded to the following parties:

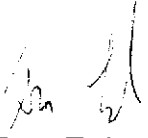
Mr. Scott Seery  
Senior Hazardous Materials Specialist  
Alameda County Health Agency  
Division of Hazardous Materials  
Department of Environmental Health  
80 Swan Way, Room 350  
Oakland, California 94621


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

This report has been prepared for the sole use of Ultramar Inc. Any reliance on this report by third parties shall be at such parties' own 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. If you have any questions or comments, please do not hesitate to call us at (916) 782-2110.

Sincerely,

**AEGIS ENVIRONMENTAL, INC.**

  
Tom E. Landwehr  
Senior Geologist

  
Douglas I. Sheeks  
Senior Geologist  
CRG No. 5211



4-9-93  
Date

TEL/DIS/law

Attachments

**FIGURES:**

FIGURE 1 ..... SITE LOCATION MAP

FIGURE 2 ..... POTENTIOMETRIC SURFACE MAP  
(FEBRUARY 2, 1993)

FIGURE 3 ..... DISTRIBUTION MAP OF BENZENE  
IN GROUNDWATER (FEBRUARY 2, 1993)

**TABLES:**

TABLE 1 ..... WATER LEVEL DATA

TABLE 2 ..... ANALYTICAL RESULTS: GROUNDWATER

**ATTACHMENTS:**

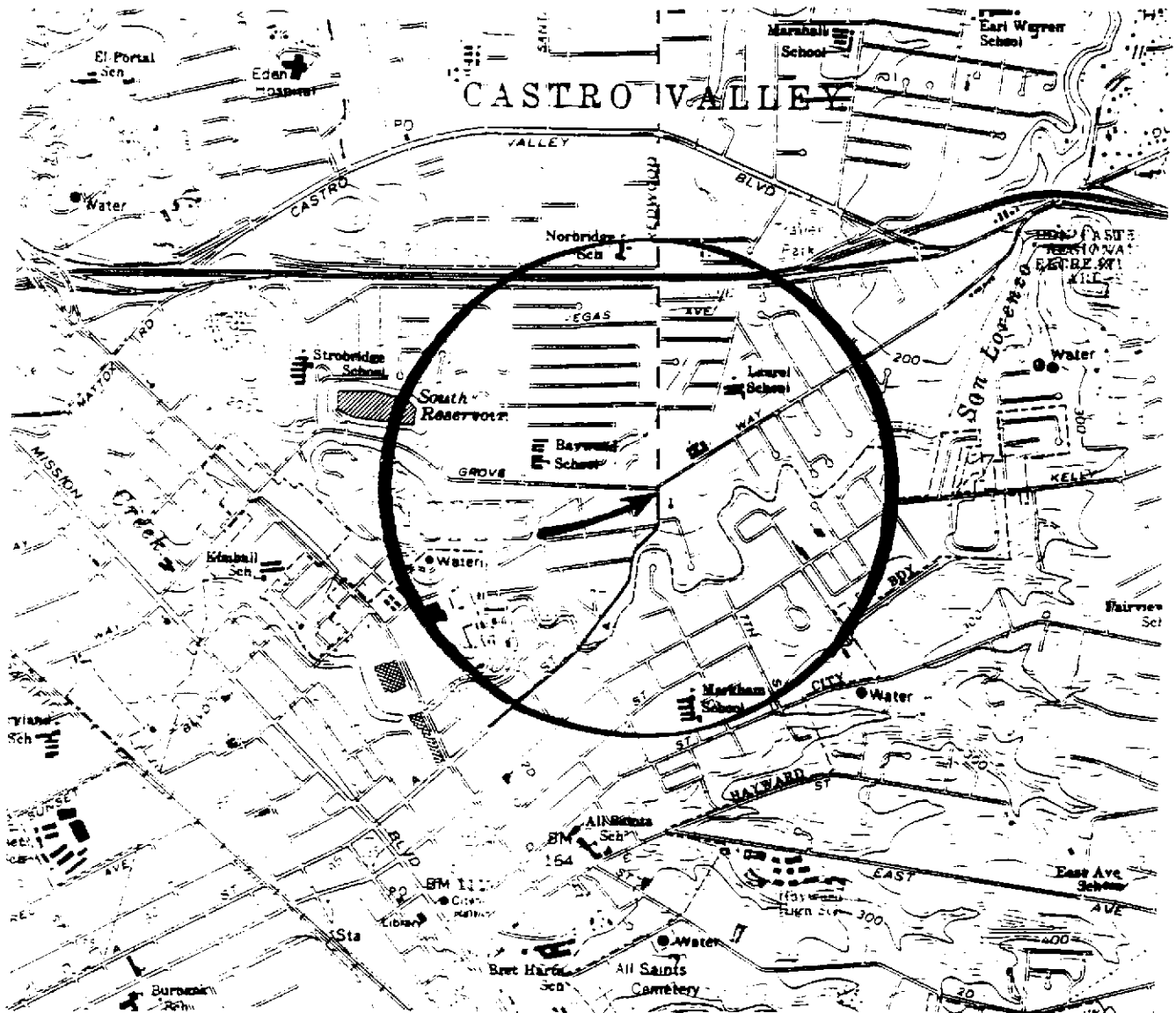
ATTACHMENT 1 ..... STANDARD OPERATING PROCEDURES

