



# HORIZON ENVIRONMENTAL INC.

Specialists in Site Assessment, Remedial Testing, Design and Operation

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8:01 am, Apr 03, 2007

Alameda County  
Environmental Health

April 2, 2007

Mr. Jerry Wickham  
Alameda County Department of Environmental Health  
1131 Harbor Bay Parkway  
Alameda, California 94502

Subject: **Transmittal of Semi-Annual Monitoring Report**  
First Quarter 2007  
Former Beacon Station 12574  
22315 Redwood Road, Castro Valley, California

Mr. Wickham:

At the request of Ultramar Inc., Horizon Environmental Inc. (Horizon) is forwarding the enclosed *Semi-Annual Groundwater Monitoring Report* dated April 2, 2007. The report documents results of first quarter 2007 groundwater monitoring at the subject site.

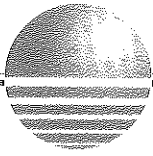
Please call Horizon at 916-939-2170 if you have any questions or require additional information.

Sincerely,  
**HORIZON ENVIRONMENTAL INC.**

Karen P. Liptak  
Staff Geologist

Enclosure

cc: Mr. Steve Coodey, Ultramar Inc.  
Mr. Bill Courtney



# HORIZON ENVIRONMENTAL INC.

Specialists in Site Assessment, Remedial Testing, Design and Operation

April 2, 2007

Mr. Steve Coodey  
Ultramar Inc.  
685 West Third Street  
Hanford, California 93230

Subject: **Semi-Annual Groundwater Monitoring Report**  
First Quarter 2007  
Former Beacon Station No. 12574  
22315 Redwood Road, Castro Valley, California

Mr. Coodey:

At the request of Ultramar Inc. (Ultramar), Horizon Environmental Inc. (Horizon) has prepared this Monitoring Report which documents first quarter 2007 groundwater monitoring at the above-referenced site (Figure 1). There are currently five groundwater monitoring wells (MW-1 through MW-4 and MW-6) associated with this site. Wells MW-1 through MW-4 are located within the property boundaries, while well MW-6 is located off-site to the south of the property on an adjoining property (Figure 2). Well MW-5 was destroyed by a third party due to off-site construction activities.

## **Groundwater Monitoring**

Groundwater monitoring activities were performed by Doulos Environmental Company (Doulos) on February 13, 2007 according to Ultramar Field Procedures (Attachment A). Monitoring activities included measurement of static groundwater levels, purging groundwater from the wells, collection of groundwater samples, and preparation and delivery of the groundwater samples to the analytical laboratory by Doulos.

The depth to water (DTW) levels in the five monitoring wells were measured to the nearest 0.01-foot from the top-of-casing (TOC). Water level measurements were subtracted from surveyed TOC elevations to obtain groundwater elevations, as listed in Table 1. The groundwater physical parameters of conductivity, pH and temperature were monitored with field instrumentation during the purging process. Groundwater levels and purge data are recorded on the Doulos Sampling Information Sheets (Attachment B).

Groundwater samples were collected by Doulos from monitoring wells MW-1 and MW-2 and were submitted under chain-of-custody documentation to Kiff Analytical LLC, a California Department of Health Services-certified analytical laboratory (ELAP No. 2236) located in Davis, California. The samples were analyzed for total petroleum hydrocarbons as gasoline (TPHg); the volatile aromatic compounds benzene, toluene, ethylbenzene and total xylenes

(BTEX); and the fuel oxygenate methyl-t-butyl ether (MTBE) by Environmental Protection Agency (EPA) Method 8260B.

### **Groundwater Monitoring Results**

Groundwater elevation data was used to construct the Groundwater Elevation Contour Map (Figure 2). The groundwater flow direction beneath the site is primarily towards the southwest at an average rate of 0.01 foot / foot. Groundwater monitoring previously performed at the site has indicated a similar groundwater flow direction and magnitude.

Groundwater analytical results are summarized in Table 1. The distribution of TPHg, Benzene and MTBE analytical data are shown on Figure 3. The analytical report is contained in Attachment C. Historical groundwater data as reported by previous consultants is included as Attachment D.

### **GeoTracker Electronic Data Deliverables**

The analytical electronic data deliverable (EDD) was prepared and uploaded by Kiff. The groundwater level EDD (GEO\_WELL) was prepared and uploaded by Horizon. The GEO\_WELL upload confirmation sheet for this quarter and the Quarterly Monitoring Report EDD (GEO\_REPORT) upload confirmation sheet for the previous quarter are contained in Attachment E.

### **Report Distribution**

We recommend a copy of this report be forwarded to:

Mr. Jerry Wickham, R.E.H.S.  
Alameda County Department of Environmental Health  
1131 Harbor Bay Parkway  
Alameda, California 94502

If you have any questions, please contact Horizon at (916) 939-2170.

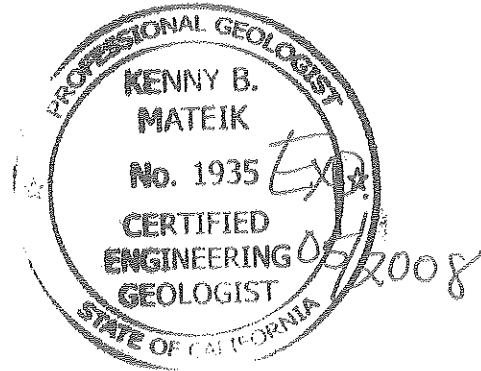
Sincerely,  
**HORIZON ENVIRONMENTAL INC.**



Kenny B. Mateik  
Professional Geologist, C.E.G. No. 1935



Karen P. Liptak  
Staff Geologist



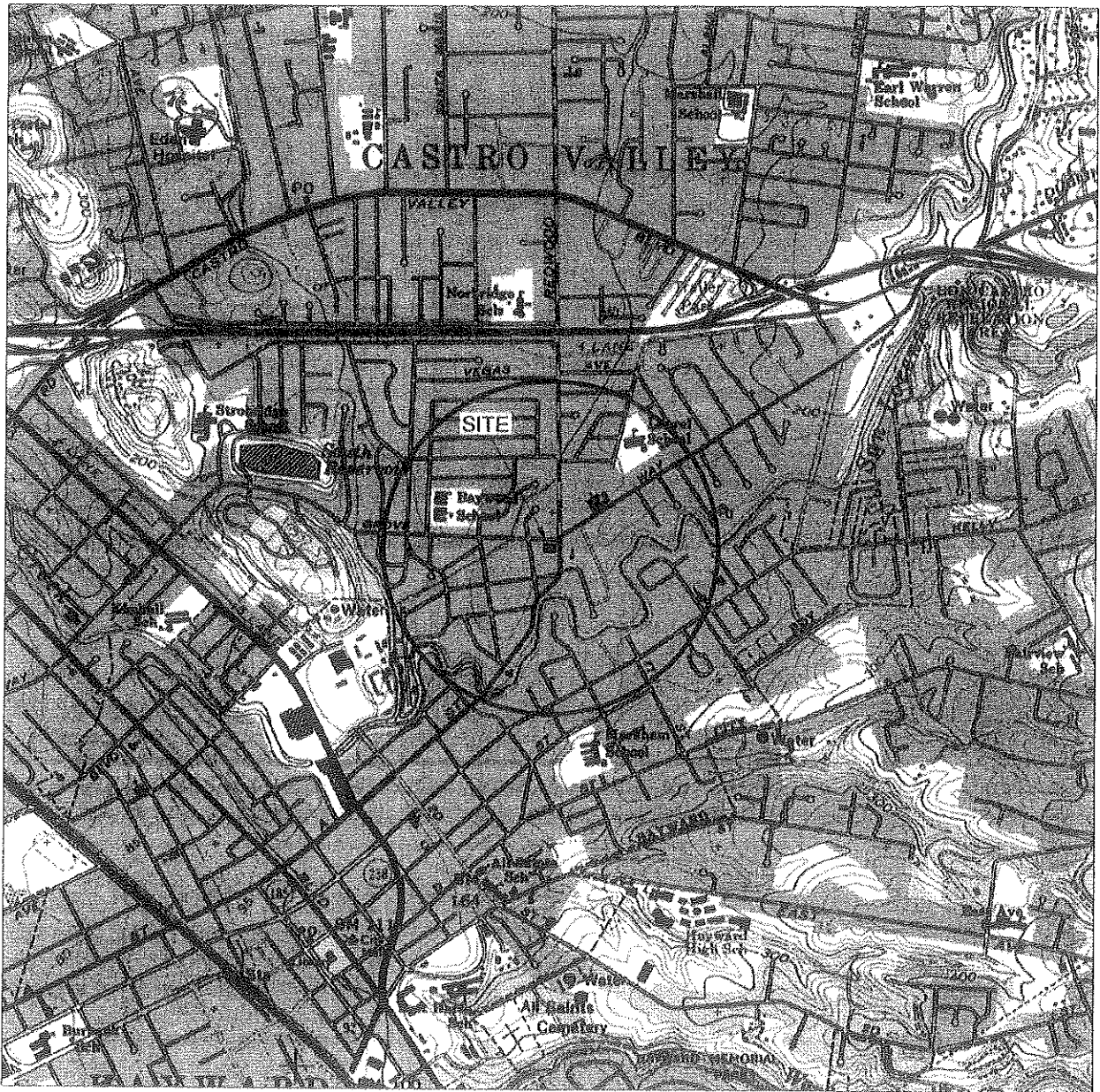
Attachments:

- Figure 1: Site Vicinity Map
- Figure 2: Site Map / Groundwater Elevation Contour Map
- Figure 3: Groundwater Analytical Summary

Table 1: Groundwater Monitoring Data

- Attachment A: Ultramar Field Procedures
- Attachment B: Doulos Sampling Information Sheets
- Attachment C: Analytical Report
- Attachment D: Historical Groundwater Data
- Attachment E: GeoTracker Electronic Data Deliverable Confirmation Sheets

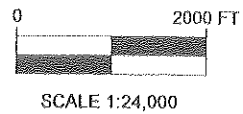
c: Mr. Bill Courtney, Property Manager



T3 S.

