



RECEIVED

28 February 2011

2:40 pm, Mar 18, 2011

Alameda County
Environmental Health

Tesoro Environmental Resource Company
3450 South 344th Way, Suite 201
Auburn, WA 98001-5931
253 896 8700 Phone
253 896 8863 Fax

Mr. Jerry Wickham
Hazardous Materials Specialist
Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Subject: **Fourth Quarter 2010 Status Report**
44 Lewelling Boulevard, San Lorenzo, California
Tesoro No. 67107 (Former Beacon 3721); ACEH Case No. RO0498

Dear Mr. Wickham:

Enclosed please find a copy of the quarterly status report for the subject site located at 44 Lewelling Boulevard in San Lorenzo, California. This report is submitted by Arctos Environmental on behalf of Tesoro Environmental Resources Company.

Based on my inquiry of the person or persons directly responsible for gathering the information contained in this report, I believe the information was prepared by qualified personnel who properly gathered and evaluated the information, and that the information submitted is, to the best of my knowledge and belief, true, correct, and complete. Please feel free to call me at 253/896-8700 or Michael Purchase of Arctos Environmental at 510/525-2180 with questions.

Sincerely,

A handwritten signature in blue ink, appearing to read "Jeffrey M. Baker".

Jeffrey M. Baker, P.E.
Supervisor, Environmental
Compliance & Remediation
Tesoro Companies, Inc.

Attachments

CC: Arctos – Michael Purchase



<input checked="" type="checkbox"/> Arctos Environmental	1332 Peralta Avenue	510 525-2180 PHONE
	Berkeley, CA 94702	510 525-2392 FAX
Main Office		
<input type="radio"/> 3450 E. Spring St., Suite 212	562 988-2755 PHONE	
	Long Beach, CA 90806	562 988-2759 FAX

28 February 2011
Project No. 01ZO

Jerry Wickham
Hazardous Materials Specialist
Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

**Subject: Fourth Quarter 2010 Status Report
44 Lewelling Boulevard, San Lorenzo, California
Tesoro No. 67107 (Former Beacon 3721); ACEH Case No. RO0498**

Dear Mr. Wickham:

Arctos Environmental (Arctos), on behalf of Tesoro Environmental Resources Company (Tesoro) has prepared this letter report summarizing project activities for the fourth quarter 2010 at the subject site (Figure 1).

Executive Summary

Arctos conducted fourth quarter groundwater monitoring on 27 and 28 October 2010. Total petroleum hydrocarbons as gasoline (TPHg) and benzene concentrations continue to show decreasing concentrations for both onsite and offsite wells. Onsite well PT-1 shows a stable trend for methyl tert-butyl ether (MTBE) with a concentration of 9.4 micrograms per liter ($\mu\text{g/l}$). An oxygen injection system is currently operating 10 feet upgradient of well PT-1 to remediate TPHg, benzene, and MTBE at the site. Offsite benzene and MTBE concentrations have remained below the Environmental Screening Levels (ESL) during the last 5 quarters of monitoring.

A comparison of current fourth quarter and historical maximum hydrocarbon concentrations show a decrease of 95 to 100 percent on site and 86 to 100 percent off site. Based on the significant concentration decreases and continued decreasing trends of offsite hydrocarbon concentrations, Arctos has proposed reducing groundwater monitoring activities at the site.

Site Background

A site background, which summarizes regional and site geology and hydrogeology and previous investigation and remediation, can be viewed at the project internet web site at https://portal.haleyaldrich.com/sites/ext/San_Lorenzo with a username and password provided by Tesoro.

Field Activities

Arctos's subcontractor, Confluence Environmental, Inc. (Confluence), of Sacramento, California, performed quarterly groundwater monitoring on 27 and 28 October 2010. Samples were collected from wells MW-1, MW-2, MW-3R, MW-4, MW-6, MW-10, MW-11, RW-1, RW-2, and PT-1 (Figure 2). Groundwater monitoring was performed in accordance with RWQCB guidelines and the quality assurance/quality control (QA/QC) procedures in Attachment A. Field data sheets are in Attachment B.

Analytical Program

The groundwater samples were analyzed in accordance with the analytical plan in Attachment A.

Groundwater Results

Groundwater elevations were recorded at approximately 29.6 to 30.7 feet above mean sea level (14.0 to 18.1 feet below ground surface; Table 1). Water elevations decreased between 1.0 and 1.3 feet since July 2010 and 1.6 to 2.6 feet since annual high water levels in April 2010. Water level data indicated that the general direction of water flow was toward the southwest with an estimated gradient of 0.003 (1 foot/330 feet; Figure 2). Fourth quarter 2010 groundwater elevations and gradient were generally consistent with historical data (Attachment C).

The highest TPHg concentration of 2,900 µg/l was at offsite well MW-10. Well MW-3R had the highest onsite TPHg concentration of 420 µg/l. Only onsite well MW-3R had benzene and tert-butyl alcohol (TBA) concentrations (24 and 14 µg/l, respectively) above the ESLs of 1 and 12 µg/l, respectively. The highest MTBE concentration of 12 µg/l was at onsite well MW-3R. Benzene, MTBE and TBA were below the ESLs for offsite wells during the fourth quarter monitoring event and have been since July 2009. The following table summarizes the concentration reductions at onsite well MW-3R and offsite wells MW-10 and MW-11.

Well	Event	TPHg (µg/l)	Benzene (µg/l)	MTBE (µg/l)	TBA (µg/l)
Onsite Wells					
MW-3/3R	Maximum Conc. (date)	160,000 (5/15/92)	17,000 (12/14/94)	2,800 (11/14/02)	580 (7/16/04)
	4th Quarter 2010	420	24	12	14
	Reduction	99.7%	99.9%	99.6%	97.6%
Offsite Wells					
MW-10	Maximum Conc. (date)	20,000 (3/31/98)	100 (2/28/92)	860 (2/26/01)	13 (11/14/02)
	4th Quarter 2010	2,900	ND<0.5	0.88	ND<5
	Reduction	85.5%	100%	99.9%	100%
MW-11	Maximum Conc. (date)	2,400 (2/18/92)	16 (8/19/98)	380 (11/4/02)	13 (6/3/02)
	4th Quarter 2010	130	ND<0.5	0.74	ND<5
	Reduction	94.6%	100%	99.8%	100%

Concentrations for onsite wells have decreased by 94.8 to 100 percent following remediation activities, which began in June 1993. Offsite hydrocarbon concentrations have decreased by 85.5 to 100 percent due to natural attenuation and reduced mass flux from site remediation.

Groundwater analytical results are summarized in Table 2. Figures 3, 4, and 5 show isoconcentration contours for TPHg, benzene, and MTBE, respectively. Figures 6A through 6G illustrate the change in groundwater quality with time for TPHg, benzene, and MTBE at wells MW-1, MW-3R, RW-1, RW-2, PT-1, MW-10, and MW-11. Historical analytical results are in Attachment D and the laboratory reports and chain-of-custody forms are in Attachment E.

Trend Analysis

Trend analysis results show that all seven wells with concentrations above the ESLs have stable or decreasing trends for TPHg, benzene, MTBE, and TBA. Only well PT-1 shows a stable trend for MTBE over the past 10 monitoring events with all of the other wells showing decreasing trends. Well PT-1 is located directly downgradient of the current groundwater remediation system, so MTBE concentrations will be addressed by the continued operation of the system. Both offsite wells MW-10 and MW-11 show decreasing trends for TPHg, the only petroleum hydrocarbon above the ESL off site. Trend analysis procedures and results are summarized in Attachment F.

Oxygen Injection Status

An oxygen diffusion system was initiated on 5 March 2009 in the western portion of the site at injection wells OS-1 through OS-4. Dissolved oxygen (DO) concentrations were above 15 milligrams per liter (mg/l) in the injection wells and remained at baseline concentrations (at or less than 1 mg/l) at downgradient observation wells PT-1 and RW-2 through March 2010. On 3 March 2010, Arctos started injecting oxygen gas directly into the existing injection wells, as described in a 18 November 2009 work plan. Oxygen gas was injected for a 10-minute period every 120 minutes at approximate flow rates of 5 to 8 cubic feet per hour (cfh). The injection pressures were maintained at less than 5 pounds per square inch (psi) at each injection well. After 10 months of operation, DO concentrations remained above 1 mg/l at downgradient well PT-1. The system went offline in December 2010 due to an issue with the power supply. The problem was repaired and the system restarted in January 2011. Groundwater sampling was conducted in January 2011 at the injection wells before restarting the system. The field readings are summarized in Attachment G.

Groundwater Monitoring Frequency Reduction

Arctos is proposing a reduction in groundwater monitoring frequency based on the California State Water Resources Control Board Resolution No. 2009-0042 and historical groundwater monitoring results. The monitoring frequency for select wells will be reduced to semiannual, annual, or will be eliminated. The wells identified for semiannual sampling will continue to be sampled quarterly to monitor the effectiveness of the groundwater remediation system. Semiannual sampling will occur during the second and fourth quarters of the year based on groundwater levels. Historically, groundwater levels and hydrocarbon concentrations are the highest during the second quarter of the year.

Arctos proposes annual monitoring for wells MW-2, MW-4, MW-7, and MW-12. Hydrocarbon concentrations have been below ESLs, or not detected, at wells MW-2 and MW-4 since 2006 and at well MW-12 since it was installed in 2007. Hydrocarbon concentrations have not been detected at well MW-7 since 2003. Annual sampling will occur in the second quarter.

Arctos is also proposing to stop monitoring at wells MW-5, MW-8, and MW-9. Monitoring at well MW-5 was suspended in 2000 and resumed to 2008 to confirm onsite concentrations. Hydrocarbon concentrations have not been detected at well MW-5 since 1998 and the well is located upgradient of nondetect well MW-2. Hydrocarbon concentrations have not been detected at wells MW-8 and MW-9 since 1994 and 1992, respectively. In addition, wells MW-8 and MW-9 are located downgradient of nondetect wells MW-7 and MW-4, respectively.

Monitoring wells MW-1, MW-3R, MW-10, MW-11, RW-1, RW-2, and PT-1 will be sampled semiannually once oxygen injection activities are complete. Monitoring well MW-6 will be sampled annually once oxygen injection activities are complete.

The proposed groundwater monitoring frequency is summarized in the following table:

Well Designation	Location	Sampling Frequency
MW-1	Upgradient	
MW-3R, RW-1, RW-2, and PT-1	On site	Quarterly during oxygen injection activities, semiannually thereafter
MW-10 and MW-11	Downgradient	
MW-6	Upgradient	Quarterly during oxygen injection activities, annual thereafter
MW-2 and MW-4	Upgradient and cross gradient	Annual
MW-7 and MW-12	Downgradient	(2nd quarter)
MW-5	Upgradient	
MW-8 and MW-9	Downgradient	None

Conclusions and Recommendations

Results of the groundwater sampling and oxygen injection activities indicate the following conclusions:

- Offsite benzene and MTBE concentrations have remained below ESLs since the third quarter 2006 and second quarter 2009 sampling events, respectively
- Petroleum hydrocarbon compounds show statistically decreasing trends for wells above the ESLs with reductions from 95 to 100 percent on site and 86 to 100 percent off site

Based on the results of the groundwater monitoring, Arctos recommends continued operation of the oxygen injection system. Arctos also proposes to implement the reduced groundwater monitoring frequency beginning in the second quarter 2011.

Jerry Wickham
Alameda County Environmental Health
28 February 2011
Page 6

ARCTOS

If you have questions or comments, please call Mike Purchase at 510/525-2180 or Jeff Gwinn at 562/988-2755.

Very truly yours,

ARCTOS ENVIRONMENTAL



Michael P. Purchase, P.E.
Senior Project Manager



Jeffrey P. Gwinn, P.E.
Vice President

Copy: Jeffrey M. Baker – Tesoro Companies, Inc.
 Brian Kelleher – Kelleher & Associates

Attachments: Table 1 – Well and Groundwater Elevations
Table 2 – Groundwater Monitoring Analytical Results
Figure 1 – Site Location Map
Figure 2 – Site Plan
Figure 3 – TPHg Concentration Contours in Groundwater
Figure 4 – Benzene Concentration Contours in Groundwater
Figure 5 – MTBE Concentration Contour in Groundwater
Figures 6A through 6G – TPHg, Benzene, and MTBE Concentrations with
Groundwater Elevations for Wells MW-1, MW-3R, RW-1, RW-2, PT-1,
MW-10, and MW-11
Attachment A – Groundwater Sampling QA/QC Procedures
Attachment B – Field Data Sheets
Attachment C – Historical Groundwater Elevations
Attachment D – Historical Groundwater Analytical Results
Attachment E – Laboratory Analytical Report and Chain-of-Custody Form
Attachment F – Trend Analysis
Attachment G – Oxygen Injection Performance Monitoring
Attachment H – Waste Manifests

TABLE 1
WELL AND GROUNDWATER ELEVATIONS
TESORO - SAN LORENZO, 67107

Well No.	Date of Measurement	Depth to Water (feet below casing)	PVC Casing Elevation ^(a) (feet MSL)	Water Table Elevation ^(b) (feet MSL)
MW-1	10/6/09	17.90	46.36	28.46
	2/17/10	15.43		30.93
	4/13/10	14.68		31.68
	7/6/10	15.82		30.54
	10/27/10	17.03		29.33
MW-2	10/6/09	17.10	45.61	28.51
	2/17/10	14.50		31.11
	4/13/10	13.55		32.06
	7/6/10	14.96		30.65
	10/27/10	16.18		29.43
MW-3R	10/6/09	16.69	45.16	28.47
	2/17/10	14.30		30.86
	4/13/10	13.50		31.66
	7/6/10	14.70		30.46
	10/27/10	15.90		29.26
MW-4	10/6/09	18.90	47.36	28.46
	2/17/10	16.49		30.87
	4/13/10	15.80		31.56
	7/6/10	16.82		30.54
	10/27/10	18.02		29.34
MW-5	10/6/09	18.00	46.50	28.50
	2/17/10	15.40		31.10
	4/13/10	14.60		31.90
	7/6/10	15.83		30.67
	10/27/10	17.08		29.42
MW-6	10/6/09	16.70	45.17	28.47
	2/17/10	14.03		31.14
	4/13/10	9.57		35.60
	7/6/10	14.50		30.67
	10/27/10	15.78		29.39
MW-7	10/6/09	16.07	44.24	28.17
	2/17/10	13.60		30.64

TABLE 1
WELL AND GROUNDWATER ELEVATIONS
TESORO - SAN LORENZO, 67107

Well No.	Date of Measurement	Depth to Water (feet below casing)	PVC Casing Elevation ^(a) (feet MSL)	Water Table Elevation ^(b) (feet MSL)
MW-7 (cont.)	4/13/10	17.70		26.54
	7/6/10	14.00		30.24
	10/27/10	15.21		29.03
MW-8	10/6/09	16.87	44.95	28.08
	2/17/10	14.62		30.33
	4/13/10	13.87		31.08
	7/6/10	15.00		29.95
	10/27/10	16.20		28.75
MW-9	10/6/09	19.30	47.65	28.35
	2/17/10	16.89		30.76
	4/13/10	16.20		31.45
	7/6/10	17.20		30.45
	10/27/10	18.40		29.25
MW-10	10/6/09	16.98	45.04	28.06
	2/17/10	14.72		30.32
	4/13/10	14.08		30.96
	7/6/10	15.05		29.99
	10/27/10	16.20		28.84
MW-11	10/6/09	19.80	47.69	27.89
	2/17/10	17.74		29.95
	4/13/10	17.24		30.45
	7/6/10	18.05		29.64
	10/27/10	19.10		28.59
MW-12	10/6/09	19.03	47.27	28.24
	2/17/10	16.90		30.37
	4/13/10	16.28		30.99
	7/6/10	17.19		30.08
	10/27/10	18.30		28.97
RW-1	10/6/09	17.48	45.86	28.38
	2/17/10	15.08		30.78
	4/13/10	14.30		31.56
	7/6/10	15.48		30.38
	10/27/10	16.70		29.16

TABLE 1
WELL AND GROUNDWATER ELEVATIONS
TESORO - SAN LORENZO, 67107

Well No.	Date of Measurement	Depth to Water (feet below casing)	PVC Casing Elevation ^(a) (feet MSL)	Water Table Elevation ^(b) (feet MSL)
RW-2	10/6/09	18.00	46.40	28.40
	2/17/10	15.64		30.76
	4/13/10	14.90		31.50
	7/6/10	15.95		30.45
	10/27/10	17.17		29.23
OS-1	10/6/09	18.78	47.19	28.41
	2/17/10	16.37		30.82
OS-2	10/6/09	18.42	46.79	28.37
	2/17/10	16.00		30.79
OS-3	10/6/09	17.30	45.68	28.38
	2/17/10	14.80		30.88
OS-4	10/6/09	17.63	46.02	28.39
	2/17/10	15.16		30.86
PT-1	10/6/09	18.10	46.48	28.38
	2/17/10	15.66		30.82
	7/6/10	16.10		30.38
	10/27/10	17.27		29.21

(a) Elevation of PVC well casting (north edge) surveyed relative to mean sea level (MSL).

Wells were surveyed by Cross Land Surveying, Inc., per AB 2886 requirements on 26 September 2008.

(b) Difference between "PVC Casing Elevation" and "Depth to Water."

TABLE 2
GROUNDWATER MONITORING ANALYTICAL RESULTS
TESORO - SAN LORENZO, 67107

Monitoring Well	Sample Date ^(a)	TPHg ^(b) (ug/l)	Benzene ^(b) (ug/l)	Toluene ^(b) (ug/l)	Ethylbenzene ^(b) (ug/l)	Total Xylenes ^(b) (ug/l)	MTBE ^(b) (ug/l)	DIPE ^(b) (ug/l)	ETBE ^(b) (ug/l)	TAME ^(b) (ug/l)	TBA ^(b) (ug/l)
ESLs ^(c)		100	1.0	40	30	20	5.0	NE ^(d)	NE	NE	12
MW-1	10/7/09	170	ND<0.5	ND<0.5	ND<0.5	ND<0.5	28	ND<0.5	ND<0.5	ND<0.5	ND<5
	2/17/10	60	ND<0.5	ND<0.5	ND<0.5	ND<0.5	21	ND<0.5	ND<0.5	ND<0.5	ND<5
	4/13/10	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	4.9	ND<0.5	ND<0.5	ND<0.5	ND<5
	7/6/10	160	ND<0.5	ND<0.5	ND<0.5	ND<0.5	6.1	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/27/10	200	ND<0.5	ND<0.5	ND<0.5	ND<0.5	4.7	ND<0.5	ND<0.5	ND<0.5	ND<5
MW-2	10/7/09	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.3	ND<0.5	ND<0.5	ND<0.5	ND<5
	2/17/10	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.58	ND<0.5	ND<0.5	ND<0.5	ND<5
	4/13/10	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	7/6/10	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/27/10	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
MW-3R	10/7/09	480	28	0.73	2.3	1.5	20	ND<0.5	ND<0.5	ND<0.5	16
	2/18/10	400	38	0.76	25	6.5	10	ND<0.5	ND<0.5	ND<0.5	18
	4/14/10	840	81	1.4	62	22	16	ND<0.5	ND<0.5	ND<0.5	16
	7/7/10	570	59	0.94	21	6.0	13	ND<0.5	ND<0.5	ND<0.5	16
	10/27/10	420	24	0.56	2.1	0.83	12	ND<0.5	ND<0.5	ND<0.5	14
MW-4	10/7/09	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.56	ND<0.5	ND<0.5	ND<0.5	ND<5
	2/17/10	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	4/13/10	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	7/6/10	ND<50	ND<0.5	ND<0.5	0.62	0.83	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/27/10	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.65	ND<0.5	ND<0.5	ND<0.5	ND<5
MW-5	10/7/09	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	4/13/10	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/27/10	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
MW-6	10/7/09	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	2.0	ND<0.5	ND<0.5	ND<0.5	ND<5
	2/18/10	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.71	ND<0.5	ND<0.5	ND<0.5	ND<5
	4/14/10	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	7/6/10	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/27/10	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.64	ND<0.5	ND<0.5	ND<0.5	ND<5
MW-7	10/7/09	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	4/13/10	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/27/10	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
MW-8	10/7/09	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	4/13/10	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/27/10	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
MW-9	10/7/09	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	2/18/10	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	4/14/10	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/27/10	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
MW-10	10/7/09	2,800	ND<0.5	ND<0.5	ND<0.5	0.61	1.3	ND<0.5	ND<0.5	ND<0.5	ND<5
	2/17/10	3,300	ND<0.5	ND<0.5	0.58	0.9	1.0	ND<0.5	ND<0.5	ND<0.5	ND<5
	4/14/10	4,300	ND<0.5	ND<0.5	24	6.9	0.8	ND<0.5	ND<0.5	ND<0.5	ND<5
	7/7/10	3,600	ND<0.5	ND<0.5	2.0	9.1	1.8	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/27/10	2,900	ND<0.5	ND<0.5	ND<0.5	2.0	0.88	ND<0.5	ND<0.5	ND<0.5	ND<5
MW-11	10/7/09	410	ND<0.5	ND<0.5	ND<0.5	ND<0.5	3.0	ND<0.5	ND<0.5	ND<0.5	ND<5
	2/17/10	460	ND<0.5	ND<0.5	ND<0.5	ND<0.5	2.0	ND<0.5	ND<0.5	ND<0.5	ND<5
	4/14/10	260	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.77	ND<0.5	ND<0.5	ND<0.5	ND<5

TABLE 2
GROUNDWATER MONITORING ANALYTICAL RESULTS
TESORO - SAN LORENZO, 67107

Monitoring Well	Sample Date ^(a)	TPHg ^(b) (ug/l)	Benzene ^(b) (ug/l)	Toluene ^(b) (ug/l)	Ethylbenzene ^(b) (ug/l)	Total Xylenes ^(b) (ug/l)	MTBE ^(b) (ug/l)	DIPE ^(b) (ug/l)	ETBE ^(b) (ug/l)	TAME ^(b) (ug/l)	TBA ^(b) (ug/l)
ESLs ^(c)		100	1.0	40	30	20	5.0	NE ^(d)	NE	NE	12
MW-11 (cont.)	7/7/10	400	ND<0.5	ND<0.5	ND<0.5	0.8	1.9	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/27/10	130	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.74	ND<0.5	ND<0.5	ND<0.5	ND<5
MW-12	10/7/09	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	2/17/10	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	4/13/10	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/27/10	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
RW-1	10/7/09	ND<50	0.68	ND<0.5	ND<0.5	ND<0.5	23	ND<0.5	ND<0.5	ND<0.5	ND<5
	2/17/10	82	3.0	ND<0.5	4.0	1.4	10	ND<0.5	ND<0.5	ND<0.5	ND<5
	4/13/10	ND<50	4.2	ND<0.5	4.8	1.1	9.7	ND<0.5	ND<0.5	ND<0.5	7.5
	7/6/10	ND<50	0.82	ND<0.5	ND<0.5	ND<0.5	8.0	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/28/10	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	6.4	ND<0.5	ND<0.5	ND<0.5	6.6
RW-2	10/7/09	350	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.85	ND<0.5	ND<0.5	ND<0.5	ND<5
	2/18/10	620	ND<0.5	ND<0.5	ND<0.5	0.92	0.84	ND<0.5	ND<0.5	ND<0.5	ND<5
	4/14/10	390	ND<0.5	ND<0.5	ND<0.5	1.1	0.97	ND<0.5	ND<0.5	ND<0.5	ND<5
	7/7/10	380	ND<0.5	ND<0.5	ND<0.5	0.79	0.82	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/28/10	220	ND<0.5	ND<0.5	ND<0.5	0.67	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
OS-1	10/7/09	60	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	2/18/10	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
OS-2	10/7/09	1,200	ND<0.5	ND<0.5	0.55	ND<0.5	1.4	ND<0.5	ND<0.5	ND<0.5	ND<5
	2/18/10	140	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.82	ND<0.5	ND<0.5	ND<0.5	ND<5
OS-3	10/7/09	2,100	230	6.5	150	230	20	ND<0.5	ND<0.5	ND<0.5	16
	2/18/10	1,600	180	3.7	120	140	23	ND<0.5	ND<0.5	ND<0.5	8.6
OS-4	10/7/09	680	14	ND<0.5	8.6	12	38	ND<0.5	ND<0.5	ND<0.5	12
	2/18/10	ND<50	ND<0.5	ND<0.5	ND<0.5	0.55	26	ND<0.5	ND<0.5	ND<0.5	ND<5
PT-1	10/7/09	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	13	ND<0.5	ND<0.5	ND<0.5	ND<5
	2/18/10	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	17	ND<0.5	ND<0.5	ND<0.5	ND<5
	4/14/10	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	13	ND<0.5	ND<0.5	ND<0.5	ND<5
	7/6/10	61	ND<0.5	ND<0.5	ND<0.5	ND<0.5	8.2	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/28/10	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	9.4	ND<0.5	ND<0.5	ND<0.5	ND<5