ATTACHMENT 2 ..... LABORATORY REPORTS AND  
CHAIN-OF-CUSTODY FORM

ATTACHMENT 3 ..... HISTORICAL WATER LEVEL DATA

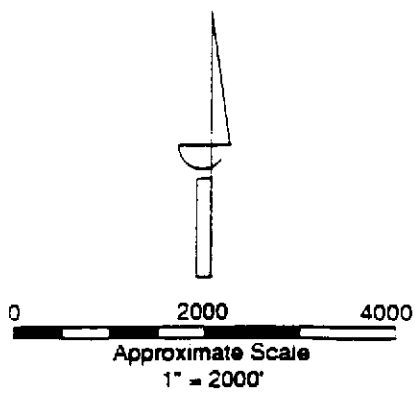
ATTACHMENT 4 ..... HISTORICAL ANALYTICAL DATA


ATTACHMENT 5 ..... FIELD DATA SHEETS



**GENERAL NOTES:**

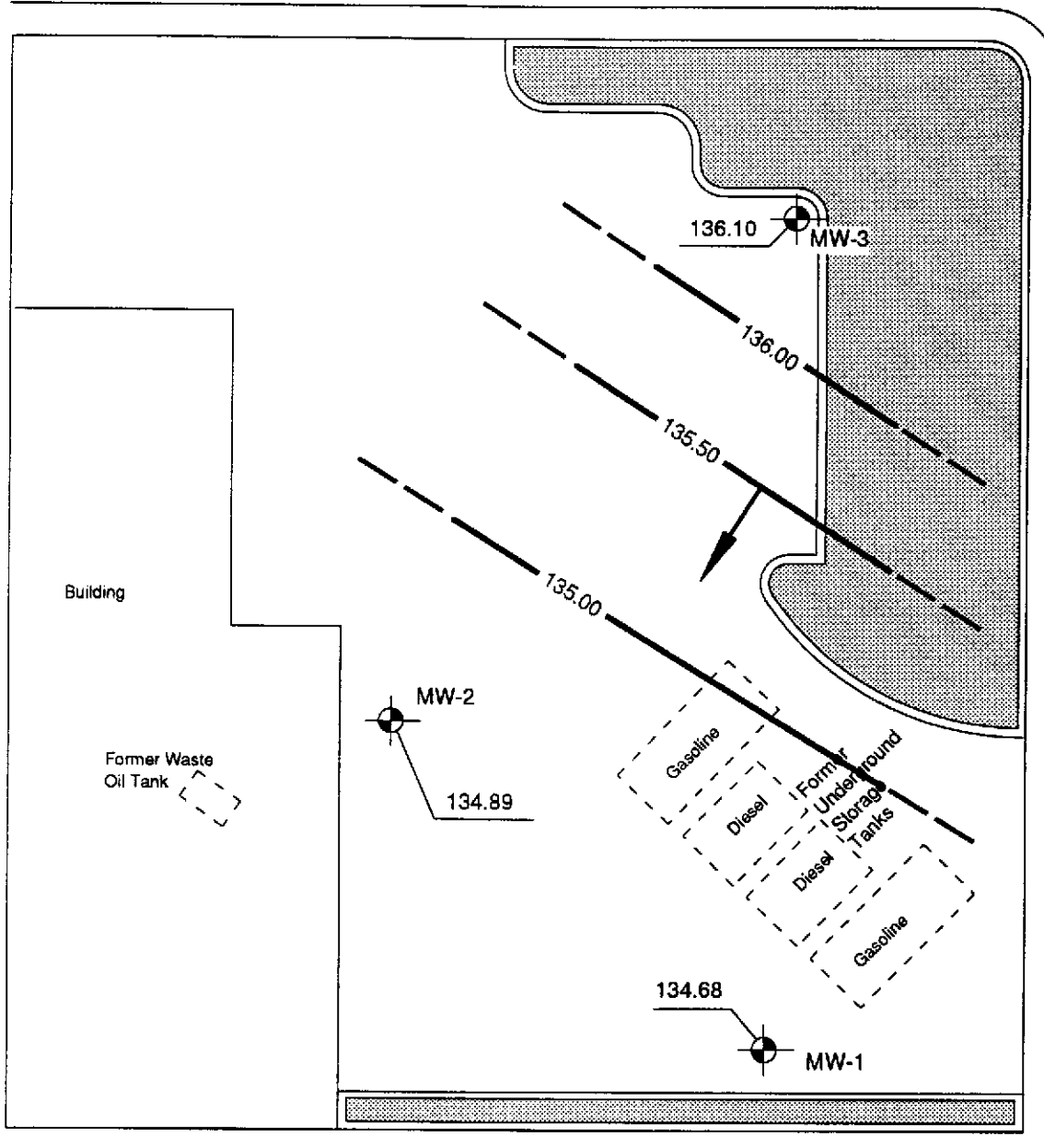
BASE MAP FROM USGS  
7.5 MINUTE TOPOGRAPHIC  
HAYWARD, CALIF.