R2 W.

GENERAL NOTES:  
 BASE MAP FROM U.S.G.S.  
 HAYWARD, CA.  
 7.5 MINUTE TOPOGRAPHIC  
 PHOTOREVISED 1980



HORIZON ENVIRONMENTAL INC.

Project Number: 1574.41  
 Prepared By: K. Liptak  
 Reviewed By: K. Mateik

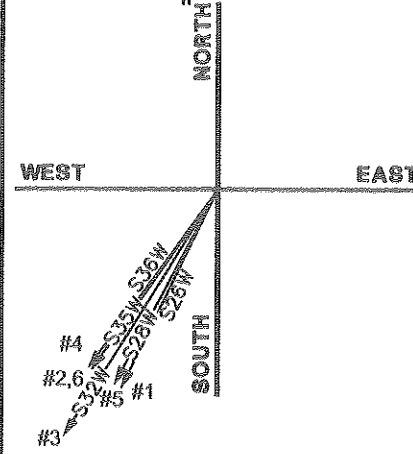
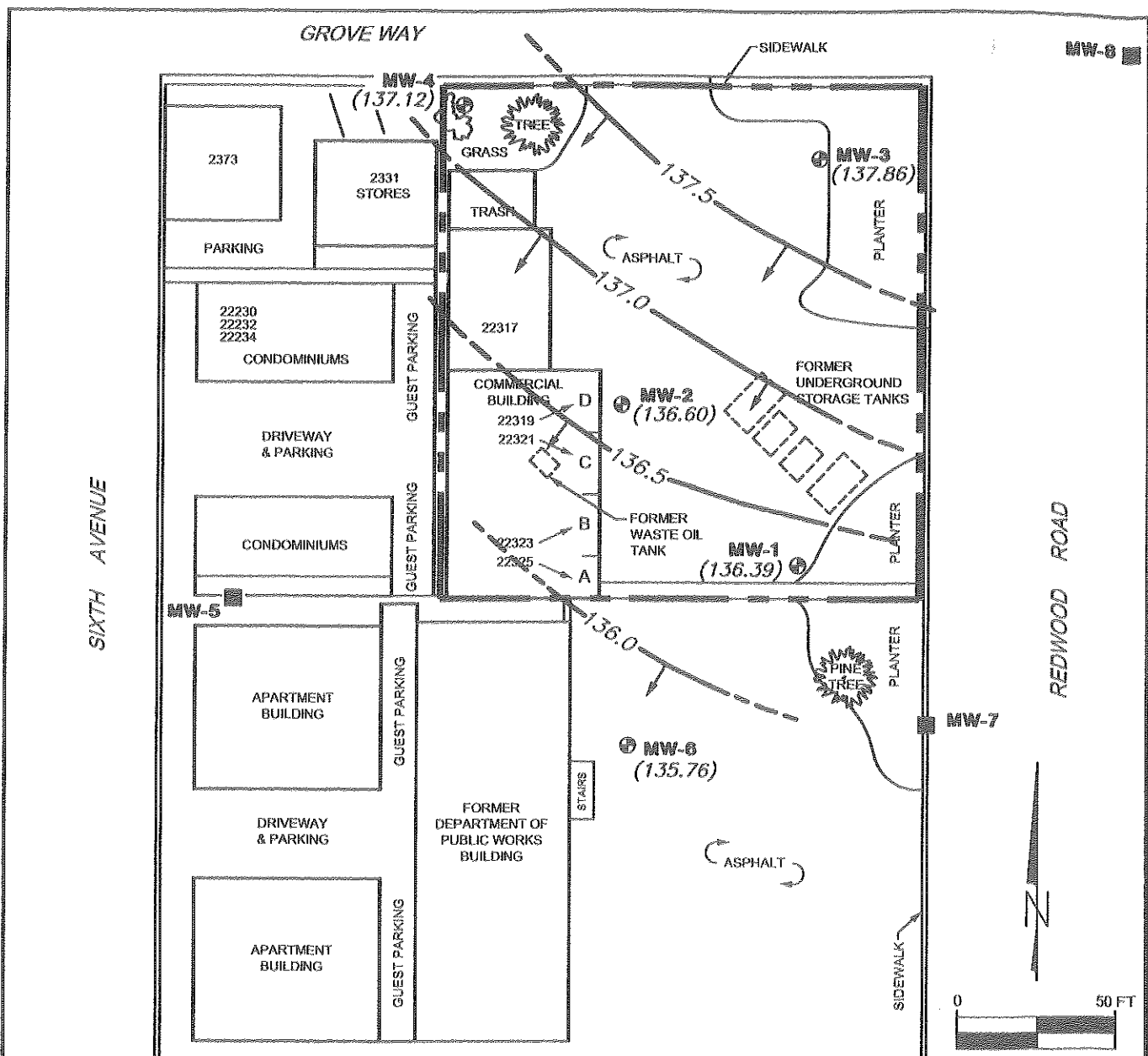
Drawn By: M. LaCoste  
 Date: 10/7/04  
 Revised Date:

SITE LOCATION MAP

FORMER BEACON STATION NO. 12574  
 22315 REDWOOD ROAD  
 CASTRO VALLEY, CA.

FIGURE

1

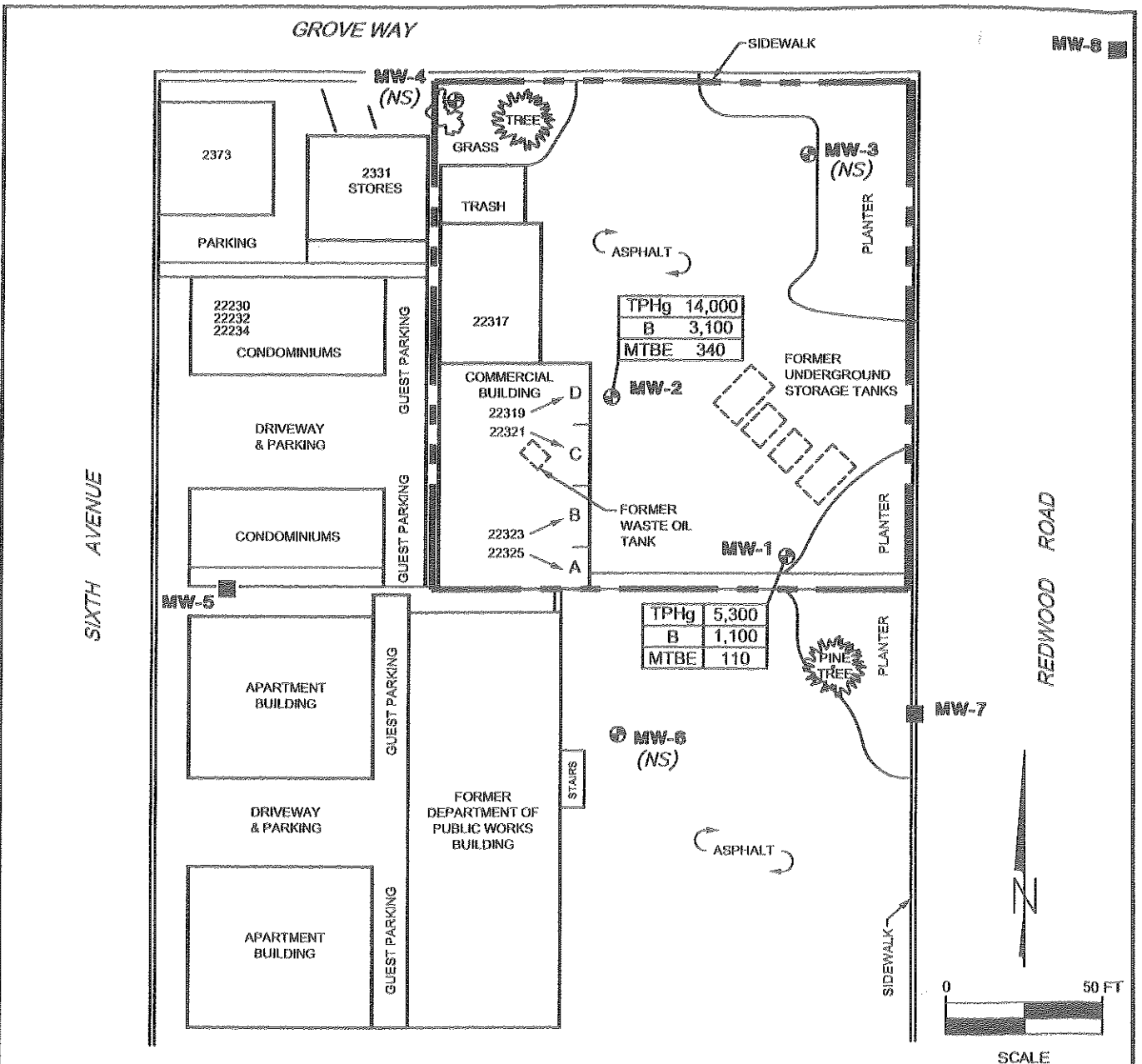


Date	Direction Of Groundwater Flow	ID No.
08/31/04	S 26 W	#1
02/01/05	S 35 W	#2
07/29/05	S 32 W	#3
01/16/05	S 36 W	#4
08/30/06	S 28 W	#5
02/13/07	S 35 W	#6

