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By Alameda County Environmental Health at 8:14 am, Jan 24, 2013

Ultramar, Inc.

January 22, 2013

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

SUBJECT: SEMI-ANNUAL GROUNDWATER MONITORING REPORT
FORMER BEACON STATION NO. 12574
22315 REDWOOD ROAD RWQCB Case No. 01-0167
CASTRO VALLEY, CALIFORNIA ACDEH: RO 0000355

Mr. Wickham:

Please find enclosed the **Semi-Annual Groundwater Monitoring Report** for the above-referenced facility. Pursuant to your requests, I declare, under penalty of perjury, that the following information and/or recommendations contained in the attached report are true and correct to the best of my knowledge.

Please call if you have any questions or comments regarding this letter or the enclosed report (303) 373-6057.

Sincerely,
ULTRAMAR INC.



Roger Levin
Manager – Environmental Liability
5590 B Havana St.
Denver, Colorado 80239

Enclosures

cc w/o encl. Mr. Ken Mateik, Horizon Environmental



HORIZON ENVIRONMENTAL INC.

Specialists in Site Assessment, Remedial Testing, Design and Operation

January 22, 2013

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

Subject: **Transmittal of Semi-Annual Monitoring Report**
Second Semi-Annual 2012
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 January 22, 2013. The report documents results of third quarter 2012 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.

A handwritten signature in blue ink, appearing to read "Karen P. Liptak".

Karen P. Liptak
Staff Geologist

Enclosure

cc: Mr. Roger Levin, Ultramar, Inc.
Mr. Allen Shin, Banya Investment LLC
Mr. Bill Courtney



HORIZON ENVIRONMENTAL INC.

Specialists in Site Assessment, Remedial Testing, Design and Operation

January 22, 2013

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

Subject: **Groundwater Monitoring Report**
Second Semi-Annual 2012
Former Beacon Station No. 12574 RWQCB Case No. 01-0167
22315 Redwood Road, Castro Valley, California ACDEH: RO0000355

Mr. Wickham:

At the request of Ultramar Inc. (Ultramar), Horizon Environmental Inc. (Horizon) has prepared this Groundwater Monitoring Report which documents the second semi-annual 2012 groundwater monitoring at the above-referenced Site (Figure 1). There are currently six groundwater monitoring wells (MW-1 through MW-6) and three vapor wells (VW-1, VW-2 and VW-3) associated with this Site. Wells MW-1 through MW-4 and VW-1, VW-2 and VW-3 are located within the Site property boundaries, while well MW-5A is located offsite to the west within the North Sixth Street right-of-way, and well MW-6 is located offsite to the south on the adjoining Kashikar property, as shown on the Site Map (Figure 2) and Site Area Map (Figure 3).

Groundwater Monitoring

Groundwater monitoring activities were conducted by Horizon on October 2, 2012 according to Horizon Field Methods and Procedures, which are presented as Attachment A, and Horizon Monitoring Well Data Sheets, which are included as Attachment B. The depth-to-water (DTW) levels in the six monitoring wells were measured to the nearest 0.01-foot from the top-of-casing (TOC), and the DTW level measurements were subtracted from surveyed TOC elevations to obtain groundwater elevations, as listed in Table 1. The physical parameters conductivity, pH and temperature were monitored with field instrumentation during the purging process. On October 2, 2012, Horizon transported the 100 gallons of monitoring well purge water to the InStrat, Inc. facility in Rio Vista, California for disposal. The non-hazardous waste manifest for the purge water is included in Attachment B.

Groundwater samples were collected by Horizon from wells MW-1 through MW-6, and were submitted under chain-of-custody (COC) documentation to Kiff Analytical LLC, a California Department of Health Services-certified analytical laboratory (NELAP No. 08263CA) located in Davis, California. As requested by the Alameda County Department of Environmental Health (ACDEH) in Item #3 of their January 8, 2009 letter, the groundwater samples were

analyzed for total petroleum hydrocarbons as gasoline (TPHg); the volatile aromatic compounds benzene, toluene, ethylbenzene and total xylenes (BTEX); the fuel oxygenates methyl-t-butyl ether (MTBE), di-isopropyl ether (DIPE), ethyl-t-butyl ether (ETBE), tert-amyl methyl ether (TAME) and tert-butanol (TBA), and the lead scavenger compounds 1,2-dichloroethane (DCA) and 1,2-dibromoethane (EDB) by Environmental Protection Agency (EPA) Method 8260B. Copies of the laboratory reports and Chain-of-Custody are included as Attachment C. Historical groundwater data as reported by previous consultants is included as Attachment D.

Groundwater Monitoring Results

Groundwater elevation data was used to construct the Groundwater Elevation Contour Map (Figure 3). The groundwater flow direction beneath the Site is towards the southwest at an average rate of 0.02 foot/foot, as depicted on Figure 3. Groundwater monitoring previously performed at the Site has indicated a similar groundwater magnitude and flow direction, as summarized on the Historical Groundwater Flow Chart included as Figure 3A. The distribution of TPHg, Benzene and MTBE analytical data are shown on the Groundwater Analytical Summary (Figure 4). A Benzene Isoconcentration Map is shown as Figure 5. Time-Trend Charts for TPHg, Benzene, MTBE and TBA in wells MW-1 and MW-2 can be found as Figures 6 through 9 of this report.

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 semi-annual monitoring and the Semi-Annual Monitoring (SAM) Report EDD (GEO_REPORT) upload confirmation sheet for the previous SAM report are contained in Attachment E.

Discussion and Recommendations

Continued elevated concentrations of TPHg, BTEX, MTBE and TBA in onsite wells MW-1 and MW-2 indicate limited degradation of dissolved gasoline hydrocarbons in groundwater beneath the Site. The dissolved gasoline concentrations reported from well MW-1 located next to the over-excavated former Beacon USTs have attenuated much more than the dissolved gasoline concentrations reported from well MW-2 located next to the former Shell USTs. The distributions of the TPHg, BTEX and TBA analytes indicate an older, degraded dissolved gasoline plume likely originating from the former Shell USTs near well MW-2 shown on Figure 2. Groundwater analytical data from offsite well MW-5A indicates no concentrations of TPHg, BTEX and TBA downgradient of the Site, but does indicate a decreased concentration of 1.0 part per billion (ppb) of MTBE present beneath North Sixth Street.

The attenuation trends of TPHg and BTEX are most pronounced after high-vacuum dual-phase extraction (HVDPE) remedial testing was performed at the Site in 2009. During the HVDPE testing, approximately 220 pounds of vapor-equivalent TPHg and 1.6 pounds of vapor-equivalent Benzene were removed from the subsurface (Horizon, June 30, 2009).

These trends can be seen in the Time-Trend Charts for TPHg and Benzene shown in Figures 6 and 8.

Remedial HVDPE and soil vapor extraction (SVE) testing data was utilized in the preparation of a combined Problem Assessment Report (PAR), Site Conceptual Model (SCM), and [Draft] Corrective Action Plan (CAP) report. The Site Conceptual Model, Human Health Risk Analysis, and [Draft] Corrective Action Plan (Horizon, August 22, 2012) was submitted to the ACDEH, and uploaded to their FTP site on August 23, 2012. After review of the [Draft] CAP report, and allowance for public comments, the ACDEH issued their approval of the proposed work scope (ACDEH, November 6, 2012). Horizon will proceed with the proposed work scope at the Site in 2013.

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

Sincerely,

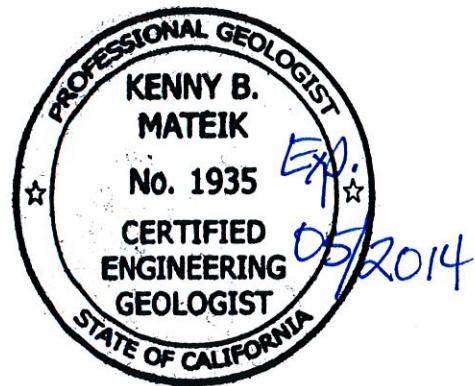
HORIZON ENVIRONMENTAL INC.

Kenny B. Mateik

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

Karen P. Liptak

Karen P. Liptak
Staff Geologist



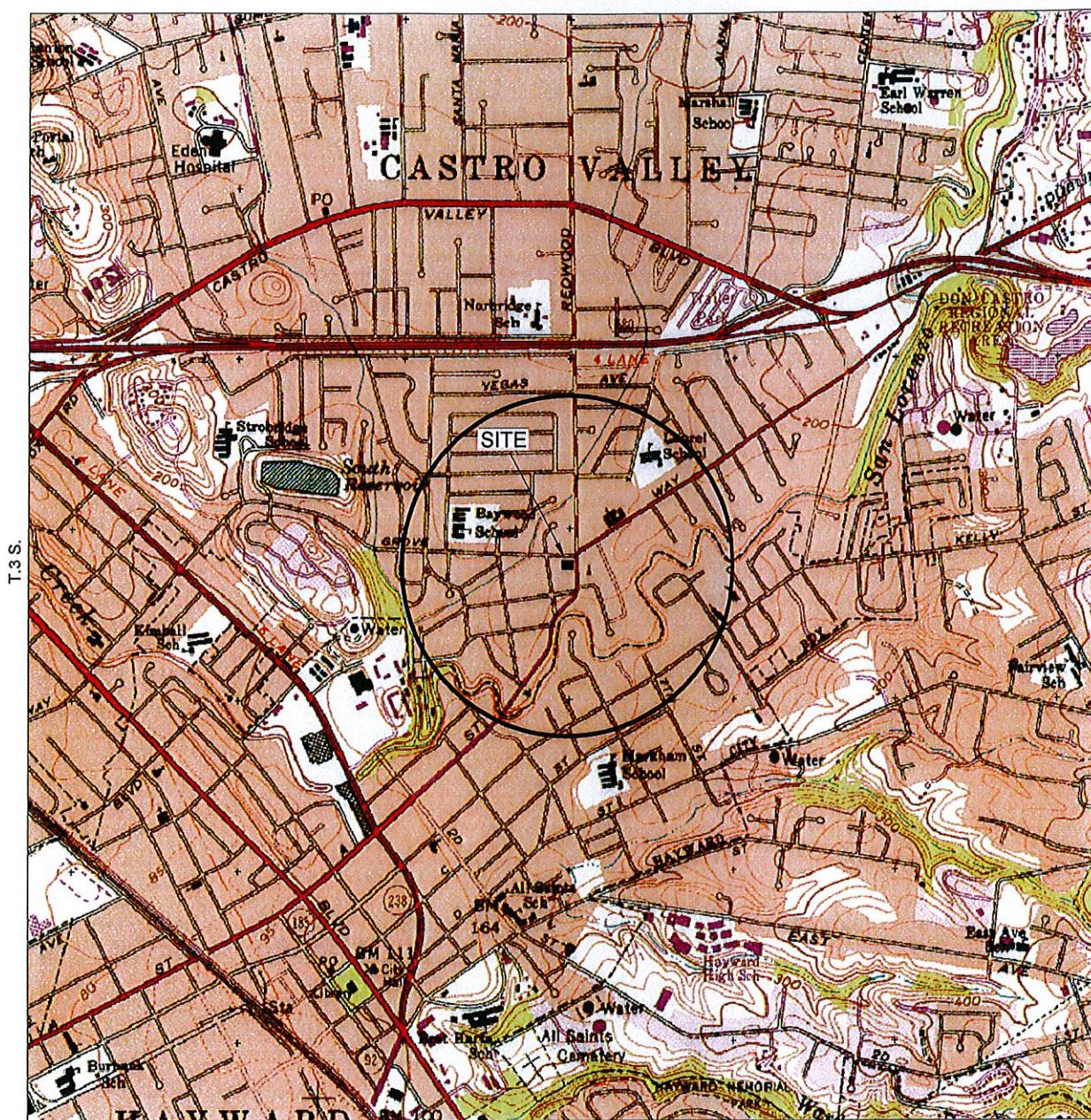
Attachments:

- Figure 1: Site Vicinity Map
- Figure 2: Site Map
- Figure 3: Site Area Map
- Figure 4: Groundwater Elevation Contour Map
- Figure 4A: Historical Groundwater Flow Table
- Figure 5: Groundwater Analytical Summary
- Figure 6: Benzene Isoconcentration Map
- Figure 7: TPHg vs. Time Graph for Monitoring Well MW-1
- Figure 8: Benzene vs. Time Graph for Monitoring Well MW-1
- Figure 9: MTBE and TBA vs. Time Graph for Monitoring Well MW-1
- Figure 10: TPHg and Benzene vs. Time Graph for Monitoring Well MW-2
- Figure 11: MTBE and TBA vs. Time Graph for Monitoring Well MW-2

Table 1: Groundwater Monitoring Data

- Attachment A: Horizon Field Methods and Procedures
Site Description and Background
- Attachment B: Horizon Monitoring Well Data Sheets
Purge Water Disposal Documentation
- Attachment C: Analytical Report
- Attachment D: Historical Groundwater Data
- Attachment E: GeoTracker Electronic Data Deliverable Confirmation Sheets

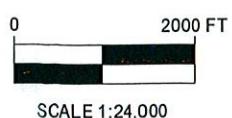
c: Mr. Roger Levin, Ultramar, Inc.
Mr. Allen Shin, Banya Investment LLC
Mr. Bill Courtney, Property Manager
Mr. Ali Kashikar, Offsite Property Owner



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



QUADRANGLE LOCATION



HORIZON ENVIRONMENTAL INC.