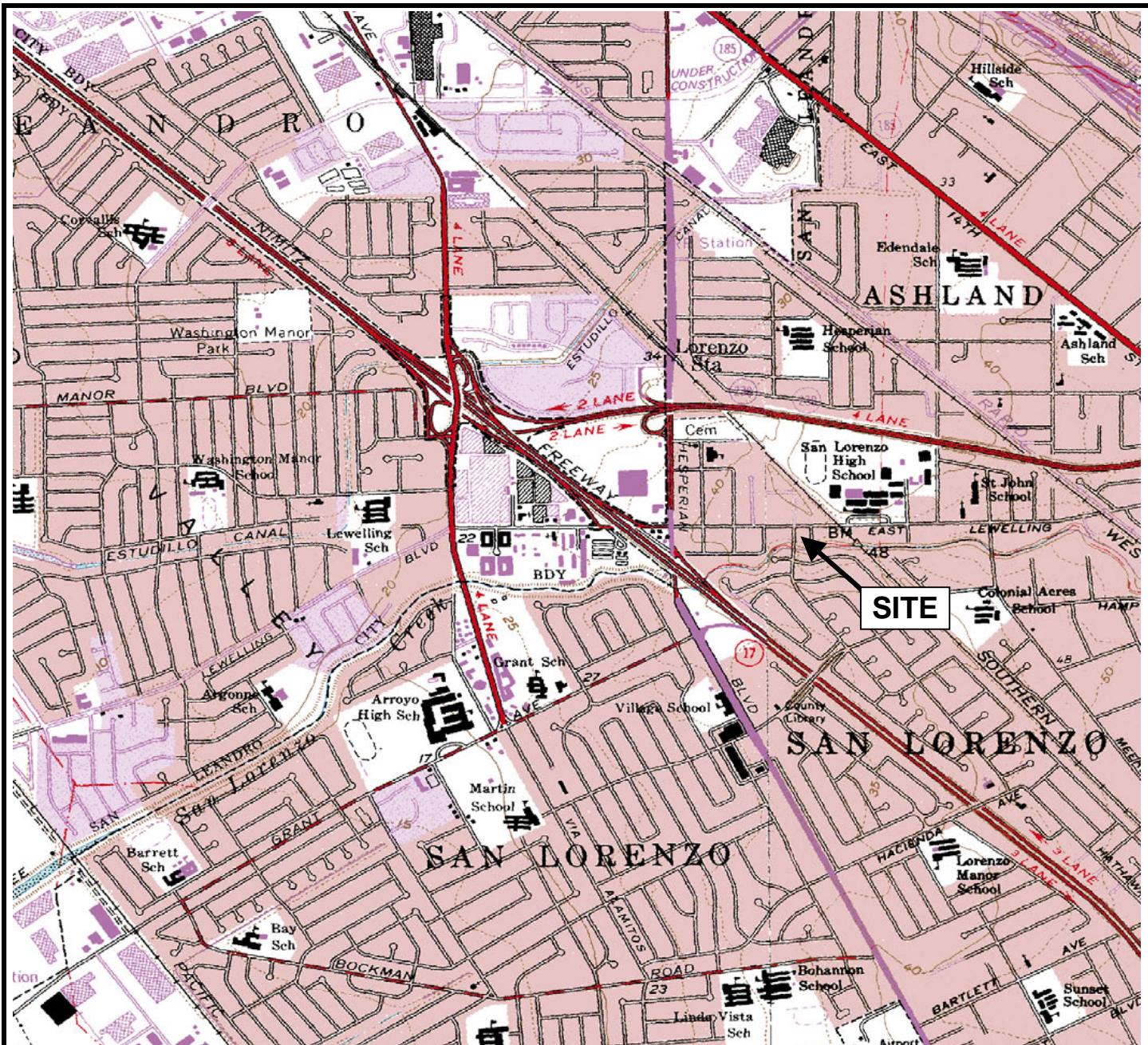
(a) Samples collected before January 2008 reported by others; data provided by RDM Environmental, Inc. (RDM), Fourth Quarter 2007 Groundwater Monitoring Report.

(b) Total petroleum hydrocarbons as gasoline (TPHg), benzene, toluene, ethylbenzene, xylenes, methyl tert-butyl ether (MTBE), di-isopropyl ether (DIPE), ethyl tert-butyl ether (ETBE), tert-amyl methyl ether (TAME), tert-butyl alcohol (TBA), analyzed by EPA Method 8260; reported in micrograms per liter (ug/l).

(c) Environmental Screening Levels (ESLs) taken from Regional Water Quality Control Board, San Francisco Bay Region, Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, Volume 1: Summary Tier 1 Lookup tables dated November 2007.

(d) NE - Not established.

(e) ND - Not detected at the reporting limit listed.



SCALE
0 2000 4000 FEET

REFERENCE

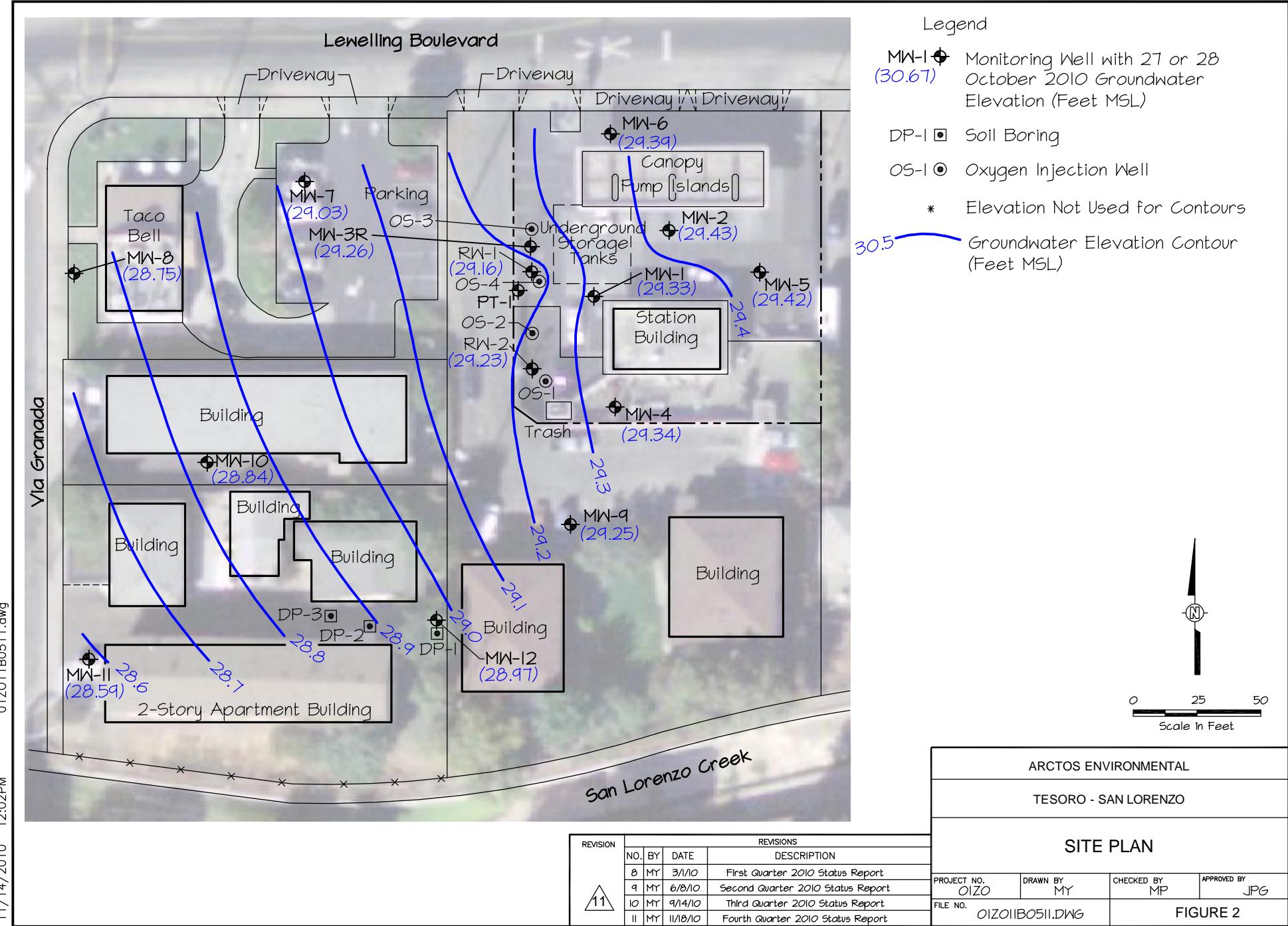
7.5 MINUTE USGS TOPOGRAPHIC MAPS OF
SAN LEANDRO AND HAYWARD, CALIFORNIA QUADRANGLES
DATE: 1959, PHOTOREVISED 1980
SCALE = 1:24,000

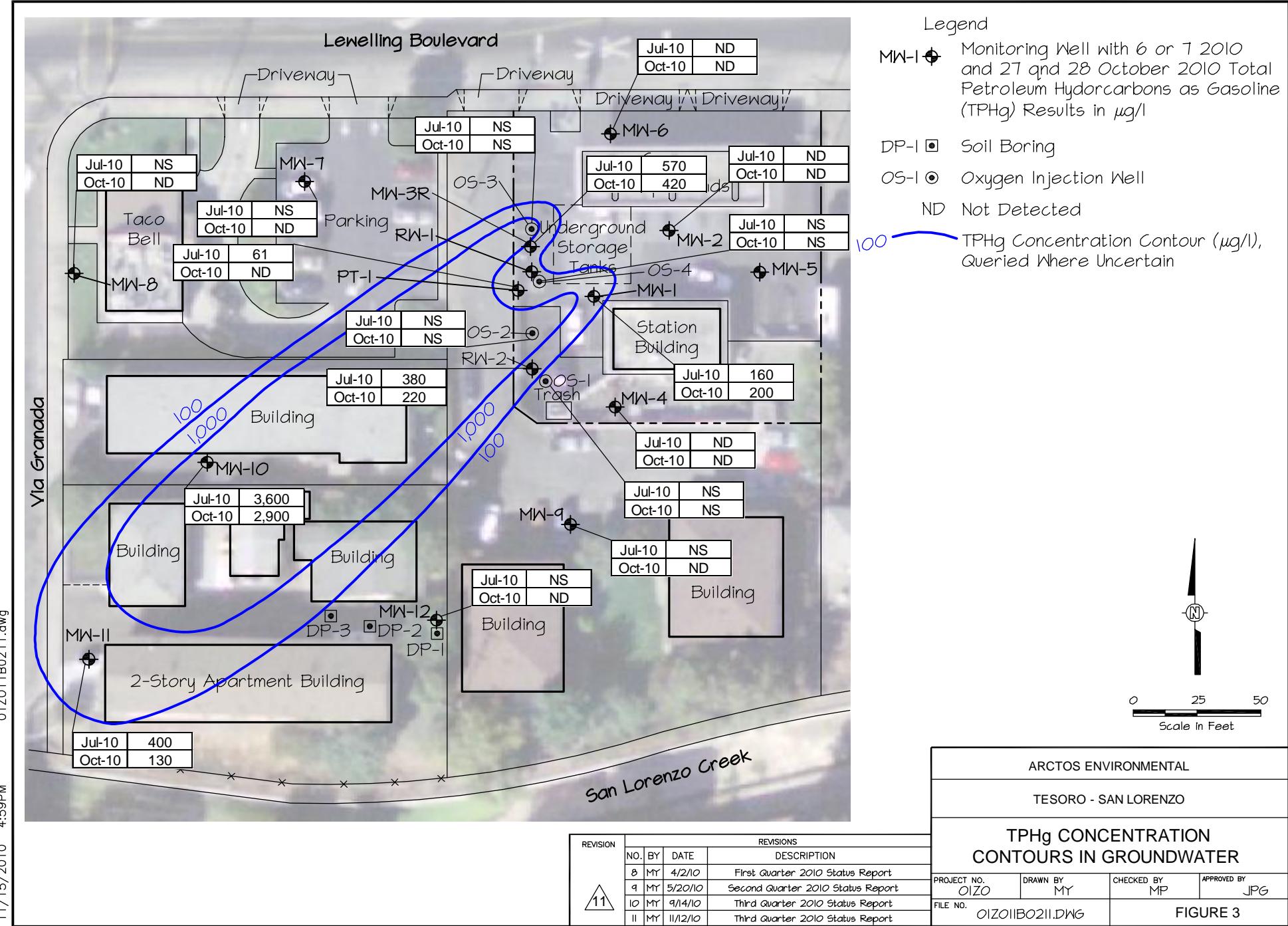
ARCTOS ENVIRONMENTAL

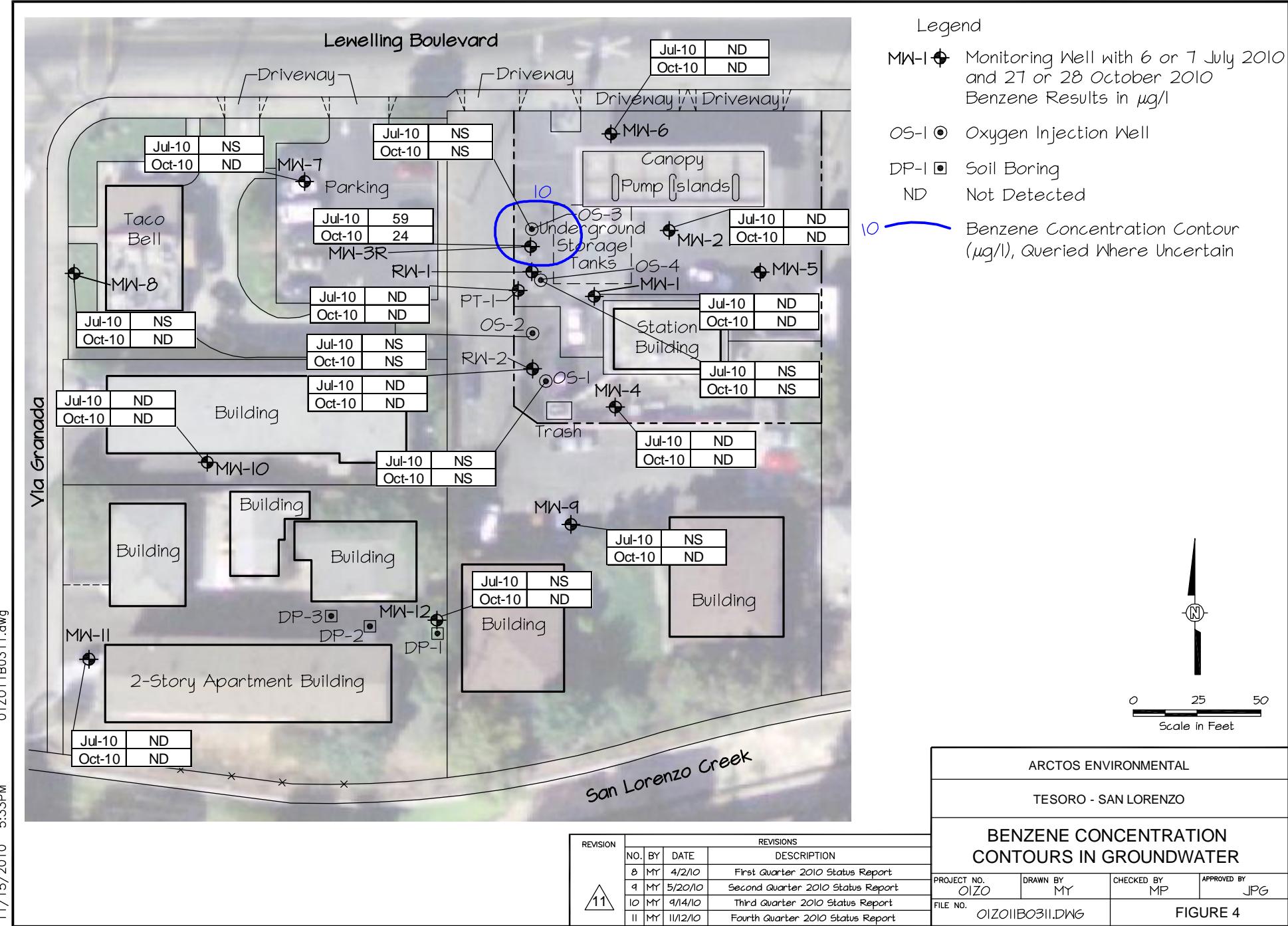
TESORO - SAN LORENZO, 67107

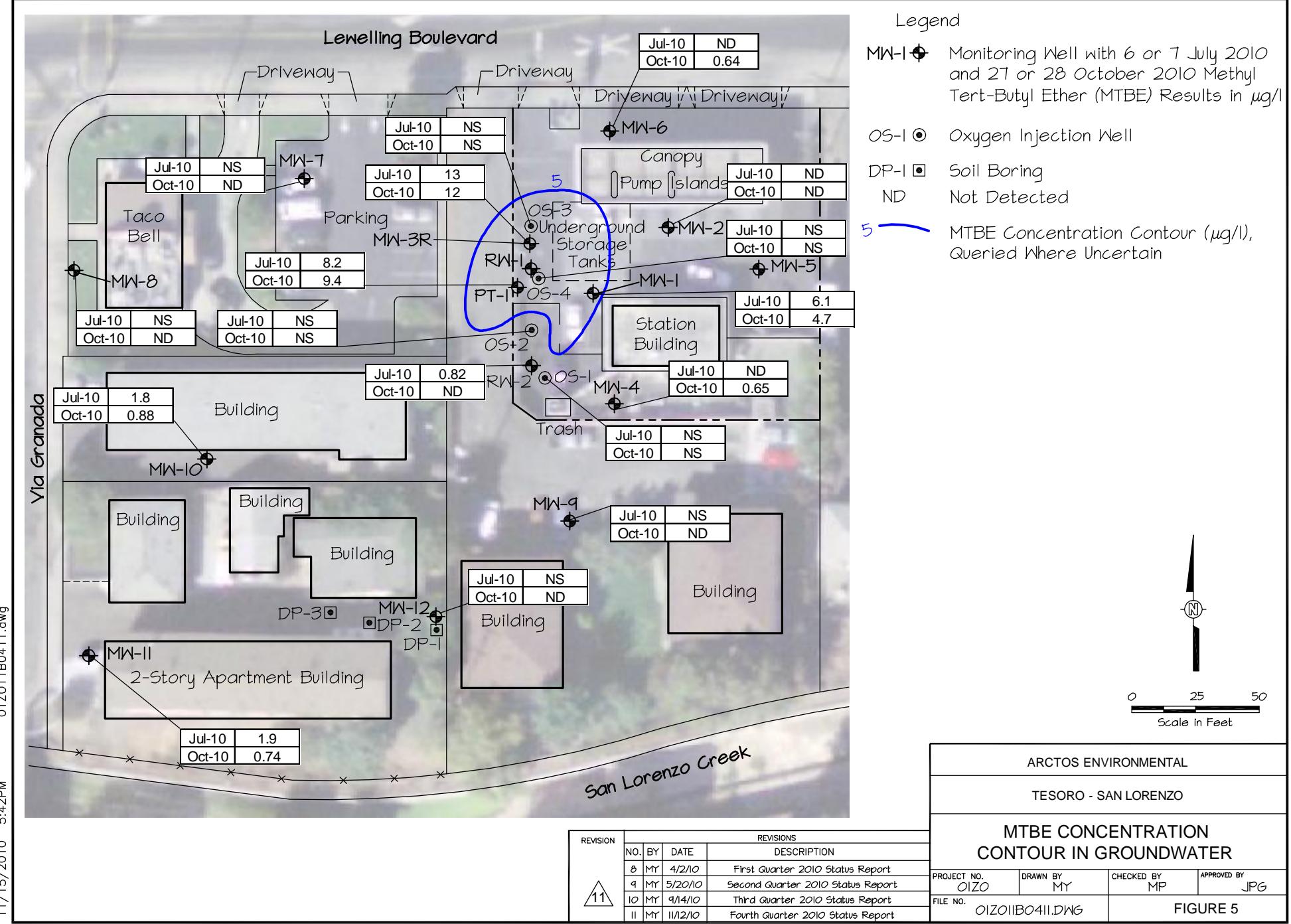
SITE LOCATION MAP

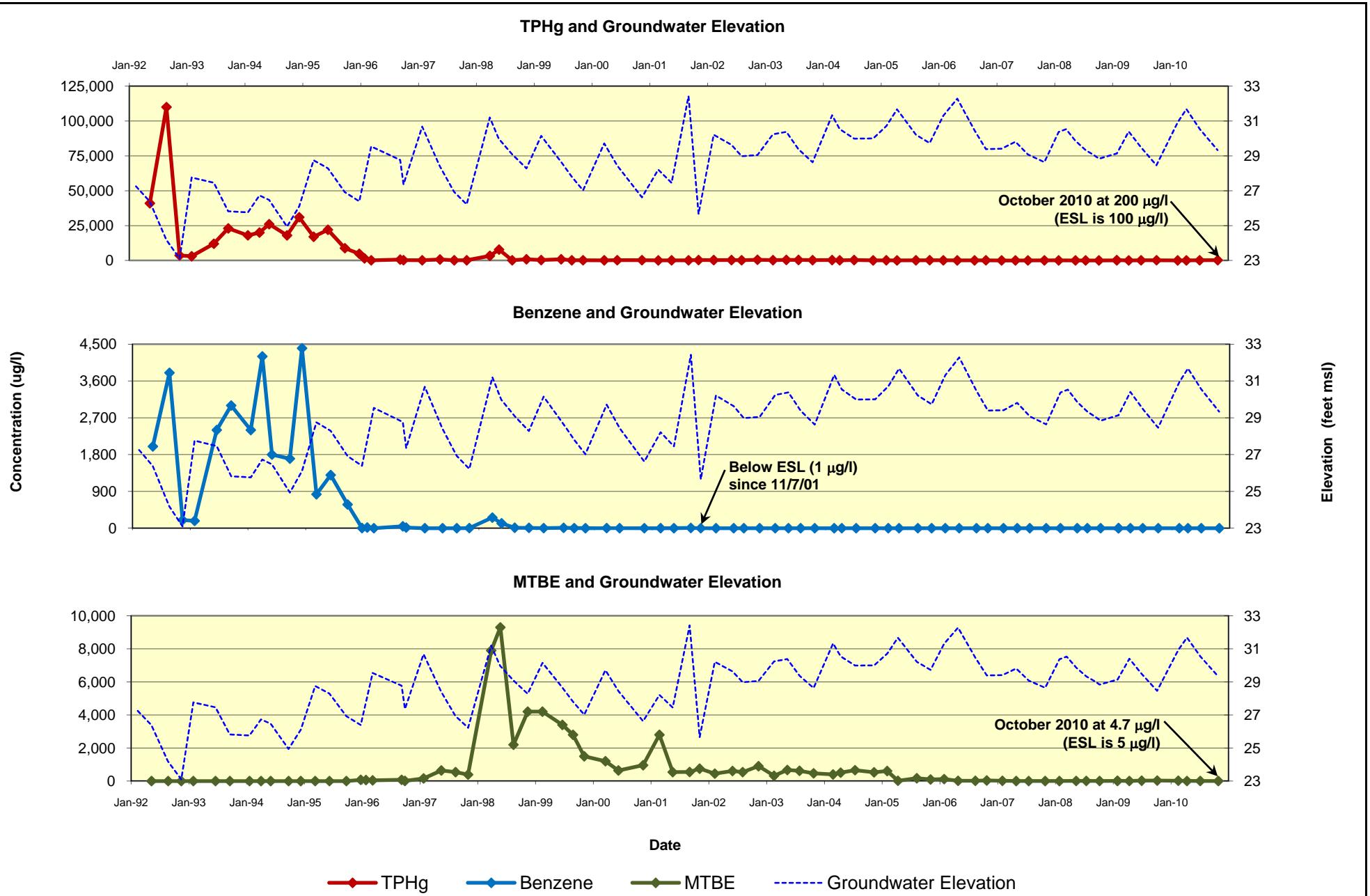
PROJECT NO. 01ZO	DRAWN BY MP	CHECKED BY MP	APPROVED BY JG
FILE NO. Site Map.xls	FIGURE 1		