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



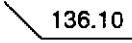



GROVE WAY



REDWOOD ROAD

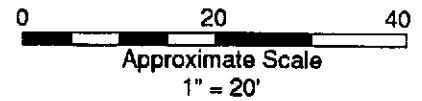
LEGEND

-  Monitoring Well
-  Potentiometric Surface Contour Line (Dashed Where Inferred)
-  136.10  
Groundwater Elevation in Feet
-  Estimated Direction of Groundwater Flow

NOTES

Site Sketch After  
Water Table Contour Map  
By Delta Environmental

All locations Are Approximate



Hydraulic Gradient = 0.04 ft/ft  
Contour Interval = 0.5 ft



AEGIS ENVIRONMENTAL, INC.

POTENTIOMETRIC SURFACE MAP  
February 2, 1993

FIGURE  
2

DRAWN BY: D. Hada DATE: February 27, 1993

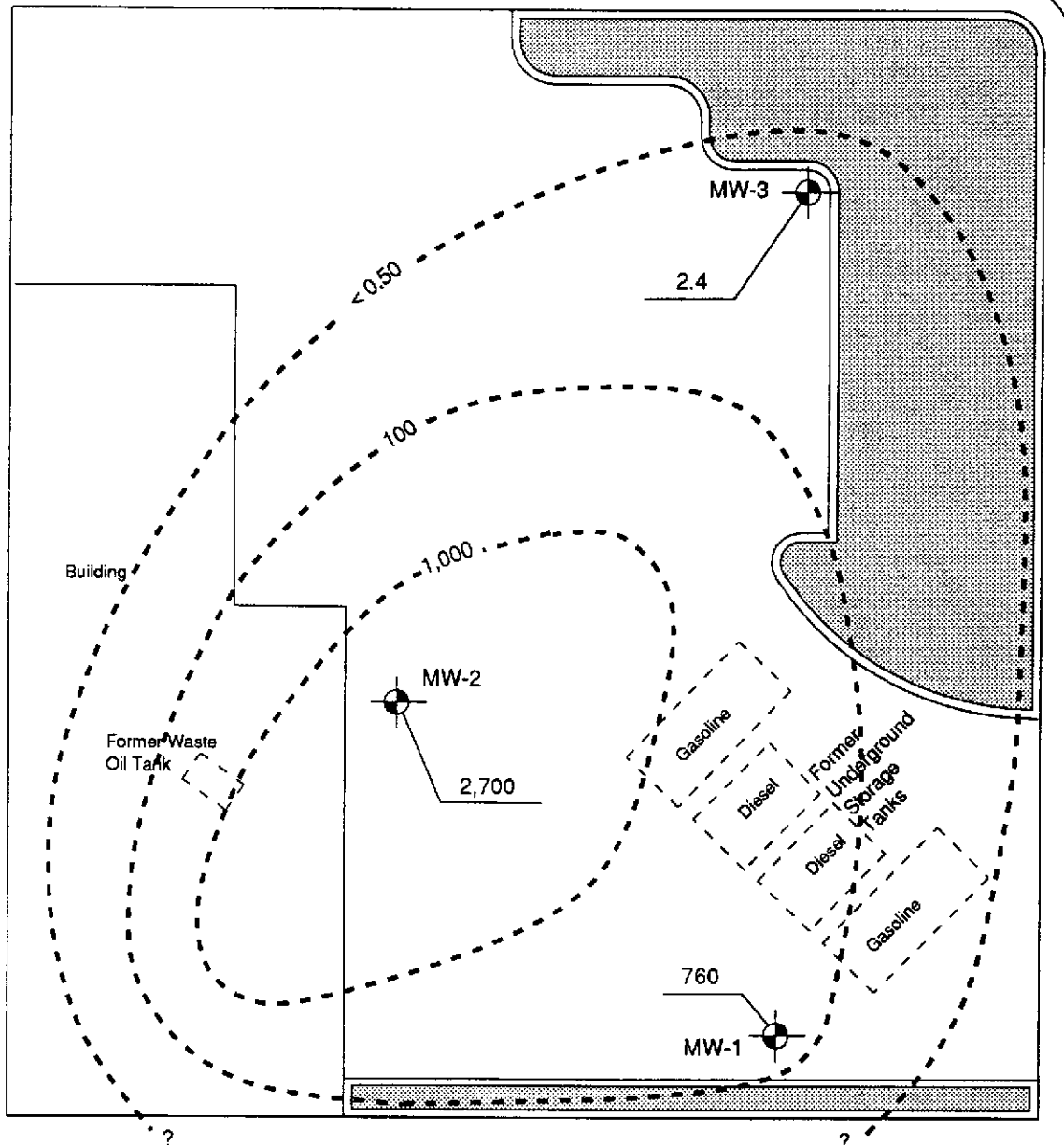
REVISED BY: *Tom C* DATE: *3/2/93*

REVIEWED BY: DATE:

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


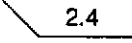


PROJECT NUMBER:  
92-779

GROVE WAY



REDWOOD ROAD

LEGEND

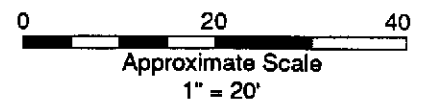
-  Monitoring Well
-  2.4 Benzene Concentration (parts-per-billion)
-  Inferred Iso-Concentration Limits
-  <math>< 0.50</math> Below Indicated Detection Limit



Contour Interval = Exponential

NOTES

Site Sketch After  
Water Table Contour Map  
By Delta Environmental

All locations Are Approximate



 <b>AEGIS ENVIRONMENTAL, INC.</b>		<b>DISTRIBUTION MAP OF BENZENE IN GROUNDWATER February 2, 1993</b>		<b>FIGURE 3</b>	
DRAWN BY: D. Hada	DATE: February 27, 1993	Former Beacon Station # 574 22315 Redwood Road Castro Valley, CA		PROJECT NUMBER:  92-779	
REVISED BY:	DATE:				
REVIEWED BY: 	DATE: 3/29/93				

**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) <sup>1</sup>	Depth to Groundwater <sup>1</sup>	Groundwater Elevation <sup>2</sup>	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	
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	
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	

NOTES: <sup>1</sup> = Measurement and reference elevation taken from notch/mark on top north side of well casing.  
<sup>2</sup> = Elevation referenced to mean sea level.  
Well Depth = Measurement from top of casing to bottom of well.