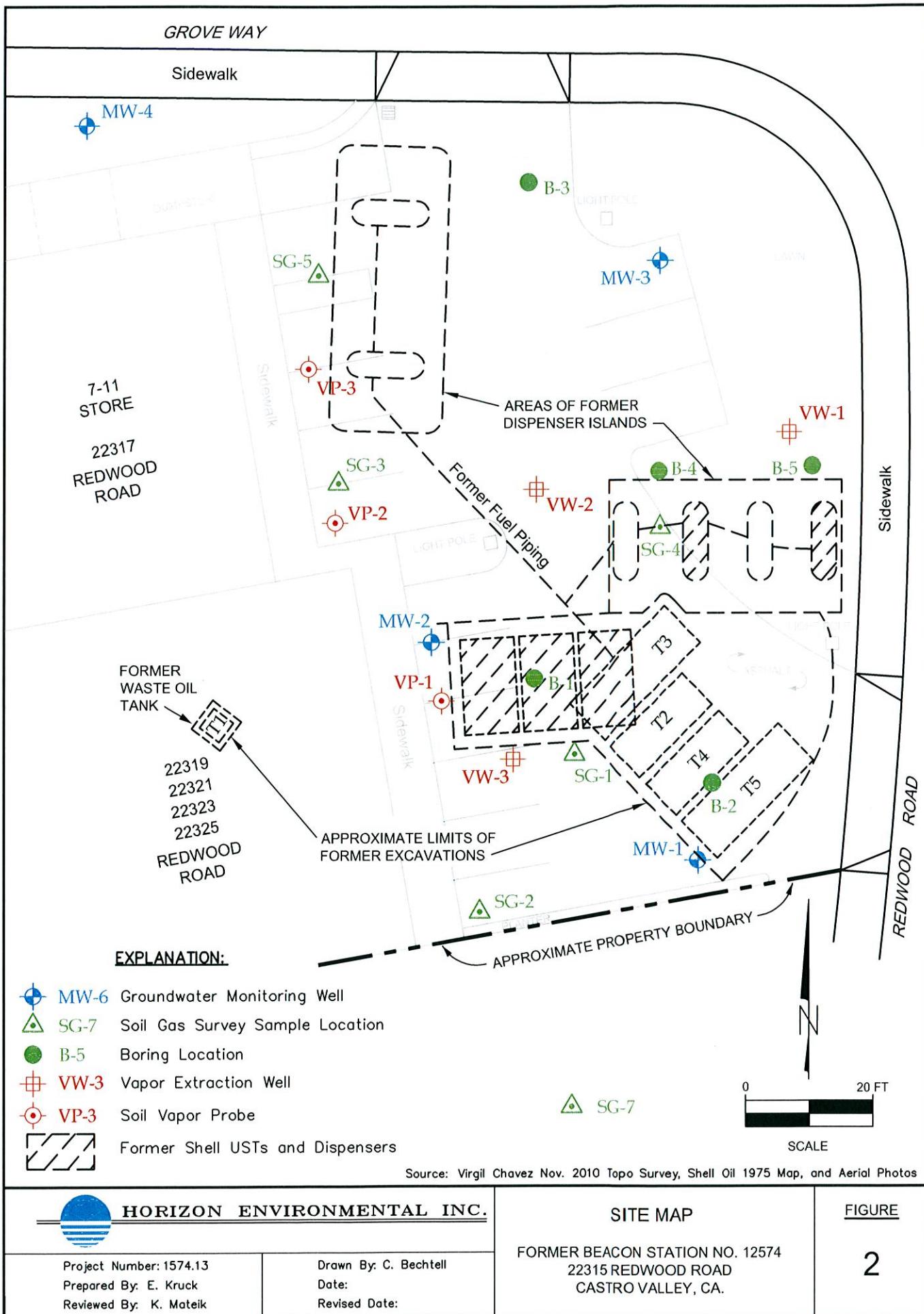
Project Number: 1574.41
Prepared By: K. Liptak
Reviewed By: K. Mateik

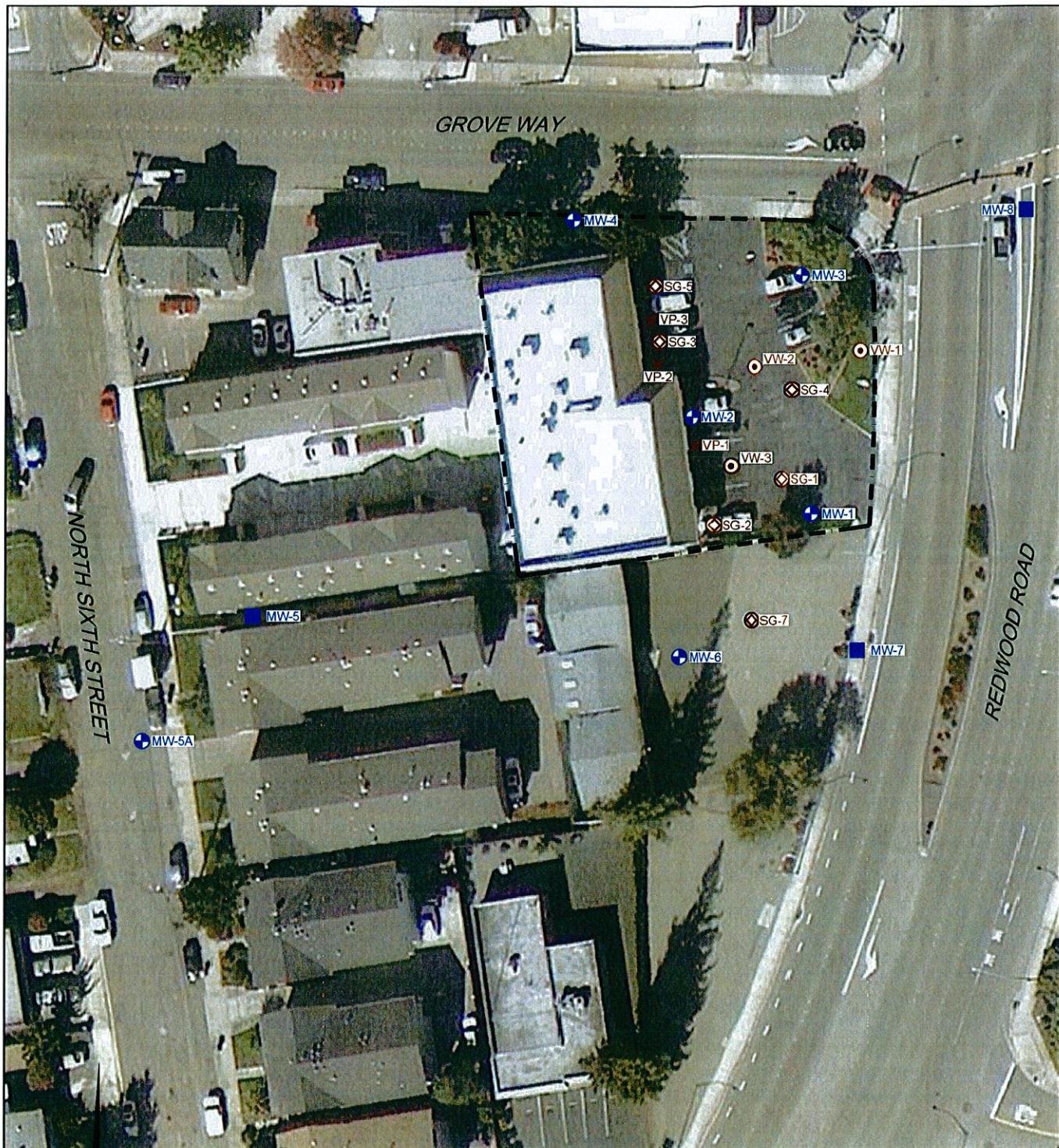
Drawn By: M. LaCoste
Date: 10/7/04
Revised Date:

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

FIGURE

1





LEGEND

- MW-6 MONITORING WELL
- MW-8 ABANDONED MONITORING WELL
- VW-3 VAPOR EXTRACTION WELL
- VP-3 SOIL VAPOR PROBE
- SG-7 SOIL GAS SAMPLING LOCATION

0 60 FT

APPROX. SCALE



HORIZON ENVIRONMENTAL INC.

Project Number: 1574.13
Prepared By: E. Kruck
Reviewed By: K. Mateik

Drawn By: M. LaCoste
Date: 1/25/12
Revised Date: 11/27/12

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

FIGURE

3

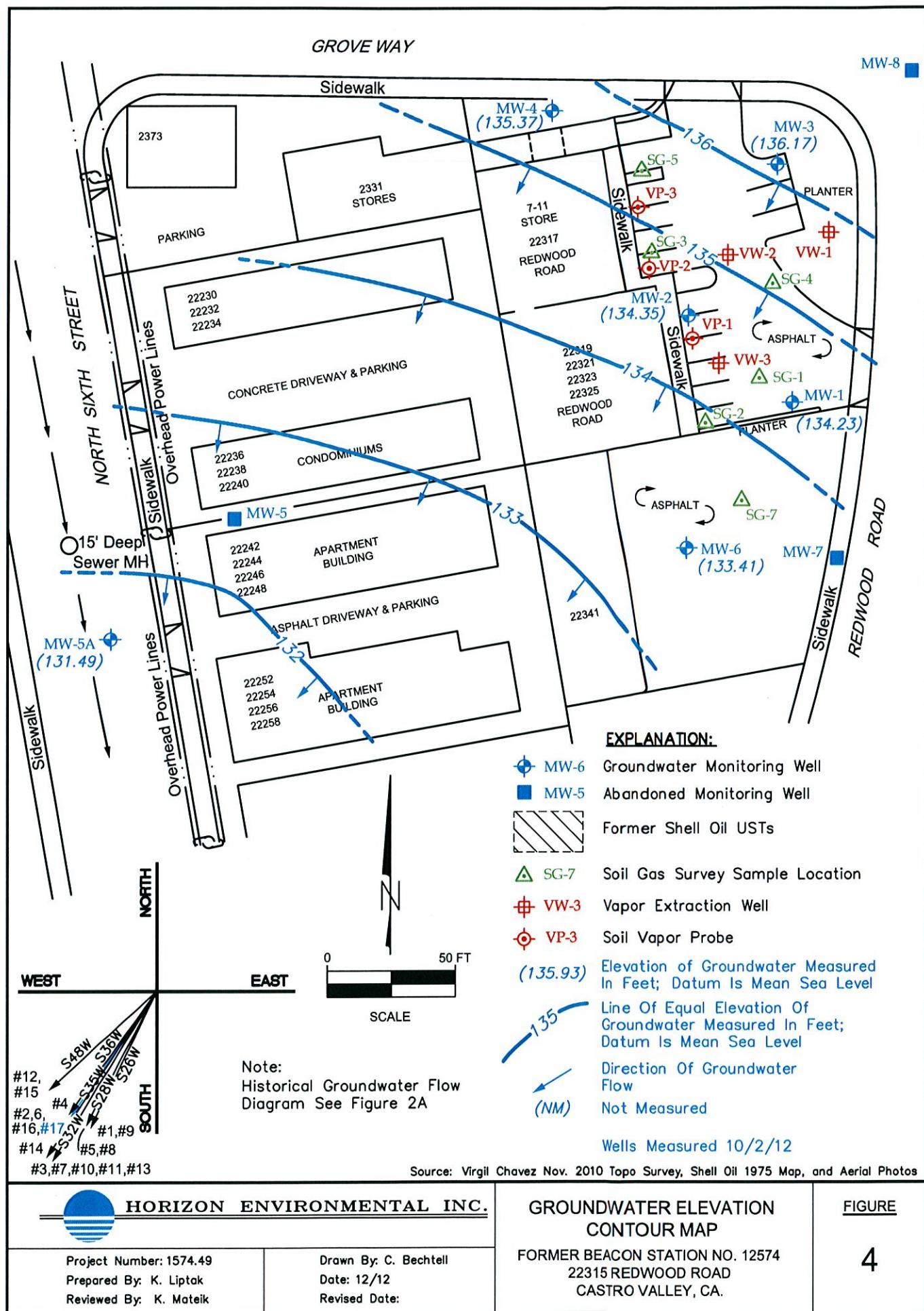
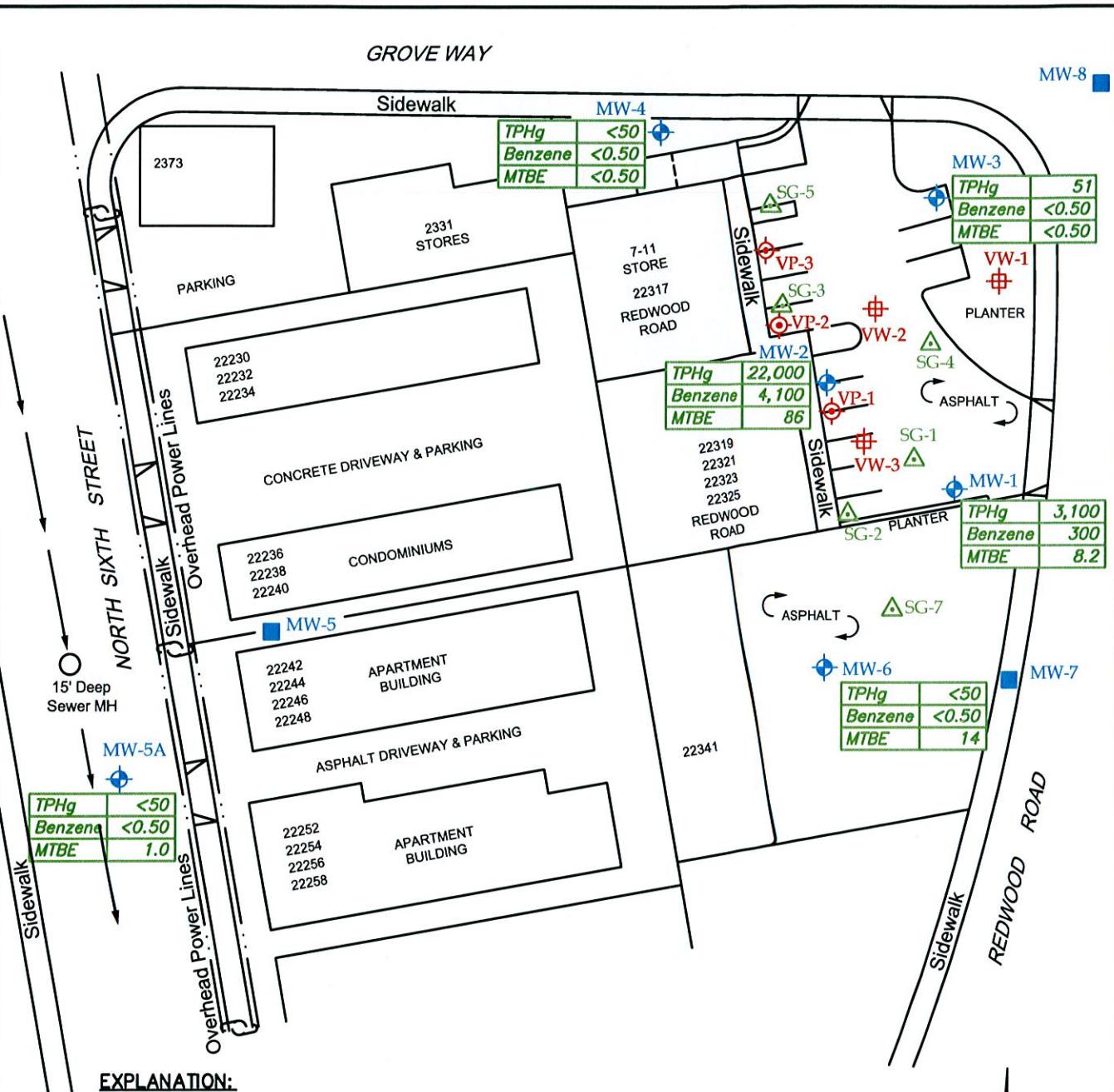


Figure 4A
HISTORICAL GROUNDWATER FLOW CHART
Former Beacon Station No. 12574
22315 Redwood Road,
Castro Valley, California

Date	Map ID Number	Direction of Groundwater Flow
08/31/04	#1	S 26 W
02/01/05	#2	S 35 W
07/29/05	#3	S 32 W
01/16/06	#4	S 36 W
08/30/06	#5	S 28 W
02/13/07	#6	S 35 W
08/13/07	#7	S 32 W
02/11/08	#8	S 28 W
07/29/08	#9	S 26 W
02/25/09	#10	S 32 W
08/26/09	#11	S 32 W
01/29/10	#12	S 48 W
08/23/10	#13	S 32 W
03/03/11	#14	S 34 W
08/24/11	#15	S 48 W
02/13/12	#16	S 35 W
10/02/12	#17	S 35 W



EXPLANATION:

MW-6 Groundwater Monitoring Well

SG-7 Soil Gas Survey Sample Location

MW-5 Abandoned Monitoring Well

VW-3 Vapor Extraction Well



VP-3 Soil Vapor Probe

TPHg	22,000	AS GASOLINE IN PARTS PER BILLION (ppb)
Benzene	4,100	BENZENE CONCENTRATION IN ppb
MTBE	86	METHYL-TERT BUTYL ETHER IN ppb

(NS) Not Sampled

Wells Sampled 10/2/12



Source: Virgil Chavez Nov. 2010 Topo Survey, Shell Oil 1975 Map, and Aerial Photos



HORIZON ENVIRONMENTAL INC.