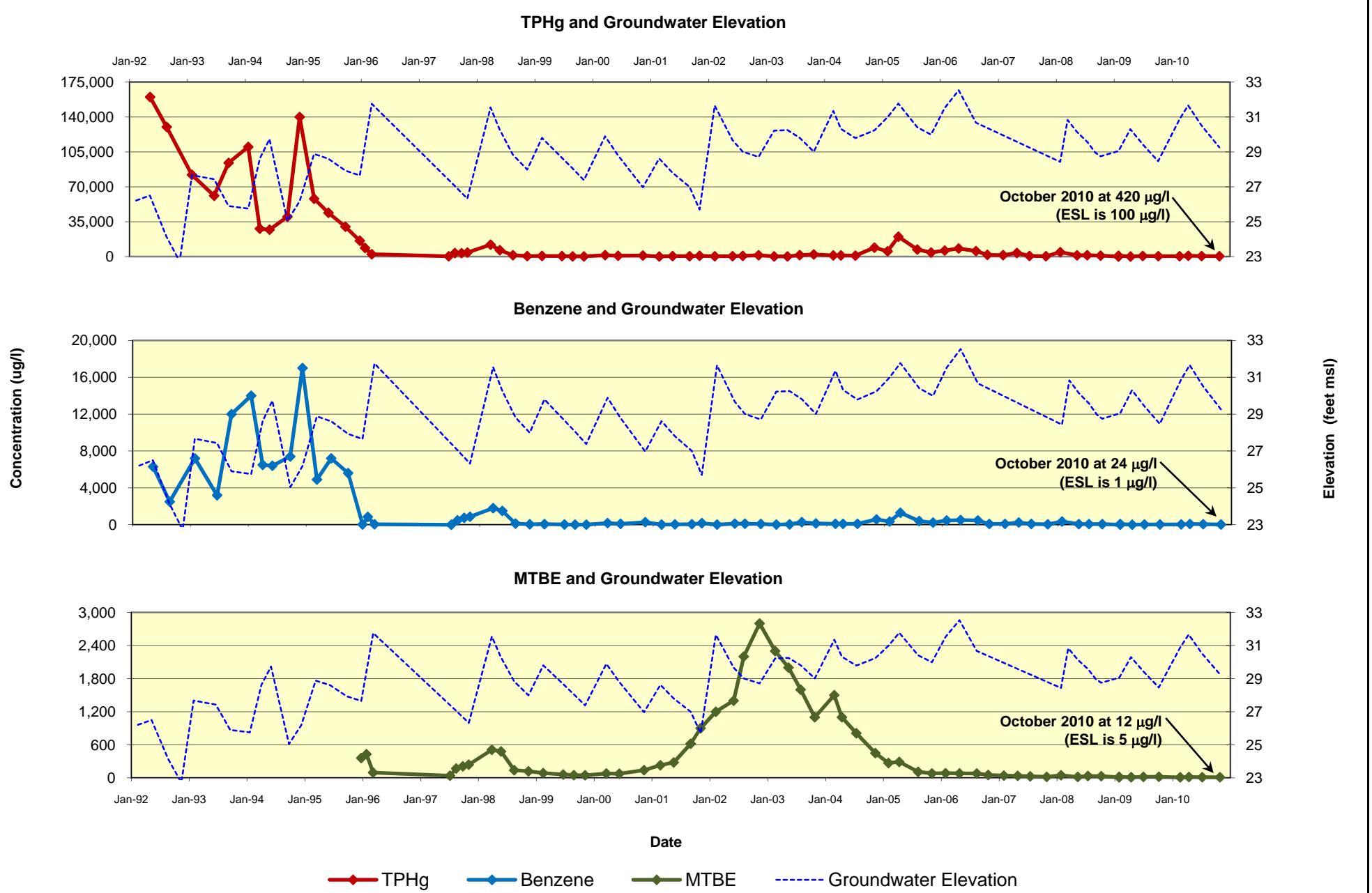


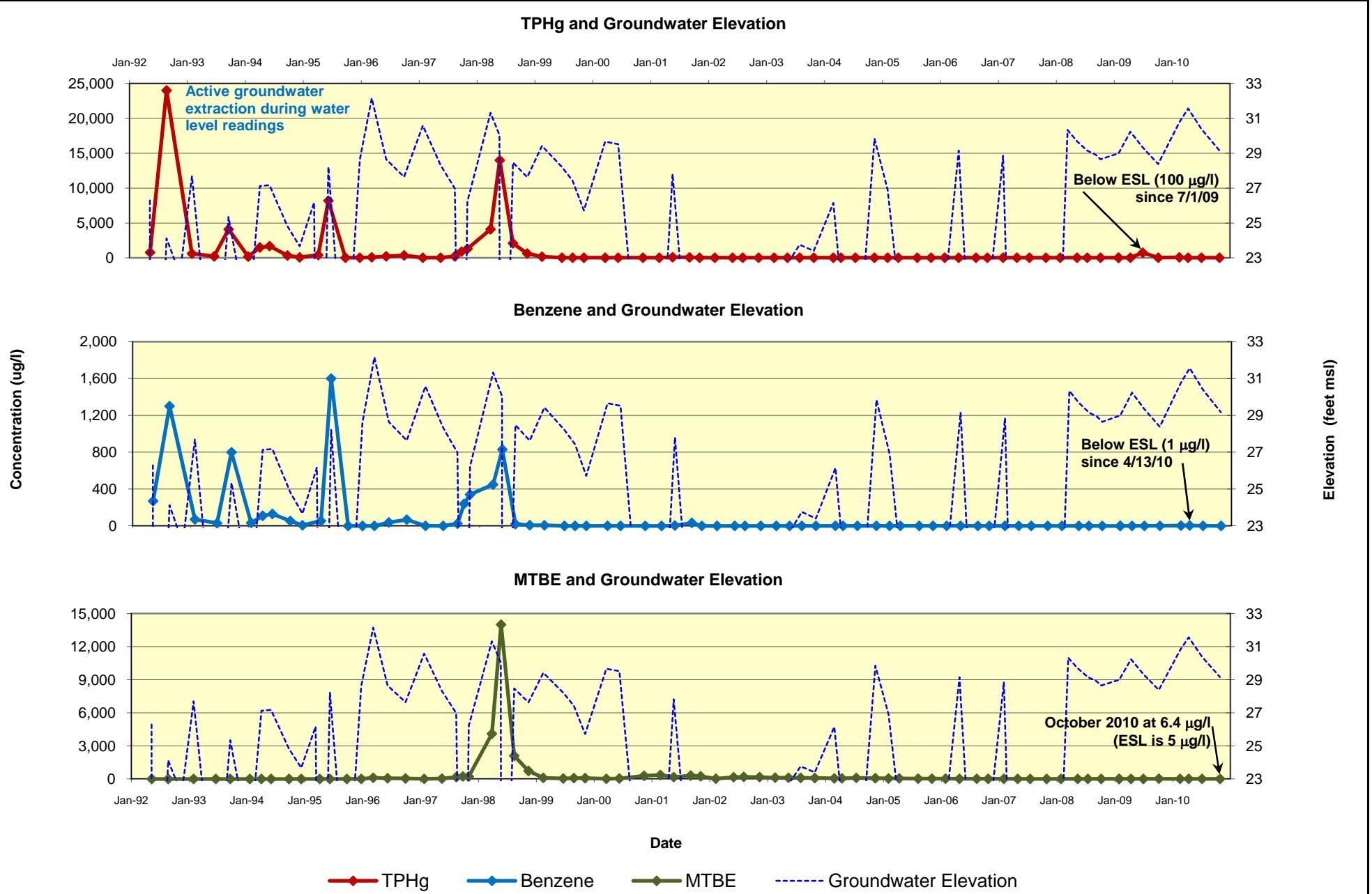




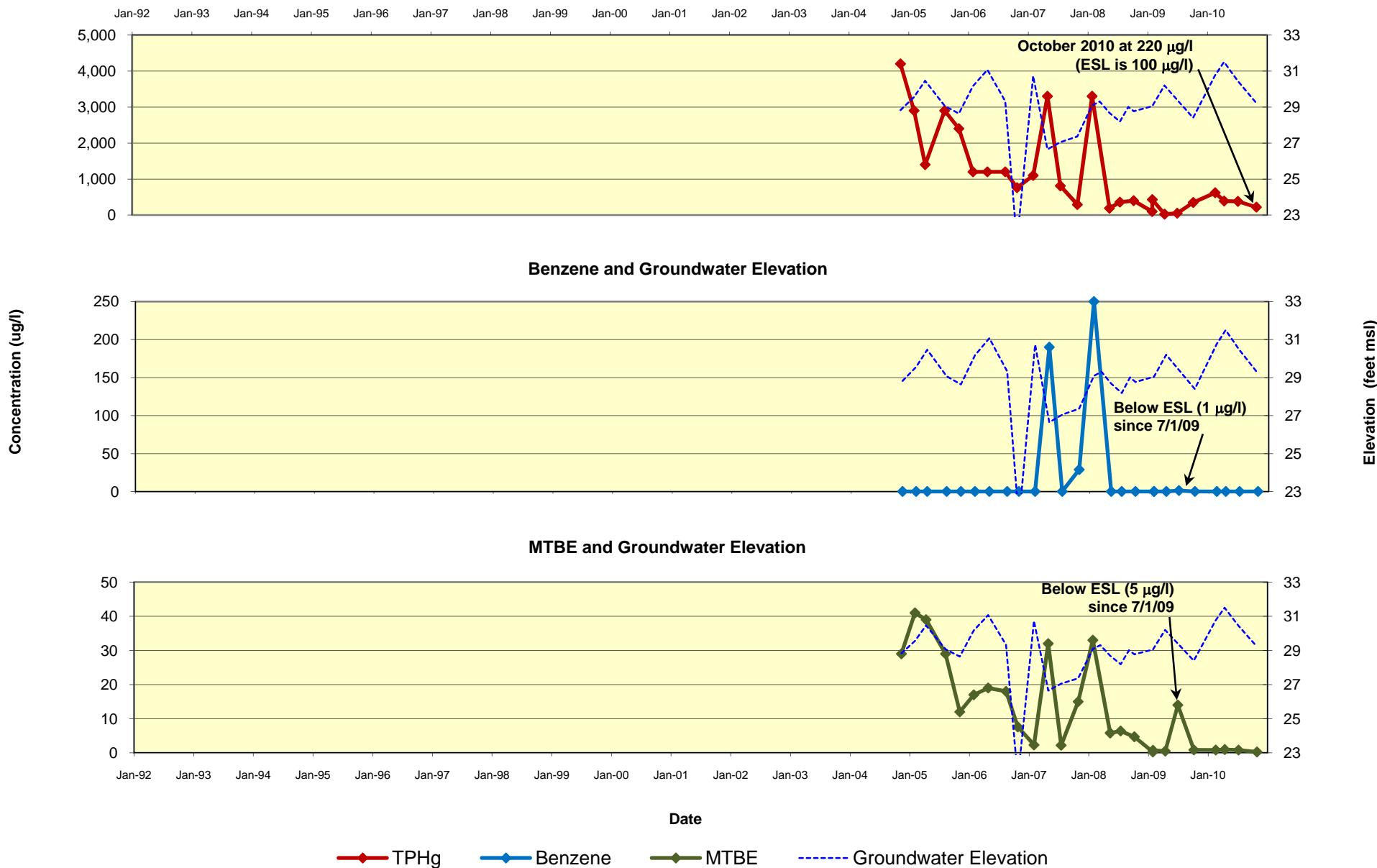


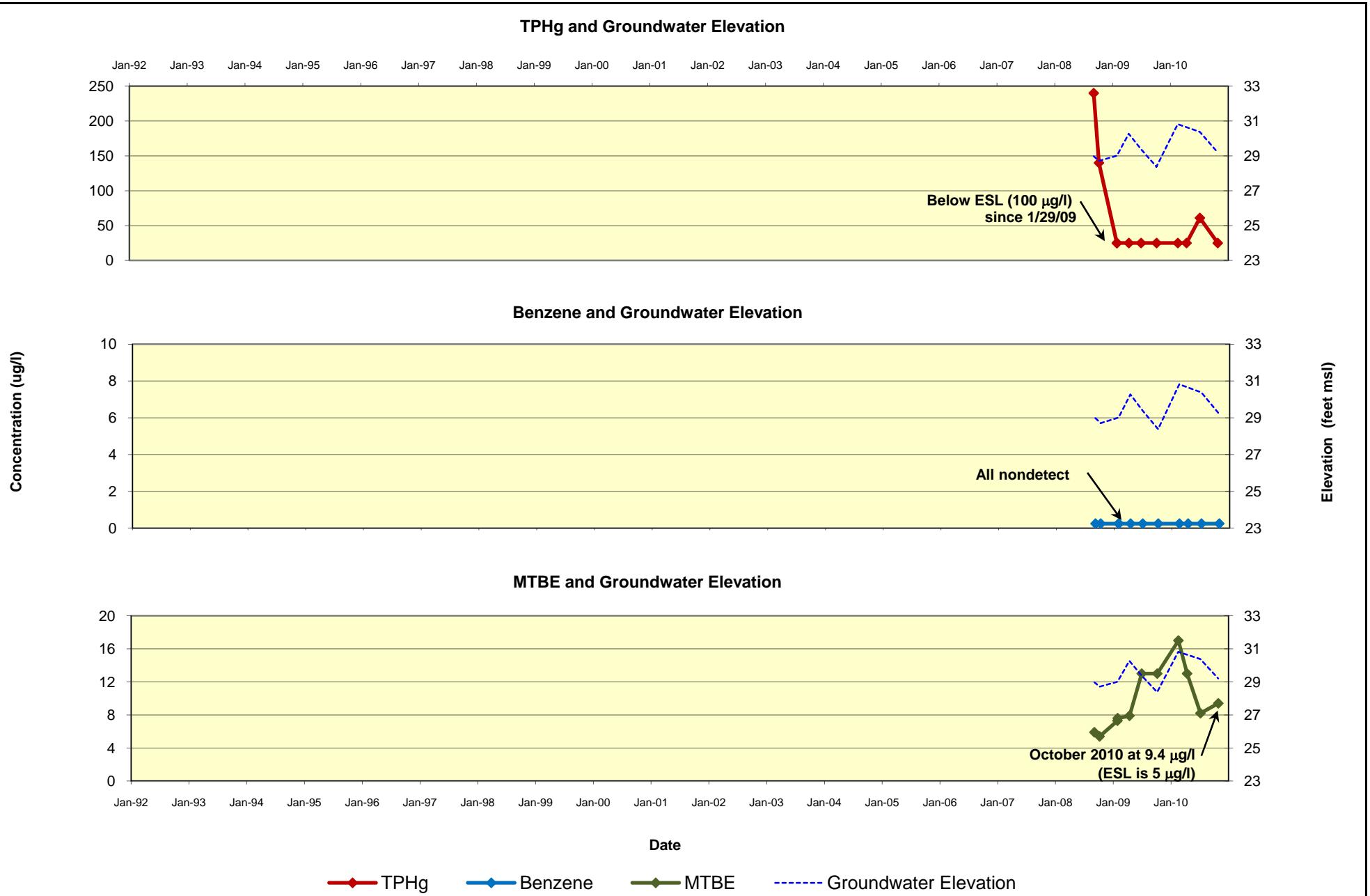




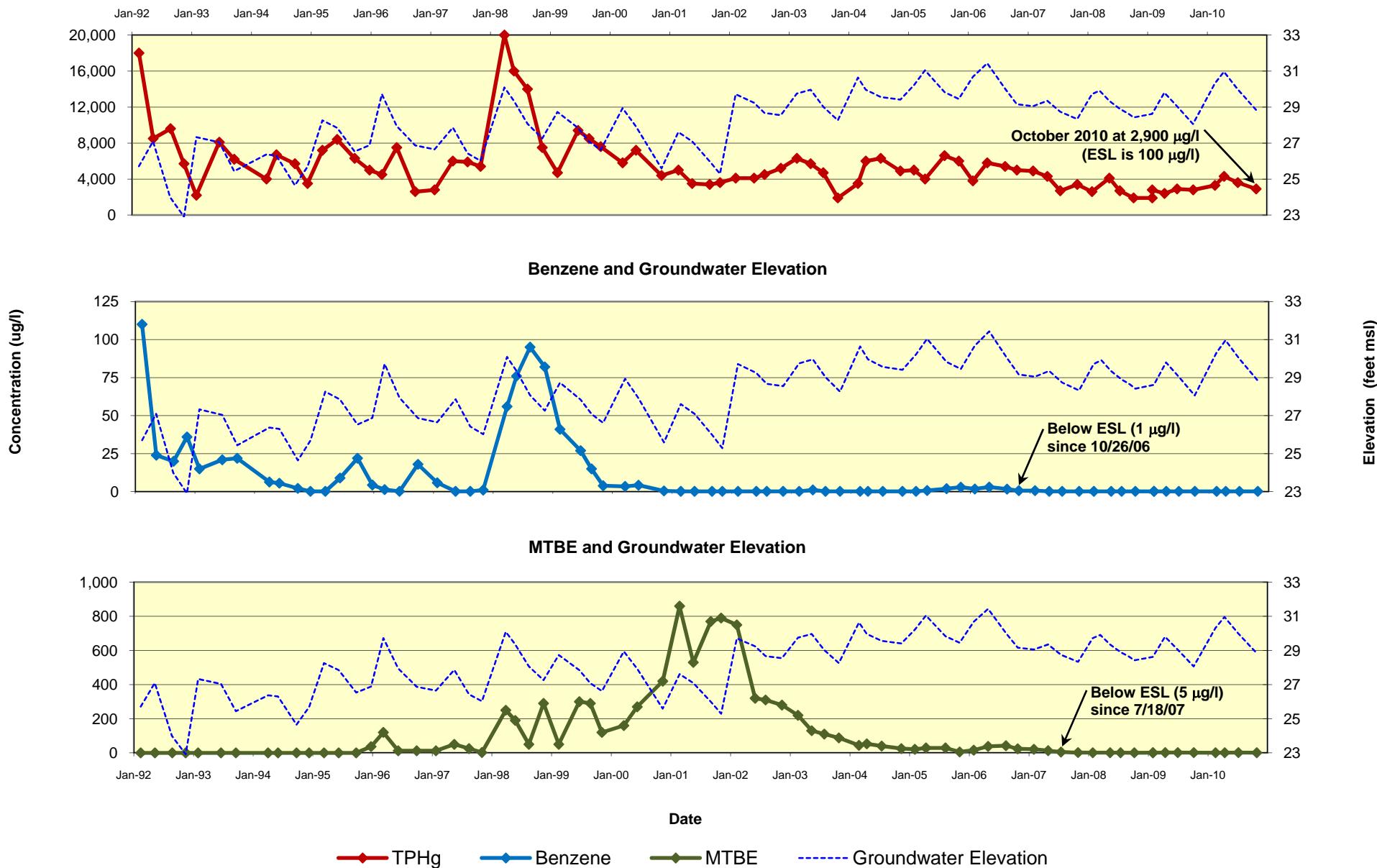


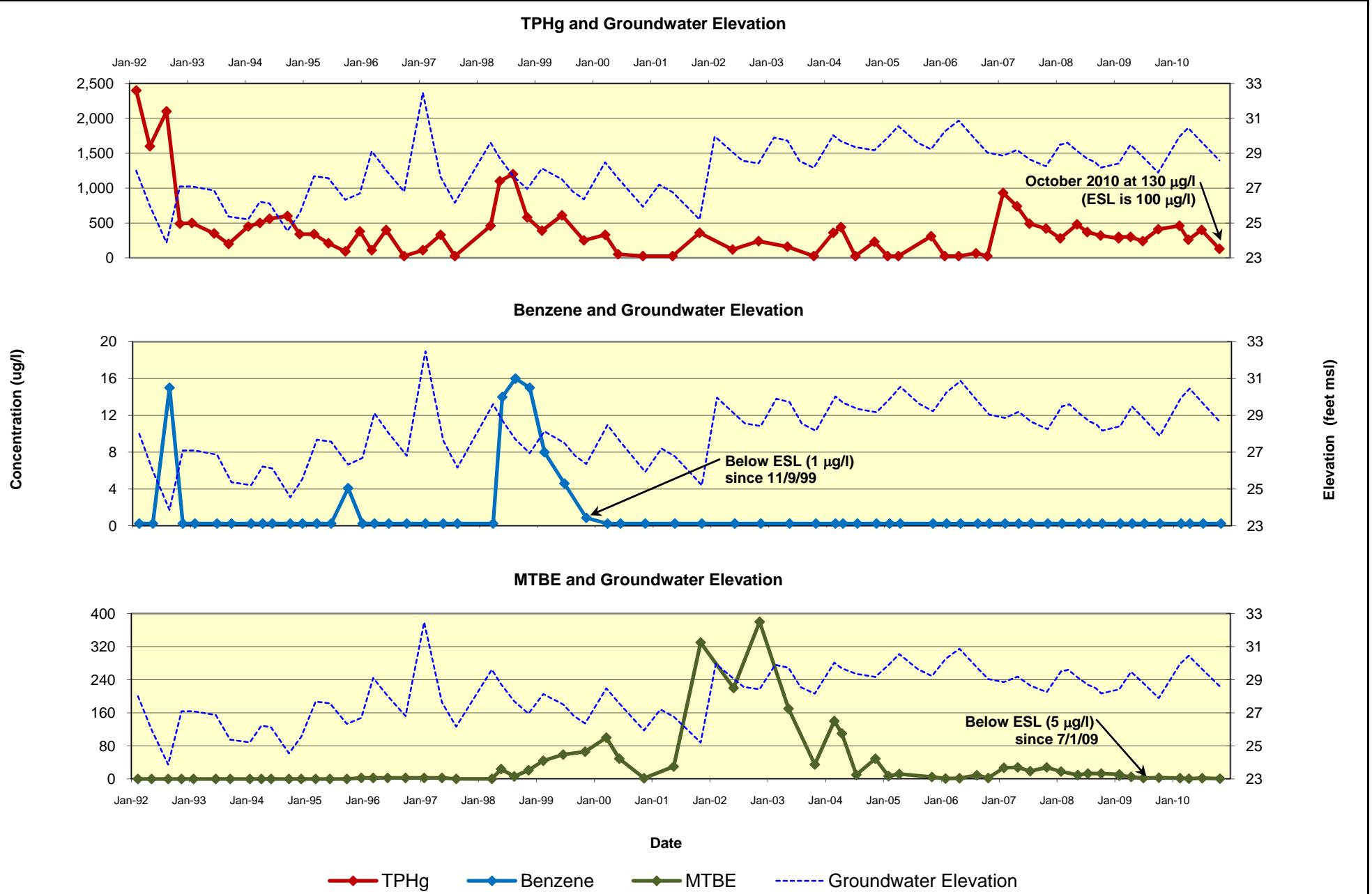
TPHg and Groundwater Elevation





TPHg and Groundwater Elevation





ATTACHMENT A

GROUNDWATER SAMPLING QA/QC PROCEDURES

ATTACHMENT A

GROUNDWATER SAMPLING QA/QC PROCEDURES

Purge-and-Bail Sampling

The depth to groundwater and total well depth were measured before sampling using an electronic water well sounder. Before sampling, at least 3 casing volumes were purged from each monitoring well using a submersible pump. Throughout purging, pH, conductivity, turbidity, and temperature were measured and recorded for the evacuated groundwater. These measurements were used to confirm that the well was purged sufficiently. Water samples were generally collected after the measurements of pH, conductivity, and temperature had stabilized to within 10 percent of the previous readings. Copies of the well purging and sampling logs are provided in Attachment B.

Sampling was performed with a new 1-1/2-inch-diameter disposable polyethylene bailer suspended from new nylon line. The bailer was equipped with a bottom-release device. Groundwater was collected with the bailer from just below the water surface in each monitoring well. Water samples were collected from the bailers in new 40-milliliter glass bottles provided by the analytical laboratory. The samples were collected so that no headspace was present in each bottle. The preservatives necessary for the analyses performed were provided in the glass bottles by the analytical laboratory.

The collected water samples were placed in sealable plastic bags and packed on ice in a portable ice chest immediately after collection. Samples were delivered within 24 to 48 hours to the analytical laboratory. Additional field procedures, including the use of sample identification labels and chain-of-custody forms, were followed to track sample collection and delivery.

General Field Quality Assurance/Control (QA/QC) Procedures

Chain-of-Custody Records

Chain-of-custody records were completed before samples were packaged for shipment. One copy of these records was placed in the project file. A second copy accompanied samples during transportation to the laboratory. The individual in the analytical laboratory who accepted responsibility for samples signed and dated the chain-of-custody record.

Equipment Decontamination Procedures

Field equipment was decontaminated between sampling events using the following procedures:

1. Rinsed with water using a brush to remove soil and mud.

2. Washed with non-phosphate detergent and water using a brush.
3. Rinsed with deionized or distilled water.
4. Rinsed again with deionized or distilled water.
5. Air dried.