**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	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
MW-2	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
MW-3	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

NOTES: < = Below indicated detection limit.  
 --- = 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 method-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 periodic 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 wetted well-casing 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 collected 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 analysis (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 analytical data.

In the event the water samples cannot be submitted to the analytical laboratory on the same day they are collected (e.g., due to weekends or holidays), the samples are temporarily stored until the first opportunity for submittal either on ice in a cooler, such as when in the field, or in a refrigerator at Aegis' office.



**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) 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 "Measured Total Depth" of the well.

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.

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 (DTW) 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 or similar 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**

**LABORATORY REPORTS AND  
CHAIN-OF-CUSTODY FORM**



RECEIVED

FEB 17 1993

February 11, 1993  
Sample Log 5803

Ans'd. *CF/SR*

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

Subject: Analytical Results for 3 Water Samples  
Identified as: Project # 92-779 (Beacon 574)  
Received: 02/04/93

Dear Ms. Richgels:

Analysis of the sample(s) referenced above has been completed. This report is written to confirm results communicated on February 11, 1993 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 916-757-4650 if you have questions regarding procedures or results. The chain-of-custody document is enclosed.

Approved by:



Joel Kiff  
Senior Chemist



Sample Log 5803

5803-1

Sample: MW-1

From : Project # 92-779 (Beacon 574)