Project Number: 1574.49
Prepared By: K. Liptak
Reviewed By: K. Mateik

Drawn By: C. Bechtell
Date: 12/12
Revised Date:

GROUNDWATER ANALYTICAL SUMMARY

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

FIGURE

5

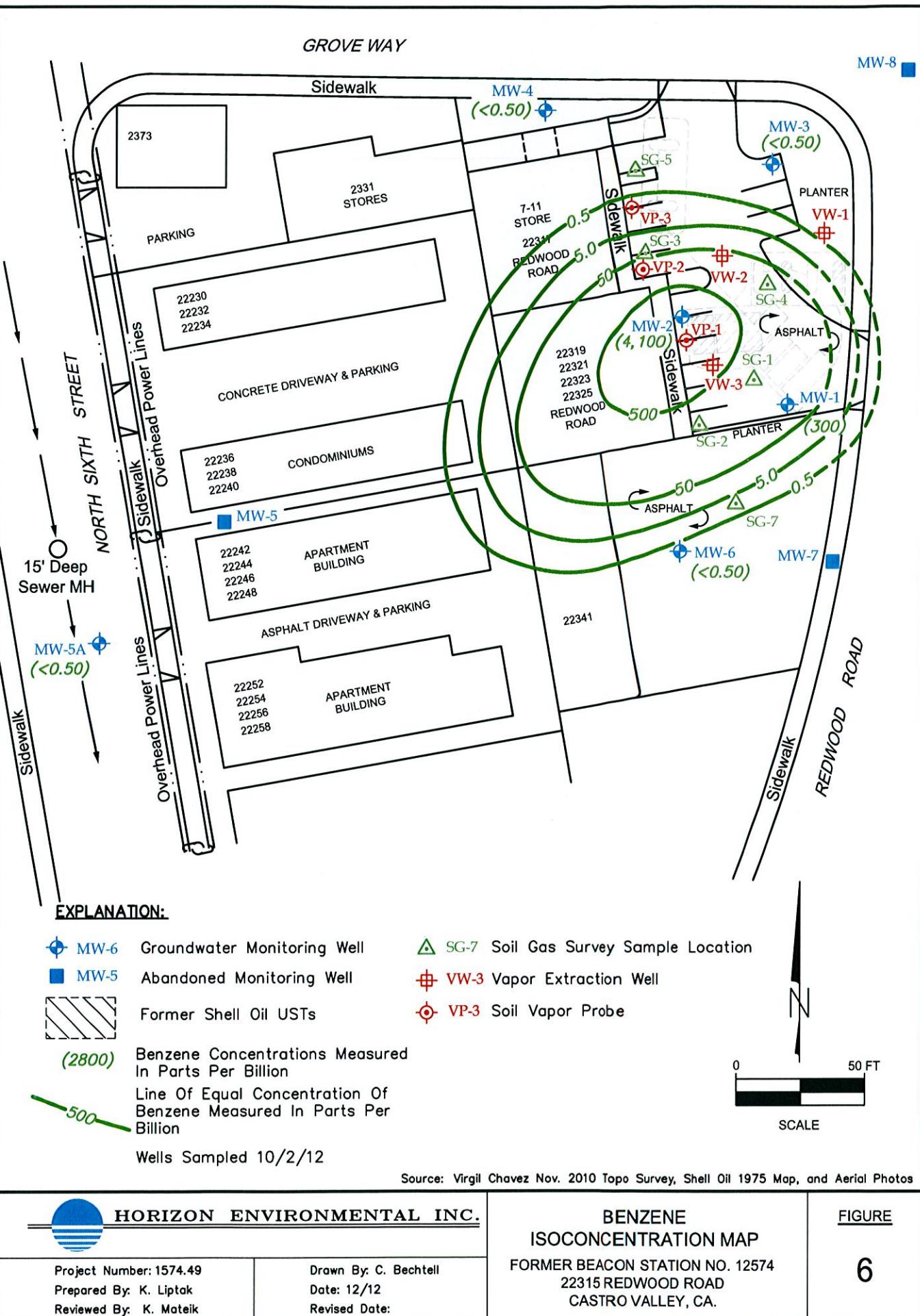


FIGURE 7
TPHg vs. Time
Monitoring Well MW-1
Former Beacon Station No. 12574
22135 Redwood Road, Castro Valley, California

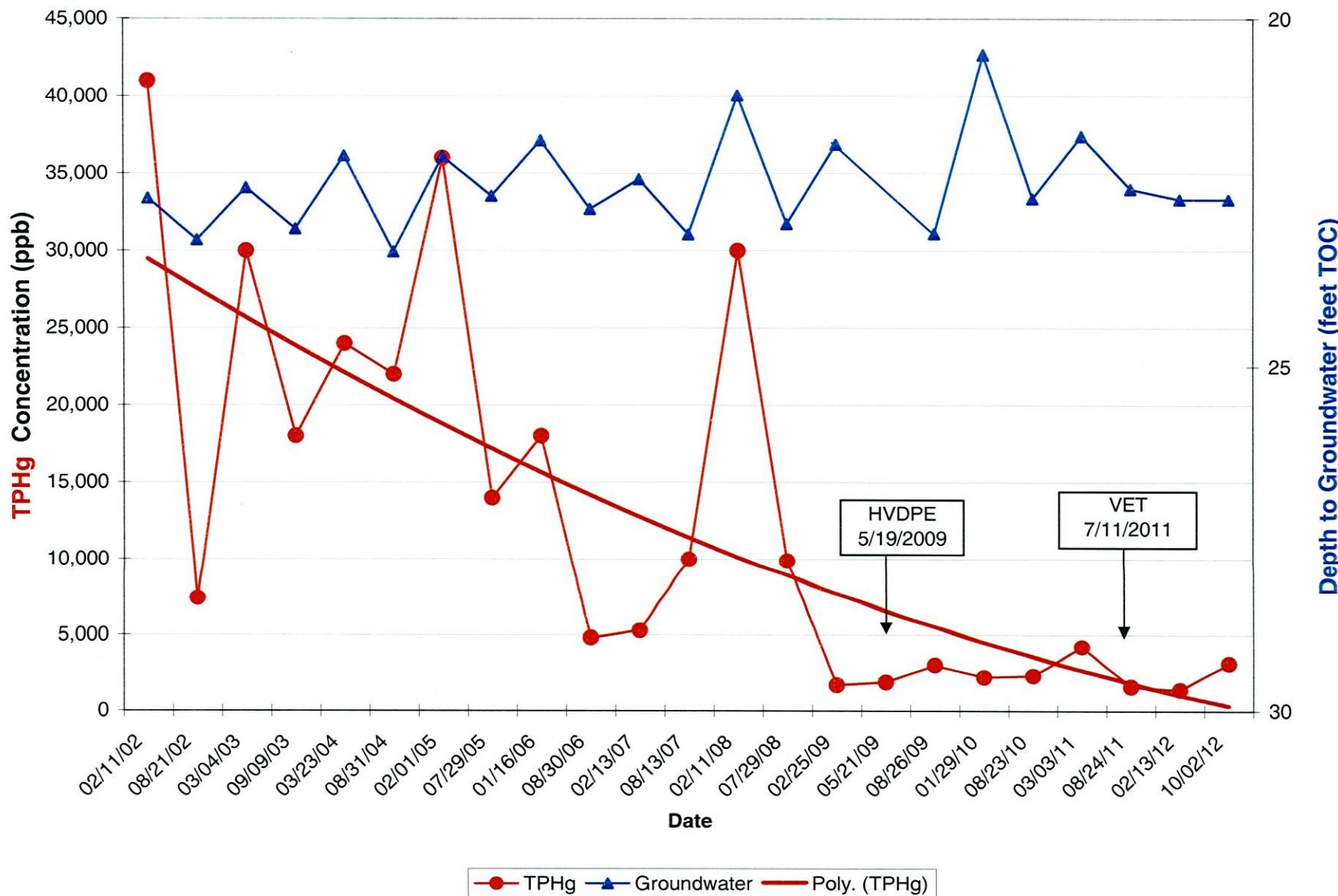


FIGURE 8
Benzene vs. Time
Monitoring Well MW-1
Former Beacon Station No. 12574
22135 Redwood Road, Castro Valley, California

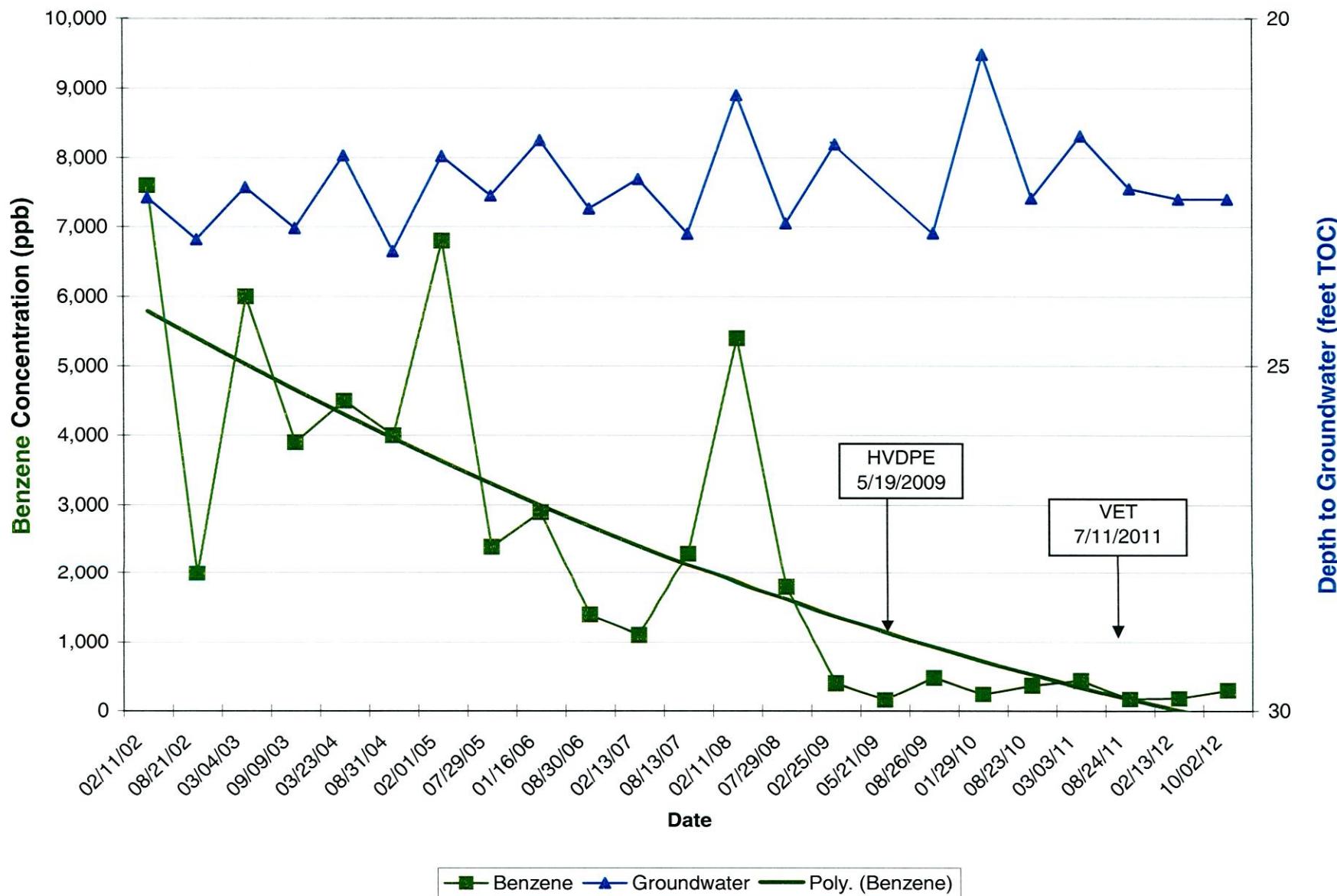


FIGURE 9
MTBE and TBA vs. Time
Monitoring Well MW-1
Former Beacon Station No. 12574
22135 Redwood Road, Castro Valley, California

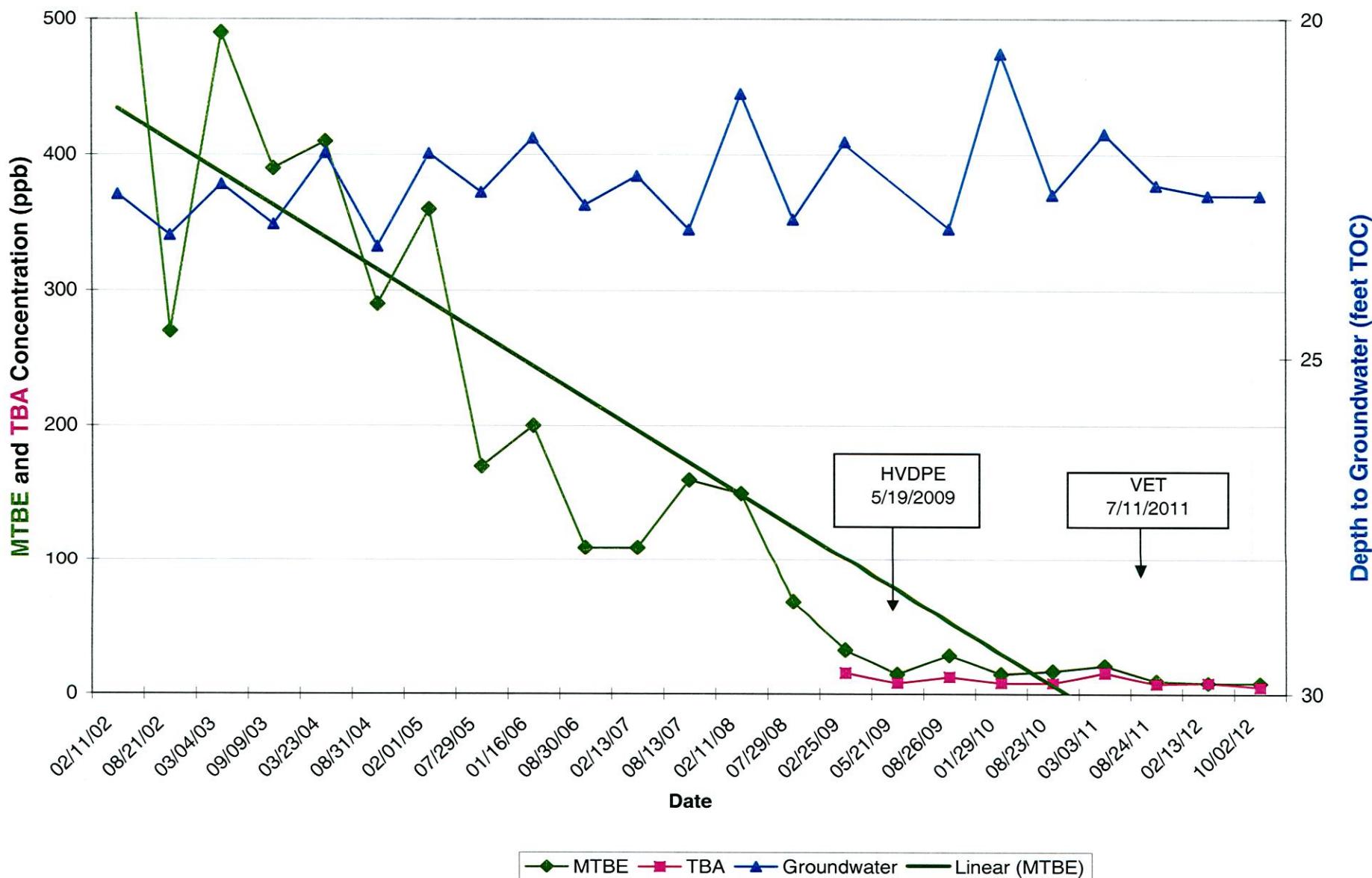


FIGURE 10
TPHg and Benzene vs. Time
Monitoring Well MW-2
Former Beacon Station No. 12574
22315 Redwood Road, Castro Valley, California