Additional decontamination procedures are presented below:

1. Personnel dressed in suitable personal protective equipment (PPE) to reduce personal exposure.
2. Equipment that would be damaged by water (such as the battery portion of water level indicator or the pH and conductivity meters) was carefully wiped clean using a sponge and dried with new paper towels. Care was taken to prevent damage to the equipment.
3. When conducting a groundwater sampling event, evacuation and sampling equipment was decontaminated before sampling operations, between each well, and at the end of the sampling event. If dedicated equipment was used, it was rinsed with deionized water.
4. Detergent waters and rinse waters were replaced periodically depending on level of contamination. Used detergent and rinse waters were contained in 55-gallon drums approved by the Department of Transportation (DOT) or holding tanks for storage.

Personal Decontamination Procedures

At a minimum, field personnel followed the following decontamination procedures:

1. Wore appropriate gloves
2. Washed hands thoroughly with soap and water
3. Avoided unnecessary contact with groundwater.

The site health and safety plan was reviewed for site-specific personal decontamination procedures.

Wastewater and Solid Waste Storage and Disposal

Small volumes of used wash and rinse solutions were collected during field work and transported to a central decontamination area. This wastewater was containerized in labeled 55-gallon DOT drums or holding tanks and stored in a secured area at the site. At

the completion of field investigation activities or a groundwater sampling event, samples from the 55-gallon drums or holding tanks were collected and analyzed in accordance with the work or sampling plans. Once the analytical results were obtained, the Project Manager determined the appropriate disposal method for this wastewater. Non-hazardous waste manifests are included in Attachment H.

Solid wastes such as used personal protective equipment, paper towels, trash bags, and any other solid debris were collected for disposal. Because the sampled groundwater was not a hazardous waste, the solid wastes were disposed with the onsite trash.

Field Investigation Documentation Procedures

Field personnel followed documentation procedures developed for site investigation work. The procedures served to (1) provide a record of the activities performed in the field and (2) permit identification of samples and tracking of their status in the field, during shipment, and at the laboratory. All documentation was recorded with waterproof ink.

Groundwater sampling activities were documented on daily field reports and on the well purge and sample log.

Health and Safety

Arctos used a site-specific health and safety plan (HSP) with procedures that were followed by field personnel for equipment safety, medical surveillance, personal protection, air quality monitoring, exposure control, emergency response, and general work practices during field activities. Before beginning work at the site, a site safety meeting was conducted. Field personnel reviewed the HSP and signed the accompanying acknowledgment form before initiating field activities. Field personnel were required to comply with the HSP throughout performance of site assessment activities.

Analytical QA/QC Procedures

Laboratory analytical QA/QC procedures included (1) preparing and analyzing laboratory samples to assess the performance of the analytical laboratory and (2) conducting data validation in accordance with the protocols described below. QC samples prepared by the laboratory included method blanks, matrix spike and matrix spike duplicates, and laboratory control samples.

The laboratory results were reviewed in general accordance with EPA guidelines for data validation. The data validation process included reviewing laboratory results for the following parameters:

- Completeness of the data package
- Compliance with EPA-required holding times

- Agreement of dilution factors with reported detection limits
- Presence or absence of analytes in the method blanks
- Agreement of duplicate samples
- Percent recovery and relative percent difference results for matrix spike and matrix spike duplicate analyses
- Percent recovery results for laboratory control samples.

Analytical Program

Groundwater samples were analyzed by Kiff Analytical LLC (Kiff), a State-certified laboratory in Davis, California for total petroleum hydrocarbons as gasoline (TPHg); benzene, toluene, ethylbenzene, and total xylenes (BTEX); methyl tert-butyl ether (MTBE); and other oxygenates using EPA Method 8260B.

Arctos, as Tesoro's Authorized Responsible Party for the site, electronically submitted the groundwater monitoring results to the State Water Resources Control Board (SWRCB). The data were submitted in the State-mandated EDF format, in accordance with Assembly Bill 2886 requirements for underground storage tank (UST) sites in California. The EDFs including laboratory analytical data and quarterly groundwater elevations were transmitted through the Geotracker web portal

ATTACHMENT B
FIELD DATA SHEETS

Equipment Calibration Log

Equipment make/model	Equipment ID/serial number	Date	Time	Calibration Standards	Equipment Reading	Equipment Calibrated	Temp (°C °F)	Tech init.	Comments
Ultrameter	60226442	10/27/10	720	4, 7, 10	4.0, 7.0 10.0	Y	15	Bn	
					14/13	14/13	Y	15	Bn
YSI 55	#2	10/27/10	1115	100%	100%	Y	15	Bn	
Ultrameter	60226442	10/28/10	715	4, 7, 10	4.0, 7.0 10.0	Y	15	Bn	
					14/13	14/13	Y	15	Bn
YSI 55	#2			1000%	100%	Y	—	Bn	

Notes/comments:

Water Level Measurements

Job Number: 142-101024 Date: 10/27/10 Client: Orion

Site: Tesoro #67107 San Lorenzo

Purging And Sampling Data Sheet

Job#: M2-101026	Sampler:	B Myers	Client:	Orion	
Well ID: HW1	Date:	10/27/10	Site:	San Lorenzo	
Well diam: 1/4" 1" 2" 3" 4" 6" Other:	DTW: 17.03 Total Depth: 33.40				
Purge equip: ES - diam: disp bailer teflon bailer other:	Bladder	Peri	Waterra	Positive Air Displacement	Ext. System
Purge method: 3-5 Case Volume	Micro/Low-Flow	Extraction	Other:		
Pump depth/ intake:	Multipliers: 1" = 0.04 2" = 0.16 3" = 0.37 4" = 0.65 5" = 1.02 6" = 1.47 Radius ² X 0.163				
(TD - DTW X Multiplier = 1 Volume		80% Recovery (TD - DTW X 0.20 + DTW)			

$$1 \text{ Volume} = \underline{2.4} \times 3 = \underline{7.8} \text{ (Total Purge)} \quad 80\% = \underline{20.30}$$

Did well dewater? YES NO Total volume removed: 8 (gal / L)

Sample method: Disp. Bailer Ded. Tubing New Tubing Ext. Port Other:

Sample date: 10/27/10 Sample time: 1300 DTW at sample: 17.39

Sample ID: 11w-1 Lab: Kiff Number of bottles: 3

Analysis: See COC

Equipment blank ID @ Field blank ID @

Duplicate ID: Pre-purge DO: 0.77 Post purge DO:

Fe²⁺: Pre-purge ORP: 56 Post purge ORP:

NAPL depth: Volume of NAPL: Volume removed: ml

Purging And Sampling Data Sheet

Job#: M2-101026	Sampler:	B Myers	Client:	Orion
Well ID: HW2	Date:	10/27/10	Site:	San Lorenzo
Well diam: 1/4" 1" 2" 3" 4" 6" Other:	DTW: 110.18 Total Depth: 33.90			
Purge equip: ES - diam: Bladder Peri Waterra Positive Air Displacement Ext. System disp baller teflon bailer other:				
Purge method: 3-5 Case Volume Micro/Low-Flow Extraction Other:				
Pump depth/ intake:	Multipliers: 1" = 0.04 2" = 0.16 3" = 0.37 4" = 0.65 5" = 1.02 6" = 1.47 Radius ² X 0.163			
(TD - DTW X Multiplier = 1 Volume	80% Recovery (TD - DTW X 0.20 + DTW)			

$$1 \text{ Volume} = 2.8 \times 3 = 8.4 \text{ (Total Purge)} \quad 80\% = 19.72$$

Did well dewater? YES NO Total volume removed: 8.5 (gal / L)

Sample method: Disp Bailer Ded. Tubing New Tubing Ext. Port Other:

Sample date: 8/27/15 Sample time: 12:45 DTW at sample: 1731

Sample ID: Mer2 Lab: Kiff Number of bottles: 3

Analysis: See COC

Equipment blank ID

Duplicate ID:	Pre-purge DO:	0.33	Post purge DO:
Fe2 ⁺ :	Pre-purge ORP:	72	Post purge ORP:
NAPL depth:	Volume of NAPL:	Volume removed:	ml

Purging And Sampling Data Sheet

Job#: M2-101026	Sampler: B Myers				Client: Orion	
Well ID: HW-3R	Date: 10/27/10			Site: San Lorenzo		
Well diam: 1/4" 1" 2" 3" 4" 6" Other:	DTW: 15.90 Total Depth: 28.10					
Purge equip: ES - diam: disp bailer teflon bailer other:	Bladder Peri Waterra Positive Air Displacement Ext. System					
Purge method: 3-5 Case Volume	Tubing: OD: New Dedicated NA					
Pump depth/ intake:	Multipliers: 1" = 0.04 2" = 0.16 3" = 0.37 4" = 0.65 5" = 1.02 6" = 1.47 Radius ² X 0.163					
(TD - DTW X Multiplier = 1 Volume		80% Recovery (TD - DTW X 0.20 + DTW)				

1 Volume = 18 x 3 = 54 (Total Purge) 80% = 18.34

Time	Temp CY °F	pH	Cond (mS / μ S)	Turbidity (NTU)	Purge Rate (gal or mL/min)	Volume Removed (gal / L)	Notes
952	19.9	7.2	1027	39	-	18	
1000	19.9	7.1	942	35	-	36	
1007	19.9	7.1	938	34	-	54	

Did well dewater? YES NO Total volume removed: 54 (gal / L)

Sample method: Disp. Bailer	Ded. Tubing	New Tubing	Ext. Port	Other:					
Sample date: 10/28/10	Sample time: 1010		DTW at sample: 17.21						
Sample ID: HW-3R	Lab: Kiff	Number of bottles: 10							
Analysis: See COC									
Equipment blank ID @	Field blank ID @								
Duplicate ID:	Pre-purge DO: 0.10	Post purge DO:							
Fe2+:	Pre-purge ORP: ~100	Post purge ORP:							
NAPL depth:	Volume of NAPL:		Volume removed: ml						

Purging And Sampling Data Sheet

Purging And Sampling Data Sheet

Job#: M2-101026	Sampler: B Myers			Client: Orion
Well ID: MW-5	Date: 10/27/10	Site: San Lorenzo		
Well diam: 1/4" 1" 2" 3" 4" 6" Other:	DTW: 17.08 Total Depth: 29.30			
Purge equip: ES - diam: Bladder Peri Waterra Positive Air Displacement Ext. System	disp bailer teflon bailer other:	Tubing: OD: New Dedicated NA		
Purge method: 3-5 Case Volume Micro/Low-Flow Extraction Other:				
Pump depth/ intake:	Multippliers: 1"= 0.04 2"= 0.16 3"= 0.37 4"= 0.65 5"= 1.02 6"= 1.47 Radius ² X 0.163			
(TD - DTW X Multiplier = 1 Volume	80% Recovery (TD - DTW X 0.20 + DTW)			
1 Volume = 2 x 3 = 6 (Total Purge)	80% = 1.952			

Time	Temp (°C °F)	pH	Cond (mS µS)	Turbidity (NTU)	Purge Rate (gal or mL / min)	Volume Removed (gal / L)	Notes
1125	20.7	7.0	559	138		2	
1127	20.7	7.0	583	126		4	
1128	20.7	7.0	623	124		6	

Did well dewater? YES NO Total volume removed: 6 (gal / L)

Sample method: Disp Bailer Ded. Tubing New Tubing Ext. Port Other:

Sample date: 10/27/10 Sample time: 11:35 DTW at sample: 17.34

Sample ID: MW-5 Lab: Kiff Number of bottles: 3

Analysis: See COC

Equipment blank ID @	Field blank ID @	
Duplicate ID:	Pre-purge DO: 3.48	Post purge DO:
Fe ²⁺ :	Pre-purge ORP: 34	Post purge ORP:
NAPL depth:	Volume of NAPL:	Volume removed: ml

Purging And Sampling Data Sheet

Job#: M2-101026	Sampler: B Myers			Client: Orion			
Well ID: Hwlo	Date: 10/27/10		Site: San Lorenzo				
Well diam: 1/4" 1" 2" 3" 4" 6" Other:	DTW: 15.78 Total Depth: 28.60						
Purge equip: ES - diam: Bladder Peri Waterra Positive Air Displacement Ext. System disp bailer teflon bailer other: Tubing: OD: New Dedicated NA							
Purge method: 3-5 Case Volume Micro/Low-Flow Extraction Other:							
Pump depth/ intake: Multipliers: 1"= 0.04 2"= 0.16 3"= 0.37 4"= 0.65 5"= 1.02 6"= 1.47 Radius ² X 0.163							
(TD - DTW X Multiplier = 1 Volume	80% Recovery (TD - DTW X 0.20 + DTW)						
1 Volume = 2 x 3 = 6 (Total Purge)	80% = 18.34						
Time	Temp (°C °F)	pH	Cond (mS / μS)	Turbidity (NTU)	Purge Rate (gal or mL/min)	Volume Removed (gal / L)	Notes
747	19.0	6.9	904	731		2	
749	20.0	7.0	891	>1000		4	
751	20.1	7.0	8601	>1000		6	
Did well dewater? YES NO	Total volume removed: 6 (gal / L)						
Sample method: Disp Bailier Ded. Tubing New Tubing Ext. Port Other:							
Sample date: 10/28/10	Sample time: 755			DTW at sample: 17.11			
Sample ID: Hwlo	Lab: Kiff			Number of bottles: 10			
Analysis: See COC							
Equipment blank ID @	Field blank ID @						
Duplicate ID:	Pre-purge DO: 1.37			Post purge DO:			
Fe2+:	Pre-purge ORP: 132			Post purge ORP:			
NAPL depth:	Volume of NAPL:			Volume removed: ml			

Purging And Sampling Data Sheet

Job#: M2-101026	Sampler: B Myers		Client: Orion				
Well ID: MW-7	Date: 10/27/10		Site: San Lorenzo				
Well diam: 1/4" 1" 2" 3" 4" 6" Other:	DTW: 15.21 Total Depth: 24.20						
Purge equip: ES - diam: Bladder Peri Waterra Positive Air Displacement Ext. System							
disp bailer teflon bailer other:	Tubing: OD: New Dedicated NA						
Purge method: 3-5 Case Volume Micro/Low-Flow Extraction Other:							
Pump depth/ intake:		Multipliers: 1" = 0.04 2" = 0.16 3" = 0.37 4" = 0.65 5" = 1.02 6" = 1.47 Radius ² X 0.163					
(TD - DTW X Multiplier = 1 Volume			80% Recovery (TD - DTW X 0.20 + DTW)				

$$1 \text{ Volume} = \underline{1.4} \times 3 = \underline{4.2} \quad (\text{Total Purge}) \qquad 80\% = \underline{17.00}$$

Time	Temp (°C / °F)	pH	Cond (mS / µS)	Turbidity (NTU)	Purge Rate (gal or mL/min)	Volume Removed (gal / L)	Notes
12/3	20.9	6.6	874	49		1.4	
12/5	20.8	6.8	879	39		2.8	
12/7	20.7	6.8	871	34		4.2	

Did well dewater? YES NO Total volume removed: 4.2 (gal / L)

Sample method Disp Bailer	Ded. Tubing	New Tubing	Ext. Port	Other:
Sample date: <u>10/27/10</u>	Sample time: <u>12:20</u>		DTW at sample: <u>15.49</u>	
Sample ID: MW-7	Lab: Kiff		Number of bottles: <u>3</u>	
Analysis: See COC				
Equipment blank ID	@	Field blank ID	@	
Duplicate ID:	Pre-purge DO: <u>1.14</u>		Post purge DO:	
Fe2+:	Pre-purge ORP: <u>70</u>		Post purge ORP:	
NAPL depth:	Volume of NAPL:		Volume removed: ml	

Purging And Sampling Data Sheet

Job#:	Sampler:	B Myers			Client:			Orion
Well ID:	Date:	10/27/10			Site:			San Lorenzo
Well diam: 1/4" 1" 2" 3" 4" 6" Other:			DTW: 16.70 Total Depth: 23.07					
Purge equip: <input checked="" type="checkbox"/> ES diam: <input checked="" type="checkbox"/> Bladder <input checked="" type="checkbox"/> Peri <input type="checkbox"/> Waterra <input type="checkbox"/> Positive Air Displacement <input type="checkbox"/> Ext. System <input checked="" type="checkbox"/> disp bailer <input type="checkbox"/> teflon bailer <input type="checkbox"/> other: <input checked="" type="checkbox"/> Tubing: OD: New Dedicated NA								
Purge method: <input checked="" type="checkbox"/> 3-5 Case Volume <input type="checkbox"/> Micro/Low-Flow <input type="checkbox"/> Extraction <input type="checkbox"/> Other:								
Pump depth/ intake:		Multipliers: 1" = 0.04 2" = 0.16 3" = 0.37 4" = 0.65 5" = 1.02 6" = 1.47 Radius ² X 0.163						
(TD - DTW X Multiplier = 1 Volume)				80% Recovery (TD - DTW X 0.20 + DTW)				

1 Volume = 1.1 x 3 = 3.3 (Total Purge) 80% = 17.58

Time	Temp ([°] C / [°] F)	pH	Cond (ms / µS)	Turbidity (NTU)	Purge Rate (gal or ml/min)	Volume Removed (gal / L)	Notes
1159	19.7	6.8	601	83	-	1.1	
1201	20.0	6.7	597	79	-	2.2	
1203	20.0	6.7	593	74	-	3.3	

Did well dewater? YES NO Total volume removed: 3.3 (gal / L)

Sample method: Disp Bailer Ded. Tubing New Tubing Ext. Port Other:

Sample date: 10/27/10 Sample time: 1205 DTW at sample: 16.45

Sample ID: 1W-8 Lab: Kiff Number of bottles: 3

Analysis: See COC

Equipment blank ID @	Field blank ID @	
Duplicate ID:	Pre-purge DO: <u>1.1</u>	Post purge DO:
Fe ²⁺ :	Pre-purge ORP: <u>666</u>	Post purge ORP:
NAPL depth:	Volume of NAPL:	Volume removed: ml

Purging And Sampling Data Sheet

Job#: M2-101026	Sampler: B Myers			Client: Orion			
Well ID: MW-9	Date: 10/27/10		Site: San Lorenzo				
Well diam: 1/4" 1" 2" 3" 4" 6" Other:	DTW: 18.40 Total Depth: 23.70						
Purge equip: ES - diam: Bladder Peri Waterra		Positive Air Displacement Ext. System					
(disp bailer) teflon bailer other:	Tubing: OD: New Dedicated NA						
Purge method: 3-5 Case Volume		Micro/Low-Flow Extraction Other:					
Pump depth/ intake:		Multipliers: 1"= 0.04 2"= 0.16 3"= 0.37 4"= 0.65 5"= 1.02 6"= 1.47 Radius ² X 0.163					
(TD - DTW X Multiplier = 1 Volume)			80% Recovery (TD - DTW X 0.20 + DTW)				
1 Volume = 0.8 x 3 = 2.4 (Total Purge)						80% = 19.46	
Time	Temp (°C °F)	pH	Cond (mS μS)	Turbidity (NTU)	Purge Rate (gal or mL / min)	Volume Removed (gal / L)	Notes
807	18.7	6.8	635	47		0.8	
808	18.9	6.5	632	47		1.6	
810	19.0	6.5	632	41		2.4	
Did well dewater? YES NO			Total volume removed: 2.5 (gal / L)				
Sample method: Disp Bailer Ded. Tubing New Tubing Ext. Port Other:							
Sample date: 10/28/10		Sample time: 815		DTW at sample: 18.63			
Sample ID: MW-9			Lab: Kiff			Number of bottles: 10	
Analysis: See COC							
Equipment blank ID @		Field blank ID @					
Duplicate ID:		Pre-purge DO: 0.52		Post purge DO:			
Fe2+:		Pre-purge ORP: 25		Post purge ORP:			
NAPL depth:		Volume of NAPL:		Volume removed: ml			

Purging And Sampling Data Sheet

Job#: M2-101026	Sampler: B Myers	Client: Orion					
Well ID: 4W-10	Date: 10/27/10	Site: San Lorenzo					
Well diam: 1/4" 1" 2" 3" 4" 6" Other:	DTW: 16.20 Total Depth: 28.70						
Purge equip: ES - diam: Bladder Peri Waterra Positive Air Displacement Ext. System disp bailer teflon bailer other: Tubing: OD: New Dedicated NA							
Purge method: 3-5 Case Volume Micro/Low-Flow Extraction Other:							
Pump depth/ intake: Multipliers: 1" = 0.04 2" = 0.16 3" = 0.37 4" = 0.65 5" = 1.02 6" = 1.47 Radius ² X 0.163							
(TD - DTW X Multiplier = 1 Volume) 80% Recovery (TD - DTW X 0.20 + DTW)							
1 Volume = <u>2</u> x 3 = <u>6</u> (Total Purge) 80% = <u>18.70</u>							
Time	Temp (C/F)	pH	Cond (mS / μ S)	Turbidity (NTU)	Purge Rate (gal or mL/min)	Volume Removed (gal / L)	Notes
1041	19.6	7.1	(63)	55	-	2	
1043	19.7	7.1	(63)	41	-	4	
1045	19.7	7.1	(632)	59	-	6	
Did well dewater? YES <u>NO</u>			Total volume removed: <u>6</u> (gal / L)				
Sample method: Disp Bailier			Ded. Tubing	New Tubing	Ext. Port	Other:	
Sample date: 10/28/10			Sample time: 10:50	DTW at sample: 16.79			
Sample ID: 4W-10		Lab: Kiff				Number of bottles:	10
Analysis: See COC							
Equipment blank ID @		Field blank ID @					
Duplicate ID:			Pre-purge DO: <u>0.75</u>			Post purge DO:	
Fe ²⁺ :			Pre-purge ORP: <u>-161</u>			Post purge ORP:	
NAPL depth:		Volume of NAPL:			Volume removed: ml		

Purging And Sampling Data Sheet

Job#: M2-101026	Sampler: B Myers	Client: Orion
Well ID: MW11	Date: 10/27/10	Site: San Lorenzo
Well diam: 1/4" 1" 2" 3" 4" 6" Other:	DTW: 19.10 Total Depth: 29.40	
Purge equip: ES - diam: Bladder Peri Waterra Positive Air Displacement Ext. System		
disp bailer teflon bailer other:	Tubing: OD: New Dedicated NA	
Purge method: 3-5 Case Volume	Micro/Low-Flow Extraction Other:	
Pump depth/ intake:	Multipliers: 1" = 0.04 2" = 0.16 3" = 0.37 4" = 0.65 5" = 1.02 6" = 1.47 Radius ² X 0.163	
(TD - DTW X Multiplier = 1 Volume	80% Recovery (TD - DTW X 0.20 + DTW)	

1 Volume = 1.6 x 3 = 4.8 (Total Purge) 80% = 3.84

Time	Temp (C/F)	pH	Cond (mS /uS)	Turbidity (NTU)	Purge Rate (gal or mL/min)	Volume Removed (gal / L)	Notes
1024	18.8	7.2	634	42	-	1.6	
1025	18.9	7.2	613	40	-	3.2	
1027	19.0	7.2	611	37	-	5	

Did well dewater? YES NO Total volume removed: 5 (gal / L)

Sample method: Disp Bailer Ded. Tubing New Tubing Ext. Port Other:

Sample date: 10/28/10 Sample time: 1030 DTW at sample: 19.80

Sample ID: MW11 Lab: Kiff Number of bottles: 10

Analysis: See COC

Equipment blank ID @	Field blank ID @	
Duplicate ID:	Pre-purge DO: 0.99	Post purge DO:
Fe2 ⁺ :	Pre-purge ORP: -75	Post purge ORP:
NAPL depth:	Volume of NAPL:	Volume removed: ml

Purging And Sampling Data Sheet

Job#: M2-101026	Sampler: B Myers	Client: Orion
Well ID: Mw12	Date: 10/27/10	Site: San Lorenzo
Well diam: 1/4" 1" 2" 3" 4" 6" Other:	DTW: 18.30 Total Depth: 28.21	
Purge equip: ES - diam: Bladder Peri Waterra Positive Air Displacement Ext. System		
disp bailer teflon bailer other: Tubing: OD: New Dedicated NA		
Purge method: 3-5 Case Volume Micro/Low-Flow Extraction Other:		
Pump depth/ intake:	Multipliers: 1" = 0.04 2" = 0.16 3" = 0.37 4" = 0.65 5" = 1.02 6" = 1.47 Radius ² X 0.163	
(TD - DTW X Multiplier = 1 Volume)		80% Recovery (TD - DTW X 0.20 + DTW)

1 Volume = 1.6 X 3 = 4.8 (Total Purge) 80% = 20.78

Time	Temp (°C/°F)	pH	Cond (mS/µS)	Turbidity (NTU)	Purge Rate (gal or ml/min)	Volume Removed (gal / L)	Notes
1144	18.4	7.2	654	109		1.6	
1146	18.4	7.4	656	89		3.2	
1148	18.2	7.4	656	77		4.8	

Did well dewater? YES **NO** Total volume removed: 5 (gal / L)

Sample method: Disp Bailer Ded. Tubing New Tubing Ext. Port Other:

Sample date: 10/27/10 Sample time: 1150 DTW at sample: 18.53

Sample ID: Mw12 Lab: Kiff Number of bottles: 3

Analysis: See COC

Equipment blank ID @	Field blank ID @	
Duplicate ID:	Pre-purge DO: <u>0.94</u>	Post purge DO:
Fe ²⁺ :	Pre-purge ORP: <u>47</u>	Post purge ORP:
NAPL depth:	Volume of NAPL:	Volume removed: ml

Purging And Sampling Data Sheet

Job#: M2-101026	Sampler: B Myers			Client: Orion
Well ID: RW-1	Date: 10/27/10	Site: San Lorenzo		
Well diam: 1/4" 1" 2" 3" 4" 6" Other:	DTW: 16.70 Total Depth: 35.51			
Purge equip: ES - diam: Bladder Peri Waterra Positive Air Displacement Ext. System				
disp bailer teflon bailer other: Tubing: OD: New Dedicated NA				
Purge method: 3-5 Case Volume Micro/Low-Flow Extraction Other:				
Pump depth/ intake:	Multipliers: 1" = 0.04 2" = 0.16 3" = 0.37 4" = 0.65 5" = 1.02 6" = 1.47 Radius ² X 0.163			
(TD - DTW X Multiplier = 1 Volume	80% Recovery (TD - DTW X 0.20 + DTW)			

1 Volume = 27.7 x 3 = 83 (Total Purge) 80% = 20.46

Time	Temp (°C / °F)	pH	Cond (mS / μS)	Turbidity (NTU)	Purge Rate (gal or mL / min)	Volume Removed (gal / L)	Notes
837	19.4	6.6	830	79	-	28	
901 848	20.0	7.1	825	459	-	56	
912 857	19.6	7.1	829	55	-	83	

Did well dewater? YES NO Total volume removed: 83 (gal / L)

Sample method: Disp Baile Ded. Tubing New Tubing Ext. Port Other:

Sample date: 10/28/10 Sample time: 900 915 DTW at sample: 18.11

Sample ID: RW-1 Lab: Kiff Number of bottles: 3

Analysis: See COC

Equipment blank ID	@	Field blank ID	@
Duplicate ID:		Pre-purge DO:	1,240 Post purge DO:
Fe2+:		Pre-purge ORP:	77 Post purge ORP:
NAPL depth:	Volume of NAPL:		Volume removed: ml

Purging And Sampling Data Sheet

Job#: M2-101026	Sampler: B Myers	Client: Orion
Well ID: RW-2	Date: 10/27/10	Site: San Lorenzo
Well diam: 1/4" 1" 2" 3" 4" 6" Other:	DTW: 17.17 Total Depth: 26.55	
Purge equip: ES - diam: Bladder Peri Waterra Positive Air Displacement Ext. System disp bailer teflon bailer other:	Tubing: OD: New Dedicated NA	
Purge method: 3-5 Case Volume Micro/Low-Flow Extraction Other:		
Pump depth/ intake:	Multipliers: 1"= 0.04 2"= 0.16 3"= 0.37 4"= 0.65 5"= 1.02 6"= 1.47 Radius ² X 0.163	
(TD - DTW X Multiplier = 1 Volume	80% Recovery (TD - DTW X 0.20 + DTW)	

1 Volume = 13.0 x 3 = 41.4 (Total Purge) 80% = 19.05

Time	Temp (C/F)	pH	Cond (mS/µS)	Turbidity (NTU)	Purge Rate (gal or mL/min)	Volume Removed (gal / L)	Notes
922	19.7	7.1	828	57	-	14	
928	19.4	7.2	775	51	-	28	
934	19.8	7.2	760	49	-	41.5	

Did well dewater? YES NO Total volume removed: 41.5 (gal / L)

Sample method: Disp. Bailer Ded. Tubing New Tubing Ext. Port Other:

Sample date: 10/28/10 Sample time: 940 DTW at sample: 18.01

Sample ID: RW-2 Lab: Kiff Number of bottles: 10

Analysis: See COC

Equipment blank ID @ Field blank ID @

Duplicate ID: Pre-purge DO: 0.16 Post purge DO:

Fe²⁺: Pre-purge ORP: -15 Post purge ORP:

NAPL depth: Volume of NAPL: Volume removed: ml

Purging And Sampling Data Sheet

Job#: M2-101026	Sampler: B Myers	Client: Orion
Well ID: PT-1	Date: 10/27/10	Site: San Lorenzo
Well diam: 1/4" 1" 2" 3" 4" 6" Other:		DTW: 17.27 Total Depth: 29.71
Purge equip: ES - diam: Bladder Peri Waterra Positive Air Displacement Ext. System disp bailer teflon bailer other: Tubing: OD: New Dedicated NA		
Purge method: 3-5 Case Volume Micro/Low-Flow Extraction Other:		
Pump depth/ intake:	Multipliers: 1" = 0.04 2" = 0.16 3" = 0.37 4" = 0.65 5" = 1.02 6" = 1.47 Radius ² X 0.163	
(TD - DTW X Multiplier = 1 Volume)		80% Recovery (TD - DTW X 0.20 + DTW)

1 Volume = 8 x 3 = 24 (Total Purge) 80% = 19.76

Time	Temp (°C / °F)	pH	Cond (mS / μS)	Turbidity (NTU)	Purge Rate (gal or mL / min)	Volume Removed (gal / L)	Notes
732	20.2	7.3	768	41	-	8	
735	20.3	7.1	797	39	-	16	
<i>well dewatered @ 19 gallons</i>							
<u>845</u>							

Did well dewater? YES NO Total volume removed: 19 (gal / L)

Sample method: Disp Bailer Ded. Tubing New Tubing Ext. Port Other:

Sample date: 10/28/10 Sample time: 845 DTW at sample: 19.30

Sample ID: PT-1 Lab: Kiff Number of bottles: 10

Analysis: See COC

Equipment blank ID	@	Field blank ID	@
Duplicate ID:		Pre-purge DO:	0.81
Fe ²⁺ :		Pre-purge ORP:	130
NAPL depth:		Volume of NAPL:	Volume removed: ml

ATTACHMENT C

HISTORICAL GROUNDWATER ELEVATIONS

TABLE C-1

HISTORICAL WELL AND GROUNDWATER ELEVATIONS
TESORO - SAN LORENZO, 67107

Well No.	Date of Measurement	Depth to Water (feet below casing)	PVC Casing Elevation ^(a) (feet MSL)	Water Table Elevation ^(b) (feet MSL)
MW-1	2/18/92	16.42	43.67	27.25
	5/14/92	17.28		26.39
	5/15/92	NM ^(c)		-- ^(d)
	8/27/92	19.48		24.19
	8/28/92	NM		--
	11/19/92	20.57		23.10
	2/3/93	15.91		27.76
	6/23/93	16.21		27.46
	9/22/93	17.85		25.82
	1/24/94	17.91		25.76
	4/7/94	16.94		26.73
	6/7/94	17.20		26.47
	9/28/94	18.73		24.94
	12/14/94	17.56		26.11
	3/15/95	14.92		28.75
	6/13/95	15.38		28.29
	9/28/95	16.75		26.92
	12/28/95	17.28		26.39
	1/30/96	NM		--
	3/12/96	14.13		29.54
	9/11/96	14.90		28.77
	10/2/96	16.31		27.36
	1/28/97	12.99		30.68
	5/20/97	15.28		28.39
	8/18/97	16.74		26.93
	9/29/97	NM		--
	11/5/97	17.45		26.22
	3/31/98	12.47		31.20
	5/26/98	13.69		29.98
	5/28/98	NM		--
	8/19/98	14.58		29.09
	11/17/98	15.39		28.28

TABLE C-1

HISTORICAL WELL AND GROUNDWATER ELEVATIONS
TESORO - SAN LORENZO, 67107

Well No.	Date of Measurement	Depth to Water (feet below casing)	PVC Casing Elevation ^(a) (feet MSL)	Water Table Elevation ^(b) (feet MSL)
MW-1 (cont.)	2/18/99	13.52	43.67 45.98	30.15
	6/24/99	15.02		28.65
	8/30/99	15.87		27.80
	11/9/99	16.65		27.02
	3/22/00	13.96		29.71
	6/12/00	15.23		28.44
	11/15/00	17.05		26.62
	2/26/01	15.46		28.21
	5/21/01	16.22		27.45
	9/5/01	11.25		32.42
	11/7/01	18.01		25.66
	2/11/02	15.77		30.21
	6/3/02	16.35		29.63
	8/6/02	17.00		28.98
	11/14/02	16.93		29.05
	2/20/03	15.74		30.24
	5/15/03	15.60		30.38
	7/31/03	16.60		29.38
	10/28/03	17.35		28.63
	2/28/04	14.65		31.33
	4/16/04	15.44		30.54
	7/16/04	15.99		29.99
	11/13/04	15.98		30.00
	2/4/05	15.27		30.71
	4/13/05	14.31		31.67
	8/10/05	15.77		30.21
	11/5/05	16.25		29.73
	1/30/06	14.67		31.31
	4/28/06	13.70		32.28
	8/15/06	15.52		30.46
	10/26/06	16.59		29.39
	2/2/07	16.57		29.41

TABLE C-1

HISTORICAL WELL AND GROUNDWATER ELEVATIONS
TESORO - SAN LORENZO, 67107

Well No.	Date of Measurement	Depth to Water (feet below casing)	PVC Casing Elevation ^(a) (feet MSL)	Water Table Elevation ^(b) (feet MSL)
MW-1 (cont.)	4/30/07	16.17	45.98	29.81
	7/18/07	16.90		29.08
	10/30/07	17.34		28.64
	1/28/08	15.61		30.37
	3/14/08	15.45		30.53
	5/13/08	16.12		29.86
	7/16/08	16.65		29.33
	9/5/08	17.31		29.05
	10/8/08	17.52		28.84
	1/29/09	17.22		29.14
	4/14/09	15.96		30.40
	7/1/09	16.88		29.48
	10/6/09	17.90		28.46
	2/17/10	15.43		30.93
	4/13/10	14.68		31.68
MW-2	7/6/10	15.82	46.36	30.54
	10/27/10	17.03		29.33
	2/18/92	16.65		26.44
	5/14/92	16.64		26.45
	8/27/92	16.61		26.48
	11/19/92	19.91		23.18
	2/3/93	15.23		27.86
	6/23/93	15.55		27.54
	9/22/93	17.22		25.87
	1/24/94	17.20		25.89
	4/7/94	16.26		26.83
	6/7/94	16.46		26.63
	9/28/94	18.06		25.03
	12/14/94	16.86		26.23
	3/15/95	14.08		29.01
	6/13/95	14.67		28.42
	9/28/95	16.07		27.02
	12/28/95	16.46		26.63

TABLE C-1

HISTORICAL WELL AND GROUNDWATER ELEVATIONS
TESORO - SAN LORENZO, 67107

Well No.	Date of Measurement	Depth to Water (feet below casing)	PVC Casing Elevation ^(a) (feet MSL)	Water Table Elevation ^(b) (feet MSL)
MW-2 (cont.)	3/12/96	13.11	43.09 45.23	29.98
	6/13/96	14.14		28.95
	10/2/96	15.71		27.38
	1/28/97	12.05		31.04
	5/20/97	14.65		28.44
	8/18/97	16.00		27.09
	9/29/97	NM		--
	11/5/97	16.75		26.34
	3/31/98	11.54		31.55
	5/26/98	12.78		30.31
	5/28/98	NM		--
	8/19/98	14.40		28.39
	11/17/98	15.18		27.63
	2/18/99	14.07		27.06
	6/24/99	14.70		30.04
	8/30/99	15.46		28.59
	11/9/99	16.03		26.81
	3/22/00	13.05		28.11
	6/12/00	14.50		27.64
	11/15/00	16.28		27.92
	2/26/01	14.98		26.04
	5/21/01	15.45		29.80
	9/5/01	15.17		28.25
	11/7/01	17.05		28.24
	2/11/02	13.29		31.94
	6/3/02	14.84		30.39
	8/6/02	14.85		30.38
	11/14/02	15.35		29.88
	2/20/03	14.08		31.15
	5/15/03	14.55		30.68
	7/31/03	15.30		29.93
	10/28/03	14.93		30.30

TABLE C-1

HISTORICAL WELL AND GROUNDWATER ELEVATIONS
TESORO - SAN LORENZO, 67107

Well No.	Date of Measurement	Depth to Water (feet below casing)	PVC Casing Elevation ^(a) (feet MSL)	Water Table Elevation ^(b) (feet MSL)
MW-2 (cont.)	2/28/04	13.56	45.23	31.67
	4/16/04	14.40		30.83
	7/16/04	15.03		30.20
	11/13/04	15.00		30.23
	2/4/05	14.26		30.97
	4/13/05	13.19		32.04
	8/10/05	14.84		30.39
	11/5/05	15.39		29.84
	1/30/06	13.54		31.69
	4/28/06	12.55		32.68
	8/15/06	14.57		30.66
	10/26/06	15.54		29.69
	2/2/07	15.60		29.63
	4/30/07	15.19		30.04
	7/18/07	15.96		29.27
	10/30/07	16.41		28.82
	1/28/08	14.63		30.60
	3/14/08	14.57		30.66
	5/13/08	15.12		30.11
	7/16/08	15.89		29.34
	9/5/08	16.44		29.17
	10/8/08	16.75		28.86
	1/29/09	16.35		29.26
	4/14/09	15.05		30.56
	7/1/09	16.02		29.59
	10/6/09	17.10		28.51
	2/17/10	14.50		31.11
	4/13/10	13.55		32.06
	7/6/10	14.96		30.65
	10/27/10	16.18		29.43
MW-3	2/18/92	16.89	43.10	26.21
	5/14/92	16.60		26.50
	5/15/92	NM		--

TABLE C-1

HISTORICAL WELL AND GROUNDWATER ELEVATIONS
TESORO - SAN LORENZO, 67107

Well No.	Date of Measurement	Depth to Water (feet below casing)	PVC Casing Elevation ^(a) (feet MSL)	Water Table Elevation ^(b) (feet MSL)
MW-3 (cont.)	8/27/92	18.96	43.10	24.14
	8/28/92	NM		--
	11/18/92	20.38		22.72
	11/19/92	NM		--
	2/3/93	15.43		27.67
	6/23/93	15.67		27.43
	9/22/93	17.20		25.90
	1/24/94	17.35		25.75
	4/7/94	14.48		28.62
	6/7/94	13.37		29.73
	9/28/94	18.05		25.05
	12/14/94	16.92		26.18
	3/15/95	14.22		28.88
	6/13/95	14.49		28.61
	9/28/95	15.17		27.93
	12/28/95	15.45		27.65
	1/30/96	NM		--
	3/12/96	11.35		31.75
	6/11/96	Dry ^(e)		--
	10/2/96	Dry ^(e)		--
	1/28/97	Dry ^(e)		--
	5/20/97	Dry ^(e)		--
	7/10/97	NM		--
	8/18/97	16.05		27.05
	9/29/97	NM		--
	11/5/97	16.78		26.32
	3/31/98	11.55		31.55
	5/26/98	12.80		30.30
	5/28/98	NM		--
	8/19/98	14.27		28.83
	11/17/98	15.11		27.99
	2/18/99	13.30		29.80

TABLE C-1

HISTORICAL WELL AND GROUNDWATER ELEVATIONS
TESORO - SAN LORENZO, 67107

Well No.	Date of Measurement	Depth to Water (feet below casing)	PVC Casing Elevation ^(a) (feet MSL)	Water Table Elevation ^(b) (feet MSL)
MW-3 (cont.)	6/24/99	14.44	43.10	28.66
	8/30/99	15.05		28.05
	11/9/99	15.72		27.38
	3/22/00	13.21		29.89
	6/12/00	14.31		28.79
	11/15/00	16.13		26.97
	2/26/01	14.48		28.62
	5/21/01	15.30		27.80
	9/5/01	16.10		27.00
	11/7/01	17.40		25.70
	2/11/02	13.56		31.65
	6/3/02	15.54		29.67
	8/6/02	16.20		29.01
	11/14/02	16.50		28.71
	2/20/03	14.99		30.22
	5/15/03	14.96		30.25
	7/31/03	15.40		29.81
	10/28/03	16.20		29.01
	2/28/04	13.86		31.35
	4/16/04	14.89		30.32
	7/16/04	15.42		29.79
MW-3R	11/13/04	14.97	45.21	30.24
	2/4/05	14.22		30.99
	4/13/05	13.44		31.77
	8/10/05	14.80		30.41
	11/5/05	15.22		29.99
	1/30/06	13.69		31.52
	4/28/06	12.68		32.53
	8/15/06	14.54		30.67
	10/26/06	23.85		21.36
	2/2/07	21.96		23.25
	4/30/07	19.40		25.81

TABLE C-1

HISTORICAL WELL AND GROUNDWATER ELEVATIONS
TESORO - SAN LORENZO, 67107

Well No.	Date of Measurement	Depth to Water (feet below casing)	PVC Casing Elevation ^(a) (feet MSL)	Water Table Elevation ^(b) (feet MSL)
MW-3R (cont.)	7/18/07	23.11	45.21	22.10
	10/30/07	22.71		22.50
	1/28/08	16.78		28.43
	3/14/08	14.38		30.83
	5/13/08	15.07		30.14
	7/16/08	15.63		29.58
	9/5/08	16.20		28.96
	10/8/08	16.41		28.75
	1/29/09	16.11		29.05
	4/14/09	14.86		30.30
	7/1/09	15.73		29.43
	10/6/09	16.69		28.47
	2/17/10	14.30		30.86
	4/13/10	13.50		31.66
	7/6/10	14.70		30.51
	10/27/10	15.90		29.26
MW-4	2/18/92	18.51	44.66	26.15
	5/14/92	18.22		26.44
	8/27/92	20.47		24.19
	8/28/92	NM		--
	11/19/92	21.58		23.08
	2/3/93	16.98		27.68
	6/23/93	17.23		27.43
	9/22/93	18.83		25.83
	1/24/94	18.86		25.80
	4/7/94	17.90		26.76
	6/7/94	18.08		26.58
	9/28/94	19.70		24.96
	12/14/94	18.55		26.11
	3/15/95	16.14		28.52
	6/13/95	16.41		28.25
	9/28/95	17.88		26.78
	12/28/95	17.81		26.85

TABLE C-1

HISTORICAL WELL AND GROUNDWATER ELEVATIONS
TESORO - SAN LORENZO, 67107

Well No.	Date of Measurement	Depth to Water (feet below casing)	PVC Casing Elevation ^(a) (feet MSL)	Water Table Elevation ^(b) (feet MSL)
MW-4 (cont.)	3/12/96	14.77	44.66 46.98	29.89
	6/11/96	15.88		28.78
	10/2/96	17.40		27.26
	1/28/97	14.11		30.55
	5/20/97	16.24		28.42
	8/18/97	17.59		27.07
	9/29/97	NM		--
	11/5/97	18.24		26.42
	3/31/98	13.61		31.05
	5/26/98	14.78		29.88
	5/28/98	NM		--
	8/19/98	16.15		28.51
	11/17/98	16.93		27.73
	2/18/99	15.30		29.36
	6/24/99	16.35		28.31
	8/30/99	17.12		27.54
	11/9/99	17.60		27.06
	3/22/00	14.98		29.68
	6/12/00	16.26		28.40
	11/15/00	17.98		26.68
	2/26/01	16.31		28.35
	5/21/01	17.15		27.51
	9/5/01	18.22		26.44
	11/7/01	19.01		25.65
	2/11/02	16.68		30.30
	6/3/02	17.29		29.69
	8/6/02	17.92		29.06
	11/14/02	17.92		29.06
	2/20/03	16.72		30.26
	5/15/03	16.51		30.47
	7/31/03	17.41		29.57
	10/28/03	18.30		28.68

TABLE C-1

HISTORICAL WELL AND GROUNDWATER ELEVATIONS
TESORO - SAN LORENZO, 67107

Well No.	Date of Measurement	Depth to Water (feet below casing)	PVC Casing Elevation ^(a) (feet MSL)	Water Table Elevation ^(b) (feet MSL)
MW-4 (cont.)	2/28/04	15.82	46.98 47.36	31.16
	4/16/04	16.42		30.56
	7/16/04	16.94		30.04
	11/13/04	17.00		29.98
	2/4/05	16.25		30.73
	4/13/05	15.33		31.65
	8/10/05	16.74		30.24
	11/5/05	17.23		29.75
	1/30/06	15.62		31.36
	4/28/06	14.71		32.27
	8/15/06	16.46		30.52
	10/26/06	17.45		29.53
	2/2/07	17.52		29.46
	4/30/07	17.10		29.88
	7/18/07	17.81		29.17
	10/30/07	18.25		28.73
	1/28/08	16.65		30.33
	3/14/08	16.48		30.50
	5/13/08	17.11		29.87
	7/16/08	17.63		29.35
	9/5/08	18.29		29.07
	10/8/08	18.50		28.86
	1/29/09	18.20		29.16
	4/14/09	17.02		30.34
	7/1/09	17.86		29.50
	10/6/09	18.90		28.46
	2/17/10	16.49		30.87
	4/13/10	15.80		31.56
	7/6/10	16.82		30.54
	10/27/10	18.02		29.34
MW-5	2/18/92	17.37	43.79	26.42
	5/14/92	17.29		26.50
	8/27/92	22.18		21.61

TABLE C-1

HISTORICAL WELL AND GROUNDWATER ELEVATIONS
TESORO - SAN LORENZO, 67107

Well No.	Date of Measurement	Depth to Water (feet below casing)	PVC Casing Elevation ^(a) (feet MSL)	Water Table Elevation ^(b) (feet MSL)
MW-5 (cont.)	11/19/92	20.68	43.79	23.11
	2/3/93	15.91		27.88
	6/23/93	16.24		27.55
	9/22/93	17.93		25.86
	1/24/94	17.82		25.97
	4/7/94	16.91		26.88
	6/7/94	17.10		26.69
	9/28/94	18.73		25.06
	12/14/94	17.53		26.26
	3/15/95	14.96		28.83
	6/13/95	15.30		28.49
	9/28/95	16.74		27.05
	12/28/95	15.10		28.69
	3/12/96	13.67		30.12
	6/11/96	14.88		28.91
	10/2/96	16.42		27.37
	1/28/97	12.83		30.96
	5/20/97	15.33		28.46
	8/18/97	16.69		27.10
	9/29/97	NM		--
	11/5/97	17.37		26.42
	3/31/98	12.40		31.39
	5/26/98	13.62		30.17
	5/28/98	NM		--
	8/19/98	15.19		28.60
	11/17/98	15.89		27.90
	2/18/99	14.23		29.56
	6/24/99	15.29		28.50
	8/30/99	16.07		27.72
	11/9/99	16.61		27.18
	3/22/00	13.81		29.98
	6/12/00	15.08		28.71

TABLE C-1

HISTORICAL WELL AND GROUNDWATER ELEVATIONS
TESORO - SAN LORENZO, 67107

Well No.	Date of Measurement	Depth to Water (feet below casing)	PVC Casing Elevation ^(a) (feet MSL)	Water Table Elevation ^(b) (feet MSL)
MW-5	11/15/00	16.71	43.79	27.08
(cont.)	2/26/01	15.05		28.74
	5/21/01	15.91		27.88
	9/5/01	16.99		26.80
	11/7/01	17.51		26.28
	2/11/02	14.31	46.12	31.81
	6/3/02	14.96		31.16
	8/6/02	15.65		30.47
	11/14/02	15.69		30.43
	2/20/03	14.19		31.93
	5/15/03	15.44		30.68
	7/31/03	16.48		29.64
	10/28/03	16.92		29.20
	2/28/04	14.64		31.48
	4/16/04	15.28		30.84
	7/16/04	15.88		30.24
	11/13/04	15.98		30.14
	2/4/05	15.17		30.95
	4/13/05	14.12		32.00
	8/10/05	15.69		30.43
	11/5/05	16.32		29.80
	1/30/06	14.49		31.63
	4/28/06	13.51		32.61
	8/15/06	15.46		30.66
	10/26/06	16.42		29.70
	2/2/07	16.49		29.63
	4/30/07	16.10		30.02
	7/18/07	16.80		29.32
	10/30/07	17.25		28.87
	1/28/08	15.47		30.65
	3/14/08	15.46		30.66
	5/13/08	16.15		29.97