- EXPLANATION:**
- ⊕ MW-6 Groundwater Monitoring Well
  - MW-8 Abandoned Monitoring Well
  - (137.86) Elevation of Groundwater Measured In Feet; Datum Is Mean Sea Level
  - 137.5 — Line Of Equal Elevation Of Groundwater Measured In Feet; Datum Is Mean Sea Level
  - Direction Of Groundwater Flow
  - (NM) Not Measured
  - Wells Measured 2/13/07

Source: Figure Modified From Survey Drawing Prepared By Majors For Tesoro Refining.

<b>HORIZON ENVIRONMENTAL INC.</b>		<b>SITE MAP/GROUNDWATER ELEVATION CONTOUR MAP</b> FORMER BEACON STATION NO. 12574 22315 REDWOOD ROAD CASTRO VALLEY, CA.	<b>FIGURE</b>  <span style="font-size: 2em;">2</span>
Project Number: 1574.44 Prepared By: K. Liptak Reviewed By: K. Matek	Drawn By: C. Bechtell Date: 03/07 Revised Date:		



**EXPLANATION:**

⊕ MW-6 Groundwater Monitoring Well

■ MW-8 Abandoned Monitoring Well

TPHg	14,000	TOTAL PETROLEUM HYDROCARBONS AS GASOLINE IN PARTS PER MILLION (ppm)
B	3,100	
MTBE	340	

BENZENE CONCENTRATION IN ppm

METHYL-TERT BUTYL ETHER IN ppm

(NS) Not Sampled

Wells Sampled 02/13/07

Source: Figure Modified From Survey Drawing Prepared By Majors For Tesoro Refining.



**HORIZON ENVIRONMENTAL INC.**

Project Number: 1574.44  
Prepared By: K. Liptak  
Reviewed By: K. Matek

Drawn By: C. Bechtell  
Date: 03/07  
Revised Date:

**GROUNDWATER ANALYTICAL SUMMARY**  
FORMER BEACON STATION NO. 12574  
22315 REDWOOD ROAD  
CASTRO VALLEY, CA.

**FIGURE**

**3**

**Table 1 - Groundwater Monitoring Data  
Former Beacon Station No. 12574  
22315 Redwood Road  
Castro Valley, California**

Well Number	Date	TPHg ppb	Benzene ppb	Toluene ppb	Ethylbenz. ppb	Xylenes ppb	MTBE ppb	Depth to GW	T.O.C. Elevation	GW Elevation	Comments
MW-1	02/11/02	41,000	7,600	160	1,600	4,200	640	22.58	158.70	136.12	
	08/21/02	7,400	2,000	31	220	510	270	23.18		135.52	
	03/04/03	30,000	6,000	130	1,300	2,900	490	22.43		136.27	
	09/09/03	18,000	3,900	69	760	1,700	390	23.02		136.88	
	03/23/04	24,000	4,500	89	1,000	2,000	410	21.97		136.73	
	08/31/04	22,000	4,000	77	780	1,600	290	23.35		135.35	no comments
	02/01/05	36,000	8,800	160	1,800	3,000	360	21.98		136.72	no comments
	07/29/05	14,000	2,400	54	460	750	170	22.55		136.15	no comments
	01/16/06	18,000	2,900	61	860	1,300	200	21.75		136.95	no comments
	08/30/06	4,800	1,400	22	150	240	110	22.74		135.96	no comments
02/13/07	5,300	1,100	49	210	280	110	22.31		136.39	no comments	
MW-2	02/11/02	17,000	3,100	270	690	1,600	660	21.03	157.33	136.30	
	08/21/02	6,800	1,600	44	290	260	440	21.60		135.73	
	03/04/03	20,000	3,400	200	590	1,100	670	20.86		136.47	
	09/09/03	19,000	3,200	120	630	940	630	21.45		135.88	
	03/23/04	18,000	3,200	110	640	740	580	20.41		136.92	
	08/31/04	13,000	2,800	59	510	420	430	21.75		135.58	no comments
	02/01/05	17,000	3,200	110	700	730	440	20.42		136.91	no comments
	07/29/05	22,000	3,900	210	770	930	360	20.97		136.36	no comments
	01/16/06	20,000	3,900	120	770	790	370	20.19		137.14	slight sheen / odor
	08/30/06	14,000	3,000	79	480	450	390	21.14		136.19	no comments
02/13/07	14,000	3,100	110	600	620	340	20.73		136.60	sheen	
MW-3	02/11/02	ns	ns	ns	ns	ns	ns	21.55	159.23	137.68	
	08/21/02	ns	ns	ns	ns	ns	ns	22.00		137.23	
	03/04/03	ns	ns	ns	ns	ns	ns	21.48		137.75	
	09/09/03	ns	ns	ns	ns	ns	ns	21.84		137.39	
	03/23/04	ns	ns	ns	ns	ns	ns	20.82		138.41	
	08/31/04	ns	ns	ns	ns	ns	ns	21.93		137.30	no comments
	02/01/05	ns	ns	ns	ns	ns	ns	20.56		138.67	no comments
	07/29/05	ns	ns	ns	ns	ns	ns	21.37		137.86	no comments
	01/16/06	ns	ns	ns	ns	ns	ns	20.75		138.48	no comments
	08/30/06	ns	ns	ns	ns	ns	ns	21.60		137.63	no comments
02/13/07	ns	ns	ns	ns	ns	ns	21.37		137.86	no comments	



**Table 1 - Groundwater Monitoring Data  
Former Beacon Station No. 12574  
22315 Redwood Road  
Castro Valley, California**

Well Number	Date	TPHg ppb	Benzene ppb	Toluene ppb	Ethylbenz. ppb	Xylenes ppb	MTBE ppb	Depth to GW	T.O.C. Elevation	GW Elevation	Comments
MW-4	02/11/02	ns	ns	ns	ns	ns	ns	16.81	154.13	137.32	
	08/21/02	ns	ns	ns	ns	ns	ns	17.58		136.55	
	03/04/03	ns	ns	ns	ns	ns	ns	16.70		137.43	
	09/09/03	ns	ns	ns	ns	ns	ns	17.48		136.65	
	03/23/04	ns	ns	ns	ns	ns	ns	16.35		137.78	
	08/31/04	ns	ns	ns	ns	ns	ns	nm		nm	no comments
	02/01/05	ns	ns	ns	ns	ns	ns	16.70		137.43	no comments
	07/29/05	ns	ns	ns	ns	ns	ns	17.06		137.07	no comments
	01/16/06	ns	ns	ns	ns	ns	ns	16.56		137.57	no comments
	08/30/06	ns	ns	ns	ns	ns	ns	17.18		136.95	no comments
02/13/07	ns	ns	ns	ns	ns	ns	17.01		137.12	no comments	
MW-5	02/11/02	ns	ns	ns	ns	ns	ns	15.70	150.73	135.03	
	08/21/02	ns	ns	ns	ns	ns	ns	16.17		134.56	
	03/04/03	ns	ns	ns	ns	ns	ns	15.46		135.27	
	09/09/03	ns	ns	ns	ns	ns	ns	16.05		134.68	
	03/23/04	ns	ns	ns	ns	ns	ns	14.88		135.85	
	08/31/04	ns	ns	ns	ns	ns	ns	nm		nm	unable to locate due to construction
	02/01/05	ns	ns	ns	ns	ns	ns	nm		nm	unable to locate due to construction
	07/29/05	ns	ns	ns	ns	ns	ns	nm		nm	unable to locate due to construction
01/16/06	--	--	--	--	--	--	--		--	well destroyed	
MW-6	02/11/02	ns	ns	ns	ns	ns	ns	20.78	156.11	135.33	
	08/21/02	ns	ns	ns	ns	ns	ns	21.41		134.70	
	03/04/03	ns	ns	ns	ns	ns	ns	20.64		135.47	
	09/09/03	ns	ns	ns	ns	ns	ns	21.23		134.88	
	03/23/04	ns	ns	ns	ns	ns	ns	20.21		135.90	
	08/31/04	ns	ns	ns	ns	ns	ns	21.50		134.61	no comments
	02/01/05	ns	ns	ns	ns	ns	ns	20.22		135.89	no comments
	07/29/05	ns	ns	ns	ns	ns	ns	20.78		135.33	no comments
	01/16/06	ns	ns	ns	ns	ns	ns	19.92		136.19	no comments
	08/30/06	<50	<0.50	<0.50	<0.50	<0.50	71	20.94		135.17	no comments
02/13/07	ns	ns	ns	ns	ns	ns	20.35		135.76	no comments	