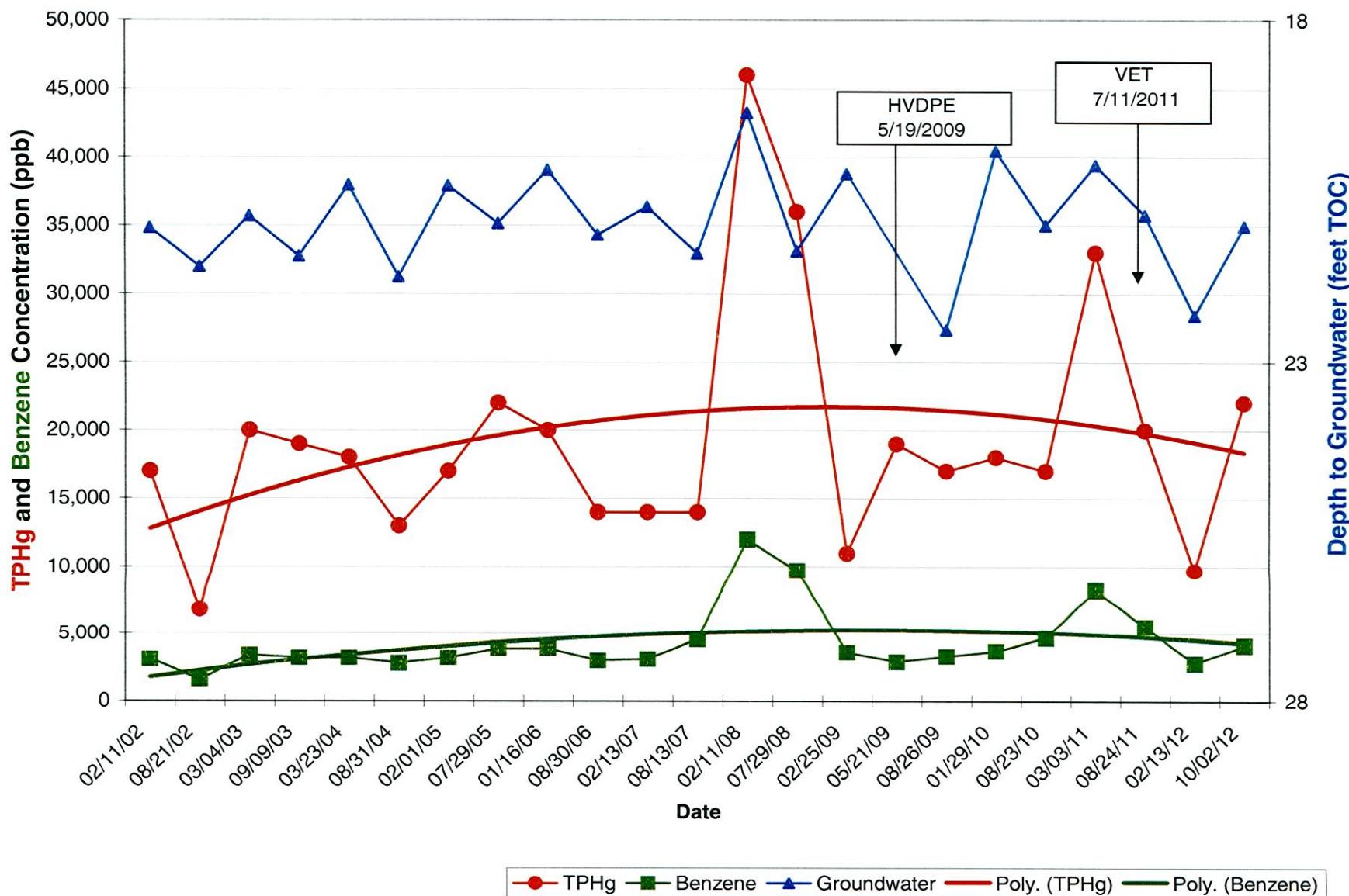


FIGURE 11
MTBE and TBA vs. Time
Monitoring Well MW-2
Former Beacon Station No. 12574
22135 Redwood Road, Castro Valley, California

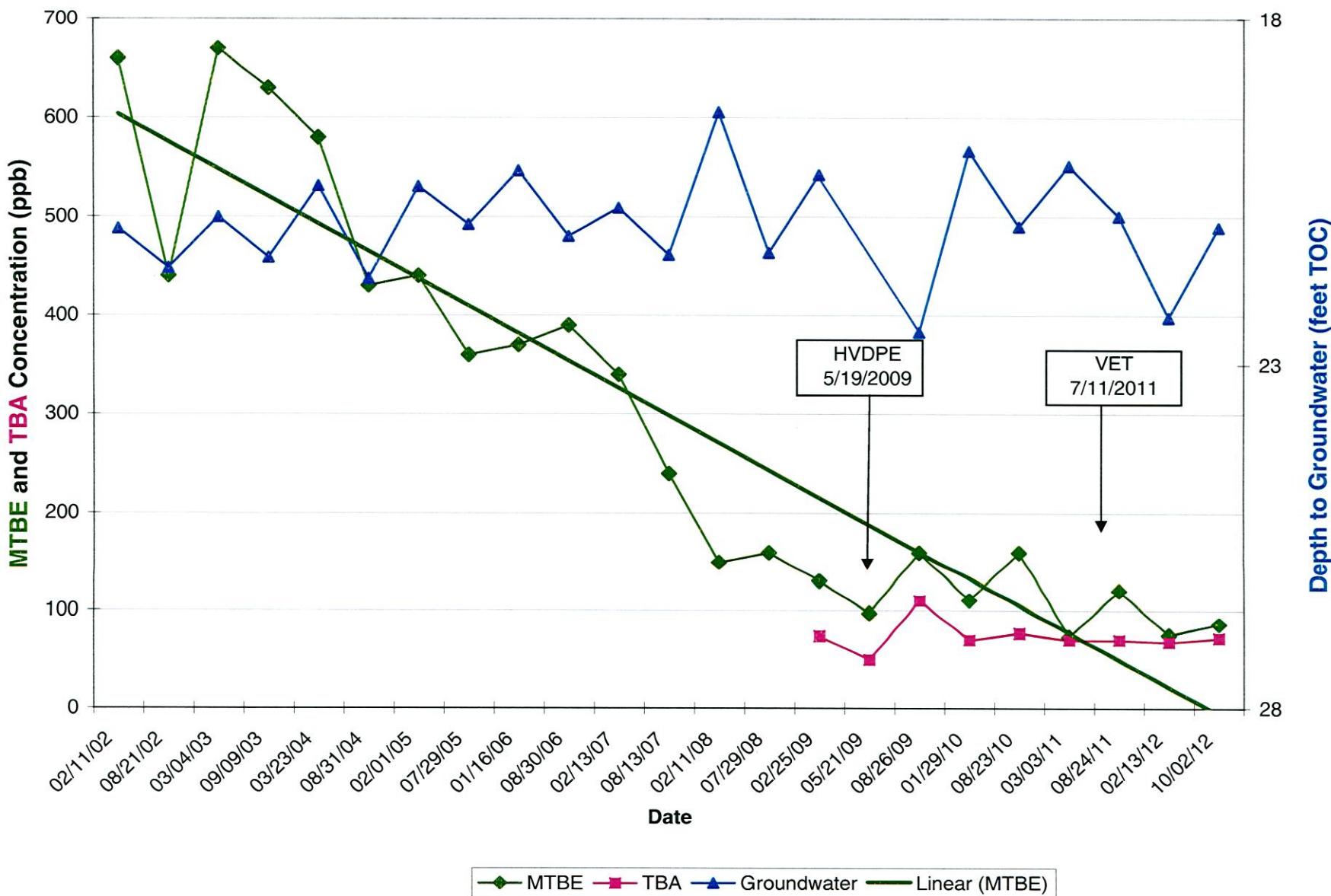


Table 1 - Groundwater Monitoring Data
Former Beacon Station No. 12574
22315 Redwood Road
Castro Valley, California

Well Number	Date	Benzene ug/L	Toluene ug/L	Ethylbenzene ug/L	Xylenes ug/L	TPHg ug/L	MTBE ug/L	TBA ug/L	Depth to GW	T.O.C. Elevation	GW Elevation	Well Diam.	Screen Interval	Comments
MW-1	02/11/02	7,600	160	1,600	4,200	41,000	640	na	22.58	158.70	136.12	4"	10' - 30'	no comments
MW-1	08/21/02	2,000	31	220	510	7,400	270	na	23.18		135.52			no comments
MW-1	03/04/03	6,000	130	1,300	2,900	30,000	490	na	22.43		136.27			no comments
MW-1	09/09/03	3,900	69	760	1,700	18,000	390	na	23.02		135.68			no comments
MW-1	03/23/04	4,500	89	1,000	2,000	24,000	410	na	21.97		136.73			no comments
MW-1	08/31/04	4,000	77	780	1,600	22,000	290	na	23.35		135.35			no comments
MW-1	02/01/05	6,800	160	1,800	3,000	36,000	360	na	21.98		136.72			no comments
MW-1	07/29/05	2,400	54	460	750	14,000	170	na	22.55		136.15			no comments
MW-1	01/16/06	2,900	61	860	1,300	18,000	200	na	21.75		136.95			no comments
MW-1	08/30/06	1,400	22	150	240	4,800	110	na	22.74		135.96			no comments
MW-1	02/13/07	1,100	49	210	280	5,300	110	na	22.31		136.39			no comments
MW-1	08/13/07	2,300	49	11	630	10,000	160	na	23.10		135.60			no comments
MW-1	02/11/08	5,400	260	2,300	3,400	30,000	150	na	21.10		137.60			no comments
MW-1	07/29/08	1,800	28	720	220	9,900	69	na	22.95		135.75			no comments
MW-1	02/25/09	400	7.0	53	34	1,700	33	16	21.81		136.89			slight odor / no sheen
MW-1	05/21/09	160	50	120	140	1,900	15	8.4	nm		nc			post HDPE sample
MW-1	08/26/09	480	130	120	240	3,000	29	13	23.09		135.61			slight odor / no sheen
MW-1	01/29/10	240	16	45	100	2,200	15	8.3	20.51		138.19			slight odor / no sheen
MW-1	08/23/10	370	7	54	83	2,300	17	8.3	22.59		136.11			odor / no sheen
MW-1	11/10/10	-----	-----	-----	-----	-----	-----	-----	156.83					GPS surveying of well
MW-1	03/03/11	440	14	190	120	4,200	21	16	21.69		135.14			odor / no sheen
MW-1	08/24/11	170	6.3	20	26	1,600	10	7.6	22.45		134.38			slight odor / no sheen
MW-1	02/13/12	180	5.4	24	43	1,400	8.4	8.6	22.60		134.23			odor / no sheen
MW-1	10/02/12	300	7.1	51	74	3,100	8.2	5.3	22.60		134.23			slight odor / no sheen
MW-2	02/11/02	3,100	270	690	1,600	17,000	660	na	21.03	157.33	136.30	4"	10' - 30'	no comments
MW-2	08/21/02	1,600	44	290	260	6,800	440	na	21.60		135.73			no comments
MW-2	03/04/03	3,400	200	590	1,100	20,000	670	na	20.86		136.47			no comments
MW-2	09/09/03	3,200	120	630	940	19,000	630	na	21.45		135.88			no comments
MW-2	03/23/04	3,200	110	640	740	18,000	580	na	20.41		136.92			no comments
MW-2	08/31/04	2,800	59	510	420	13,000	430	na	21.75		135.58			no comments
MW-2	02/01/05	3,200	110	700	730	17,000	440	na	20.42		136.91			no comments
MW-2	07/29/05	3,900	210	770	930	22,000	360	na	20.97		136.36			no comments
MW-2	01/16/06	3,900	120	770	790	20,000	370	na	20.19		137.14			slight sheen / odor
MW-2	08/30/06	3,000	79	480	450	14,000	390	na	21.14		136.19			no comments
MW-2	02/13/07	3,100	110	600	620	14,000	340	na	20.73		136.60			sheen
MW-2	08/13/07	4,600	150	560	410	14,000	240	na	21.41		135.92			no comments
MW-2	02/11/08	12,000	4,400	1,700	5,200	46,000	150	na	19.35		137.98			no comments
MW-2	07/29/08	9,700	840	1,400	4,000	36,000	160	na	21.38		135.95			no comments
MW-2	02/25/09	3,600	66	400	320	11,000	130	74	20.25		137.08			odor / no sheen
MW-2	05/21/09	2,900	710	590	1,900	19,000	97	50	nm		nc			post HDPE sample
MW-2	08/26/09	3,300	280	640	1,600	17,000	160	110	22.53		134.80			odor / no sheen
MW-2	01/29/10	3,700	140	550	1,100	18,000	110	70	19.91		137.42			odor / no sheen
MW-2	08/23/10	4,700	72	550	380	17,000	160	77	21.00		136.33			odor / no sheen
MW-2	11/10/10	-----	-----	-----	-----	-----	-----	-----	155.36					GPS surveying of well
MW-2	03/03/11	8,200	150	1,800	2,400	33,000	73	<70	20.12		135.24			odor / no sheen
MW-2	08/24/11	5,500	89	1,000	410	20,000	120	<70	20.85		134.51			odor / no sheen
MW-2	02/13/12	2,800	30	310	82	9,700	75	68	22.32		133.04			odor / no sheen
MW-2	10/02/12	4,100	120	760	310	22,000	86	72	21.01		134.35			odor / no sheen