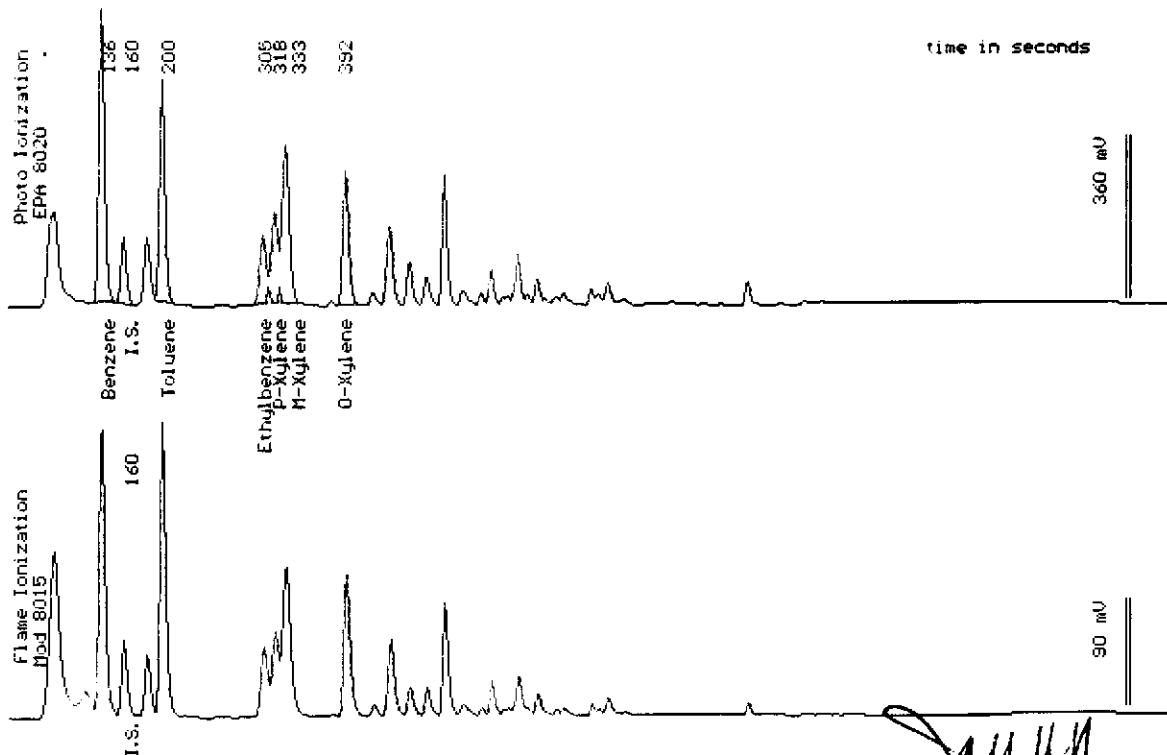
Sampled : 02/02/93

Dilution : 1:10

QC Batch : 4082i

Matrix : Water

Parameter	(MDL) ug/L	Measured Value ug/L
Benzene	(5.0)	760
Toluene	(5.0)	770
Ethylbenzene	(5.0)	250
Total Xylenes	(5.0)	1200
TPH as Gasoline	(500)	8500



Date Analyzed: 02-11-93  
Column : 0.53mm ID X 30m DBMEX (J&W Scientific)

Joel Kiff  
Senior Chemist



Sample Log 5803

5803-2

Sample: MW-2

From : Project # 92-779 (Beacon 574)