**Notes:**

TPHg = Total Petroleum Hydrocarbons as gasoline  
 TPHd = Total Petroleum Hydrocarbons as diesel  
 MTBE = Methyl Tertiary-Butyl Ether  
 < = less than the specified laboratory detection limit  
 ppb = parts per billion

nm = not measured  
 ns = not sampled  
 nc = not calculated  
 na = not analyzed

T.O.C. = Top of casing  
 Depths and Elevations recorded in feet.  
 GW = Groundwater

**ATTACHMENT A**

**ULTRAMAR FIELD PROCEDURES**

## ATTACHMENT A - ULTRAMAR FIELD PROCEDURES

The following section describes procedures used by field personnel in the performance of ground water sampling at Ultramar Inc. sites.

### 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 of the purge water are monitored. The well is considered to be sufficiently purged when: The four casing volumes have been removed; the temperature, pH, and conductivity values 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 or pumped 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 depth to water 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 depth to water 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 well 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 the purging process, a final free product thickness measurement will be taken and a ground water sample will not be collected.

Ground water samples are stored in 40-milliliter vials so that air passage through the sample is minimized (to prevent volatilization of 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. The Chain-of-Custody form is completed to ensure sample integrity. Ground water samples are transported to a state-certified laboratory and analyzed within the U.S. Environmental Protection Agency-specified hold times for the specified analytes.

**ATTACHMENT B**

**DOULOS SAMPLING INFORMATION SHEETS**

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

Project Address: Beacon # 12574 22315 Redwood Rd.  
Castro Valley, Ca.

Date: 2-13-07

Project No.: 12574-28

Recorded by: \_\_\_\_\_

Well No.	Time	Well Elev. TOC	Depth to Groundwater	Measured Total Depth	Groundwater Elevation	Depth to Product	Product Thickness	Comments
MW-1	1:16		22.31	29.73				
MW-2	1:20		20.73	29.50				SHEEN
MW-3	1:24		21.37	29.46				
MW-4	1:25		17.01	24.75				
MW-6	1:30		20.35	27.99				

Notes:

Client: Ultramar

Sampling Date: 2-13-07

Site: Beacon #12574

Project No.:

22315 Redwood Rd.

Well Designation: MW-1

Castro Valley, Ca.

Is setup of traffic control devices required?

NO YES  
NO YES  
NO YES  
NO YES

time: \_\_\_\_\_ hours

Is there standing water in the well box?

Above TOC Below TOC

Is top of casing cut level?

If no, see remarks

Is well cap sealed and locked?

If no, see remarks

Height of well casing riser (in inches): 4

Well cover type: 8" or 12" UV 12" EMCO 8" or 12" BK 8" Christy

12" Christy 8" M&D 12" M&D 12" DWP

12" CNI 36" CNI 12" Pomeco Other:

General condition of wellhead assembly: Excellent Good X Fair Poor

Purging Equipment: 2" disposable bailer Submersible pump

2" PVC bailer Dedicated bailer

4" PVC bailer X Centrifugal pump

Sampled with: Disposable bailer X Teflon bailer Disposable Tubing

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

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

Initial Measurement

Recharge Measurement

Time: 1:16 Time: 3:50 Calculated purge: 19.2

Depth of well: 29.73 Depth to water: 23.50 Actual purge: 19.2

Depth to water: 22.31

Start purge: 1:36 Sampling time: 3:54

Time	Temperature	E.C.	pH	Turbidity	Volume
1:40	19.0	590	7.35		1
1:43	20.0	518	7.30		2
1:47	20.1	510	7.23		3
1:50	20.2	502	7.22		4

Sample appearance: Clean

Lock: Dolphin

Equipment replaced: (check all that apply)

Note condition of replaced item(s)

2" Locking Cap: \_\_\_\_\_

Lock: \_\_\_\_\_ 7/32 Allenhead: \_\_\_\_\_

4" Locking Cap: \_\_\_\_\_

Lock-Dolphin: \_\_\_\_\_ 9/16 Bolt: \_\_\_\_\_

6" Locking Cap: \_\_\_\_\_

Pinned Allenhead (DWP): \_\_\_\_\_

Remarks:

Signature:

Client: Ultramar  
 Site: Beacon #12574  
22315 Redwood Rd.  
Castro Valley, Ca.

Sampling Date: 2-13-07  
 Project No.: \_\_\_\_\_  
 Well Designation: MU-2

Is setup of traffic control devices required?  NO YES time: \_\_\_\_\_ hours  
 Is there standing water in the 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" or 12" UV \_\_\_\_\_ 12" EMCO \_\_\_\_\_ 8" or 12" BK \_\_\_\_\_ 8" Christy \_\_\_\_\_  
 12" Christy \_\_\_\_\_ 8" M&D \_\_\_\_\_ 12" M&D \_\_\_\_\_ 12" DWP \_\_\_\_\_  
 12" CNI \_\_\_\_\_ 36" CNI \_\_\_\_\_ 12" Pomeco \_\_\_\_\_ 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  Centrifugal pump  
 Sampled with: Disposable bailer  Teflon bailer \_\_\_\_\_ Disposable Tubing \_\_\_\_\_

Well Diameter: 2" \_\_\_\_\_ 4"  6" \_\_\_\_\_ 8" \_\_\_\_\_  
 Purge Vol. Multiplier: 0.16 \_\_\_\_\_ 0.65 \_\_\_\_\_ 1.47 \_\_\_\_\_ 2.61 gal/ft.  
 Initial Measurement Recharge Measurement  
 Time: 1:20 Time: 4:20 Calculated purge: 22.8  
 Depth of well: 29.90 Depth to water: 20.96 Actual purge: 22.8  
 Depth to water: 20.73

Start purge: 2:00 Sampling time: 4:23

Time	Temperature	E.C.	pH	Turbidity	Volume
<u>2:04</u>	<u>20.0</u>	<u>412</u>	<u>7.33</u>		<u>1</u>
<u>2:10</u>	<u>20.2</u>	<u>401</u>	<u>7.20</u>		<u>2</u>
<u>2:14</u>	<u>20.4</u>	<u>362</u>	<u>7.10</u>		<u>3</u>
<u>2:19</u>	<u>20.5</u>	<u>360</u>	<u>7.09</u>		<u>4</u>

Sample appearance: Clear Lock: Dolphin

Equipment replaced: (check all that apply) Note condition of replaced item(s)  
 2" Locking Cap: \_\_\_\_\_ Lock: \_\_\_\_\_ 7/32 Allenhead: \_\_\_\_\_  
 4" Locking Cap: \_\_\_\_\_ Lock-Dolphin: \_\_\_\_\_ 9/16 Bolt: \_\_\_\_\_  
 6" Locking Cap: \_\_\_\_\_ Pinned Allenhead (DWP): \_\_\_\_\_

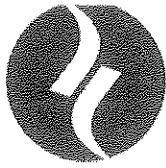
Remarks: \_\_\_\_\_  
 \_\_\_\_\_

Signature: \_\_\_\_\_

ATTACHMENT C

ANALYTICAL REPORT





Ken Mateik  
Horizon Environmental  
4970 Windplay Drive, Suite 5  
El Dorado Hills, CA 95762

Subject : 2 Water Samples  
Project Name : Beacon  
Project Number : 12574 Castro Valley  
P.O. Number : 12574-29

Dear Mr. Mateik,

Chemical analysis of the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. US EPA protocols for sample storage and preservation were followed.