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

Well Number	Date	Benzene ug/L	Toluene ug/L	Ethylbenzene ug/L	Xylenes ug/L	TPHg ug/L	MTBE ug/L	TBA ug/L	Depth to GW	T.O.C. Elevation	GW Elevation	Well Diam.	Screen Interval	Comments
MW-3	02/11/02	ns	ns	ns	ns	ns	ns	ns	21.55	159.23	137.68	4"	10' - 30'	not sampled
MW-3	08/21/02	ns	ns	ns	ns	ns	ns	ns	22.00		137.23			not sampled
MW-3	03/04/03	ns	ns	ns	ns	ns	ns	ns	21.48		137.75			not sampled
MW-3	09/09/03	ns	ns	ns	ns	ns	ns	ns	21.84		137.39			not sampled
MW-3	03/23/04	ns	ns	ns	ns	ns	ns	ns	20.82		138.41			not sampled
MW-3	08/31/04	ns	ns	ns	ns	ns	ns	ns	21.93		137.30			no comments
MW-3	02/01/05	ns	ns	ns	ns	ns	ns	ns	20.56		138.67			no comments
MW-3	07/29/05	ns	ns	ns	ns	ns	ns	ns	21.37		137.86			no comments
MW-3	01/16/06	ns	ns	ns	ns	ns	ns	ns	20.75		138.48			no comments
MW-3	08/30/06	ns	ns	ns	ns	ns	ns	ns	21.60		137.63			no comments
MW-3	02/13/07	ns	ns	ns	ns	ns	ns	ns	21.37		137.86			no comments
MW-3	08/13/07	ns	ns	ns	ns	ns	ns	ns	nm		nm			well paved over
MW-3	02/11/08	ns	ns	ns	ns	ns	ns	ns	nm		nm			well paved over
MW-3	07/29/08	ns	ns	ns	ns	ns	ns	ns	nm		nm			well paved over
MW-3	02/25/09	<0.50	<0.50	<0.50	<0.50	<50	<0.50	<5.0	20.87		138.36			no odor / no sheen
MW-3	08/26/09	<0.50	<0.50	0.71	<0.50	140	<0.50	<5.0	21.68		137.55			no odor / no sheen
MW-3	01/29/10	<0.50	<0.50	<0.50	<0.50	<50	<0.50	<5.0	19.60		139.63			no odor / no sheen
MW-3	08/23/10	<0.50	<0.50	<0.50	<0.50	<50	<0.50	<5.0	21.10		138.13			no odor / no sheen
MW-3	11/10/10	-----	-----	-----	-----	-----	-----	-----	157.37					GPS surveying of well
MW-3	03/03/11	<0.50	<0.50	<0.50	<0.50	<50	<0.50	<5.0	20.58		136.79			no odor / no sheen
MW-3	08/24/11	<0.50	<0.50	<0.50	<0.50	<50	<0.50	<5.0	21.15		136.22			no odor / no sheen
MW-3	02/13/12	<0.50	<0.50	<0.50	<0.50	<50	<0.50	<5.0	21.44		135.93			no odor / no sheen
MW-3	10/02/12	<0.50	<0.50	0.53	<0.50	51	<0.50	<5.0	21.20		136.17			no odor / no sheen
MW-4	02/11/02	ns	ns	ns	ns	ns	ns	ns	16.81	154.13	137.32	2"	13' - 28'	not sampled
MW-4	08/21/02	ns	ns	ns	ns	ns	ns	ns	17.58		136.55			not sampled
MW-4	03/04/03	ns	ns	ns	ns	ns	ns	ns	16.70		137.43			not sampled
MW-4	09/09/03	ns	ns	ns	ns	ns	ns	ns	17.48		136.65			not sampled
MW-4	03/23/04	ns	ns	ns	ns	ns	ns	ns	16.35		137.78			not sampled
MW-4	08/31/04	ns	ns	ns	ns	ns	ns	ns	nm		nm			no comments
MW-4	02/01/05	ns	ns	ns	ns	ns	ns	ns	16.70		137.43			no comments
MW-4	07/29/05	ns	ns	ns	ns	ns	ns	ns	17.06		137.07			no comments
MW-4	01/16/06	ns	ns	ns	ns	ns	ns	ns	16.56		137.57			no comments
MW-4	08/30/06	ns	ns	ns	ns	ns	ns	ns	17.18		136.95			no comments
MW-4	02/13/07	ns	ns	ns	ns	ns	ns	ns	17.01		137.12			no comments
MW-4	08/13/07	ns	ns	ns	ns	ns	ns	ns	17.94		136.19			no comments
MW-4	02/11/08	ns	ns	ns	ns	ns	ns	ns	15.68		138.45			no comments
MW-4	07/29/08	ns	ns	ns	ns	ns	ns	ns	17.31		136.82			no comments
MW-4	02/25/09	<0.50	<0.50	<0.50	<0.50	<50	<0.50	<5.0	16.44		137.69			no odor / no sheen
MW-4	08/26/09	<0.50	<0.50	<0.50	<0.50	<50	<0.50	<5.0	17.41		136.72			no odor / no sheen
MW-4	01/29/10	<0.50	<0.50	<0.50	<0.50	<50	<0.50	<5.0	16.15		137.98			no odor / no sheen
MW-4	08/23/10	<0.50	<0.50	<0.50	<0.50	<50	<0.50	<5.0	16.78		137.35			no odor / no sheen
MW-4	11/10/10	-----	-----	-----	-----	-----	-----	-----	152.26					GPS surveying of well
MW-4	03/03/11	<0.50	<0.50	<0.50	<0.50	<50	<0.50	<5.0	16.29		135.97			no odor / no sheen
MW-4	08/24/11	<0.50	<0.50	<0.50	<0.50	<50	<0.50	<5.0	16.93		135.33			no odor / no sheen
MW-4	02/13/12	<0.50	<0.50	<0.50	<0.50	<50	<0.50	<5.0	17.05		135.21			no odor / no sheen
MW-4	10/02/12	<0.50	<0.50	<0.50	<0.50	<50	<0.50	<5.0	16.89		135.37			no odor / no sheen

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

Well Number	Date	Benzene ug/L	Toluene ug/L	Ethylbenzene ug/L	Xylenes ug/L	TPHg ug/L	MTBE ug/L	TBA ug/L	Depth to GW	T.O.C. Elevation	GW Elevation	Well Diam.	Screen Interval	Comments
MW-5	02/11/02	ns	ns	ns	ns	ns	ns	ns	15.70	150.73	135.03			not sampled
MW-5	08/21/02	ns	ns	ns	ns	ns	ns	ns	16.17		134.56			not sampled
MW-5	03/04/03	ns	ns	ns	ns	ns	ns	ns	15.46		135.27			not sampled
MW-5	09/09/03	ns	ns	ns	ns	ns	ns	ns	16.05		134.68			not sampled
MW-5	03/23/04	ns	ns	ns	ns	ns	ns	ns	14.88		135.85			not sampled
MW-5	08/31/04	ns	ns	ns	ns	ns	ns	ns	nm		nm			unable to locate due to construction
MW-5	02/01/05	ns	ns	ns	ns	ns	ns	ns	nm		nm			unable to locate due to construction
MW-5	07/29/05	ns	ns	ns	ns	ns	ns	ns	nm		nm			unable to locate due to construction
MW-5	08/24/11	ns	ns	ns	ns	ns	ns	ns	nm		nm			unable to locate due to construction
MW-5	02/13/12	ns	ns	ns	ns	ns	ns	ns	nm		nm			unable to locate due to construction
MW-5	10/02/12	ns	ns	ns	ns	ns	ns	ns	nm		nm			unable to locate due to construction
MW-5A	11/01/10	<0.50	<0.50	<0.50	<0.50	<50	18	<5.0	15.11	146.36	131.25	2"	10' - 30'	no odor / no sheen
MW-5A	03/03/11	<0.50	<0.50	<0.50	<0.50	<50	17	<5.0	13.96		132.40			no odor / no sheen
MW-5A	08/24/11	<0.50	<0.50	<0.50	<0.50	<50	14	<5.0	14.82		131.54			no odor / no sheen
MW-5A	02/13/12	<0.50	<0.50	<0.50	<0.50	<50	17	<5.0	14.90		131.46			no odor / no sheen
MW-5A	10/02/12	<0.50	<0.50	<0.50	<0.50	<50	1.0	<5.0	14.87		131.49			no odor / no sheen
MW-6	02/11/02	ns	ns	ns	ns	ns	ns	ns	20.78	156.11	135.33	2"	15' - 30'	not sampled
MW-6	08/21/02	ns	ns	ns	ns	ns	ns	ns	21.41		134.70			not sampled
MW-6	03/04/03	ns	ns	ns	ns	ns	ns	ns	20.64		135.47			not sampled
MW-6	09/09/03	ns	ns	ns	ns	ns	ns	ns	21.23		134.88			not sampled
MW-6	03/23/04	ns	ns	ns	ns	ns	ns	ns	20.21		135.90			not sampled
MW-6	08/31/04	ns	ns	ns	ns	ns	ns	ns	21.50		134.61			no comments
MW-6	02/01/05	ns	ns	ns	ns	ns	ns	ns	20.22		135.89			no comments
MW-6	07/29/05	ns	ns	ns	ns	ns	ns	ns	20.78		135.33			no comments
MW-6	01/16/06	ns	ns	ns	ns	ns	ns	ns	19.92		136.19			no comments
MW-6	08/30/06	<0.50	<0.50	<0.50	<0.50	<50	71	ns	20.94		135.17			no comments
MW-6	02/13/07	ns	ns	ns	ns	ns	ns	ns	20.35		135.76			no comments
MW-6	08/13/07	ns	ns	ns	ns	ns	ns	ns	21.29		134.82			no comments
MW-6	02/11/08	ns	ns	ns	ns	ns	ns	ns	19.50		136.61			no comments
MW-6	07/29/08	ns	ns	ns	ns	ns	ns	ns	21.23		134.88			no comments
MW-6	02/25/09	<0.50	<0.50	<0.50	<0.50	<50	45	<5.0	19.95		136.16			no odor / no sheen
MW-6	08/26/09	<0.50	<0.50	<0.50	<0.50	<50	43	<5.0	21.27		134.84			no odor / no sheen
MW-6	01/29/10	<0.50	<0.50	<0.50	<0.50	<50	46	5.4	19.64		136.47			no odor / no sheen
MW-6	08/23/10	<0.50	<0.50	<0.50	<0.50	<50	36	<5.0	20.88		135.23			no odor / no sheen
MW-6	11/10/10	-----	-----	-----	-----	-----	-----	-----	-----	154.27				GPS surveying of well
MW-6	03/03/11	<0.50	<0.50	<0.50	<0.50	<50	40	5.1	19.90		134.37			no odor / no sheen
MW-6	08/24/11	<0.50	<0.50	<0.50	<0.50	<50	29	<5.0	20.67		133.60			no odor / no sheen
MW-6	02/13/12	<0.50	<0.50	<0.50	<0.50	<50	24	<5.0	20.84		133.43			no odor / no sheen
MW-6	10/02/12	<0.50	<0.50	<0.50	<0.50	<50	14	<5.0	20.86		133.41			no odor / no sheen

Notes:

TPHg = Total Petroleum Hydrocarbons as gasoline nm = not measured

TPHd = Total Petroleum Hydrocarbons as diesel ns = not sampled

MTBE = Methyl Tertiary-Butyl Ether nc = not calculated

< = less than the specified laboratory detection limit na = not analyzed

ppb = parts per billion

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

Monitoring well casing tops resurveyed in November 2010
to Global Positioning System (GPS) coordinates.

ATTACHMENT A

HORIZON FIELD METHODS AND PROCEDURES

AND

SITE HISTORY INFORMATION

Site Description

The Site is located on the southwestern corner of the intersection of Redwood Road and Grove Way in Castro Valley, California, as shown on the Site Location Map (Figure 1). The Site is bounded by Grove Way to the north, Redwood Road to the east, a vacant office building to the south, and residential apartments to the west. Chevron #9-2960 was formerly located at 2416 Grove Avenue, northeast of the Site and across the intersection of Grove Avenue and Redwood Road. The Chevron site is an open Fuel Leak case (RWQCB Case No. 01-0346 and ACDEH Case No. 0275).

Existing Site facilities include a 7-11 convenience store and other commercial buildings situated on the western portion of the Site property, and a parking lot and landscaping areas situated on the central and eastern portions of the Site. Former service station facilities included eight former USTs located in the southern portion of the Site, six former dispenser islands, and associated former fuel distribution piping located in the northern and eastern portions of the Site. There are currently six groundwater monitoring wells (MW-1 through MW-6) associated with this Site. Wells MW-1 through MW-4 are located within the property boundaries, while well MW-5A is located offsite to the west within the North Sixth Street right-of-way, and well MW-6 is located offsite to the south on the adjoining Kashikar property, as shown on the Site Map (Figure 2).

Site Background

Prior to 1981, the Site had been leased and operated by Shell Oil Company (Shell). Ultramar leased the Site and operated a retail service station (Beacon No. 574) from 1981 to 1987. Information provided by Ultramar indicates that the former Beacon Site facilities included four former fuel USTs located in the southeastern portion of the property and one former waste-oil UST located in the southwestern portion of the property. These USTs were removed by Ultramar in 1987. Three former fuel USTs located to the west of the former Beacon USTs existed and were removed by Shell Oil Company sometime prior to 1981 (Acton, Mickelson, van Dam, Inc., November 1994). Acton, Mickelson, van Dam, Inc. (AMD) indicated that at least one previous generation of USTs had been installed and used at the Site by Shell, however, no records have been located with the ACDEH and local fire department for the removal of the previous generation of Shell USTs. According to the 1994 AMD report, Ultramar was not aware of any specific incidents in which gasoline leaked from or was spilled during filling of any of the former Beacon USTs in use during their Site lease period (AMD, 1994).

The five former Beacon USTs were removed from the Site on May 5, 1987. These USTs consisted of one 500-gallon waste oil UST (Tank T1), two 5,000-gallon diesel USTs (Tanks T2 and T4), an 8,000-gallon gasoline UST (Tank T3), and a 7,000-gallon gasoline UST (Tank T5), as shown on the Site Plan (Figure 2). Records made available by Ultramar

indicate that these USTs were originally installed and owned by Shell (AMD, 1994). Analytical results of soil samples collected at the time of the UST removals indicated the presence of petroleum constituents in soil underlying the USTs. Over-excavation of the UST basin to a depth of approximately 20 feet below surface grade (bsg) was performed in May 1987 by Ultramar. After completion of the over-excavation work, laboratory analysis of seven soil samples collected at the limit of the over-excavation indicated concentrations of 125.5, 208.7, and 1,989 milligrams per kilogram (mg/Kg or parts per million [ppm]) of total volatile hydrocarbons (AMD, 1994) primarily along the northern side of the over-excavated UST basin.