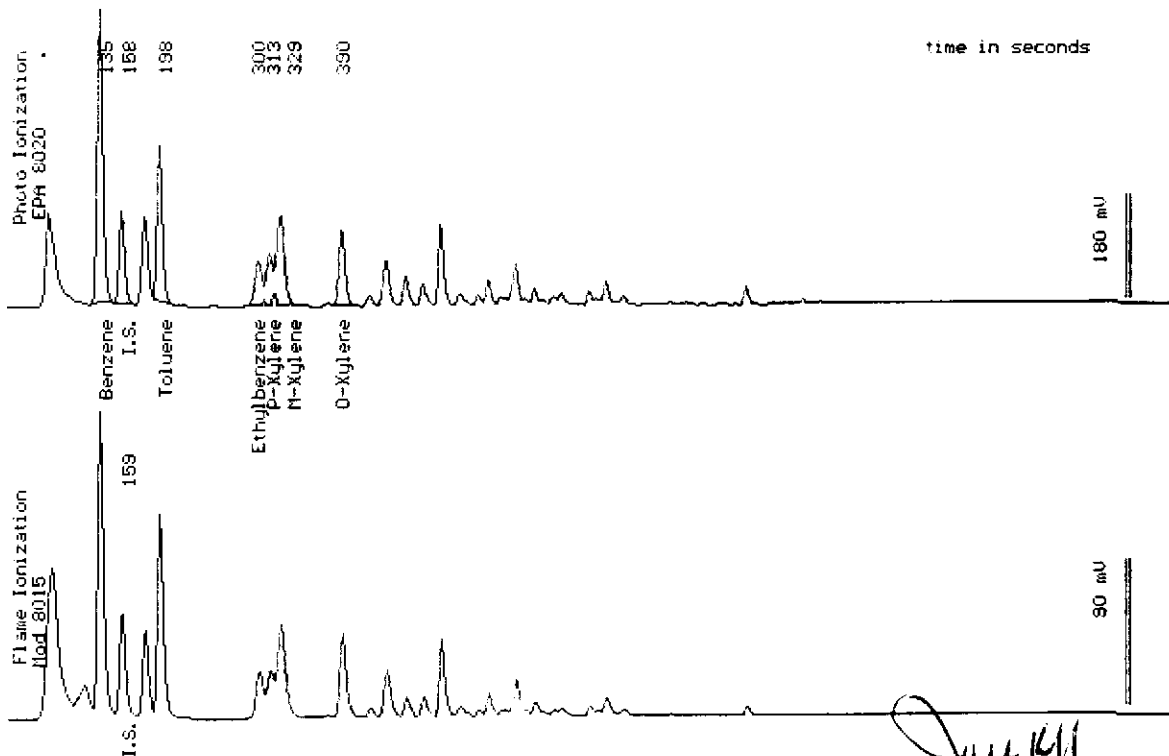
Sampled : 02/02/93

Dilution : 1:50

QC Batch : 4082i

Matrix : Water

Parameter	(MDL) ug/L	Measured Value ug/L
Benzene	(25)	2700
Toluene	(25)	1900
Ethylbenzene	(25)	590
Total Xylenes	(25)	2600
TPH as Gasoline	(2500)	24000



Date Analyzed: 02-11-93  
Column : 0.53mm ID X 30m DBMEX (J&W Scientific)

Joel Kiff  
Senior Chemist



Sample Log 5803

5803-3

Sample: MW-3

From : Project # 92-779 (Beacon 574)

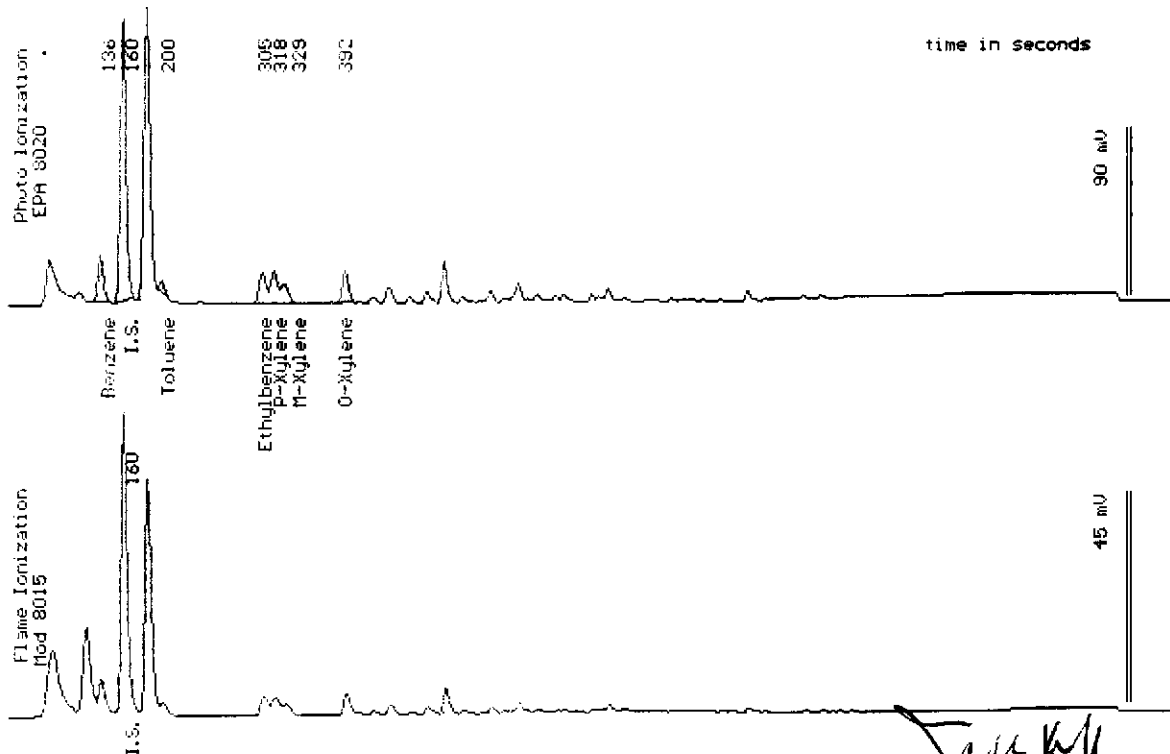
Sampled : 02/02/93

Dilution : 1:1

Matrix : Water

QC Batch : 4082i

Parameter	(MDL) ug/L	Measured Value ug/L
Benzene	(.50)	2.4
Toluene	(.50)	.71
Ethylbenzene	(.50)	2.7
Total Xylenes	(.50)	6.2
TPH as Gasoline	(50)	86