TABLE C-1

HISTORICAL WELL AND GROUNDWATER ELEVATIONS
TESORO - SAN LORENZO, 67107

Well No.	Date of Measurement	Depth to Water (feet below casing)	PVC Casing Elevation ^(a) (feet MSL)	Water Table Elevation ^(b) (feet MSL)
MW-5 (cont.)	7/16/08	16.71	46.12 46.50	29.41
	9/5/08	17.34		29.16
	10/8/08	17.60		28.90
	1/29/09	17.23		29.27
	4/14/09	15.95		30.55
	7/1/09	16.89		29.61
	10/6/09	18.00		28.50
	2/17/10	15.40		31.10
	4/13/10	14.60		31.90
	7/6/10	15.83		30.67
MW-6	10/27/10	17.08	42.47	29.42
	2/18/92	15.87		26.60
	5/14/92	16.04		26.43
	8/27/92	18.17		24.30
	11/19/92	19.30		23.17
	2/3/93	14.60		27.87
	6/23/93	15.00		27.47
	9/22/93	16.66		25.81
	1/24/94	16.52		25.95
	4/7/94	15.70		26.77
	6/7/94	15.88		26.59
	9/28/94	17.51		24.96
	12/14/94	16.27		26.20
	3/15/95	13.52		28.95
	6/13/95	13.96		28.51
	9/28/95	15.61		26.86
	12/28/95	15.54		26.93
	1/30/96	NM		--
	3/12/96	11.88		30.59
	6/11/96	13.52		28.95
	10/2/96	15.10		27.37
	1/28/97	11.18		31.29
	5/20/97	14.00		28.47

TABLE C-1

HISTORICAL WELL AND GROUNDWATER ELEVATIONS
TESORO - SAN LORENZO, 67107

Well No.	Date of Measurement	Depth to Water (feet below casing)	PVC Casing Elevation ^(a) (feet MSL)	Water Table Elevation ^(b) (feet MSL)
MW-6 (cont.)	8/18/97	15.54	42.47 44.79	26.93
	9/29/97	NM		--
	11/5/97	16.25		26.22
	3/31/98	10.60		31.87
	5/26/98	12.01		30.46
	5/28/98	NM		--
	8/19/98	13.60		28.87
	11/17/98	14.53		27.94
	2/18/99	12.39		30.08
	6/24/99	13.89		28.58
	8/30/99	14.75		27.72
	11/9/99	15.18		27.29
	3/22/00	12.30		30.17
	6/12/00	13.69		28.78
	11/15/00	15.73		26.74
	2/26/01	14.42		28.05
	5/21/01	15.23		27.24
	9/5/01	16.31		26.16
	11/7/01	17.01		25.46
	2/11/02	15.72		29.07
	6/3/02	16.39		28.40
	8/6/02	18.90		25.89
	11/14/02	18.93		25.86
	2/20/03	15.64		29.15
	5/15/03	14.07		30.72
	7/31/03	15.21		29.58
	10/28/03	15.73		29.06
	2/28/04	13.12		31.67
	4/16/04	13.92		30.87
	7/16/04	14.53		30.26
	11/13/04	14.62		30.17
	2/4/05	13.74		31.05

TABLE C-1

HISTORICAL WELL AND GROUNDWATER ELEVATIONS
TESORO - SAN LORENZO, 67107

Well No.	Date of Measurement	Depth to Water (feet below casing)	PVC Casing Elevation ^(a) (feet MSL)	Water Table Elevation ^(b) (feet MSL)
MW-6 (cont.)	4/13/05	15.59	44.79	29.20
	8/10/05	14.33		30.46
	11/5/05	14.98		29.81
	1/30/06	12.99		31.80
	4/28/06	11.90		32.89
	8/15/06	14.13		30.66
	10/26/06	15.08		29.71
	2/2/07	15.16		29.63
	4/30/07	14.76		30.03
	7/18/07	15.53		29.26
	10/30/07	16.00		28.79
	1/28/08	14.09		30.70
	3/14/08	14.12		30.67
	5/13/08	14.89		29.90
	7/16/08	15.51		29.28
	9/5/08	16.08		29.09
	10/8/08	16.34		28.83
	1/29/09	15.98		29.19
	4/14/09	14.62		30.55
MW-7	7/1/09	15.60	41.54	29.57
	10/6/09	16.70		28.47
	2/17/10	14.03		31.14
	4/13/10	9.57		35.60
	7/6/10	14.50		30.29
	10/27/10	15.78		29.39
	2/18/92	15.51		26.03
	5/14/92	15.41		26.13

TABLE C-1

HISTORICAL WELL AND GROUNDWATER ELEVATIONS
TESORO - SAN LORENZO, 67107

Well No.	Date of Measurement	Depth to Water (feet below casing)	PVC Casing Elevation ^(a) (feet MSL)	Water Table Elevation ^(b) (feet MSL)
MW-7 (cont.)	4/7/94	15.10	41.54	26.44
	6/7/94	15.16		26.38
	9/28/94	16.82		24.72
	12/14/94	15.75		25.79
	3/15/95	14.00		27.54
	6/13/95	13.44		28.10
	9/28/95	14.84		26.70
	12/28/95	14.55		26.99
	3/12/96	11.88		29.66
	6/11/96	13.52		28.02
	10/2/96	14.50		27.04
	1/28/97	11.08		30.46
	5/20/97	13.46		28.08
	8/18/97	14.95		26.59
	9/29/97	NM		--
	11/5/97	15.43		26.11
	3/31/98	10.25		31.29
	5/26/98	11.45		30.09
	5/28/98	NM		--
	8/19/98	13.08		28.46
	11/17/98	13.93		27.61
	2/18/99	12.16		29.38
	6/24/99	13.35		28.19
	8/30/99	14.23		27.31
	11/9/99	14.60		26.94
	3/22/00	11.91		29.63
	6/12/00	13.28		28.26
	11/15/00	15.12		26.42
	2/26/01	13.46		28.08
	5/21/01	14.31		27.23
	9/5/01	15.42		26.12
	11/7/01	16.18		25.36

TABLE C-1

HISTORICAL WELL AND GROUNDWATER ELEVATIONS
TESORO - SAN LORENZO, 67107

Well No.	Date of Measurement	Depth to Water (feet below casing)	PVC Casing Elevation ^(a) (feet MSL)	Water Table Elevation ^(b) (feet MSL)
MW-7 (cont.)	2/11/02	13.76	43.85	30.09
	6/3/02	14.33		29.52
	8/6/02	15.04		28.81
	11/14/02	15.05		28.80
	2/20/03	14.01		29.84
	5/15/03	13.81		30.04
	7/31/03	14.99		28.86
	10/28/03	15.48		28.37
	2/28/04	12.87		30.98
	4/16/04	13.54		30.31
	7/16/04	13.96		29.89
	11/13/04	14.13		29.72
	2/4/05	13.22		30.63
	4/13/05	12.15		31.70
	8/10/05	13.69		30.16
	11/5/05	14.25		29.60
	1/30/06	12.59	44.24	31.26
	4/28/06	11.50		32.35
	8/15/06	13.51		30.34
	10/26/06	14.48		29.37
	2/2/07	14.62		29.23
	4/30/07	14.26		29.59
	7/18/07	14.92		28.93
	10/30/07	15.40		28.45
	1/28/08	13.47		30.38
	3/14/08	13.65		30.20
	5/13/08	14.31		29.54
	7/16/08	14.91		28.94
	9/5/08	15.47		28.77
	10/8/08	15.83		28.41
	1/29/09	15.46		28.78
	4/14/09	14.16		30.08

TABLE C-1

HISTORICAL WELL AND GROUNDWATER ELEVATIONS
TESORO - SAN LORENZO, 67107

Well No.	Date of Measurement	Depth to Water (feet below casing)	PVC Casing Elevation ^(a) (feet MSL)	Water Table Elevation ^(b) (feet MSL)
MW-7 (cont.)	7/1/09	15.06	44.24	29.18
	10/6/09	16.07		28.17
	2/17/10	13.60		30.64
	4/13/10	17.70		26.54
	7/6/10	14.00		30.24
	10/27/10	15.21		29.03
MW-8	2/18/92	16.57	42.26	25.69
	5/14/92	16.24		26.02
	8/27/92	18.28		23.98
	11/19/92	19.32		22.94
	2/3/93	14.87		27.39
	6/23/93	15.18		27.08
	9/22/93	18.79		23.47
	1/24/94	17.06		25.20
	4/7/94	15.95		26.31
	6/7/94	15.10		27.16
	9/28/94	17.63		24.63
	12/14/94	16.66		25.60
	3/15/95	14.30		27.96
	6/13/95	14.37		27.89
	9/28/95	15.62		26.64
	12/28/95	15.62		26.64
	3/12/96	12.75		29.51
	6/11/96	13.94		28.32
	10/2/96	15.41		26.85
	1/28/97	12.30		29.96
	5/20/97	14.42		27.84
	8/18/97	16.16		26.10
	9/29/97	NM		--
	11/5/97	16.25		26.01
	3/31/98	11.49		30.77
	5/26/98	12.60		29.66
	5/28/98	NM		--

TABLE C-1

HISTORICAL WELL AND GROUNDWATER ELEVATIONS
TESORO - SAN LORENZO, 67107

Well No.	Date of Measurement	Depth to Water (feet below casing)	PVC Casing Elevation ^(a) (feet MSL)	Water Table Elevation ^(b) (feet MSL)
MW-8 (cont.)	8/19/98	14.15	42.26 44.58	28.11
	11/17/98	14.98		27.28
	2/18/99	13.41		28.85
	6/24/99	14.35		27.91
	8/30/99	15.16		27.10
	11/9/99	15.61		26.65
	3/22/00	13.17		29.09
	6/12/00	14.19		28.07
	11/15/00	16.04		26.22
	2/26/01	12.99		29.27
	5/21/01	13.86		28.40
	9/5/01	14.91		27.35
	11/7/01	15.62		26.64
	2/11/02	13.55		31.03
	6/3/02	13.96		30.62
	8/6/02	15.82		28.76
	11/14/02	15.86		28.72
	2/20/03	14.70		29.88
	5/15/03	14.50		30.08
	7/31/03	15.73		28.85
	10/28/03	16.14		28.44
	2/28/04	14.02		30.56
	4/16/04	14.52		30.06
	7/16/04	14.88		29.70
	11/13/04	15.12		29.46
	2/4/05	14.17		30.41
	4/13/05	13.16		31.42
	8/10/05	14.41		30.17
	11/5/05	14.87		29.71
	1/30/06	13.65		30.93
	4/28/06	12.63		31.95
	8/15/06	14.42		30.16

TABLE C-1

HISTORICAL WELL AND GROUNDWATER ELEVATIONS
TESORO - SAN LORENZO, 67107

Well No.	Date of Measurement	Depth to Water (feet below casing)	PVC Casing Elevation ^(a) (feet MSL)	Water Table Elevation ^(b) (feet MSL)
MW-8 (cont.)	10/26/06	15.32	44.58	29.26
	2/2/07	15.52		29.06
	4/30/07	15.15		29.43
	7/18/07	15.80		28.78
	10/30/07	16.23		28.35
	1/28/08	14.81		29.77
	3/14/08	14.67		29.91
	5/13/08	15.30		29.28
	7/16/08	15.82		28.76
	9/5/08	16.35		28.60
	10/8/08	16.70		28.25
	1/29/09	16.40		28.55
	4/14/09	15.15		29.80
	7/1/09	15.92		29.03
	10/6/09	16.87		28.08
	2/17/10	14.62		30.33
	4/13/10	13.87		31.08
	7/6/10	15.00		29.95
	10/27/10	16.20		28.75
MW-9	2/18/92	18.87	44.94	26.07
	5/14/92	18.55		26.39
	8/27/92	20.80		24.14
	11/19/92	21.90		23.04
	2/3/93	17.25		27.69
	6/23/93	17.61		27.33
	9/22/93	19.18		25.76
	1/24/94	19.17		25.77
	4/7/94	18.23		26.71
	6/7/94	18.40		26.54
	9/28/94	20.01		24.93
	12/14/94	18.88		26.06
	3/15/95	16.24		28.70
	6/13/95	16.75		28.19

TABLE C-1

HISTORICAL WELL AND GROUNDWATER ELEVATIONS
TESORO - SAN LORENZO, 67107

Well No.	Date of Measurement	Depth to Water (feet below casing)	PVC Casing Elevation ^(a) (feet MSL)	Water Table Elevation ^(b) (feet MSL)
MW-9 (cont.)	9/28/95	18.04	44.94 47.26	26.90
	12/28/95	17.87		27.07
	3/12/96	NM		--
	6/11/96	16.26		28.68
	10/2/96	17.74		27.20
	1/28/97	14.51		30.43
	5/20/97	16.73		28.21
	8/18/97	NM		--
	9/29/97	NM		--
	11/5/97	18.61		26.33
	3/31/98	NM		--
	5/26/98	15.28		29.66
	5/28/98	NM		--
	8/19/98	16.55		28.39
	11/17/98	17.32		27.62
	2/18/99	15.74		29.20
	6/24/99	16.73		28.21
	8/30/99	17.48		27.46
	11/9/99	17.98		26.96
	3/22/00	15.46		29.48
	6/12/00	16.70		28.24
	11/15/00	18.65		26.29
	2/26/01	14.80		30.14
	5/21/01	15.68		29.26
	9/5/01	16.70		28.24
	11/7/01	17.23		27.71
	2/11/02	17.16		30.10
	6/3/02	17.66		29.60
	8/6/02	18.26		29.00
	11/14/02	18.33		28.93
	2/20/03	16.85		30.41
	5/15/03	16.63		30.63

TABLE C-1

HISTORICAL WELL AND GROUNDWATER ELEVATIONS
TESORO - SAN LORENZO, 67107

Well No.	Date of Measurement	Depth to Water (feet below casing)	PVC Casing Elevation ^(a) (feet MSL)	Water Table Elevation ^(b) (feet MSL)
MW-9 (cont.)	7/31/03	17.58	47.26	29.68
	10/28/03	17.93		29.33
	2/28/04	16.22		31.04
	4/16/04	16.82		30.44
	7/16/04	17.33		29.93
	11/13/04	17.42		29.84
	2/4/05	16.68		30.58
	4/13/05	15.78		31.48
	8/10/05	17.11		30.15
	11/5/05	17.59		29.67
	1/30/06	16.06		31.20
	4/28/06	12.50		34.76
	8/15/06	16.87		30.39
	10/26/06	17.87		29.39
	2/2/07	17.88		29.38
	4/30/07	17.48		29.78
	7/18/07	18.15		29.11
	10/30/07	18.55		28.71
	1/28/08	16.98		30.28
	3/14/08	16.89		30.37
	5/13/08	17.48		29.78
	7/16/08	17.95		29.31
	9/5/08	18.61	47.65	29.04
	10/8/08	18.89		28.76
	1/29/09	18.58		29.07
	4/14/09	17.34		30.31
	7/1/09	18.22		29.43
	10/6/09	19.30		28.35
	2/17/10	16.89		30.76
	4/13/10	16.20		31.45
	7/6/10	17.20		30.45
	10/27/10	18.40		29.25

TABLE C-1

HISTORICAL WELL AND GROUNDWATER ELEVATIONS
TESORO - SAN LORENZO, 67107

Well No.	Date of Measurement	Depth to Water (feet below casing)	PVC Casing Elevation ^(a) (feet MSL)	Water Table Elevation ^(b) (feet MSL)
MW-10	2/18/92	16.63	42.34	25.71
	5/14/92	15.25		27.09
	5/15/92	NM		--
	8/27/92	18.35		23.99
	8/29/92	NM		--
	11/19/92	19.43		22.91
	2/3/93	15.01		27.33
	6/23/93	15.30		27.04
	9/22/93	16.90		25.44
	1/24/94	NM		--
	4/7/94	15.97		26.37
	6/7/94	16.04		26.30
	9/28/94	17.69		24.65
	12/14/94	16.65		25.69
	3/15/95	14.08		28.26
	6/13/95	14.49		27.85
	9/28/95	15.81		26.53
	12/28/95	15.46		26.88
	3/12/96	12.62		29.72
	6/11/96	14.40		27.94
	10/2/96	15.47		26.87
	1/28/97	15.69		26.65
	5/20/97	14.48		27.86
	8/18/97	15.91		26.43
	9/29/97	NM		--
	11/5/97	16.32		26.02
	3/31/98	12.25		30.09
	5/26/98	12.97		29.37
	5/28/98	NM		--
	8/19/98	14.27		28.07
	11/17/98	15.08		27.26
	2/18/99	13.61		28.73
	6/24/99	14.50		27.84

TABLE C-1

HISTORICAL WELL AND GROUNDWATER ELEVATIONS
TESORO - SAN LORENZO, 67107

Well No.	Date of Measurement	Depth to Water (feet below casing)	PVC Casing Elevation ^(a) (feet MSL)	Water Table Elevation ^(b) (feet MSL)
MW-10 (cont.)	8/30/99	15.26	42.34 44.65	27.08
	11/9/99	15.72		26.62
	3/22/00	13.40		28.94
	6/12/00	14.42		27.92
	11/15/00	16.75		25.59
	2/26/01	14.73		27.61
	5/21/01	15.25		27.09
	9/5/01	16.35		25.99
	11/7/01	17.05		25.29
	2/11/02	14.94		29.71
	6/3/02	15.41		29.24
	8/6/02	15.98		28.67
	11/14/02	16.10		28.55
	2/20/03	14.90		29.75
	5/15/03	14.69		29.96
	7/31/03	15.63		29.02
	10/28/03	16.39		28.26
	2/28/04	14.01		30.64
	4/16/04	14.69		29.96
	7/16/04	15.09		29.56
	11/13/04	15.24		29.41
	2/4/05	14.43		30.22
	4/13/05	13.61		31.04
	8/10/05	14.82		29.83
	11/5/05	15.20		29.45
	1/30/06	13.97		30.68
	4/28/06	13.22		31.43
	8/15/06	14.63		30.02
	10/26/06	15.49		29.16
	2/2/07	15.60		29.05
	4/30/07	15.30		29.35
	7/18/07	15.91		28.74

TABLE C-1

HISTORICAL WELL AND GROUNDWATER ELEVATIONS
TESORO - SAN LORENZO, 67107

Well No.	Date of Measurement	Depth to Water (feet below casing)	PVC Casing Elevation ^(a) (feet MSL)	Water Table Elevation ^(b) (feet MSL)
MW-10 (cont.)	10/30/07	16.32	44.65 45.04	28.33
	1/28/08	14.93		29.72
	3/14/08	14.74		29.91
	5/13/08	15.31		29.34
	7/16/08	15.75		28.90
	9/5/08	16.40		28.64
	10/8/08	16.62		28.42
	1/29/09	16.42		28.62
	4/14/09	15.24		29.80
	7/1/09	16.00		29.04
	10/6/09	16.98		28.06
	2/17/10	14.72		30.32
	4/13/10	14.08		30.96
	7/6/10	15.05		29.99
	10/27/10	16.20		28.84
MW-11	2/18/92	17.00	45.00	28.00
	5/14/92	19.02		25.98
	8/27/92	21.13		23.87
	11/19/92	17.91		27.09
	2/3/93	17.91		27.09
	6/23/93	18.14		26.86
	9/22/93	19.63		25.37
	1/24/94	19.79		25.21
	4/7/94	18.78		26.22
	6/7/94	18.88		26.12
	9/28/94	20.45		24.55
	12/14/94	19.45		25.55
	3/15/95	17.32		27.68
	6/13/95	17.43		27.57
	9/28/95	18.67		26.33
	12/28/95	18.31		26.69
	3/12/96	15.89		29.11
	6/11/96	16.98		28.02

TABLE C-1

HISTORICAL WELL AND GROUNDWATER ELEVATIONS
TESORO - SAN LORENZO, 67107

Well No.	Date of Measurement	Depth to Water (feet below casing)	PVC Casing Elevation ^(a) (feet MSL)	Water Table Elevation ^(b) (feet MSL)
MW-11 (cont.)	10/2/96	18.20	45.00 47.36	26.80
	1/28/97	12.53		32.47
	5/20/97	17.36		27.64
	8/18/97	18.84		26.16
	9/29/97	NM		--
	11/5/97	NM		--
	3/31/98	15.39		29.61
	5/26/98	16.25		28.75
	5/28/98	NM		--
	8/19/98	17.30		27.70
	11/17/98	18.05		26.95
	2/18/99	16.87		28.13
	6/24/99	17.50		27.50
	8/30/99	18.19		26.81
	11/9/99	18.64		26.36
	3/22/00	16.52		28.48
	6/12/00	17.44		27.56
	11/15/00	19.07		25.93
	2/26/01	17.80		27.20
	5/21/01	18.23		26.77
	9/5/01	19.21		25.79
	11/7/01	19.80		25.20
	2/11/02	17.40		29.96
	6/3/02	18.30		29.06
	8/6/02	18.80		28.56
	11/14/02	18.94		28.42
	2/20/03	17.46		29.90
	5/15/03	17.64		29.72
	7/31/03	18.81		28.55
	10/28/03	19.20		28.16
	2/28/04	17.33		30.03
	4/16/04	17.67		29.69

TABLE C-1

HISTORICAL WELL AND GROUNDWATER ELEVATIONS
TESORO - SAN LORENZO, 67107

Well No.	Date of Measurement	Depth to Water (feet below casing)	PVC Casing Elevation ^(a) (feet MSL)	Water Table Elevation ^(b) (feet MSL)
MW-11 (cont.)	7/16/04	18.01	47.36	29.35
	11/13/04	18.19		29.17
	2/4/05	17.47		29.89
	4/13/05	16.81		30.55
	8/10/05	17.74		29.62
	11/5/05	18.14		29.22
	1/30/06	17.11		30.25
	4/28/06	16.49		30.87
	8/15/06	17.61		29.75
	10/26/06	18.32		29.04
	2/2/07	18.50		28.86
	4/30/07	18.17		29.19
	7/18/07	18.71		28.65
	10/30/07	19.11		28.25
	1/28/08	17.87		29.49
	3/14/08	17.76		29.60
	5/13/08	18.23		29.13
	7/16/08	18.67		28.69
	9/5/08	19.21		28.48
	10/8/08	19.52		28.17
	1/29/09	19.28		28.41
	4/14/09	18.21		29.48
	7/1/09	18.90		28.79
	10/6/09	19.80		27.89
	2/17/10	17.74	47.69	29.95
	4/13/10	17.24		30.45
	7/6/10	18.05		29.64
	10/27/10	19.10		28.59
MW-12	7/18/07	18.00		28.88
	10/30/07	18.42		28.46
	1/28/08	16.96		29.92
	3/14/08	16.83		30.05
	5/13/08	17.35		29.53

TABLE C-1

HISTORICAL WELL AND GROUNDWATER ELEVATIONS
TESORO - SAN LORENZO, 67107

Well No.	Date of Measurement	Depth to Water (feet below casing)	PVC Casing Elevation ^(a) (feet MSL)	Water Table Elevation ^(b) (feet MSL)
MW-12 (cont.)	7/16/08	17.70	46.88 47.27	29.18
	9/5/08	18.51		28.76
	10/8/08	18.75		28.52
	1/29/09	18.49		28.78
	4/14/09	17.34		29.93
	7/1/09	18.13		29.14
	10/6/09	19.03		28.24
	2/17/10	16.90		30.37
	4/13/10	16.28		30.99
	7/6/10	17.19		30.08
RW-1	10/27/10	18.30		28.97
	5/14/92	16.88	43.17	26.29
	5/15/92	NM		--
	8/27/92	19.05		24.12
	11/19/92	21.11		22.06
	2/3/93	15.48		27.69
	6/23/93	28.25		14.92
	9/22/93	17.83		25.34
	1/24/94	24.00		19.17
	4/7/94	16.05		27.12
	6/7/94	16.00		27.17
	9/28/94	18.35		24.82
	12/14/94	19.50		23.67
	3/15/95	17.00		26.17
	4/10/95	NM		--
	6/13/95	14.95		28.22
	9/28/95	27.63		15.54
	12/28/95	14.54		28.63
	3/12/96	11.02		32.15
	6/11/96	14.52		28.65
	10/2/96	15.53		27.64
	1/28/97	12.59		30.58
	5/20/97	14.85		28.32

TABLE C-1

HISTORICAL WELL AND GROUNDWATER ELEVATIONS
TESORO - SAN LORENZO, 67107

Well No.	Date of Measurement	Depth to Water (feet below casing)	PVC Casing Elevation ^(a) (feet MSL)	Water Table Elevation ^(b) (feet MSL)
RW-1 (cont.)	8/18/97	16.19	43.17 45.47	26.98
	9/29/97	NM		--
	11/5/97	16.95		26.22
	3/31/98	11.85		31.32
	5/26/98	13.13		30.04
	5/28/98	NM		--
	8/19/98	14.70		28.47
	11/17/98	15.54		27.63
	2/18/99	13.75		29.42
	6/24/99	14.96		28.21
	8/30/99	15.75		27.42
	11/9/99	17.45		25.72
	3/22/00	13.51		29.66
	6/12/00	13.65		29.52
	11/15/00	29.45		13.72
	2/26/01	28.40		14.77
	5/21/01	15.36		27.81
	9/5/01	26.90		16.27
	11/7/01	28.41		14.76
	2/11/02	27.61		17.86
	6/3/02	26.90		18.57
	8/6/02	25.56		19.91
	11/14/02	24.83		20.64
	2/20/03	23.56		21.91
	5/15/03	22.80		22.67
	7/31/03	21.71		23.76
	10/28/03	22.07		23.40
	2/28/04	19.32		26.15
	4/16/04	23.95		21.52
	7/16/04	30.04		15.43
	11/13/04	15.63		29.84
	2/4/05	18.57		26.90