Kiff Analytical is certified by the State of California (# 2236). If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,



Joel Kiff

Project Name : **Beacon**

Project Number : **12574 Castro Valley**

Sample : **MW-1**

Matrix : Water

Lab Number : 54924-01

Sample Date :2/13/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
<b>Benzene</b>	<b>1100</b>	2.5	ug/L	EPA 8260B	2/18/2007
<b>Toluene</b>	<b>49</b>	2.5	ug/L	EPA 8260B	2/18/2007
<b>Ethylbenzene</b>	<b>210</b>	2.5	ug/L	EPA 8260B	2/18/2007
<b>Total Xylenes</b>	<b>280</b>	2.5	ug/L	EPA 8260B	2/18/2007
<b>Methyl-t-butyl ether (MTBE)</b>	<b>110</b>	2.5	ug/L	EPA 8260B	2/18/2007
<b>TPH as Gasoline</b>	<b>5300</b>	250	ug/L	EPA 8260B	2/18/2007
Toluene - d8 (Surr)	102		% Recovery	EPA 8260B	2/18/2007
4-Bromofluorobenzene (Surr)	105		% Recovery	EPA 8260B	2/18/2007

Sample : **MW-2**

Matrix : Water

Lab Number : 54924-02

Sample Date :2/13/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
<b>Benzene</b>	<b>3100</b>	6.0	ug/L	EPA 8260B	2/18/2007
<b>Toluene</b>	<b>110</b>	6.0	ug/L	EPA 8260B	2/18/2007
<b>Ethylbenzene</b>	<b>600</b>	6.0	ug/L	EPA 8260B	2/18/2007
<b>Total Xylenes</b>	<b>620</b>	6.0	ug/L	EPA 8260B	2/18/2007
<b>Methyl-t-butyl ether (MTBE)</b>	<b>340</b>	6.0	ug/L	EPA 8260B	2/18/2007
<b>TPH as Gasoline</b>	<b>14000</b>	600	ug/L	EPA 8260B	2/18/2007
Toluene - d8 (Surr)	103		% Recovery	EPA 8260B	2/18/2007
4-Bromofluorobenzene (Surr)	105		% Recovery	EPA 8260B	2/18/2007

Approved By:

  
Joel Kiff

Report Number : 54924

Date : 2/22/2007

QC Report : Method Blank Data

Project Name : Beacon

Project Number : 12574 Castro Valley

<u>Parameter</u>	<u>Measured Value</u>	<u>Method Reporting Limit</u>	<u>Units</u>	<u>Analysis Method</u>	<u>Date Analyzed</u>
Benzene	< 0.50	0.50	ug/L	EPA 8260B	2/17/2007
Toluene	< 0.50	0.50	ug/L	EPA 8260B	2/17/2007
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	2/17/2007
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	2/17/2007
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	2/17/2007
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	2/17/2007
Toluene - d8 (Surr)	97.8		%	EPA 8260B	2/17/2007
4-Bromofluorobenzene (Surr)	96.6		%	EPA 8260B	2/17/2007

<u>Parameter</u>	<u>Measured Value</u>	<u>Method Reporting Limit</u>	<u>Units</u>	<u>Analysis Method</u>	<u>Date Analyzed</u>
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Report Number : 54924

Date : 2/22/2007

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : **Beacon**

Project Number : **12574 Castro Valley**

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
Benzene	54911-01	<0.50	39.9	39.5	43.0	43.6	ug/L	EPA 8260B	2/17/07	108	110	2.20	70-130	25
Toluene	54911-01	<0.50	39.9	39.5	41.2	41.8	ug/L	EPA 8260B	2/17/07	103	106	2.42	70-130	25
Tert-Butanol	54911-01	<5.0	200	198	188	198	ug/L	EPA 8260B	2/17/07	94.4	100	6.13	70-130	25
Methyl-t-Butyl Ether	54911-01	17	39.9	39.5	60.8	59.4	ug/L	EPA 8260B	2/17/07	108	106	2.16	70-130	25

QC Report : Laboratory Control Sample (LCS)

Report Number : 54924

Date : 2/22/2007

Project Name : **Beacon**

Project Number : **12574 Castro Valley**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	40.0	ug/L	EPA 8260B	2/17/07	108	70-130
Toluene	40.0	ug/L	EPA 8260B	2/17/07	104	70-130
Tert-Butanol	200	ug/L	EPA 8260B	2/17/07	98.2	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	2/17/07	110	70-130



**ATTACHMENT D**

**HISTORICAL GROUNDWATER DATA**

**Table 2**  
**Cumulative Groundwater Elevation Data**  
**Former Beacon Station # 12574 - Castro Valley, California**

Well ID	Top of Casing Elevation (Feet) <sup>1</sup>	Date Sounded	Depth to Groundwater (Feet) <sup>1</sup>	Groundwater Elevation (Feet) <sup>2</sup>	Well Depth (Feet)
MW-1	156.55	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	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
		06/02/94	23.24	133.31	29.85
		09/09/94	23.93	132.62	29.86
		12/20/94	22.94	133.61	29.85
		03/08/95	22.20	134.35	29.71
		06/14/95	22.65	133.90	29.70
		09/26/95	23.44	133.11	29.71
		12/27/95	23.04	133.51	29.72
		03/26/96	21.39	135.16	29.71
		06/05/96	22.43	134.12	29.73
		09/16/96	24.42	132.13	29.74
		12/02/96	23.14	133.41	29.75
		03/10/97	22.30	134.25	29.76
		06/12/97	22.97	133.58	29.76
		09/29/97	23.35	133.20	29.78
		12/01/97	22.73	133.82	29.79
		03/19/98	20.56	135.99	29.78
		05/28/98	21.78	134.77	29.76
		08/31/98	22.64	133.91	29.78
		12/08/98	22.87	133.68	29.76
		02/17/99	21.53	135.02	29.75
		06/10/99	22.74	133.81	29.74
		09/07/99	23.06	133.49	29.73
		12/13/00	23.06	133.46	29.74
3/16/00	20.66	135.89	29.75		
6/12/00	22.53	134.02	29.76		
9/5/00	22.73	133.82	29.74		
11/13/00	23.20	133.35	29.74		
2/26/01	21.75	134.80	29.73		
6/12/01	22.70	133.85	29.73		
9/21/01	23.40	133.15	29.73		
MW-2	155.17	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	29.71



**Table 2**  
**Cumulative Groundwater Elevation Data**  
**Former Beacon Station # 12574 - Castro Valley, California**

Well ID	Top of Casing Elevation (Feet) <sup>1</sup>	Date Sounded	Depth to Groundwater (Feet) <sup>1</sup>	Groundwater Elevation (Feet) <sup>2</sup>	Well Depth (Feet)
		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
		06/02/94	21.59	133.58	29.69
		09/09/94	22.33	132.84	29.66
		12/20/94	21.37	133.80	29.65
		03/08/95	20.60	134.57	29.52
		06/14/95	21.04	134.13	29.54
		09/26/95	21.84	133.33	29.53
		12/27/95	21.44	133.73	29.56
		03/26/96	19.81	135.36	29.56
		06/05/96	20.83	134.34	29.59
		09/16/96	21.93	133.24	29.58
		12/02/96	21.54	133.63	29.58
		03/10/97	20.71	134.46	29.58
		06/12/97	21.41	133.76	29.52
		09/29/97	21.26	133.91	29.51
		12/01/97	20.97	134.20	29.50
		03/19/98	18.98	136.19	29.51
		05/28/98	20.22	134.95	29.50
		08/31/98	21.09	134.08	29.51
		12/08/98	21.31	133.86	29.50
		02/17/99	20.02	135.15	29.51
		06/10/99	21.30	133.87	29.50
		09/07/99	21.49	133.68	29.50
		12/13/99	21.52	133.65	29.50
		3/16/00	19.13	136.04	29.50
		6/12/00	20.93	134.24	29.50
		9/5/00	21.15	134.02	29.50
		11/13/00	21.66	133.51	29.50
		2/26/01	20.17	135.00	29.50
		6/12/01	21.15	134.02	29.50
		9/21/01	21.63	133.54	29.50
MW-3	157.13	03/27/92	21.46	135.67	-
		06/04/92	22.34	134.79	-
		09/23/92	22.84	134.29	-
		11/12/92	23.04	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

**Table 2**  
**Cumulative Groundwater Elevation Data**  
**Former Beacon Station # 12574 - Castro Valley, California**

Well ID	Top of Casing Elevation (Feet) <sup>1</sup>	Date Sounded	Depth to Groundwater (Feet) <sup>1</sup>	Groundwater Elevation (Feet) <sup>2</sup>	Well Depth (Feet)
		03/01/94	21.97	135.16	29.55
		06/02/94	22.29	134.84	29.56
		09/09/94	22.91	134.22	29.56
		12/20/94	22.11	135.02	29.54
		03/08/95	21.40	135.73	29.38
		06/14/95	21.80	135.33	29.36
		09/26/95	22.38	134.75	29.37
		12/27/95	22.07	135.06	29.37
		03/26/96	20.73	136.40	29.38
		06/05/96	21.54	135.59	29.40
		09/16/96	22.37	134.76	29.43
		12/02/96	22.35	134.78	29.45
		03/10/97	21.44	135.69	29.47
		06/12/97	21.97	135.16	29.45
		09/29/97	22.30	134.83	29.45
		12/01/97	21.78	135.35	29.46
		03/19/98	19.88	137.25	29.46
		05/28/98	20.91	136.22	29.47
		08/31/98	21.61	135.52	29.47
		12/08/98	21.83	135.30	29.47
		02/17/99	20.81	130.32	29.45
		06/10/99	21.61	135.52	29.45
		09/07/99	21.91	135.22	29.45
		12/13/99	21.93	135.20	29.44
		3/16/00	19.86	137.27	29.46
		6/12/00	21.61	135.52	29.46
		9/5/00	21.54	135.59	29.47
		11/13/00	21.98	135.15	29.46
		2/26/01	20.65	136.48	29.46
		6/12/01	21.70	135.43	29.46
		9/21/01	22.05	135.07	29.46
MW-4	151.96	05/18/93	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
		06/02/94	17.68	134.28	28.12
		09/09/94	18.19	133.77	28.13
		12/20/94	17.52	134.44	28.10
		03/08/95	16.82	135.14	27.97
		06/14/95	17.22	134.74	27.97
		09/26/95	17.79	134.17	27.91
		12/27/95	17.47	134.49	27.89
		03/26/96	16.32	135.64	27.89
		06/05/96	17.10	134.86	27.88
		09/16/96	17.85	134.11	27.89