Date Analyzed: 02-11-93  
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Joe Kiff  
Senior Chemist



ULTRAM  
(716) 753-4500

**Ultram Inc.**  
**CHAIN OF CUSTODY REPORT**

**BEACON**

Beacon Station No. <b>574</b>		Sampler (Print Name) <b>MIKE WESNEY</b>			ANALYSES				Date <b>2-4-13</b>	Form No. <b>1</b> of <b>1</b>
Project No. <b>92-779</b>		Sampler (Signature) <i>Mike Wesney</i>			BTEX	TPH (gasoline)	TPH (diesel)	No. of Containers	Please use Tri-Regional detection limits!  REMARKS	
Project Location <b>22315 REDWOOD B. CASTRO VALLEY</b>		Affiliation <b>Aegis Environmental</b>								
Sample No./Identification	Date	Time	Lab No.							
<b>MW-1</b>	<b>2-2-92</b>	<b>2:25</b>		<b>XX</b>	<b>XX</b>					
<b>MW-2</b>	<b>↓</b>	<b>2:36</b>		<b>XX</b>	<b>XX</b>					
<b>MW-3</b>	<b>↓</b>	<b>2:31</b>		<b>XX</b>	<b>XX</b>					
Relinquished by: (Signature/Affiliation) <i>Mike Wesney</i>		Date <b>2/4/13</b>	Time <b>1:55</b>	Received by: (Signature/Affiliation) <i>Luis Dora</i>				Date <b>2/4/13</b>	Time <b>1:55</b>	
Relinquished by: (Signature/Affiliation) <i>Luis Dora</i>		Date <b>2/4/13</b>	Time <b>4:05</b>	Received by: (Signature/Affiliation)				Date	Time	
Relinquished by: (Signature/Affiliation)		Date	Time	Received by: (Signature/Affiliation) <i>[Signature]</i>				Date <b>2/4/13</b>	Time <b>16:05</b>	
Report To: <b>Sheila Richgels</b> <b>Aegis Environmental</b> <b>1050 Melody Lane, Ste 160</b> <b>Roseville, CA 95678</b>				<b>(916) 782-2110</b> <b>FAX 786 7830</b>		Bill to: <b>ULTRAMAR INC.</b> <b>525 West Third Street</b> <b>Hanford, CA 93230</b> Attention: <b>KENNETH EARNEST</b>				

WHITE: Return to Client with Report

YELLOW: Laboratory Copy

PINK: Originator Copy

**ATTACHMENT 3**  
**HISTORICAL WATER LEVEL DATA**



**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) <sup>1</sup>	Depth to Groundwater <sup>1</sup>	Groundwater Elevation <sup>2</sup>
MW-1	03/26/91	156.55	22.43	134.12
	04/01/91		22.37	134.18
	11/22/91		24.09	132.46
	03/27/92		22.43	134.12
	06/04/92		23.40	133.15
	09/23/92		24.07	132.48
MW-2	03/26/91	155.17	20.91	134.26
	04/01/91		20.82	134.35
	11/22/91		22.54	132.63
	03/27/92		20.82	134.35
	06/04/92		21.81	133.36
	09/23/92		22.45	132.72
MW-3	03/26/91	157.13	21.62	135.51
	04/01/91		21.55	135.58
	11/22/91		23.98	133.15
	03/27/92		21.46	135.67
	06/04/92		22.34	134.79
	09/23/92		22.84	134.29

- NOTES:
- 1 = Measurement and reference elevation taken from notch/mark on top north side of well casing.
  - 2 = Elevation referenced to mean sea level and obtained from previous consultant.

**ATTACHMENT 4**  
**HISTORICAL ANALYTICAL DATA**

TABLE 2

## ANALYTICAL RESULTS: GROUNDWATER

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

Sample ID	Date Collected	Total Petroleum Hydrocarbons			Aromatic Volatile Organics			
		Gasoline	Diesel	Motor Oil	Benzene	Toluene	Ethyl-benzene	Total Xylenes
MW-1	04/01/91	4,100	<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
	09/23/92	3,400	---	---	480	430	110	550
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	2,400	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
MW-3	04/01/91	3,100	<100	---	41	91	37	420
	11/22/91	470	<50	<50	10	6.3	11	36
	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

## NOTES:

&lt;

=

Below the indicated detection limits labeled in the analytical laboratory results report.

---

=

Not analyzed.