TABLE C-1

HISTORICAL WELL AND GROUNDWATER ELEVATIONS
TESORO - SAN LORENZO, 67107

Well No.	Date of Measurement	Depth to Water (feet below casing)	PVC Casing Elevation ^(a) (feet MSL)	Water Table Elevation ^(b) (feet MSL)
RW-1 (cont.)	4/13/05	24.21	45.47	21.26
	8/10/05	33.59		11.88
	11/5/05	25.63		19.84
	1/30/06	24.39		21.08
	4/28/06	16.32		29.15
	8/15/06	34.04		11.43
	10/26/06	25.48		19.99
	2/2/07	16.62		28.85
	4/30/07	NM		--
	7/18/07	30.72		14.75
	10/30/07	31.15		14.32
	1/28/08	26.79		18.68
	3/14/08	15.14		30.33
	5/13/08	15.79		29.68
	7/16/08	16.32		29.15
	9/5/08	16.93		28.93
	10/8/08	17.21		28.65
	1/29/09	16.87		28.99
	4/14/09	15.63	45.86	30.23
	7/1/09	16.53		29.33
	10/6/09	17.48		28.38
	2/17/10	15.08		30.78
	4/13/10	14.30		31.56
	7/6/10	15.48		30.38
	10/27/10	16.70		29.16
RW-2	11/13/04	16.17	45.00	28.83
	2/4/05	15.44		29.56
	4/13/05	14.54		30.46
	8/10/05	15.93		29.07
	11/5/05	16.36		28.64
	1/30/06	14.83		30.17
	4/28/06	13.93		31.07
	8/15/06	15.67		29.33

TABLE C-1

HISTORICAL WELL AND GROUNDWATER ELEVATIONS
TESORO - SAN LORENZO, 67107

Well No.	Date of Measurement	Depth to Water (feet below casing)	PVC Casing Elevation ^(a) (feet MSL)	Water Table Elevation ^(b) (feet MSL)
RW-2 (cont.)	10/26/06	23.50	45.00 46.40	21.50
	2/2/07	14.27		30.73
	4/30/07	18.35		26.65
	7/18/07	17.95		27.05
	10/30/07	17.63		27.37
	1/28/08	15.91		29.09
	3/14/08	15.69		29.31
	5/13/08	16.32		28.68
	7/16/08	16.81		28.19
	9/5/08	17.39		29.01
	10/8/08	17.63		28.77
	1/29/09	17.35		29.05
	4/14/09	16.20		30.20
	7/1/09	17.00		29.40
	10/6/09	18.00		28.40
	2/17/10	15.64		30.76
	4/13/10	14.90		31.50
	7/6/10	15.95		30.45
	10/27/10	17.17		29.23
OS-1	9/5/08	18.14	47.19	29.05
	10/8/08	18.41		28.78
	1/29/09	18.10		29.09
	4/14/09	16.86		30.33
	7/1/09	17.78		29.41
	10/6/09	18.78		28.41
	10/6/09	18.78		28.41
	2/17/10	16.37		30.82
OS-2	9/5/08	17.75	46.79	29.04
	10/8/08	NM		--
	1/29/09	17.74		29.05
	4/14/09	16.50		30.29
	7/1/09	17.38		29.41
	10/6/09	18.42		28.37

TABLE C-1

HISTORICAL WELL AND GROUNDWATER ELEVATIONS
TESORO - SAN LORENZO, 67107

Well No.	Date of Measurement	Depth to Water (feet below casing)	PVC Casing Elevation ^(a) (feet MSL)	Water Table Elevation ^(b) (feet MSL)
OS-2	10/6/09	18.42	46.79	28.37
	(cont.) 2/17/10	16.00		30.79
OS-3	9/5/08	16.68	45.68	29.00
	10/8/08	16.95		28.73
	1/29/09	16.60		29.08
	4/14/09	15.33		30.35
	7/1/09	16.26		29.42
	10/6/09	17.30		28.38
	10/6/09	17.30		28.38
	2/17/10	14.80		30.88
OS-4	9/5/08	17.00	46.02	29.02
	10/8/08	17.26		28.76
	1/29/09	16.97		29.05
	4/14/09	15.70		30.32
	7/1/09	16.61		29.41
	10/6/09	17.63		28.39
	10/6/09	17.63		28.39
	2/17/10	15.16		30.86
PT-1	9/5/08	17.50	46.48	28.98
	10/8/08	17.77		28.71
	1/29/09	17.47		29.01
	4/14/09	16.21		30.27
	7/1/09	17.10		29.38
	10/6/09	18.10		28.38
	10/6/09	18.10		28.38
	2/17/10	15.66		30.82
	7/6/10	16.10		30.38
	10/27/10	17.27		29.21

(a) Elevation of PVC well casing relative to mean sea level (MSL), provided by RDM Environmental, Inc. (RDM), Fourth Quarter 2007 Groundwater Monitoring Report.

Wells were surveyed by Cross Land Surveying, Inc., per AB 2886 requirements on 26 September 2008.

(b) Difference between "PVC Casing Elevation" and "Depth to Water."

(c) NM = Well not measured.

(d) "--" Not calculated.

(e) Field logs noted well was plugged at 14 feet below top of casing on 20 May 1997.

ATTACHMENT D

HISTORICAL GROUNDWATER ANALYTICAL RESULTS

TABLE D-1

HISTORICAL GROUNDWATER MONITORING ANALYTICAL RESULTS
TESORO - SAN LORENZO, 67107

Monitoring Well	Sample Date ^(a)	TPHg ^(b) (ug/l)	Benzene ^(b) (ug/l)	Toluene ^(b) (ug/l)	Ethylbenzene ^(b) (ug/l)	Total Xylenes ^(b) (ug/l)	MTBE ^(b) (ug/l)	DIPE ^(b) (ug/l)	ETBE ^(b) (ug/l)	TAME ^(b) (ug/l)	TBA ^(b) (ug/l)
ESLs ^(c)		100	1.0	40	30	20	5.0	NE ^(d)	NE	NE	12
MW-1	5/15/92	41,000	2,000	47	1,200	400	-- ^(e)	--	--	--	--
	8/28/92	110,000	3,800	54	850	970	--	--	--	--	--
	11/19/92	3,600	200	ND<0.5 ^(f)	90	140	--	--	--	--	--
	2/3/93	3,000	180	22	79	130	--	--	--	--	--
	6/23/93	12,000	2,400	74	650	510	--	--	--	--	--
	9/22/93	23,000	3,000	290	1,100	1,200	--	--	--	--	--
	1/24/94	18,000	2,400	280	1,100	1,700	--	--	--	--	--
	4/7/94	20,000	4,200	820	1,600	2,100	--	--	--	--	--
	6/7/94	26,000	1,800	510	1,100	1,600	--	--	--	--	--
	9/28/94	18,000	1,700	210	970	870	--	--	--	--	--
	12/14/94	31,000	4,400	2,400	2,300	4,300	--	--	--	--	--
	3/15/95	17,000	830	310	840	1,200	--	--	--	--	--
	6/13/95	22,000	1,300	99	1,500	1,100	--	--	--	--	--
	9/28/95	8,800	580	ND<25	780	410	--	--	--	--	--
	12/28/95	4,800	4.9	ND<1.3	ND<1.3	290	74	--	--	--	--
	1/30/96	1,500	17	7.1	20	45	63	--	--	--	--
	3/12/96	110	ND<0.5	ND<0.5	ND<0.5	ND<0.5	44	--	--	--	--
	9/11/96	600	48	0.9	37	26	75	--	--	--	--
	10/2/96	210	16	ND<0.5	6.0	0.92	11	--	--	--	--
	1/28/97	150	ND<0.5	ND<0.5	ND<0.5	ND<0.5	160	--	--	--	--
	5/20/97	680	ND<2.5	ND<2.5	ND<2.5	ND<2.5	640	--	--	--	--
	8/18/97	ND<250	ND<2.5	ND<2.5	ND<2.5	ND<2.5	540	--	--	--	--
	11/5/97	ND<250	2.8	ND<2.5	ND<2.5	ND<2.5	390	--	--	--	--
	3/31/98	3,300	260	13	110	150	7,900	--	--	--	--
	5/28/98	7,800	120	ND<10	39	55	9,300	--	--	--	--
	8/19/98	ND<250	12	ND<2.5	6.0	3.8	2,200	--	--	--	--
	11/17/98	860	8.3	ND<2.5	9.2	7.6	4,200	--	--	--	--
	2/18/99	310	2.7	ND<2.5	ND<2.5	3.9	4,200	--	--	--	--
	6/24/99	860	10	ND<2.5	12	6.5	3,400	--	--	--	--
	8/30/99	140	2.0	ND<0.5	3.9	2.0	2,800	--	--	--	--
	11/9/99	170	ND<0.5	ND<0.5	3.1	2.0	1,500	--	--	--	--
	3/22/00	ND<200	2.8	ND<2	3.6	ND<2	1,200	--	--	--	--
	6/12/00	190	1.3	ND<1	ND<1	ND<1	640	--	--	--	--
	11/15/00	240	ND<1	ND<1	ND<1	ND<1	960	--	--	--	--
	2/26/01	ND<100	1.2	ND<1	ND<1	ND<1	2,800	--	--	--	--
	5/21/01	ND<200	ND<2	ND<2	ND<2	ND<2	540	--	--	--	--
	9/5/01	ND<200	7.0	ND<2	ND<2	ND<2	550	--	--	--	--

TABLE D-1

HISTORICAL GROUNDWATER MONITORING ANALYTICAL RESULTS
TESORO - SAN LORENZO, 67107

Monitoring Well	Sample Date ^(a)	TPHg ^(b) (ug/l)	Benzene ^(b) (ug/l)	Toluene ^(b) (ug/l)	Ethylbenzene ^(b) (ug/l)	Total Xylenes ^(b) (ug/l)	MTBE ^(b) (ug/l)	DIPE ^(b) (ug/l)	ETBE ^(b) (ug/l)	TAME ^(b) (ug/l)	TBA ^(b) (ug/l)
ESLs ^(c)		100	1.0	40	30	20	5.0	NE ^(d)	NE	NE	12
MW-1 (cont.)	11/7/01	290	ND<2	ND<2	ND<2	ND<2	750	--	--	--	--
	2/11/02	270	ND<1	ND<1	ND<1	ND<1	450	--	--	--	--
	6/3/02	310	ND<2	ND<2	ND<2	ND<2	610	--	--	--	--
	8/6/02	170	ND<0.5	ND<0.5	ND<0.5	ND<0.5	540	--	--	--	--
	11/14/02	490	ND<2	ND<2	ND<2	ND<2	900	--	--	--	--
	2/20/03	210	ND<1	ND<1	ND<1	ND<1	320	--	--	--	--
	5/15/03	400	ND<1.5	ND<1.5	ND<1.5	ND<1.5	670	ND<1.5	ND<1.5	ND<1.5	ND<15
	7/31/03	380	ND<1.5	ND<1.5	ND<1.5	ND<1.5	620	ND<1.5	ND<1.5	ND<1.5	ND<15
	10/28/03	230	ND<1	ND<1	ND<1	ND<1	470	ND<1	ND<1	ND<1	ND<10
	2/28/04	300	ND<0.5	ND<0.5	ND<0.5	ND<0.5	400	ND<0.5	ND<0.5	ND<0.5	ND<5
	4/16/04	ND<200	ND<1.5	ND<1.5	ND<1.5	ND<1.5	510	ND<1.5	ND<1.5	ND<1.5	ND<15
	7/16/04	280	ND<1.5	ND<1.5	ND<1.5	ND<1.5	660	ND<1.5	ND<1.5	ND<1.5	ND<15
	11/13/04	ND<100	ND<1	ND<1	ND<1	ND<1	530	ND<1	ND<1	ND<1	19
	2/4/05	140	ND<1	ND<1	ND<1	ND<1	610	ND<1	ND<1	ND<1	18
	4/13/05	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	19	ND<0.5	ND<0.5	ND<0.5	12
	8/10/05	100	ND<0.5	ND<0.5	ND<0.5	ND<0.5	170	ND<0.5	ND<0.5	ND<0.5	17
	11/5/05	220	ND<0.5	ND<0.5	ND<0.5	ND<0.5	95	ND<0.5	ND<0.5	ND<0.5	24
	1/30/06	92	ND<0.5	ND<0.5	ND<0.5	ND<0.5	120	ND<0.5	ND<0.5	ND<0.5	20
	4/28/06	57	ND<0.5	ND<0.5	ND<0.5	ND<0.5	18	ND<0.5	ND<0.5	ND<0.5	13
	8/15/06	60	ND<0.5	ND<0.5	ND<0.5	ND<0.5	15	ND<0.5	ND<0.5	ND<0.5	10
	10/26/06	110	ND<0.5	ND<0.5	ND<0.5	ND<0.5	34	ND<0.5	ND<0.5	ND<0.5	6.2
	2/2/07	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	17	ND<0.5	ND<0.5	ND<0.5	6.7
	4/30/07	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	7/18/07	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.94	ND<0.5	ND<0.5	68	5.5
	10/30/07	77 ^(g)	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.0	ND<0.5	ND<0.5	ND<0.5	ND<5
	1/28/08	56 ^(g)	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.6	ND<0.5	ND<0.5	ND<0.5	ND<5
	5/13/08	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	7.2	ND<0.5	ND<0.5	ND<0.5	ND<5
	7/16/08	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	7.3	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/8/08	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	5.7	ND<0.5	ND<0.5	ND<0.5	ND<5
	1/29/09	98	ND<0.5	ND<0.5	ND<0.5	ND<0.5	11	ND<0.5	ND<0.5	ND<0.5	ND<5
	1/29/09 (dup)	250	ND<0.5	ND<0.5	ND<0.5	ND<0.5	19	ND<0.5	ND<0.5	ND<0.5	ND<5
	4/14/09	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	5.2	ND<0.5	ND<0.5	ND<0.5	ND<5
	7/1/09	110	ND<0.5	ND<0.5	ND<0.5	ND<0.5	24	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/7/09	170	ND<0.5	ND<0.5	ND<0.5	ND<0.5	28	ND<0.5	ND<0.5	ND<0.5	ND<5
	2/17/10	60	ND<0.5	ND<0.5	ND<0.5	ND<0.5	21	ND<0.5	ND<0.5	ND<0.5	ND<5
	4/13/10	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	4.9	ND<0.5	ND<0.5	ND<0.5	ND<5
	7/14/10	160	ND<0.5	ND<0.5	ND<0.5	ND<0.5	6.1	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/27/10	200	ND<0.5	ND<0.5	ND<0.5	ND<0.5	4.7	ND<0.5	ND<0.5	ND<0.5	ND<5

TABLE D-1

HISTORICAL GROUNDWATER MONITORING ANALYTICAL RESULTS
TESORO - SAN LORENZO, 67107

Monitoring Well	Sample Date ^(a)	TPHg ^(b) (ug/l)	Benzene ^(b) (ug/l)	Toluene ^(b) (ug/l)	Ethylbenzene ^(b) (ug/l)	Total Xylenes ^(b) (ug/l)	MTBE ^(b) (ug/l)	DIPE ^(b) (ug/l)	ETBE ^(b) (ug/l)	TAME ^(b) (ug/l)	TBA ^(b) (ug/l)
ESLs ^(c)		100	1.0	40	30	20	5.0	NE ^(d)	NE	NE	12
MW-2	2/18/92	1,600	ND<0.5	ND<0.5	1.9	ND<0.5	--	--	--	--	--
	5/14/92	740	1.2	1.0	1.3	ND<0.5	--	--	--	--	--
	8/27/92	1,400	6.5	1.1	0.6	ND<0.5	--	--	--	--	--
	11/19/92	360	ND<0.5	ND<0.5	2.7	ND<0.5	--	--	--	--	--
	2/3/93	590	1.2	1.6	4.5	6.4	--	--	--	--	--
	6/23/93	160	ND<0.5	ND<0.5	0.52	0.5	--	--	--	--	--
	9/22/93	290	ND<0.5	0.59	1.2	0.59	--	--	--	--	--
	1/24/94	330	ND<0.5	ND<0.5	0.68	ND<0.5	--	--	--	--	--
	4/7/94	490	ND<0.5	ND<0.5	ND<0.5	4.4	--	--	--	--	--
	6/7/94	550	ND<0.5	ND<0.5	1.5	ND<0.5	--	--	--	--	--
	9/28/94	190	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	12/14/94	1,400	7.2	0.84	ND<0.5	ND<0.5	--	--	--	--	--
	3/15/95	730	39	ND<0.5	0.53	ND<0.5	--	--	--	--	--
	6/13/95	750 ^(g)	8.3	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	9/28/95	670 ^(g)	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	12/28/95	3,100	9.5	ND<5	ND<5	5.2	4,600	--	--	--	--
	3/12/96	710	ND<1.3	ND<1.3	ND<1.3	ND<1.3	3,200	--	--	--	--
	6/13/96	1,900 ^(g)	1.6	1.6	ND<1.3	ND<1.3	5,100	--	--	--	--
	10/2/96	2,800	ND<2.5	ND<2.5	ND<2.5	ND<2.5	7,900	--	--	--	--
	1/28/97	130	ND<0.5	ND<0.5	ND<0.5	ND<0.5	210	--	--	--	--
	5/20/97	1,400	120	16	ND<2.5	4.0	390	--	--	--	--
	8/18/97	ND<250	ND<2.5	ND<2.5	ND<2.5	ND<2.5	2,000	--	--	--	--
	11/5/97	ND<250	ND<2.5	ND<2.5	ND<2.5	ND<2.5	2,900	--	--	--	--
	3/31/98	ND<10,000	ND<0.5	ND<0.5	ND<0.5	ND<0.5	85,000	--	--	--	--
	5/28/98	ND<50,000	ND<500	ND<500	ND<500	ND<500	97,000	--	--	--	--
	8/19/98	210	ND<0.5	ND<0.5	ND<0.5	ND<0.5	22,000	--	--	--	--
	11/17/98	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	17,000	--	--	--	--
	2/18/99	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	13,000	--	--	--	--
	6/24/99	180	ND<15	ND<15	ND<15	ND<15	39,000	--	--	--	--
	8/30/99	ND<2,500	ND<25	ND<25	ND<25	ND<25	18,000	--	--	--	--
	11/9/99	ND<500	ND<5	ND<5	ND<5	ND<5	14,000	--	--	--	--
	3/22/00	ND<500	ND<5	ND<5	ND<5	ND<5	54,000	--	--	--	--
	6/12/00	ND<2,000	ND<20	ND<20	ND<20	ND<20	53,000	--	--	--	--
	11/15/00	ND<5,000	ND<50	ND<50	ND<50	ND<50	35,000	--	--	--	--
	2/26/01	ND<2,000	ND<20	ND<20	ND<20	ND<20	2,800	--	--	--	--
	5/21/01	ND<5,000	ND<25	ND<25	ND<25	ND<25	20,000	--	--	--	--
	9/5/01	ND<2,000	ND<20	ND<20	ND<20	ND<20	12,000	--	--	--	--
	11/7/01	ND<2,000	ND<20	ND<20	ND<20	ND<20	7,600	--	--	--	--

TABLE D-1
HISTORICAL GROUNDWATER MONITORING ANALYTICAL RESULTS
TESORO - SAN LORENZO, 67107

Monitoring Well	Sample Date ^(a)	TPHg ^(b) (ug/l)	Benzene ^(b) (ug/l)	Toluene ^(b) (ug/l)	Ethylbenzene ^(b) (ug/l)	Total Xylenes ^(b) (ug/l)	MTBE ^(b) (ug/l)	DIPE ^(b) (ug/l)	ETBE ^(b) (ug/l)	TAME ^(b) (ug/l)	TBA ^(b) (ug/l)
ESLs ^(c)		100	1.0	40	30	20	5.0	NE ^(d)	NE	NE	12
MW-2 (cont.)	2/11/02	ND<500	ND<5	ND<5	ND<5	ND<5	1,500	--	--	--	--
	6/3/02	ND<500	ND<5	ND<5	ND<5	ND<5	2,200	--	--	--	--
	8/6/02	ND<500	ND<5	ND<5	ND<5	ND<5	3,300	--	--	--	--
	11/14/02	ND<1,000	ND<10	ND<10	ND<10	ND<10	3,200	--	--	--	--
	2/20/03	ND<50	ND<2	ND<2	ND<2	ND<2	160	--	--	--	--
	5/15/03	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	270	ND<0.5	ND<0.5	ND<0.5	ND<5
	7/31/03	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	300	ND<2	ND<0.5	ND<0.5	ND<5
	10/28/03	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1,600	ND<1	ND<0.5	1.8	20
	2/28/04	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	340	ND<1.5	ND<0.5	ND<0.5	ND<5
	4/16/04	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	130	ND<1.5	ND<0.5	ND<0.5	35
	7/16/04	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	68	ND<1	ND<0.5	ND<0.5	ND<5
	11/13/04	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	35	ND<0.5	ND<0.5	ND<0.5	ND<5
	2/4/05	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	22	ND<0.5	ND<0.5	ND<0.5	ND<5
	4/13/05	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	11	ND<0.5	ND<0.5	ND<0.5	ND<5
	8/10/05	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	12	ND<0.5	ND<0.5	ND<0.5	ND<5
	11/5/05	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	11	ND<0.5	ND<0.5	ND<0.5	ND<5
	1/30/06	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	5.2	ND<0.5	ND<0.5	ND<0.5	ND<5
	4/28/06	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.3	ND<0.5	ND<0.5	ND<0.5	ND<5
	8/15/06	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	2.7	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/26/06	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.9	ND<0.5	ND<0.5	ND<0.5	ND<5
	2/2/07	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.1	ND<0.5	ND<0.5	ND<0.5	ND<5
	4/30/07	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.85	ND<0.5	ND<0.5	ND<0.5	ND<5
	7/18/07	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.2	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/30/07	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.7	ND<0.5	ND<0.5	ND<0.5	ND<5
	1/28/08	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.89	ND<0.5	ND<0.5	ND<0.5	ND<5
	5/13/08	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.86	ND<0.5	ND<0.5	ND<0.5	ND<5
	7/16/08	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.3	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/8/08	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.8	ND<0.5	ND<0.5	ND<0.5	ND<5
	1/29/09	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.6	ND<0.5	ND<0.5	ND<0.5	ND<5
	4/14/09	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.77	ND<0.5	ND<0.5	ND<0.5	ND<5
	7/1/09	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.6	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/7/09	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.3	ND<0.5	ND<0.5	ND<0.5	ND<5
	2/17/10	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.58	ND<0.5	ND<0.5	ND<0.5	ND<5
	4/13/10	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/27/10	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
MW-3	5/15/92	160,000	6,300	5,900	1,700	6,100	--	--	--	--	--
	8/28/92	1.3E+006	2,500	40,000	6,700	44,000	--	--	--	--	--
	2/3/93	82,000	7,200	11,000	2,900	13,000	--	--	--	--	--
	6/23/93	61,000	3,200	5,300	2,500	9,100	--	--	--	--	--