**Table 2**  
**Cumulative Groundwater Elevation Data**  
**Former Beacon Station # 12574 - Castro Valley, California**

Well ID	Top of Casing Elevation (Feet) <sup>1</sup>	Date Sounded	Depth to Groundwater (Feet) <sup>1</sup>	Groundwater Elevation (Feet) <sup>2</sup>	Well Depth (Feet)
		12/02/96	17.59	134.37	27.88
		03/10/97	16.79	135.17	27.89
		06/12/97	17.49	134.47	27.90
		09/29/97	18.33	133.63	27.91
		12/01/97	17.36	134.60	27.90
		03/19/98	15.90	136.06	27.91
		05/28/98	16.34	135.62	27.90
		08/31/98	16.83	135.13	27.90
		12/08/98	17.37	134.59	27.91
		02/17/99	16.49	135.47	27.98
		06/10/99	17.63	134.33	24.76
		09/07/99	17.80	134.16	24.75
		12/13/99	17.82	134.14	24.73
		3/16/00	15.81	136.15	24.71
		6/12/00	16.64	135.32	24.70
		9/5/00	16.71	135.25	24.70
		11/13/00	17.24	134.72	24.70
		2/26/01	15.83	136.13	24.70
		6/12/01	16.80	135.16	24.70
		9/21/01	17.30	134.66	24.71
MW-5	148.68	05/18/93	15.72	132.96	-
		08/11/93	16.42	132.26	28.43
		11/05/93	16.92	131.76	28.43
		03/01/94	15.54	133.14	28.11
		06/02/94	16.19	132.49	28.12
		09/09/94	16.87	131.81	28.13
		12/20/94	15.87	132.84	28.10
		03/08/95	15.11	133.57	27.97
		06/14/95	15.69	132.99	27.97
		09/26/95	16.46	132.22	27.91
		12/27/95	15.91	132.77	27.89
		03/26/96	14.31	134.37	27.89
		06/05/96	15.43	133.25	27.88
		09/16/96	16.52	132.16	27.89
		12/02/96	16.05	132.63	27.88
		03/10/97	14.80	133.88	27.89
		06/12/97	15.95	132.78	27.90
		09/29/97	16.33	132.35	27.91
		12/01/97	15.48	133.20	27.90
		03/19/98	13.16	135.52	27.91
		05/28/98	14.04	134.64	27.90
		08/31/98	14.81	133.87	27.90
		12/08/98	15.75	132.93	27.91
		02/17/99	14.80	133.88	27.98
		06/10/99	15.54	133.14	24.76

**Table 2**  
**Cumulative Groundwater Elevation Data**  
**Former Beacon Station # 12574 - Castro Valley, California**

Well ID	Top of Casing Elevation (Feet) <sup>1</sup>	Date Sounded	Depth to Groundwater (Feet) <sup>1</sup>	Groundwater Elevation (Feet) <sup>2</sup>	Well Depth (Feet)
		09/07/99	16.01	132.67	24.75
		12/13/99	16.21	132.47	24.73
		3/16/00	14.35	134.33	29.60
		6/12/00	15.21	133.47	29.61
		9/5/00	15.80	132.88	29.60
		11/13/00	16.21	132.47	29.60
		2/26/01	14.71	133.97	29.61
		6/12/01	15.72	132.96	29.60
		9/21/01	16.21	132.47	29.60
MW-6	153.96	05/18/93	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
		06/02/94	21.37	132.59	29.98
		09/09/94	22.05	131.91	29.96
		12/20/94	21.06	132.90	29.89
		03/08/95	20.29	133.67	29.67
		06/14/95	20.81	133.15	29.65
		09/26/95	21.62	132.34	29.66
		12/27/95	21.12	132.84	29.63
		03/26/96	19.50	134.46	29.60
		06/05/96	20.56	133.40	29.63
		09/16/96	21.70	132.26	29.65
		12/02/96	21.25	132.71	29.66
		03/10/97	20.16	133.80	29.64
		06/12/97	21.16	132.80	29.62
		09/29/97	21.51	132.45	29.62
		12/01/97	20.89	133.07	29.61
		03/19/98	18.71	135.25	29.60
		05/28/98	19.99	133.97	29.62
		08/31/98	20.81	133.15	29.63
		12/08/98	21.00	132.96	29.64
		02/17/99	19.54	134.42	29.63
		06/10/99	20.74	133.22	27.98
		09/07/99	21.23	132.73	27.98
		12/13/99	21.22	132.74	27.98
		3/16/00	18.79	135.17	27.99
		6/12/00	20.49	133.47	27.99
		9/5/00	20.95	133.01	27.98
		11/13/00	21.44	132.52	27.98
		2/26/01	19.86	134.10	27.99
		6/12/01	20.91	133.05	27.98
		9/21/01	21.22	132.74	27.99
MW-7	156.09	05/18/93	22.64	133.45	-

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**Cumulative Groundwater Elevation Data**  
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Well ID	Top of Casing Elevation (Feet) <sup>1</sup>	Date Sounded	Depth to Groundwater (Feet) <sup>1</sup>	Groundwater Elevation (Feet) <sup>2</sup>	Well Depth (Feet)
		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
		06/02/94	23.22	132.87	30.12
		09/09/94	23.90	132.19	30.12
		12/20/94	22.98	133.11	30.10
		03/08/95	22.14	133.95	29.91
		06/14/95	22.61	133.48	29.91
		09/26/95	23.43	132.66	29.90
		12/27/95	23.01	133.08	29.90
		03/26/96	21.32	134.77	29.87
		06/05/96	22.37	133.72	29.91
		09/16/96	23.51	132.58	29.90
		12/02/96	23.08	133.01	29.91
		03/10/97	21.94	134.15	29.90
		06/12/97	22.96	133.13	29.88
		09/29/97	23.35	132.74	29.87
		12/01/97	22.68	133.41	29.88
		03/19/98	20.52	135.57	29.88
		05/28/98	21.76	134.33	29.88
		08/31/98	22.66	133.43	29.86
		12/08/98 <sup>3</sup>			
MW-8	158.04	05/18/93	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
		06/02/94	22.29	135.75	34.04
		09/09/94	22.99	135.05	34.04
		12/20/94	22.14	135.90	33.98
		03/08/95	21.25	136.79	34.48
		06/14/95	21.70	136.34	34.49
		09/26/95	22.29	135.75	34.40
		12/27/95	21.96	136.08	34.43
		03/26/96	20.48	137.56	34.42
		06/05/96	21.50	136.54	34.41
		09/16/96	22.38	135.66	34.43
		12/02/96	22.39	135.65	34.42
		03/10/97	20.89	137.16	34.43
		06/12/97	21.80	136.24	34.42
		09/29/97	22.81	135.23	34.40
		12/01/97	21.70	136.34	34.41
		03/19/98	19.35	138.69	34.42
		05/28/98	20.52	137.52	34.41
		08/31/98	21.40	136.64	34.40
		12/08/98 <sup>3</sup>			

**Table 2**  
**Cumulative Groundwater Elevation Data**  
**Former Beacon Station # 12574 - Castro Valley, California**

Well ID	Top of Casing Elevation (Feet) <sup>1</sup>	Date Sounded	Depth to Groundwater (Feet) <sup>1</sup>	Groundwater Elevation (Feet) <sup>2</sup>	Well Depth (Feet)
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**NOTES:**

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

2 : Elevation reference to mean sea level.

Well Depth : Measured from top of casing to bottom of well.

3 : Well abandoned.