Various investigations have been performed at the Site since 1987. A detailed summary of the investigations performed between 1987 and 2008 are presented in the Site Conceptual Model, Human Health Risk Analysis, and [Draft] Corrective Action Plan (Horizon, August 22, 2012). The following investigations were performed at the Site since 2009:

- May 2009: High-vacuum dual-phase extraction (HVDPE) remedial testing was performed at the Site. Approximately 220 pounds of vapor-equivalent Total Petroleum Hydrocarbons as gasoline (TPHg) and 1.6 pounds of vapor-equivalent Benzene were removed from the subsurface, and approximately 1,660 gallons of groundwater were extracted from wells MW-1 and MW-2 during the 48 hours of remedial testing. The results of the testing indicated HVDPE is effective in extracting gasoline vapors from the vadose zone soils beneath the former USTs, and in capturing impacted groundwater from beneath the Site, as reported in the High Vacuum Dual-Phase Extraction Testing Report (Horizon, June 30, 2009).
- December 2009: Five direct-push soil gas probes (SG-1 through SG-5) were advanced onsite to collect and analyze soil gas samples. The analytical soil gas results indicated that elevated concentrations of gasoline hydrocarbons were present primarily in shallow soil gas samples SG-1 and SG-3 located near the former USTs and dispensers. The highest concentrations were encountered in sample location SG-3, which was located adjacent to the front of the commercial building at the Site, as reported in the Soil Gas Survey and Soil Assessment Report (Horizon, January 2010).
- December 2009: Five onsite borings (B-1 through B-5) were advanced to collect subsurface soil and groundwater samples. The boring locations were selected based on approximate locations of the former USTs and dispenser islands. The analytical soil and groundwater results indicated that elevated concentrations of petroleum hydrocarbons are present in saturated soils beneath the western portion of the former UST basin, and are also present in unsaturated and saturated soils beneath the former eastern dispenser islands, as reported in the Soil Gas Survey and Soil Assessment Report (Horizon, January 2010).

- October 2010: One of two proposed offsite direct-push soil gas probes was advanced to collect and analyze soil gas samples. Only temporary offsite soil gas probe SG-7 to the south of the Site was advanced, as no access was granted for offsite soil gas probe SG-6 proposed to the west of the Site. The laboratory analytical results indicate that the soil gas concentrations were below the Region 2 ESL and CHHSL listed values for residential and commercial sites at offsite location SG-7 on the Kashikar property located to the south of the Site at 22341 Redwood Road, as reported in the Subsurface Investigation Report (Horizon, December 2010).
- October 2010: Three onsite vapor extraction wells (VW-1, VW-2 and VW-3), three onsite vapor probe wells (VP-1, VP-2 and VP-3), and one offsite replacement groundwater monitoring well (MW-5A) were installed in their respective borings. Laboratory analytical results of soil samples collected from onsite borings VW-2 (north of the former Shell USTs), VW-3 (south of the former Shell USTs), and VP-2 (northwest of the former Shell USTs) indicated the presence of diesel and gasoline hydrocarbons at depths between 10 to 20 feet bsg. No concentrations of diesel and gasoline hydrocarbons were reported from soil samples from onsite borings VW-1 (just north of the former eastern dispensers), VP-1 (west of the former Shell USTs), and VP-3 (west of the former western dispensers). No concentrations of gasoline hydrocarbons were reported from soil samples from offsite boring MW-5A installed in North Sixth Street, as reported in the Subsurface Investigation Report (Horizon, December 2010), and shown on the Site Area Map (Figure 3).
- July 2011: Soil vapor extraction (SVE) remedial testing was performed at the Site. During the 65-hour vapor extraction test (VET), approximately 471 pounds of TPHg and 0.84-pound of benzene were removed from the subsurface via wells MW-1 and MW-2. The results of the VET indicated that standard SVE will also effectively remove gasoline hydrocarbons from unsaturated subsurface soils at depths of approximately 10 to 20 feet bsg beneath the Site, as presented in the Report on Soil Vapor Extraction Testing dated (Horizon, August 23, 2011).

Groundwater monitoring and sampling has been performed at the Site since 1992. Historical groundwater level data has indicated that groundwater has been present beneath the Site between the depths of approximately 14 to 22 feet bsg, and the direction of groundwater flow beneath the Site has been consistently to the south or southwest. Dissolved concentrations of TPHg, BTEX, and MTBE have been reported for groundwater samples collected from onsite wells MW-1 and MW-2, and dissolved concentrations of MTBE have been reported for groundwater samples collected from offsite wells MW-5A and MW-6.

The Site Conceptual Model, Human Health Risk Analysis, and [Draft] Corrective Action Plan (Horizon, August 22, 2012) was submitted to the ACDEH, and uploaded to their FTP site. After review of the [Draft] CAP report, and allowance for public comments, the ACDEH issued their approval of the proposed work scope (ACDEH, November 6, 2012).

ATTACHMENT B

HORIZON MONITORING WELL DATA SHEETS

AND

PURGE WATER DISPOSAL DOCUMENTATION

HORIZON ENVIRONMENTAL INC.

Specialists in Site Assessment, Remedial Testing, Design and Operation

**MONITORING WELL
OBSERVATION SUMMARY SHEET**

Company	Fmr Beacon 12574	Job No.	1574.49
Location	22315 Redwood Rd.	Date	10/21/12
City	Castro Valley	Time	1005 - 1040

Comments:

Sampler: B. Schlegel

Assistant: _____

HORIZON ENVIRONMENTAL INC.

Specialists in Site Assessment, Remedial Testing, Design and Operation

MONITORING WELL DATA

Station No.	Fmr Beacon 12574	Location	Castro Valley
Address	22315 Redwood Rd.	Job No.	1574.49
Well No.	MW-1	Date	10/2/12

T.D. - D.T.W. x *VF = Casing Volume			
29.88	- 22.60	x 0.66	= 4.8

*VF = gal / ft	2" x 0.17 3" x 0.38	4" x 0.66 6" x 1.50
-------------------	------------------------	------------------------

Gals. Purged	5	8		15		
Conduct.	678	676		655		
P/H	6.6	6.6	Dry @	6.5		
Temp (°F)	72.0	71.7	9 gallons	71.3		
Turbid	low	low		low		
Product/Sheen	no	no		no		Sample time
Time	1215	1218		1230		1310
Odor	Slight HC	Slight HC		Slight HC		

Total Volume Purged:

~3

Total Gallons Purged:

15

Sample Containers:

4 HCl vials

H₂O Stored? tank - Instrat

Comments:

D.O 1.6 ORP -90

Purging Equipment:

pump

Sampling Equipment:

baiter

D.T.W. after purging:

27.68

22.70 @ sample

B. Schlegel
Technician

HORIZON ENVIRONMENTAL INC.

Specialists in Site Assessment, Remedial Testing, Design and Operation

MONITORING WELL DATA

Station No.	Fmr Beacon 12574	Location	Castro Valley
Address	22315 Redwood Rd.	Job No.	1574.49
Well No.	MW-2	Date	10/21/12

T.D. - D.T.W. x *VF = Casing Volume			
29.72	- 21.01	x 0.66	= 5.7

*VF = gal/ft	2" x 0.17 3" x 0.38	4" x 0.66 8" x 1.50
-----------------	------------------------	------------------------

Gals. Purged	6	10	Dry	18		
Conduct.	774	760	@ 10 gal/ft	776		
R/H	6.5	6.6		6.5		
Temp (°F)	72.9	71.5		70.9		
Turbid	low	low		low		
Product/Sheen	no	no		no		Sample time
Time	1320	1325		1337		1350
Odor	HC	HC		HC		

Total Volume Purged:

~3

Purging Equipment:

pump

Total Gallons Purged:

18

Sampling Equipment:

bailer

Sample Containers:

4 HCl vials

D.T.W. after purging:

27.91 22.30 @ sample

H₂O Stored? tank - Instrat

Comments:

D.O 2.0 ORP -112

B. Schlegel
Technician

HORIZON ENVIRONMENTAL INC.

Specialists in Site Assessment, Remedial Testing, Design and Operation

MONITORING WELL DATA

Station No.	Fmr Beacon 12574	Location	Castro Valley
Address	22315 Redwood Rd.	Job No.	1574.49
Well No.	MW-3	Date	10/21/12

T.D. - D.T.W. x *VF = Casing Volume			
29.6 26	- 21.20	x 0.66	= 5.5

*VF = gal/R	2" x 0.17 3" x 0.38	4" x 0.66 6" x 1.50
----------------	------------------------	------------------------

Gals. Purged	6	12	18	Dry @ 18	24	
Conduct.	514	507	509		500	
P/H	7.3	7.2	7.2		7.1	
Temp (°F)	71.6	70.0	70.2		69.8	
Turbid	low	med	med		low	
Product/Sheen	no	no	no		no	Sample time
Time	1103	1106	1109		1114	1140
Odor	Ø	Ø	Ø		Ø	

Total Volume Purged:

4

Purging Equipment:

pump

Total Gallons Purged:

24

Sampling Equipment:

bailer

Sample Containers:

4 HCl vials

D.T.W. after purging:

27.10

21.64 @ sample

H₂O Stored? tank - Instrat

Comments:

D.O 2.7 ORP -13

B. Schlegel
Technician

HORIZON ENVIRONMENTAL INC.

Specialists in Site Assessment, Remedial Testing, Design and Operation

MONITORING WELL DATA

Station No. Fmr Beacon 12574	Location Castro Valley
Address 22315 Redwood Rd.	Job No. 1574.49
Well No. MW-4	Date 10/2/12

T.D. - D.T.W. x *VF = Casing Volume			
28.03	- 16.89	x 0.17	= 1.9

*VF = gal / ft	2" x 0.17 3" x 0.38	4" x 0.66 6" x 1.50
-------------------	------------------------	------------------------

Gals. Purged	2	4	6	8		
Conduct.	697	700	685	679		
P/H	7.6	7.6	7.6	7.5		
Temp (°F)	72.5	70.4	69.6	69.4		
Turbid	med	med	low-med	low-med		
Product/Sheen	no	no	no	no		Sample time
Time	1122 2.6	1124	1126	1129		1134
Odor	Ø	Ø	Ø	Ø		

Total Volume Purged:

4

Purging Equipment:

pump

Total Gallons Purged:

8

Sampling Equipment:

baiter

Sample Containers:

4 HCl vials

D.T.W. after purging:

18.09

H₂O Stored? tank - instant

Comments:

D.O 2.6 ORP -34

B. Schlegel
Technician

HORIZON ENVIRONMENTAL INC.

Specialists in Site Assessment, Remedial Testing, Design and Operation

MONITORING WELL DATA

Station No.	Fmr Beacon 12574	Location	Castro Valley
Address	22315 Redwood Rd.	Job No.	1574.49
Well No.	MW-5A	Date	10/2/12

T.D. - D.T.W. x "VF = Casing Volume			
29.3	- 14.87	x 0.17	= 2.5

"VF = gal / ft	2' x 0.17 3' x 0.38	4' x 0.66 8' x 1.50
-------------------	------------------------	------------------------

Gals. Purged	3	6	9	12		
Conduct.	482	532	547	551		
P/H	6.7	6.7	6.7	6.7		
Temp (°F)	73.3	70.2	69.6	69.5		
Turbid	low-med	med	low-med	low-med		
Product/Sheen	no	no	no	no		Sample time
Time	1149	1152	1154	1156		1204
Odor	Ø	Ø	Ø	Ø		

Total Volume Purged:

Purging Equipment:

pump

Total Gallons Purged:

Sampling Equipment:

baiter

Sample Containers:

D.T.W. after purging:

4 HCl vials

H₂O Stored? tank - Instrat

Comments:

D.O 5.7 ORP 17

B. Schlegel
Technician

HORIZON ENVIRONMENTAL INC.

Specialists in Site Assessment, Remedial Testing, Design and Operation

MONITORING WELL DATA

Station No.	Fmr Beacon 12574	Location	Castro Valley
Address	22315 Redwood Rd.	Job No.	1574.49
Well No.	MW-6	Date	10/2/12

T.D. - D.T.W. x "VF = Casing Volume			
30.0	- 20.86	x 0.17	= 1.6

"VF = gal/ft	2" x 0.17 3" x 0.38	4" x 0.66 8" x 1.50
-----------------	------------------------	------------------------

Gals. Purged	2	4	6	8		
Conduct.	708	717	713	710		
P/H	6.8	6.8	6.7	6.8		
Temp (°F)	73.0	71.8	71.4	71.6		
Turbid	low	low	low	low		
Product/Sheen	no	no	no	no		Sample time
Time	1242	1247	1255	1301		1306
Odor	Ø	Ø	Ø	Ø		

Total Volume Purged:

Purging Equipment:

pump - bailed

Total Gallons Purged:

Sampling Equipment:

8

bailed

Sample Containers:

D.T.W. after purging:

4 HCl vials

20.93

H₂O Stored? tank - Instat

Comments:

D.O 4.2 ORP 3

B. Schlegel
Technician

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of ()
3. Generator's Name and Mailing Address		ULTRAMAR # 12574 22315 REDWOOD RD CASTRO VALLEY, CA		
4. Generator's Phone ()		HORIZON		
5. Transporter 1 Company Name		6. US EPA ID Number	A. State Transporter's ID	
HORIZON ENV			B. Transporter 1 Phone	
7. Transporter 2 Company Name		8. US EPA ID Number	C. State Transporter's ID	
			D. Transporter 2 Phone	
9. Designated Facility Name and Site Address		10. US EPA ID Number	E. State Facility's ID	
INSTRATECH 1100 C AIRPORT RD REDWOOD CITY, CA 94061			F. Facility's Phone (707) 576-0204	
11. WASTE DESCRIPTION		12. Containers No. Type	13. Total Quantity	14. Unit Wt./Vol.
a. NON-HAZ MONITORING WELL WATER		01 Poly	100	GAL
b.				
c.				
d.				
G. Additional Descriptions for Materials Listed Above (CLEAR, NO ODOR/SOLID)		H. Handling Codes for Wastes Listed Above		
15. Special Handling Instructions and Additional Information				
16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.				
Printed/Typed Name		Date		
		Month Day Year		
Printed/Typed Name				
Printed/Typed Name		Signature		
		Date		
Month Day Year				
Printed/Typed Name				
Printed/Typed Name		Signature		
		Date		
Month Day Year				
17. Transporter 1 Acknowledgement of Receipt of Materials				
Printed/Typed Name		Signature		
Brandon Schlegel Agent for Ultramar		Signature		
		Date		
Month Day Year				
Printed/Typed Name				
Printed/Typed Name		Signature		
		Date		
Month Day Year				
19. Discrepancy Indication Space				
20. Facility Owner or Operator; Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.				
Printed/Typed Name		Signature		
MICHAEL WHITEHEAD		Signature		
		Date		
Month Day Year				

ATTACHMENT C

ANALYTICAL REPORT



Report Number : 82869

Date : 10/12/2012

Laboratory Results

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

Subject : 6 Water Samples
Project Name : Former Beacon 12574-SAM
Project Number : 1574.49
P.O. Number : WO 129528

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. Testing procedures comply with the 2003 NELAC and TNI 2009 standards. Laboratory results relate only to the samples tested. This report may be freely reproduced in full, but may only be reproduced in part with the express permission of Kiff Analytical, LLC. Kiff Analytical, LLC is certified by the State of California under the National Environmental Laboratory Accreditation Program (NELAP), lab # 08263CA. If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,

A handwritten signature in black ink that reads "Troy G. Turpen".