**AEGIS ENVIRONMENTAL, INC.**  
**GROUNDWATER/LIQUID LEVEL DATA**  
(measurements in feet)

Project Address: Beacon - 22315 Redwood, Castro Villy - 574

Date: 2-2-93

Recorded by: Mike Wesley

Project No.: 92-779

Well No.	Time	Measured Total Depth	Depth to Gr. Water	Depth to Product	Product Thickness	Comments (TOC/TOB) (product skimmer in well)
MW-1	2:06	29.80	21.87	N/A	N/A	
MW-2	2:08	29.73	20.28	↓	↓	
MW-3	2:04	29.45	21.03	↓	↓	

Notes:

**ATTACHMENT 5**  
**FIELD DATA SHEETS**



Client: BEACON #574  
Site: 22315 Redwood Rd.

Project No: 92-779  
Well Designation: MW1

Purging Equipment:  2" Disposable bailer  
 2" PVC bailer  
 4" PVC bailer  
 Submersible pump  
 Dedicated bailer

Sampled with disposal bailer or other: \_\_\_\_\_  
Well recharged to 80% recovery.

Well Diameter: 2" \_\_\_\_\_ 3" \_\_\_\_\_ 4"  6" \_\_\_\_\_ 8" \_\_\_\_\_  
Purge Vol. Multiplier: 0.163 0.367 0.653 1.47 2.61 gal/ft.

Depth of well: 29.80 Calculated purge: 21 gal  
Depth to water: 21.87 Actual purge: 9 gal

Start purge: 2:13 Sampling time: 2:25 Sampling Date: 2-2-93

Time	Temp.	E.C.	pH	Turbidity	Volume
2:15	63.3	1.32 ms	6.37	N/A	6
2:15	Dry	7 gal		↓	7
2:18	63.9	1.36 ms	6.35	↓	9

Sample appearance: Greenish Grey

QC samples collected at this well: \_\_\_\_\_

Lock: 3759

Remarks: Hand Bailed 2 gal Remaining Water w/ Disp Bailor

Signature

Mike Neomey

Review

[Signature]



Client: BEACON #574  
Site: 22315 Redwood Rd.

Project No: 92-779  
Well Designation: MW2

Purging Equipment:  2" Disposable bailer  
 2" PVC bailer  Submersible pump  
 4" PVC bailer  Dedicated bailer

Sampled with disposal bailer or other: \_\_\_\_\_  
Well recharged to 80% recovery.

Well Diameter: 2" \_\_\_\_\_ 3" \_\_\_\_\_ 4" X 6" \_\_\_\_\_ 8" \_\_\_\_\_  
Purge Vol. Multiplier: 0.163 0.367 0.653 1.47 2.61 gal/ft.

Depth of well: 29.73 Calculated purge: 26gal  
Depth to water: 20.28 Actual purge: 12gal

Start purge: 2:20 Sampling time: 2:36 Sampling Date: 2-2-93

Time	Temp.	E.C.	pH	Turbidity	Volume
2:23	59.3	1.57ms	5.27	N/P	8
2:24	Dry 10	gal		↓	10
2:27	59.6	1.55ms	5.25	↓	12

Sample appearance: Cloudy

QC samples collected at this well: \_\_\_\_\_

Lock: 3753

Remarks: Hand Bailed 2gal Remaining water w/ Disp Bailer

Signature Mike Kearney Review [Signature]



Client: BEACON #574  
Site: 22315 Redwood Rd.

Project No: 92-779  
Well Designation: MW13

Purging Equipment:  2" Disposable bailer  
 2" PVC bailer  
 4" PVC bailer  
 Submersible pump  
 Dedicated bailer

Sampled with disposal bailer or other: \_\_\_\_\_  
Well recharged to 80% recovery. \_\_\_\_\_

Well Diameter: 2" \_\_\_\_\_ 3" \_\_\_\_\_ 4"  6" \_\_\_\_\_ 8" \_\_\_\_\_  
Purge Vol. Multiplier: 0.163 0.367 0.653 1.47 2.61 gal/ft.

Depth of well: 29.45  
Depth to water: 21.03  
Calculated purge: 24 gal  
Actual purge: 9 gal

Start purge: 2:05 Sampling time: 2:21 Sampling Date: 2-2-91

Time	Temp.	E.C.	pH	Turbidity	Volume
2:08	64.5	135 us	off scale <	N/A	6
2:08	Dry	7 gal		↓	7
2:10	64.9	1.32 us	" "	↓	9

Sample appearance: Semi clear

QC samples collected at this well: \_\_\_\_\_

Lock: 3753

Remarks: Hand Bailed Remaining water w/ Disp Bailer

Signature Mike Kearney

Review [Signature]