**Table 3**  
**Summary of Groundwater Analytical Results**  
**Former Beacon Station # 12574 - Castro Valley, California**

Well ID	Sample Date	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)
MW-2	9/21/01	23,000	NA	NA	4,600	75	1,200	2,300	450
	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	29,000	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	13,000	NA	NA	1,500	490	350	1,100	-
	06/02/94	12,000	NA	NA	2,000	790	460	1,300	-
	09/09/94	13,000	NA	NA	1,800	660	440	1,000	-
	12/20/94	16,000	NA	NA	2,300	1,000	650	1,900	-
	03/08/95	16,000	NA	NA	2,200	1,000	550	2,100	-
	06/14/95	NS	NS	NS	NS	NS	NS	NS	-
	09/26/95	18,000	NA	NA	2,500	1,000	770	2,700	-
	12/27/95	NS	NS	NS	NS	NS	NS	NS	-
	03/26/96	33,000	NA	NA	4,200	2,600	1,000	5,000	-
	06/05/96	NS	NS	NS	NS	NS	NS	NS	-
	09/16/96	19,000	NA	NA	2,600	490	560	2,000	940
	12/02/96	NS	NS	NS	NS	NS	NS	NS	NS
	03/10/97	23,000	NA	NA	3,700	870	650	3,000	1,400
	06/12/97	NS	NS	NS	NS	NS	NS	NS	NS
	09/29/97	30,000	NA	NA	4,900	880	990	3,800	1,400
	12/01/97	NS	NS	NS	NS	NS	NS	NS	NS
	03/19/98	72,000	NA	NA	14,000	9,500	2,300	11,000	<1,500
	05/28/98	NS	NS	NS	NS	NS	NS	NS	NS
	08/31/98	29,000	NA	NA	4,900	1,600	960	3,900	890
	12/08/98	NS	NS	NS	NS	NS	NS	NS	NS
	02/17/99	26,000	NA	NA	5,200	930	1,200	4,400	640
	06/10/99	NS	NS	NS	NS	NS	NS	NS	NS
	09/07/99	32,000	NA	NA	5,700	600	1200	3,500	1,100
	12/13/99	NS	NS	NS	NS	NS	NS	NS	NS
3/16/00	38,000	NA	NA	4,900	780	1,100	3,700	870	
6/12/00	NS	NS	NS	NS	NS	NS	NS	NS	
9/5/00	21,000	NA	NA	3,400	490	730	2,200	1,000	
11/13/00	NS	NS	NS	NS	NS	NS	NS	NS	
2/26/01	33,000	NA	NA	5,200	260	1,400	3,200	740	



**Table 3**  
**Summary of Groundwater Analytical Results**  
**Former Beacon Station # 12574 - Castro Valley, California**

Well ID	Sample Date	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)
MW-3	6/12/01	NS	NS	NS	NS	NS	NS	NS	NS
	9/21/01	63,000	NA	NA	4,400	180	1,000	2,000	730
	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	62	19	-
	11/12/92	230	NA	NA	12	5.5	77	19	-
	02/02/93	86	NA	NA	2.4	0.71	27	6.2	-
	05/07/93	140	NA	NA	2.6	1.2	39	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	2.7	56	10	-
	06/02/94	440	NA	NA	13	4.9	14	31	-
	09/09/94	620	NA	NA	12	4.8	97	20	-
	12/20/94	770	NA	NA	24	11	16	36	-
	03/08/95	300	NA	NA	6.1	0.97	4.8	7.5	-
	06/14/95	NS	NS	NS	NS	NS	NS	NS	-
	09/26/95	130	NA	NA	4.8	1.6	4.8	9.4	-
	12/27/95	NS	NS	NS	NS	NS	NS	NS	-
	03/26/96	<50	NA	NA	<0.50	<0.50	<0.50	<0.50	-
	06/05/96	NS	NS	NS	NS	NS	NS	NS	-
	09/16/96	170	NA	NA	10	2.9	44	15	<5.0
	12/02/96	NS	NS	NS	NS	NS	NS	NS	NS
	03/10/97	84	NA	NA	2.3	<0.50	14	2.6	<5.0
	06/12/97	NS	NS	NS	NS	NS	NS	NS	NS
	09/29/97	740	NA	NA	61	9.8	42	61	<5.0
	12/01/97	NS	NS	NS	NS	NS	NS	NS	NS
	03/19/98	<50	NA	NA	<0.50	<0.50	<0.50	<0.50	<5.0
	05/28/98	NS	NS	NS	NS	NS	NS	NS	NS
	08/31/98	320	NA	NA	6.7	1.0	10	9.3	3.4
	12/08/98	NS	NS	NS	NS	NS	NS	NS	NS
	02/17/99	310	NA	NA	<5.0	8.6	1.8	13	14
	06/10/99	NS	NS	NS	NS	NS	NS	NS	NS
	09/07/99	99	NA	NA	4.2	0.51	4.0	3.0	<5.0
12/13/99	NS	NS	NS	NS	NS	NS	NS	NS	
3/16/00	<50	NA	NA	<0.50	<0.50	<0.50	<0.50	<5.0	
6/12/00	NS	NA	NA	NS	NS	NS	NS	NS	
9/5/00	240	NA	NA	3.0	0.53	9.6	4.0	<5.0	
11/13/00	NS	NA	NA	NS	NS	NS	NS	NS	

**Table 3**  
**Summary of Groundwater Analytical Results**  
**Former Beacon Station # 12574 - Castro Valley, California**

Well ID	Sample Date	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)
MW-4	2/26/01	100	NA	NA	0.84	<0.50	3.5	1.7	0.84
	6/12/01	NS	NS	NS	NS	NS	NS	NS	NS
	8/27/01 <sup>3</sup>	-	-	-	-	-	-	-	-
	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	-
	06/02/94	<50	NA	NA	<0.5	<0.5	<0.5	<0.5	-
	09/09/94	<50	NA	NA	<0.5	<0.5	<0.5	<0.5	-
	12/20/94	<50	NA	NA	<0.5	<0.5	<0.5	<0.5	-
	03/08/95	NS	NS	NS	NS	NS	NS	NS	-
	06/14/95	NS	NS	NS	NS	NS	NS	NS	-
	09/26/95	NS	NS	NS	NS	NS	NS	NS	-
	12/27/95	NS	NS	NS	NS	NS	NS	NS	-
	03/26/96	NS	NS	NS	NS	NS	NS	NS	-
	06/05/96	NS	NS	NS	NS	NS	NS	NS	-
	09/16/96	<50	NA	NA	<0.50	<0.50	<0.50	<0.50	<5.0
	12/02/96	NS	NS	NS	NS	NS	NS	NS	NS
	03/10/97	NS	NS	NS	NS	NS	NS	NS	NS
	06/12/97	NS	NS	NS	NS	NS	NS	NS	NS
	09/29/97	NS	NS	NS	NS	NS	NS	NS	NS
	12/01/97	NS	NS	NS	NS	NS	NS	NS	NS
	03/19/98	NS	NS	NS	NS	NS	NS	NS	NS
	05/28/98	NS	NS	NS	NS	NS	NS	NS	NS
	08/31/98	NS	NS	NS	NS	NS	NS	NS	NS
	12/08/98	NS	NS	NS	NS	NS	NS	NS	NS
	02/17/99	NS	NS	NS	NS	NS	NS	NS	NS
	06/10/99	NS	NS	NS	NS	NS	NS	NS	NS
	09/07/99	NS	NS	NS	NS	NS	NS	NS	NS
	12/13/99	NS	NS	NS	NS	NS	NS	NS	NS
	3/16/00	NS	NS	NS	NS	NS	NS	NS	NS
	6/12/00	NS	NS	NS	NS	NS	NS	NS	NS
9/5/00	NS	NS	NS	NS	NS	NS	NS	NS	
11/13/00	NS	NS	NS	NS	NS	NS	NS	NS	
2/26/01	NS	NS	NS	NS	NS	NS	NS	NS	
6/12/01	NS	NS	NS	NS	NS	NS	NS	NS	
8/27/01 <sup>3</sup>	-	-	-	-	-	-	-	-	-
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	-

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**Summary of Groundwater Analytical Results**  
**Former Beacon Station # 12574 - Castro Valley, California**