Troy Turpen



Report Number : 82869

Date : 10/12/2012

Project Name : **Former Beacon 12574-SAM**Project Number : **1574.49**Sample : **MW-1**

Matrix : Water

Lab Number : 82869-01

Sample Date : 10/02/2012

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	300	0.50	ug/L	EPA 8260B	10/11/12 13:24
Toluene	7.1	0.50	ug/L	EPA 8260B	10/11/12 13:24
Ethylbenzene	51	0.50	ug/L	EPA 8260B	10/11/12 13:24
Total Xylenes	74	0.50	ug/L	EPA 8260B	10/11/12 13:24
Methyl-t-butyl ether (MTBE)	8.2	0.50	ug/L	EPA 8260B	10/11/12 13:24
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	10/11/12 13:24
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	10/11/12 13:24
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	10/11/12 13:24
Tert-Butanol	5.3	5.0	ug/L	EPA 8260B	10/11/12 13:24
TPH as Gasoline	3100	50	ug/L	EPA 8260B	10/11/12 13:24
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	10/11/12 13:24
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	10/11/12 13:24
1,2-Dichloroethane-d4 (Surr)	98.1		% Recovery	EPA 8260B	10/11/12 13:24
Toluene - d8 (Surr)	97.8		% Recovery	EPA 8260B	10/11/12 13:24



Report Number : 82869

Date : 10/12/2012

Project Name : Former Beacon 12574-SAM

Project Number : 1574.49

Sample : MW-2

Matrix : Water

Lab Number : 82869-02

Sample Date : 10/02/2012

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	4100	9.0	ug/L	EPA 8260B	10/11/12 15:01
Toluene	120	9.0	ug/L	EPA 8260B	10/11/12 15:01
Ethylbenzene	760	9.0	ug/L	EPA 8260B	10/11/12 15:01
Total Xylenes	310	9.0	ug/L	EPA 8260B	10/11/12 15:01
Methyl-t-butyl ether (MTBE)	86	9.0	ug/L	EPA 8260B	10/11/12 15:01
Diisopropyl ether (DIPE)	< 9.0	9.0	ug/L	EPA 8260B	10/11/12 15:01
Ethyl-t-butyl ether (ETBE)	< 9.0	9.0	ug/L	EPA 8260B	10/11/12 15:01
Tert-amyl methyl ether (TAME)	< 9.0	9.0	ug/L	EPA 8260B	10/11/12 15:01
Tert-Butanol	72	50	ug/L	EPA 8260B	10/11/12 15:01
TPH as Gasoline	22000	900	ug/L	EPA 8260B	10/11/12 15:01
1,2-Dichloroethane	< 9.0	9.0	ug/L	EPA 8260B	10/11/12 15:01
1,2-Dibromoethane	< 9.0	9.0	ug/L	EPA 8260B	10/11/12 15:01
1,2-Dichloroethane-d4 (Surr)	99.7		% Recovery	EPA 8260B	10/11/12 15:01
Toluene - d8 (Surr)	98.2		% Recovery	EPA 8260B	10/11/12 15:01



Report Number : 82869

Date : 10/12/2012

Project Name : **Former Beacon 12574-SAM**Project Number : **1574.49**Sample : **MW-3**

Matrix : Water

Lab Number : 82869-03

Sample Date : 10/02/2012

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	10/11/12 09:03
Toluene	< 0.50	0.50	ug/L	EPA 8260B	10/11/12 09:03
Ethylbenzene	0.53	0.50	ug/L	EPA 8260B	10/11/12 09:03
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	10/11/12 09:03
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	10/11/12 09:03
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	10/11/12 09:03
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	10/11/12 09:03
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	10/11/12 09:03
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	10/11/12 09:03
TPH as Gasoline	51	50	ug/L	EPA 8260B	10/11/12 22:41
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	10/11/12 09:03
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	10/11/12 09:03
1,2-Dichloroethane-d4 (Surr)	98.7		% Recovery	EPA 8260B	10/11/12 09:03
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	10/11/12 09:03



Report Number : 82869

Date : 10/12/2012

Project Name : **Former Beacon 12574-SAM**Project Number : **1574.49**Sample : **MW-4**

Matrix : Water

Lab Number : 82869-04

Sample Date : 10/02/2012

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	10/11/12 13:19
Toluene	< 0.50	0.50	ug/L	EPA 8260B	10/11/12 13:19
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	10/11/12 13:19
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	10/11/12 13:19
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	10/11/12 13:19
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	10/11/12 13:19
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	10/11/12 13:19
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	10/11/12 13:19
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	10/11/12 13:19
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	10/11/12 13:19
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	10/11/12 13:19
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	10/11/12 13:19
1,2-Dichloroethane-d4 (Surr)	102		% Recovery	EPA 8260B	10/11/12 13:19
Toluene - d8 (Surr)	102		% Recovery	EPA 8260B	10/11/12 13:19



Report Number : 82869

Date : 10/12/2012

Project Name : **Former Beacon 12574-SAM**Project Number : **1574.49**Sample : **MW-5A**

Matrix : Water

Lab Number : 82869-05

Sample Date : 10/02/2012

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	10/11/12 09:04
Toluene	< 0.50	0.50	ug/L	EPA 8260B	10/11/12 09:04
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	10/11/12 09:04
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	10/11/12 09:04
Methyl-t-butyl ether (MTBE)	1.0	0.50	ug/L	EPA 8260B	10/11/12 09:04
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	10/11/12 09:04
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	10/11/12 09:04
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	10/11/12 09:04
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	10/11/12 09:04
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	10/11/12 09:04
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	10/11/12 09:04
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	10/11/12 09:04
1,2-Dichloroethane-d4 (Surr)	100		% Recovery	EPA 8260B	10/11/12 09:04
Toluene - d8 (Surr)	99.7		% Recovery	EPA 8260B	10/11/12 09:04



Report Number : 82869

Date : 10/12/2012

Project Name : Former Beacon 12574-SAM

Project Number : 1574.49

Sample : MW-6

Matrix : Water

Lab Number : 82869-06

Sample Date : 10/02/2012

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	10/11/12 13:50
Toluene	< 0.50	0.50	ug/L	EPA 8260B	10/11/12 13:50
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	10/11/12 13:50
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	10/11/12 13:50
Methyl-t-butyl ether (MTBE)	14	0.50	ug/L	EPA 8260B	10/11/12 13:50
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	10/11/12 13:50
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	10/11/12 13:50
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	10/11/12 13:50
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	10/11/12 13:50
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	10/11/12 13:50
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	10/11/12 13:50
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	10/11/12 13:50
1,2-Dichloroethane-d4 (Surr)	102		% Recovery	EPA 8260B	10/11/12 13:50
Toluene - d8 (Surr)	103		% Recovery	EPA 8260B	10/11/12 13:50

QC Report : Method Blank Data**Project Name : Former Beacon 12574-SAM****Project Number : 1574.49**

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	10/11/2012
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	10/11/2012
Toluene	< 0.50	0.50	ug/L	EPA 8260B	10/11/2012
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	10/11/2012
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	10/11/2012
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	10/11/2012
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	10/11/2012
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	10/11/2012
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	10/11/2012
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	10/11/2012
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	10/11/2012
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	10/11/2012
1,2-Dichloroethane-d4 (Surr)	99.2	%		EPA 8260B	10/11/2012
Toluene - d8 (Surr)	102	%		EPA 8260B	10/11/2012
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	10/11/2012
Benzene	< 0.50	0.50	ug/L	EPA 8260B	10/11/2012
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	10/11/2012
Toluene	< 0.50	0.50	ug/L	EPA 8260B	10/11/2012
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	10/11/2012
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	10/11/2012
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	10/11/2012
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	10/11/2012
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	10/11/2012
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	10/11/2012
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	10/11/2012
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	10/11/2012
1,2-Dichloroethane-d4 (Surr)	101	%		EPA 8260B	10/11/2012
Toluene - d8 (Surr)	99.4	%		EPA 8260B	10/11/2012

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	10/11/2012
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	10/11/2012
Toluene	< 0.50	0.50	ug/L	EPA 8260B	10/11/2012
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	10/11/2012
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	10/11/2012
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	10/11/2012
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	10/11/2012
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	10/11/2012
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	10/11/2012
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	10/11/2012
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	10/11/2012
1,2-Dichloroethane-d4 (Surr)	98.6	%		EPA 8260B	10/11/2012
Toluene - d8 (Surr)	100	%		EPA 8260B	10/11/2012

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : Former Beacon 12574-SAM

Project Number : 1574.49

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
1,2-Dibromoethane	82868-04	<0.50	40.0	40.0	42.5	42.0	ug/L	EPA 8260B	10/11/12	106	105	1.12	80-120	25
1,2-Dichloroethane	82868-04	<0.50	40.0	40.0	41.2	40.3	ug/L	EPA 8260B	10/11/12	103	101	2.30	75.7-122	25
Benzene	82868-04	7.4	40.0	40.0	47.2	46.5	ug/L	EPA 8260B	10/11/12	99.6	97.8	1.84	80-120	25
Diisopropyl ether	82868-04	<0.50	39.4	39.4	37.9	37.3	ug/L	EPA 8260B	10/11/12	96.1	94.7	1.50	80-120	25
Ethyl-tert-butyl ether	82868-04	<0.50	40.6	40.6	41.8	38.4	ug/L	EPA 8260B	10/11/12	103	94.6	8.37	76.5-120	25
Ethylbenzene	82868-04	<0.50	40.0	40.0	39.9	40.1	ug/L	EPA 8260B	10/11/12	99.8	100	0.533	80-120	25
Methyl-t-butyl ether	82868-04	16	40.1	40.1	59.3	51.2	ug/L	EPA 8260B	10/11/12	109	88.3	20.7	69.7-121	25
P + M Xylene	82868-04	<0.50	40.0	40.0	38.0	37.8	ug/L	EPA 8260B	10/11/12	95.0	94.6	0.414	76.8-120	25
Tert-Butanol	82868-04	15	201	201	208	215	ug/L	EPA 8260B	10/11/12	96.4	99.6	3.35	80-120	25
Tert-amyl-methyl ether	82868-04	<0.50	40.4	40.4	43.6	39.9	ug/L	EPA 8260B	10/11/12	108	98.8	9.00	78.9-120	25

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : Former Beacon 12574-SAM

Project Number : 1574.49

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
Toluene	82868-04	<0.50	40.0	40.0	41.1	40.4	ug/L	EPA 8260B	10/11/12	103	101	1.72	80-120	25
Toluene	82877-02	1.2	40.0	40.0	40.6	40.7	ug/L	EPA 8260B	10/11/12	98.6	98.9	0.311	80-120	25
1,2-Dibromoethane	82869-05	<0.50	40.0	40.0	42.6	42.2	ug/L	EPA 8260B	10/11/12	106	106	0.793	80-120	25
1,2-Dichloroethane	82869-05	<0.50	40.0	40.0	41.4	40.7	ug/L	EPA 8260B	10/11/12	103	102	1.59	75.7-122	25
Benzene	82869-05	<0.50	40.0	40.0	41.6	40.3	ug/L	EPA 8260B	10/11/12	104	101	3.30	80-120	25
Diisopropyl ether	82869-05	<0.50	39.4	39.4	38.0	37.6	ug/L	EPA 8260B	10/11/12	96.3	95.4	0.981	80-120	25
Ethyl-tert-butyl ether	82869-05	<0.50	40.6	40.6	39.6	39.5	ug/L	EPA 8260B	10/11/12	97.6	97.3	0.348	76.5-120	25
Ethylbenzene	82869-05	<0.50	40.0	40.0	42.0	40.8	ug/L	EPA 8260B	10/11/12	105	102	2.96	80-120	25
Methyl-t-butyl ether	82869-05	1.0	40.1	40.1	36.5	36.5	ug/L	EPA 8260B	10/11/12	88.4	88.6	0.130	69.7-121	25

Project Name : **Former Beacon 12574-SAM**Project Number : **1574.49**

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
P + M Xylene														
	82869-05	<0.50	40.0	40.0	40.0	39.0	ug/L	EPA 8260B	10/11/12	100	97.4	2.72	76.8-120	25
Tert-Butanol														
	82869-05	<5.0	201	201	207	207	ug/L	EPA 8260B	10/11/12	103	103	0.306	80-120	25
Tert-amyl-methyl ether														
	82869-05	<0.50	40.4	40.4	41.6	41.4	ug/L	EPA 8260B	10/11/12	103	102	0.440	78.9-120	25
Toluene														
	82869-05	<0.50	40.0	40.0	41.4	40.4	ug/L	EPA 8260B	10/11/12	104	101	2.60	80-120	25
1,2-Dibromoethane														
	82869-03	<0.50	40.0	40.0	41.6	40.7	ug/L	EPA 8260B	10/11/12	104	102	2.23	80-120	25
1,2-Dichloroethane														
	82869-03	<0.50	40.0	40.0	42.5	42.4	ug/L	EPA 8260B	10/11/12	106	106	0.242	75.7-122	25
Benzene														
	82869-03	<0.50	40.0	40.0	40.5	39.7	ug/L	EPA 8260B	10/11/12	101	99.2	1.98	80-120	25
Diisopropyl ether														
	82869-03	<0.50	39.4	39.4	39.5	39.2	ug/L	EPA 8260B	10/11/12	100	99.5	0.714	80-120	25
Ethyl-tert-butyl ether														
	82869-03	<0.50	40.6	40.6	41.4	40.7	ug/L	EPA 8260B	10/11/12	102	100	1.64	76.5-120	25

Project Name : **Former Beacon 12574-SAM**Project Number : **1574.49**

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
Ethylbenzene	82869-03	0.53	40.0	40.0	37.8	37.2	ug/L	EPA 8260B	10/11/12	93.3	91.8	1.65	80-120	25
Methyl-t-butyl ether	82869-03	<0.50	40.1	40.1	39.9	39.6	ug/L	EPA 8260B	10/11/12	99.6	98.8	0.829	69.7-121	25
P + M Xylene	82869-03	<0.50	40.0	40.0	37.6	37.4	ug/L	EPA 8260B	10/11/12	94.1	93.5	0.652	76.8-120	25
Tert-Butanol	82869-03	<5.0	201	201	202	202	ug/L	EPA 8260B	10/11/12	100	101	0.140	80-120	25
Tert-amyl-methyl ether	82869-03	<0.50	40.4	40.4	41.8	41.6	ug/L	EPA 8260B	10/11/12	104	103	0.402	78.9-120	25
Toluene	82869-03	<0.50	40.0	40.0	40.6	40.2	ug/L	EPA 8260B	10/11/12	102	100	1.02	80-120	25

Project Name : **Former Beacon 12574-SAM**Project Number : **1574.49**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
1,2-Dibromoethane	39.9	ug/L	EPA 8260B	10/11/12	102	80-120
1,2-Dichloroethane	39.9	ug/L	EPA 8260B	10/11/12	99.1	75.7-122
Benzene	39.9	ug/L	EPA 8260B	10/11/12	96.4	80-120
Diisopropyl ether	39.3	ug/L	EPA 8260B	10/11/12	94.6	80-120
Ethyl-tert-butyl ether	40.5	ug/L	EPA 8260B	10/11/12	101	76.5-120
Ethylbenzene	39.9	ug/L	EPA 8260B	10/11/12	100	80-120
Methyl-t-butyl ether	40.0	ug/L	EPA 8260B	10/11/12	101	69.7-121
P + M Xylene	39.9	ug/L	EPA 8260B	10/11/12	94.2	76.8-120
TPH as Gasoline	481	ug/L	EPA 8260B	10/11/12	98.3	70.0-130
Tert-Butanol	201	ug/L	EPA 8260B	10/11/12	98.6	80-120
Tert-amyl-methyl ether	40.3	ug/L	EPA 8260B	10/11/12	105	78.9-120
Toluene	39.9	ug/L	EPA 8260B	10/11/12	99.7	80-120
TPH as Gasoline	480	ug/L	EPA 8260B	10/11/12	104	70.0-130
1,2-Dibromoethane	39.9	ug/L	EPA 8260B	10/11/12	104	80-120
1,2-Dichloroethane	39.9	ug/L	EPA 8260B	10/11/12	101	75.7-122
Benzene	39.9	ug/L	EPA 8260B	10/11/12	102	80-120
Diisopropyl ether	39.3	ug/L	EPA 8260B	10/11/12	96.9	80-120
Ethyl-tert-butyl ether	40.5	ug/L	EPA 8260B	10/11/12	97.7	76.5-120
Ethylbenzene	39.9	ug/L	EPA 8260B	10/11/12	103	80-120
Methyl-t-butyl ether	40.0	ug/L	EPA 8260B	10/11/12	88.9	69.7-121

Project Name : **Former Beacon 12574-SAM**Project Number : **1574.49**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
P + M Xylene	39.9	ug/L	EPA 8260B	10/11/12	98.4	76.8-120
TPH as Gasoline	480	ug/L	EPA 8260B	10/11/12	115	70.0-130
Tert-Butanol	201	ug/L	EPA 8260B	10/11/12	100	80-120
Tert-amyl-methyl ether	40.3	ug/L	EPA 8260B	10/11/12	101	78.9-120
Toluene	39.9	ug/L	EPA 8260B	10/11/12	102	80-120
1,2-Dibromoethane	40.2	ug/L	EPA 8260B	10/11/12	101	80-120
1,2-Dichloroethane	40.2	ug/L	EPA 8260B	10/11/12	106	75.7-122
Benzene	40.2	ug/L	EPA 8260B	10/11/12	99.1	80-120
Diisopropyl ether	39.6	ug/L	EPA 8260B	10/11/12	97.8	80-120
Ethyl-tert-butyl ether	40.8	ug/L	EPA 8260B	10/11/12	99.6	76.5-120
Ethylbenzene	40.2	ug/L	EPA 8260B	10/11/12	91.0	80-120
Methyl-t-butyl ether	40.2	ug/L	EPA 8260B	10/11/12	100	69.7-121
P + M Xylene	40.2	ug/L	EPA 8260B	10/11/12	91.6	76.8-120
Tert-Butanol	202	ug/L	EPA 8260B	10/11/12	96.7	80-120
Tert-amyl-methyl ether	40.5	ug/L	EPA 8260B	10/11/12	102	78.9-120
Toluene	40.2	ug/L	EPA 8260B	10/11/12	101	80-120



2795 2nd Street Suite 300
Davis, CA 95616
Lab: 530.297.4800
Fax: 530.297.4802

SRG # / Lab No.

82869

Page 1 of 1

Project Contact (Hardcopy or PDF To): KEN MATEIK			California EDF Report? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No						Chain-of-Custody Record and Analysis Request																			
Company / Address: Horizon Environmental 4970 Windplay Drive, Suite 5, El Dorado Hills, CA 95762			Sampling Company Log Code: HEIE						Analysis Request						TAT													
Phone #: 916 - 939 - 2170	Fax #: 916 - 939 - 2172	Global ID: T0600100155												<input type="checkbox"/> 12 hr														
Project #: 1574.49	P.O. #: WO 129528	EDF Deliverable To (Email Address): kiffanalytical.com												<input type="checkbox"/> 24 hr														
Project Name: Former Beacon 12574-SAM			Sampler Signature: <i>Brandon Schlegel</i>												<input type="checkbox"/> 48hr													
Project Address: 22315 Redwood Road Castro Valley, CA 94546		Sampling		Container		Preservative		Matrix								<input type="checkbox"/> 72 hr												
		Date	Time	40 ml VOA	Sleeve	Poly	Glass	Tedlar	HCl	HNO ₃	None	Ice	WATER	Soil	Air	MTBE (EPA 8260B) per EPA 8021 level @ 5.0 ppb	MTBE (EPA 8260B) @ 0.5 ppb	BTEX (EPA 8260B)	TPH Gas (EPA 8260B)	5 Oxygenates (EPA 8260B)	7 Oxygenates (EPA 8260B)	Lead Scav. (1,2 DCA & 1,2 EDB-EPA 8260B)	Volatile Halocarbons (EPA 8260B)	Volatile Organics Full List (EPA 8260B)	Volatile Organics (EPA 524.2 Drinking Water)	TPH as Diesel (EPA 8015M)	TPH as Motor Oil (EPA 8015M)	Total Lead (EPA 6010)
MW-1	10/2/12	1310	4					X		X	X				X X X	X	X X X	X	X X X	X	X X X	X	X X X	X	X X X	X	1 wk	01
MW-2		1350	4					X		X	X				X X X	X	X X X	X	X X X	X	X X X	X	X X X	X	X X X	X	1 wk	02
MW-3		1140	4					X		X	X				X X X	X	X X X	X	X X X	X	X X X	X	X X X	X	X X X	X	1 wk	03
MW-4		1134	4					X		X	X				X X X	X	X X X	X	X X X	X	X X X	X	X X X	X	X X X	X	1 wk	04
MW-5A		1204	4					X		X	X				X X X	X	X X X	X	X X X	X	X X X	X	X X X	X	X X X	X	1 wk	05
MW-6	10/2/12	1306	4					X		X	X				X X X	X	X X X	X	X X X	X	X X X	X	X X X	X	X X X	X	1 wk	06
Relinquished by:	<i>Brandon Schlegel</i>		Date	Time	Received by:						Remarks:																	
			10/5/12	0946							STANDARD TURN AROUND TIME (One Week)																	
Relinquished by:			Date	Time	Received by:						Bill to: ULTRAMAR Inc.																	
											Attention: Mr. Roger Levin																	
Relinquished by:			Date	Time	Received by Laboratory:						For Lab Use Only: Sample Receipt																	
			10/5/12	0946	<i>Roz M. See Analytical</i>						Temp °C	Initials	Date	Time	Therm. ID #	Coolant Present												
																	Yes / No											

SAMPLE RECEIPT CHECKLIST

SRG#:

82869

Date: 100512

Project ID:

Former Beacon 12574-SAM

Method of Receipt: Courier Over-the-counter ShipperShipping Only: FedEx * OnTrac * Greyhound Other *Service level if not Priority or Sunrise (M-F):**COC Inspection**

Is COC present?

 Yes No

Custody seals on shipping container?

 Intact Broken Not present N/AIs COC Signed by Relinquisher? Yes No

Dated?

 Yes No

Is sampler name legibly indicated on COC?

 Yes No

Is analysis or hold requested for all samples?

 Yes No

Is the turnaround time indicated on COC?

 Yes No

Is COC free of whiteout and uninitialed cross-outs?

 Yes No, Whiteout No, Cross-outs**Sample Inspection**Coolant Present: Yes No (includes water)Temperature °C 2.8 Therm. ID# 1R-4 Initial RLM Date/Time 100512/1245 N/AAre there custody seals on sample containers? Intact Broken Not presentDo containers match COC? Yes No No, COC lists absent sample(s) No, Extra sample(s) presentAre there samples matrices other than soil, water, air or carbon? Yes NoAre any sample containers broken, leaking or damaged? Yes NoAre preservatives indicated? Yes, on sample containers Yes, on COC Not indicated N/AAre preservatives correct for analyses requested? Yes No N/AAre samples within holding time for analyses requested? Yes NoAre the correct sample containers used for the analyses requested? Yes NoIs there sufficient sample to perform testing? Yes NoDoes any sample contain product, have strong odor or are otherwise suspected to be hot? Yes No**Receipt Details**

Matrix WA Container type VOA # of containers received 24

Matrix Container type # of containers received _____

Matrix Container type # of containers received _____

Date and Time Sample Put into Temp Storage Date: 100512 Time: 1250

QuicklogAre the Sample ID's indicated: On COC On sample container(s) On Both Not indicatedIf Sample ID's are listed on both COC and containers, do they all match? Yes No N/AIs the Project ID indicated: On COC On sample container(s) On Both Not indicatedIf project ID is listed on both COC and containers, do they all match? Yes No N/AAre the sample collection dates indicated: On COC On sample container(s) On Both Not indicatedIf collection dates are listed on both COC and containers, do they all match? Yes No N/AAre the sample collection times indicated: On COC On sample container(s) On Both Not indicatedIf collection times are listed on both COC and containers, do they all match? Yes No N/A**COMMENTS:**

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) ¹	Date Sounded	Depth to Groundwater (Feet) ¹	Groundwater Elevation (Feet) ²	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) ¹	Date Sounded	Depth to Groundwater (Feet) ¹	Groundwater Elevation (Feet) ²	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) ¹	Date Sounded	Depth to Groundwater (Feet) ¹	Groundwater Elevation (Feet) ²	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) ¹	Date Sounded	Depth to Groundwater (Feet) ¹	Groundwater Elevation (Feet) ²	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) ¹	Date Sounded	Depth to Groundwater (Feet) ¹	Groundwater Elevation (Feet) ²	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	-

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

Well ID	Top of Casing Elevation (Feet) ¹	Date Sounded	Depth to Groundwater (Feet) ¹	Groundwater Elevation (Feet) ²	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 ³			
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 ³			

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

Well ID	Top of Casing Elevation (Feet) ¹	Date Sounded	Depth to Groundwater (Feet) ¹	Groundwater Elevation (Feet) ²	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

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-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 ($\mu\text{g/L}$)	TPHd ($\mu\text{g/L}$)	TPHmo ($\mu\text{g/L}$)	Benzene ($\mu\text{g/L}$)	Toluene ($\mu\text{g/L}$)	Ethyl-benzene ($\mu\text{g/L}$)	Xylenes ($\mu\text{g/L}$)	MTBE ($\mu\text{g/L}$)
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 ($\mu\text{g/L}$)	TPHd ($\mu\text{g/L}$)	TPHmo ($\mu\text{g/L}$)	Benzene ($\mu\text{g/L}$)	Toluene ($\mu\text{g/L}$)	Ethyl-benzene ($\mu\text{g/L}$)	Xylenes ($\mu\text{g/L}$)	MTBE ($\mu\text{g/L}$)
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 ³	-	-	-	-	-	-	-	-
	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
MW-5	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
MW-5	6/12/01	NS	NS	NS	NS	NS	NS	NS	NS
	8/27/01 ³	-	-	-	-	-	-	-	-
	05/18/93	<50	NA	NA	<0.5	<0.5	<0.5	<0.5	-
MW-5	08/11/93	<50	NA	NA	<0.5	<0.5	<0.5	<0.5	-

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

Well ID	Sample Date	TPHg ($\mu\text{g/L}$)	TPHd ($\mu\text{g/L}$)	TPHmo ($\mu\text{g/L}$)	Benzene ($\mu\text{g/L}$)	Toluene ($\mu\text{g/L}$)	Ethyl-benzene ($\mu\text{g/L}$)	Xlenes ($\mu\text{g/L}$)	MTBE ($\mu\text{g/L}$)
	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
MW-6	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 ³	-	-	-	-	-	-	-	-
	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	

Table 3
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Former Beacon Station # 12574 - Castro Valley, California

Well ID	Sample Date	TPHg ($\mu\text{g/L}$)	TPHd ($\mu\text{g/L}$)	TPHmo ($\mu\text{g/L}$)	Benzene ($\mu\text{g/L}$)	Toluene ($\mu\text{g/L}$)	Ethyl-benzene ($\mu\text{g/L}$)	Xylenes ($\mu\text{g/L}$)	MTBE ($\mu\text{g/L}$)
	03/08/95	180 ¹	NA	NA	<0.5	<0.5	<0.5	<0.5	
	06/14/95	220 ¹	NA	NA	<0.5	<0.5	<0.5	<0.5	
	09/26/95	110 ¹	NA	NA	<0.50	<0.50	<0.50	<0.50	
	12/27/95	130 ¹	NA	NA	<0.50	<0.50	<0.50	<0.50	
	03/08/95	100 ¹	NA	NA	<0.50	<0.50	<0.50	<0.50	
MW-6 (cont.)	06/05/96	100 ¹	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
MW-7	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 ³	-	-	-	-	-	-	-	-
	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 ($\mu\text{g/L}$)	TPHd ($\mu\text{g/L}$)	TPHmo ($\mu\text{g/L}$)	Benzene ($\mu\text{g/L}$)	Toluene ($\mu\text{g/L}$)	Ethyl-benzene ($\mu\text{g/L}$)	Xylenes ($\mu\text{g/L}$)	MTBE ($\mu\text{g/L}$)
	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 (cont.)	12/01/97	<50	NA	NA	<0.50	<0.50	<0.50	<0.50	29
	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 ²								
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 ²								

Notes:

<: Below indicated detection limit.

NS : Not sampled.

NA: Not Analyzed.

UPLOADING A GEO_WELL FILE

SUCCESS

Processing is complete. No errors were found!
Your file has been successfully submitted!

<u>Submittal Type:</u>	GEO_WELL
<u>Report Title:</u>	1574-Q312
<u>Facility Global ID:</u>	T0600100155
<u>Facility Name:</u>	BEACON #12574
<u>File Name:</u>	GEO_WELL.zip
<u>Organization Name:</u>	Horizon Environmental Inc.
<u>Username:</u>	HORIZON
<u>IP Address:</u>	76.93.96.189
<u>Submittal Date/Time:</u>	10/15/2012 7:58:33 PM
<u>Confirmation Number:</u>	5294065356

STATE WATER RESOURCES CONTROL BOARD
GEOTRACKER ESI

SUCCESS

Your GEO_REPORT file has been successfully submitted!

<u>Submittal Type:</u>	GEO_REPORT
<u>Report Title:</u>	12574-SAMR-1Q12
<u>Report Type:</u>	Monitoring Report - Semi-Annually
<u>Report Date:</u>	4/11/2012
<u>Facility Global ID:</u>	T0600100155
<u>Facility Name:</u>	BEACON #12574
<u>File Name:</u>	12574-SAMR-1Q12.pdf
<u>Organization Name:</u>	Horizon Environmental Inc.
<u>Username:</u>	HORIZON
<u>IP Address:</u>	69.12.226.3
<u>Submittal Date/Time:</u>	4/12/2012 11:25:44 AM
<u>Confirmation Number:</u>	8727416276