Well ID	Sample Date	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)
	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	-
	06/02/94	<50	NA	NA	<0.5	<0.5	<0.5	<0.5	-
	09/09/94	<50	NA	NA	<0.5	<0.5	<0.5	<0.5	-
MW-5 (cont.)	12/20/94	<50	NA	NA	<0.5	<0.5	<0.5	<0.5	-
	03/08/95	<50	NA	NA	<0.5	<0.5	<0.5	<0.5	-
	06/14/95	<50	NA	NA	<0.5	<0.5	<0.5	<0.5	-
	09/26/95	<50	NA	NA	<0.50	<0.50	<0.50	<0.50	-
	12/27/95	<50	NA	NA	<0.50	<0.50	<0.50	<0.50	-
	03/26/96	<50	NA	NA	<0.50	<0.50	<0.50	<0.50	-
	06/05/96	<50	NA	NA	<0.50	<0.50	<0.50	<0.50	15
	09/16/96	<50	NA	NA	<0.50	<0.50	<0.50	<0.50	20
	12/02/96	<50	NA	NA	<0.50	<0.50	<0.50	<0.50	12
	03/10/97	<50	NA	NA	<0.50	<0.50	<0.50	<0.50	7.0
	06/12/97	<50	NA	NA	<0.50	<0.50	<0.50	<0.50	7.2
	09/29/97	<50	NA	NA	<0.50	<0.50	<0.50	<0.50	<5.0
	12/01/97	<50	NA	NA	<0.50	<0.50	<0.50	<0.50	<5.0
	03/19/98	<50	NA	NA	<0.50	<0.50	<0.50	<0.50	<5.0
	05/28/98	<50	NA	NA	<0.50	<0.50	<0.50	<0.50	<5.0
	08/31/98	<50	NA	NA	<0.50	<0.50	<0.50	<0.50	<0.50
	12/08/98	<50	NA	NA	<0.50	<0.50	<0.50	<0.50	<5.0
	02/17/99	<50	NA	NA	<0.50	<0.50	<0.50	<0.50	<5.0
	06/10/99	<50	NA	NA	<0.50	<0.50	<0.50	<0.50	<5.0
	09/07/99	<50	NA	NA	<0.50	<0.50	<0.50	<0.50	<5.0
	12/13/99	<50	NA	NA	<0.50	<0.50	<0.50	<0.50	<5.0
	3/16/00	<50	NA	NA	<0.50	<0.50	<0.50	<0.50	<5.0
	6/12/00	<50	NA	NA	<0.50	<0.50	<0.50	<0.50	<5.0
	9/5/00	<50	NA	NA	<0.50	<0.50	<0.50	<0.50	<5.0
	11/13/00	<50	NA	NA	<0.50	<0.50	<0.50	<0.50	<0.50
	2/26/01	<50	NA	NA	<0.50	<0.50	<0.50	<0.50	<0.50
	6/12/01	<50	NA	NA	<0.50	<0.50	<0.50	<0.50	<0.50
8/27/01 <sup>3</sup>	-	-	-	-	-	-	-	-	-
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	<0.5	-
	03/01/94	210	NA	NA	<0.5	<0.5	<0.5	<0.5	-
	06/02/94	190	NA	NA	<0.5	<0.5	<0.5	<0.5	-
	09/09/94	140	NA	NA	<0.5	<0.5	<0.5	<0.5	-
	12/20/94	210	NA	NA	<0.5	<0.5	<0.5	<0.5	-

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**Summary of Groundwater Analytical Results**  
**Former Beacon Station # 12574 - Castro Valley, California**

Well ID	Sample Date	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)
	03/08/95	180 <sup>1</sup>	NA	NA	<0.5	<0.5	<0.5	<0.5	
	06/14/95	220 <sup>1</sup>	NA	NA	<0.5	<0.5	<0.5	<0.5	
	09/26/95	110 <sup>1</sup>	NA	NA	<0.50	<0.50	<0.50	<0.50	
	12/27/95	130 <sup>1</sup>	NA	NA	<0.50	<0.50	<0.50	<0.50	
	03/08/95	100 <sup>1</sup>	NA	NA	<0.50	<0.50	<0.50	<0.50	
MW-6 (cont.)	06/05/96	100 <sup>1</sup>	NA	NA	<0.50	<0.50	<0.50	<0.50	430
	09/16/96	170	NA	NA	<0.50	<0.50	<0.50	<0.50	430
	12/02/96	160	NA	NA	<0.50	<0.50	<0.50	<0.50	160
	03/10/97	140	NA	NA	<0.50	<0.50	<0.50	<0.50	390
	06/12/97	<50	NA	NA	<0.50	<0.50	<0.50	<0.50	330
	09/29/97	<50	NA	NA	<0.50	<0.50	<0.50	<0.50	130
	12/01/97	<50	NA	NA	<0.50	<0.50	<0.50	<0.50	200
	03/19/98	<50	NA	NA	<0.50	<0.50	<0.50	<0.50	240
	05/28/98	<50	NA	NA	<0.50	<0.50	<0.50	<0.50	290
	08/31/98	<50	NA	NA	<0.50	<0.50	<0.50	<0.50	290
	12/08/98	<50	NA	NA	<0.50	<0.50	<0.50	<0.50	230
	02/17/99	<50	NA	NA	<0.50	<0.50	<0.50	<0.50	200
	06/10/99	<50	NA	NA	<0.50	<0.50	<0.50	<0.50	290
	09/07/99	<50	NA	NA	<0.50	<0.50	<0.50	<0.50	230
	12/13/99	<50	NA	NA	<0.50	<0.50	<0.50	<0.50	180
	3/16/00	<50	NA	NA	<0.50	<0.50	<0.50	<0.50	260
	6/12/00	<50	NA	NA	<0.50	<0.50	<0.50	<0.50	160
	9/5/00	<50	NA	NA	<0.50	0.50	<0.50	0.81	170
	11/13/00	<50	NA	NA	<0.50	<0.50	<0.50	<0.50	190
	2/26/01	<50	NA	NA	<0.50	<0.50	<0.50	<0.50	130
	6/12/01	<50	NA	NA	<0.50	<0.50	<0.50	<0.50	96
	8/27/01 <sup>3</sup>	-	-	-	-	-	-	-	-
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	60	NA	NA	<0.5	<0.5	<0.5	<0.5	
	06/02/94	<50	NA	NA	<0.5	<0.5	<0.5	<0.5	
	09/09/94	<50	NA	NA	<0.5	<0.5	<0.5	<0.5	
	12/20/94	<50	NA	NA	<0.5	<0.5	<0.5	<0.5	
	03/08/95	<50	NA	NA	<0.5	<0.5	<0.5	<0.5	
	06/14/95	<50	NA	NA	<0.5	<0.5	<0.5	<0.5	
	09/26/95	<50	NA	NA	<0.50	<0.50	<0.50	<0.50	
	12/27/95	<50	NA	NA	<0.50	<0.50	<0.50	<0.50	

**Table 3**  
**Summary of Groundwater Analytical Results**  
**Former Beacon Station # 12574 - Castro Valley, California**

Well ID	Sample Date	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)
	03/08/95	<50	NA	NA	<0.50	<0.50	<0.50	<0.50	
	06/05/96	<50	NA	NA	<0.50	<0.50	<0.50	<0.50	20
	09/16/96	<50	NA	NA	<0.50	<0.50	<0.50	<0.50	26
	12/02/96	140	NA	NA	<0.50	<0.50	<0.50	<0.50	140
	03/10/97	<50	NA	NA	<0.50	<0.50	<0.50	<0.50	29
	06/12/97	<50	NA	NA	<0.50	<0.50	<0.50	<0.50	28
	09/29/97	<50	NA	NA	<0.50	<0.50	<0.50	<0.50	27
MW-7	12/01/97	<50	NA	NA	<0.50	<0.50	<0.50	<0.50	29
(cont.)	03/19/98	<50	NA	NA	<0.50	<0.50	<0.50	<0.50	6.0
	05/28/98	<50	NA	NA	<0.50	<0.50	<0.50	<0.50	25
	08/31/98	<50	NA	NA	<0.50	<0.50	<0.50	<0.50	20
	12/08/98 <sup>2</sup>								
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	-
	06/02/94	<50	NA	NA	<0.5	<0.5	<0.5	<0.5	-
	09/09/94	<50	NA	NA	<0.5	<0.5	<0.5	<0.5	-
	12/20/94	<50	NA	NA	<0.5	<0.5	<0.5	<0.5	-
	03/08/95	NS	NS	NS	NS	NS	NS	NS	-
	06/14/95	NS	NS	NS	NS	NS	NS	NS	-
	09/26/95	NS	NS	NS	NS	NS	NS	NS	-
	12/27/95	NS	NS	NS	NS	NS	NS	NS	-
	03/08/95	NS	NS	NS	NS	NS	NS	NS	-
	06/05/96	NS	NS	NS	NS	NS	NS	NS	-
	09/16/96	<50	NA	NA	<0.50	<0.50	<0.50	<0.50	<5.0
	12/02/96	NS	NS	NS	NS	NS	NS	NS	NS
	03/10/97	NS	NS	NS	NS	NS	NS	NS	NS
	06/12/97	NS	NS	NS	NS	NS	NS	NS	NS
	09/29/97	NS	NS	NS	NS	NS	NS	NS	NS
	12/01/97	NS	NS	NS	NS	NS	NS	NS	NS
	03/19/98	NS	NS	NS	NS	NS	NS	NS	NS
	05/28/98	NS	NS	NS	NS	NS	NS	NS	NS
	08/31/98	NS	NS	NS	NS	NS	NS	NS	NS
	12/08/98 <sup>2</sup>								

Notes:

<: Below indicated detection limit.

NS : Not sampled.

NA: Not Analyzed.

**Table 3**  
**Summary of Groundwater Analytical Results**  
**Former Beacon Station # 12574 - Castro Valley, California**

Well ID	Sample Date	TPHg (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)
<sup>1</sup> : Product not typical gasoline. <sup>2</sup> : Well abandoned <sup>3</sup> : As directed by Alameda County, Monitoring wells not sampled.									

**ATTACHMENT E**

**GEOTRACKER ELECTRONIC DATA DELIVERABLE  
CONFIRMATION SHEETS**

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<b><u>Global ID:</u></b>	T0600100155
<b><u>Title:</u></b>	1574-SAMR-Q306
<b><u>Document Type:</u></b>	Monitoring Report - Semi-annual
<b><u>Submittal Type:</u></b>	GEO_REPORT
<b><u>Submittal Date/Time:</u></b>	10/11/2006 10:22:04 AM
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