TABLE D-1

HISTORICAL GROUNDWATER MONITORING ANALYTICAL RESULTS
TESORO - SAN LORENZO, 67107

Monitoring Well	Sample Date ^(a)	TPHg ^(b) (ug/l)	Benzene ^(b) (ug/l)	Toluene ^(b) (ug/l)	Ethylbenzene ^(b) (ug/l)	Total Xylenes ^(b) (ug/l)	MTBE ^(b) (ug/l)	DIPE ^(b) (ug/l)	ETBE ^(b) (ug/l)	TAME ^(b) (ug/l)	TBA ^(b) (ug/l)
ESLs ^(c)		100	1.0	40	30	20	5.0	NE ^(d)	NE	NE	12
MW-3 (cont.)	9/22/93	94,000	12,000	14,000	3,900	18,000	--	--	--	--	--
	1/24/94	110,000	14,000	17,000	4,200	14,000	--	--	--	--	--
	4/7/94	28,000	6,500	1,800	1,700	4,100	--	--	--	--	--
	6/7/94	27,000	6,400	2,300	1,500	3,500	--	--	--	--	--
	9/28/94	40,000	7,400	4,300	1,500	4,600	--	--	--	--	--
	12/14/94	140,000	17,000	21,000	3,900	22,000	--	--	--	--	--
	3/15/95	58,000	4,900	1,900	1,800	7,100	--	--	--	--	--
	6/13/95	44,000	7,200	2,900	1,200	4,600	--	--	--	--	--
	9/28/95	30,000	5,600	2,100	1,900	6,900	--	--	--	--	--
	12/28/95	16,000	32	5.8	18	4,700	360	--	--	--	--
	1/30/96	8,700	850	800	190	1,700	430	--	--	--	--
	3/12/96	2,400	48	64	5.3	630	97	--	--	--	--
	7/10/97	300	ND<0.5	ND<0.5	ND<0.5	4.8	40	--	--	--	--
	8/18/97	3,600	480	8.4	100	230	170	--	--	--	--
	9/29/97	3,500	740	8.6	160	240	210	--	--	--	--
	11/5/97	4,100	870	15	180	210	240	--	--	--	--
	3/31/98	12,000	1,800	600	410	1,400	510	--	--	--	--
	5/28/98	6,500	1,500	400	280	870	480	--	--	--	--
	8/19/98	1,400	130	11	24	60	140	--	--	--	--
	11/17/98	510	48	3.5	9.9	14	120	--	--	--	--
	2/18/99	690	67	28	24	81	88	--	--	--	--
	6/24/99	540	27	21	8.6	32	61	--	--	--	--
	8/30/99	250	12	12	3.2	13	50	--	--	--	--
	11/9/99	230	9.8	5.3	3.4	10	48	--	--	--	--
	3/22/00	1,500	180	47	46	100	80	--	--	--	--
	6/12/00	920	100	6.2	20	25	76	--	--	--	--
	11/15/00	1,100	280	5.0	21	20	140	--	--	--	--
	2/26/01	140	14	4.3	3.1	11	230	--	--	--	190
	5/21/01	510	36	0.72	1.0	2.2	280	--	--	--	110
	9/5/01	390	59	0.53	0.75	0.57	620	--	--	--	120
	11/7/01	830	170	2.3	4.9	4.8	900	--	--	--	--
	2/11/02	370	17	ND<2.5	4.7	7.9	1,200	--	--	--	--
	6/3/02	460	120	ND<2.5	5.6	8.4	1,400	--	--	--	140
	8/6/02	800	110	ND<5	ND<5	ND<5	2,200	--	--	--	170
	11/14/02	1,400	89	ND<10	ND<10	ND<10	2,800	--	--	--	210
	2/20/03	ND<500	14	ND<5	ND<5	ND<5	2,300	--	--	--	97
	5/15/03	ND<500	43	ND<5	ND<5	ND<5	2,000	ND<5	ND<5	ND<5	87
	7/31/03	1,500	280	ND<5	6.6	7.4	1,600	ND<5	ND<5	ND<5	130

TABLE D-1
HISTORICAL GROUNDWATER MONITORING ANALYTICAL RESULTS
TESORO - SAN LORENZO, 67107

Monitoring Well	Sample Date ^(a)	TPHg ^(b) (ug/l)	Benzene ^(b) (ug/l)	Toluene ^(b) (ug/l)	Ethylbenzene ^(b) (ug/l)	Total Xylenes ^(b) (ug/l)	MTBE ^(b) (ug/l)	DIPE ^(b) (ug/l)	ETBE ^(b) (ug/l)	TAME ^(b) (ug/l)	TBA ^(b) (ug/l)
ESLs ^(c)		100	1.0	40	30	20	5.0	NE ^(d)	NE	NE	12
MW-3 (cont.)	10/28/03	2,200	140	1.6	6.5	4.0	1,100	ND<0.5	ND<0.5	0.75	74
	2/28/04	1,200	99	31	12	52	1,500	ND<0.5	ND<0.5	ND<0.5	82
	4/16/04	1,200	95	19	12	48	1,100	ND<0.5	ND<0.5	ND<0.5	340
	7/16/04	980	94	27	9.4	38	810	ND<0.5	ND<0.5	ND<0.5	580
MW-3R	11/13/04	9,000	580	52	440	1,600	450	ND<0.5	ND<0.5	ND<0.5	440
	2/4/05	5,400	350	29	260	1,100	270	ND<0.5	ND<0.5	ND<0.5	390
	4/13/05	20,000	1,300	84	1,200	3,200	290	ND<0.5	ND<0.5	ND<0.5	150
	8/10/05	7,100	400	23	340	1,200	110	ND<0.5	ND<0.5	ND<0.5	160
	11/5/05	4,100	230	10	250	600	81	ND<0.5	ND<0.5	ND<0.5	200
	1/30/06	6,100	460	20	470	1,000	85	ND<0.5	ND<0.5	ND<0.5	190
	4/28/06	8,200	510	15	490	940	81	ND<0.5	ND<0.5	ND<0.5	90
	8/15/06	5,600	470	11	500	680	80	ND<0.5	ND<0.5	ND<0.5	92
	10/26/06	1,800	82	4.2	38	220	53	ND<0.5	ND<0.5	ND<0.5	45
	2/2/07	1,500	94	4.3	7.0	110	42	ND<0.5	ND<0.5	ND<0.5	26
	4/30/07	3,700	240	17	280	300	38	ND<0.5	ND<0.5	ND<0.5	22
	7/18/07	690	85	1.5	3.6	20	29	ND<0.5	ND<0.5	ND<0.5	17
	10/30/07	410	46	0.9	4.7	12	19	ND<0.5	ND<0.5	ND<0.5	14
	1/28/08	4,500	350	10	250	220	48	ND<0.5	ND<0.5	ND<0.5	22
	5/13/08	1,300	68	4.4	74	38	18	ND<0.5	ND<0.5	ND<0.5	15
	7/16/08	1,400	71	9.8	38	20	35	ND<0.5	ND<0.5	ND<0.5	33
	10/8/08	980	66	2.5	6.7	ND<0.5	32	ND<0.5	ND<0.5	ND<0.5	22
	1/29/09	58	ND<0.5	ND<0.5	ND<0.5	ND<0.5	11	ND<0.5	ND<0.5	ND<0.5	8.0
	1/30/09 (dup)	860	82	1.4	16	4.3	19	ND<0.5	ND<0.5	ND<0.5	21
	4/15/09	120	1.6	ND<0.5	ND<0.5	ND<0.5	12	ND<0.5	ND<0.5	ND<0.5	16
	7/1/09	690	30	1.2	4.4	2	19	ND<0.5	ND<0.5	ND<0.5	20
	10/7/09	480	28	0.73	2.3	1.5	20	ND<0.5	ND<0.5	ND<0.5	16
	2/18/10	400	38	0.76	25	6.5	10	ND<0.5	ND<0.5	ND<0.5	18
	4/14/10	840	81	1.4	62	22	16	ND<0.5	ND<0.5	ND<0.5	16
	10/27/10	420	24	0.56	2.1	0.83	12	ND<0.5	ND<0.5	ND<0.5	14
MW-4	2/18/92	5,100	ND<0.5	ND<0.5	12	21	--	--	--	--	--
	5/14/92	4,600	ND<0.5	5.6	1.8	2.2	--	--	--	--	--
	8/28/92	1,700	6.6	1.3	1.6	3.1	--	--	--	--	--
	11/19/92	400	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	2/3/93	1,100	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	6/23/93	120	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	9/22/93	110	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	1/24/94	260	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	4/7/94	430	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	6/7/94	150	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--

TABLE D-1
HISTORICAL GROUNDWATER MONITORING ANALYTICAL RESULTS
TESORO - SAN LORENZO, 67107

Monitoring Well	Sample Date ^(a)	TPHg ^(b) (ug/l)	Benzene ^(b) (ug/l)	Toluene ^(b) (ug/l)	Ethylbenzene ^(b) (ug/l)	Total Xylenes ^(b) (ug/l)	MTBE ^(b) (ug/l)	DIPE ^(b) (ug/l)	ETBE ^(b) (ug/l)	TAME ^(b) (ug/l)	TBA ^(b) (ug/l)
ESLs ^(c)		100	1.0	40	30	20	5.0	NE ^(d)	NE	NE	12
MW-4 (cont.)	9/28/94	75	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	12/14/94	160	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	3/15/95	500	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	6/13/95	210 ^(g)	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	9/28/95	140 ^(g)	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	12/28/95	510 ^(g)	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--
	3/12/96	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--
	6/11/96	50 ^(g)	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--
	10/2/96	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--
	1/28/97	270 (g)	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--
	5/20/97	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--
	8/18/97	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--
	11/5/97	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--
	3/31/98	110	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--
	5/28/98	94	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--
	8/19/98	120 ^(g)	ND<0.5	ND<0.5	ND<0.5	ND<0.5	46	--	--	--	--
	11/17/98	ND<50	1.3	ND<0.5	ND<0.5	ND<0.5	780	--	--	--	--
	2/18/99	130	8.2	ND<0.5	ND<0.5	ND<0.5	240	--	--	--	--
	6/24/99	ND<50	ND<1	ND<0.5	ND<0.5	ND<0.5	2,100	--	--	--	--
	11/9/99	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	2,500	--	--	--	--
	3/22/00	69	ND<0.5	ND<0.5	ND<0.5	ND<0.5	12,000	--	--	--	--
	6/12/00	ND<2,000	ND<20	ND<20	ND<20	ND<20	17,000	--	--	--	--
	11/15/00	ND<100	ND<1	ND<1	ND<1	ND<1	17,000	--	--	--	--
	5/21/01	ND<5,000	ND<25	ND<25	ND<25	ND<25	13,000	--	--	--	--
	11/7/01	ND<1,000	ND<10	ND<10	ND<10	ND<10	3,800	--	--	--	--
	6/3/02	ND<200	ND<2	ND<2	ND<2	ND<2	1,100	--	--	--	--
	11/14/02	ND<200	ND<2	ND<2	ND<2	ND<2	700	--	--	--	--
	5/15/03	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	73	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/28/03	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	65	ND<0.5	ND<0.5	ND<0.5	ND<5
	4/16/04	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	6.0	ND<0.5	ND<0.5	ND<0.5	ND<5
	11/13/04	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	50	ND<0.5	ND<0.5	ND<0.5	ND<5
	1/30/06	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	3.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	4/28/06	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.89	ND<0.5	ND<0.5	ND<0.5	ND<5
	8/15/06	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	8.8	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/26/06	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	7.7	ND<0.5	ND<0.5	ND<0.5	ND<5
	2/2/07	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.0	ND<0.5	ND<0.5	ND<0.5	ND<5
	4/30/07	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	7/18/07	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5

TABLE D-1
HISTORICAL GROUNDWATER MONITORING ANALYTICAL RESULTS
TESORO - SAN LORENZO, 67107

Monitoring Well	Sample Date ^(a)	TPHg ^(b) (ug/l)	Benzene ^(b) (ug/l)	Toluene ^(b) (ug/l)	Ethylbenzene ^(b) (ug/l)	Total Xylenes ^(b) (ug/l)	MTBE ^(b) (ug/l)	DIPE ^(b) (ug/l)	ETBE ^(b) (ug/l)	TAME ^(b) (ug/l)	TBA ^(b) (ug/l)
ESLs ^(c)		100	1.0	40	30	20	5.0	NE ^(d)	NE	NE	12
MW-4 (cont.)	10/30/07	90	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	1/28/08	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.7	ND<0.5	ND<0.5	ND<0.5	ND<5
	5/13/08	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	7/16/08	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.51	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/8/08	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	1/29/09	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	4/14/09	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	7/1/09	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/7/09	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.56	ND<0.5	ND<0.5	ND<0.5	ND<5
	2/17/10	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
MW-5	4/13/10	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/27/10	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.65	ND<0.5	ND<0.5	ND<0.5	ND<5
	2/18/92	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	5/14/92	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	8/27/92	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	11/19/92	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	2/3/93	55	3.0	2.7	8.0	9.9	--	--	--	--	--
	6/23/93	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	9/22/93	ND<50	0.66	1.1	ND<0.5	0.6	--	--	--	--	--
	1/24/94	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	4/7/94	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	6/7/94	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	9/28/94	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	12/14/94	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	3/15/95	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	6/13/95	ND<50	ND<0.5	0.52	ND<0.5	ND<0.5	--	--	--	--	--
	9/28/95	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	12/28/95	120	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--
	3/12/96	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	9.0	--	--	--	--
	6/11/96	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--
	10/2/96	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--
	1/28/97	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--
	5/20/97	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--
	8/18/97	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--
	11/5/97	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--
	3/31/98	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--
	5/28/98	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--
	8/19/98	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	7.1	--	--	--	--
	11/17/98	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	6.3	--	--	--	--

TABLE D-1

HISTORICAL GROUNDWATER MONITORING ANALYTICAL RESULTS
TESORO - SAN LORENZO, 67107

Monitoring Well	Sample Date ^(a)	TPHg ^(b) (ug/l)	Benzene ^(b) (ug/l)	Toluene ^(b) (ug/l)	Ethylbenzene ^(b) (ug/l)	Total Xylenes ^(b) (ug/l)	MTBE ^(b) (ug/l)	DIPE ^(b) (ug/l)	ETBE ^(b) (ug/l)	TAME ^(b) (ug/l)	TBA ^(b) (ug/l)
ESLs ^(c)		100	1.0	40	30	20	5.0	NE ^(d)	NE	NE	12
MW-5 (cont.)	2/18/99	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--
	3/22/00	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--
	10/8/08	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	1/29/09	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/7/09	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	4/13/10	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/27/10	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
MW-6	2/18/92	370	4.8	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	5/14/92	120	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	8/27/92	ND<50	1.2	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	11/19/92	66	1.3	ND<0.5	1.0	1.1	--	--	--	--	--
	2/3/93	100	1.9	2.6	23	12	--	--	--	--	--
	6/23/93	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	9/22/93	81	2.2	3.8	0.53	2.7	--	--	--	--	--
	1/24/94	98	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	4/7/94	150	0.71	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	6/7/94	180	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	9/28/94	100	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	12/14/94	140	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	3/15/95	110	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	6/13/95	150 ^(g)	ND<0.5	0.87	ND<0.5	ND<0.5	--	--	--	--	--
	9/28/95	ND<50	0.78	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	12/28/95	410	ND<0.5	ND<0.5	ND<0.5	ND<0.5	70	--	--	--	--
	1/30/96	81	1.0	ND<0.5	ND<0.5	ND<0.5	46	--	--	--	--
	3/12/96	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	7.0	--	--	--	--
	6/11/96	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--
	10/2/96	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--
	1/28/97	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--
	5/20/97	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--
	8/18/97	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--
	11/5/97	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	2.8	--	--	--	--
	3/31/98	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--
	5/28/98	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--
	8/19/98	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--
	11/17/98	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--
	2/18/99	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--
	3/22/00	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--
	10/8/08	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	5.1	ND<0.5	ND<0.5	ND<0.5	ND<5
	1/29/09	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	3.5	ND<0.5	ND<0.5	ND<0.5	ND<5

TABLE D-1

HISTORICAL GROUNDWATER MONITORING ANALYTICAL RESULTS
TESORO - SAN LORENZO, 67107

Monitoring Well	Sample Date ^(a)	TPHg ^(b) (ug/l)	Benzene ^(b) (ug/l)	Toluene ^(b) (ug/l)	Ethylbenzene ^(b) (ug/l)	Total Xylenes ^(b) (ug/l)	MTBE ^(b) (ug/l)	DIPE ^(b) (ug/l)	ETBE ^(b) (ug/l)	TAME ^(b) (ug/l)	TBA ^(b) (ug/l)
ESLs ^(c)		100	1.0	40	30	20	5.0	NE ^(d)	NE	NE	12
MW-6 (cont.)	4/15/09	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	7/1/09	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.71	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/7/09	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	2	ND<0.5	ND<0.5	ND<0.5	ND<5
	2/18/10	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.71	ND<0.5	ND<0.5	ND<0.5	ND<5
	4/14/10	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	7/6/10	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/27/10	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.64	ND<0.5	ND<0.5	ND<0.5	ND<5
MW-7	2/18/92	670	16	ND<0.5	10	16	--	--	--	--	--
	5/14/92	1,500	44	ND<0.5	38	88	--	--	--	--	--
	8/27/92	23,000	400	5.8	290	1,400	--	--	--	--	--
	11/19/92	330	29	ND<0.5	10	53	--	--	--	--	--
	2/3/93	2,000	200	ND<0.5	110	480	--	--	--	--	--
	6/23/93	280	20	ND<0.5	16	16	--	--	--	--	--
	9/22/93	860	71	2.2	33	210	--	--	--	--	--
	1/24/94	900	61	ND<1.3	10	160	--	--	--	--	--
	4/7/94	630	53	ND<0.5	7.1	49	--	--	--	--	--
	6/7/94	730	55	ND<0.5	14	24	--	--	--	--	--
	9/28/94	300	21	ND<0.5	2.3	3.1	--	--	--	--	--
	12/14/94	430	19	ND<0.5	3.3	32	--	--	--	--	--
	3/15/95	70	0.88	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	6/13/95	190	7.3	0.79	7.6	8.9	--	--	--	--	--
	9/28/95	60	1.5	ND<0.5	1.2	0.84	--	--	--	--	--
	12/28/95	60	ND<0.5	ND<0.5	0.91	0.69	10	--	--	--	--
	3/12/96	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	11	--	--	--	--
	6/11/96	79	ND<0.5	ND<0.5	ND<0.5	ND<0.5	16	--	--	--	--
	10/2/96	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	26	--	--	--	--
	1/28/97	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	13	--	--	--	--
	5/20/97	78	ND<0.5	0.85	ND<0.5	ND<0.5	40	--	--	--	--
	8/18/97	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	18	--	--	--	--
	11/5/97	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	8.0	--	--	--	--
	3/31/98	ND<50	ND<0.5	ND<0.5	ND<0.5	1.3	6.0	--	--	--	--
	5/28/98	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	10	--	--	--	--
	8/19/98	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	27	--	--	--	--
	11/17/98	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	30	--	--	--	--
	2/18/99	51	ND<0.5	ND<0.5	ND<0.5	ND<0.5	22	--	--	--	--
	11/9/99	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	16	--	--	--	--
	3/22/00	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	18	--	--	--	--
	11/15/00	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	17	--	--	--	--
	11/7/01	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	5.4	--	--	--	--

TABLE D-1

HISTORICAL GROUNDWATER MONITORING ANALYTICAL RESULTS
TESORO - SAN LORENZO, 67107

Monitoring Well	Sample Date ^(a)	TPHg ^(b) (ug/l)	Benzene ^(b) (ug/l)	Toluene ^(b) (ug/l)	Ethylbenzene ^(b) (ug/l)	Total Xylenes ^(b) (ug/l)	MTBE ^(b) (ug/l)	DIPE ^(b) (ug/l)	ETBE ^(b) (ug/l)	TAME ^(b) (ug/l)	TBA ^(b) (ug/l)
ESLs ^(c)		100	1.0	40	30	20	5.0	NE ^(d)	NE	NE	12
MW-7 (cont.)	11/14/02	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.64	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/28/03	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	11/13/04	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	1/30/06	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	2/2/07	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	4/30/07	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/30/07	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	5/13/08	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	7/16/08	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/8/08	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	1/29/09	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	4/14/09	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/7/09	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	4/13/10	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/27/10	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
MW-8	2/18/92	1,200	ND<0.5	ND<0.5	9.5	ND<0.5	--	--	--	--	--
	5/14/92	130	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	8/27/92	140	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	11/19/92	320	ND<0.5	ND<0.5	2.0	ND<0.5	--	--	--	--	--
	2/3/93	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	6/23/93	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	9/22/93	ND<50	ND<0.5	ND<0.5	0.67	ND<0.5	--	--	--	--	--
	1/24/94	290	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	4/7/94	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	6/7/94	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	9/28/94	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	12/14/94	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	3/15/95	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	6/13/95	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	12/28/95	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--
	3/12/96	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--
	6/11/96	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--
	10/2/96	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--
	1/28/97	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--
	5/20/97	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--
	8/18/97	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--
	11/5/97	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--
	3/31/98	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--
	5/28/98	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--

TABLE D-1

HISTORICAL GROUNDWATER MONITORING ANALYTICAL RESULTS
TESORO - SAN LORENZO, 67107

Monitoring Well	Sample Date ^(a)	TPHg ^(b) (ug/l)	Benzene ^(b) (ug/l)	Toluene ^(b) (ug/l)	Ethylbenzene ^(b) (ug/l)	Total Xylenes ^(b) (ug/l)	MTBE ^(b) (ug/l)	DIPE ^(b) (ug/l)	ETBE ^(b) (ug/l)	TAME ^(b) (ug/l)	TBA ^(b) (ug/l)
ESLs ^(c)		100	1.0	40	30	20	5.0	NE ^(d)	NE	NE	12
MW-8 (cont.)	8/19/98	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--
	11/17/98	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--
	2/18/99	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--
	3/22/00	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--
	4/30/07	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	7/18/07	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	5/13/08	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	7/16/08	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/8/08	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	1/29/09	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	4/14/09	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/7/09	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	4/13/10	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/27/10	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
MW-9	2/18/92	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	5/14/92	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	8/27/92	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	11/19/92	ND<50	ND<0.5	ND<0.5	ND<0.5	1.3	--	--	--	--	--
	2/3/93	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	6/23/93	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	9/22/93	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	1/24/94	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	4/7/94	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	6/7/94	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	9/28/94	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	12/14/94	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	3/15/95	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	6/13/95	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	9/28/95	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	12/28/95	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--
	6/11/96	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--
	10/2/96	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--
	1/28/97	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--
	5/20/97	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--
	11/5/97	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--
	8/19/98	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--
	11/17/98	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--
	2/18/99	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--
	3/22/00	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--

TABLE D-1
HISTORICAL GROUNDWATER MONITORING ANALYTICAL RESULTS
TESORO - SAN LORENZO, 67107

Monitoring Well	Sample Date ^(a)	TPHg ^(b) (ug/l)	Benzene ^(b) (ug/l)	Toluene ^(b) (ug/l)	Ethylbenzene ^(b) (ug/l)	Total Xylenes ^(b) (ug/l)	MTBE ^(b) (ug/l)	DIPE ^(b) (ug/l)	ETBE ^(b) (ug/l)	TAME ^(b) (ug/l)	TBA ^(b) (ug/l)
ESLs ^(c)		100	1.0	40	30	20	5.0	NE ^(d)	NE	NE	12
MW-9 (cont.)	6/3/02	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--
	8/6/02	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	4/30/07	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	7/18/07	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	5/13/08	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	7/16/08	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/8/08	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	1/29/09	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	4/14/09	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	7/1/09	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/7/09	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	2/18/10	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	4/14/10	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/27/10	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
MW-10	2/18/92	18,000	110	57	440	53	--	--	--	--	--
	5/15/92	8,500	24	9.8	97	ND<0.5	--	--	--	--	--
	8/29/92	9,600	20	2.8	40	3.5	--	--	--	--	--
	11/19/92	5,700	36	21	330	31	--	--	--	--	--
	2/3/93	2,200	15	4.6	36	9.6	--	--	--	--	--
	6/23/93	8,100	21	24	540	45	--	--	--	--	--
	9/22/93	6,200	22	17	350	16	--	--	--	--	--
	4/7/94	4,000	6.4	2.9	150	4.7	--	--	--	--	--
	6/7/94	6,700	5.6	ND<2.5	150	5.7	--	--	--	--	--
	9/28/94	5,700	2.2	2.6	110	44	--	--	--	--	--
	12/14/94	3,500	ND<1.3	ND<1.3	77	27	--	--	--	--	--
	3/15/95	7,200	ND<5	6.7	150	23	--	--	--	--	--
	6/13/95	8,400	9	48	610	130	--	--	--	--	--
	9/28/95	6,300	22	17	360	24	--	--	--	--	--
	12/28/95	5,000	4.4	5.6	340	11	37	--	--	--	--
	3/12/96	4,500	1.4	5.9	41	73	120	--	--	--	--
	6/11/96	7,500	ND<5	25	350	81	ND<25	--	--	--	--
	10/2/96	2,600	18	ND<2.5	ND<2.5	ND<2.5	ND<25	--	--	--	--
	1/28/97	2,800	5.9	ND<2.5	29	19	ND<25	--	--	--	--
	5/20/97	6,000	ND<20	34	290	74	ND<100	--	--	--	--
	8/18/97	5,900	ND<20	7.7	94	15	ND<50	--	--	--	--
	11/5/97	5,400	1.1	0.86	47	1.6	2.3	--	--	--	--
	3/31/98	20,000	56	180	1,400	3,700	250	--	--	--	--
	5/28/98	16,000	76	200	1,600	3,900	190	--	--	--	--
	8/19/98	14,000	95	160	1,300	1,700	ND<100	--	--	--	--

TABLE D-1

HISTORICAL GROUNDWATER MONITORING ANALYTICAL RESULTS
TESORO - SAN LORENZO, 67107

Monitoring Well	Sample Date ^(a)	TPHg ^(b) (ug/l)	Benzene ^(b) (ug/l)	Toluene ^(b) (ug/l)	Ethylbenzene ^(b) (ug/l)	Total Xylenes ^(b) (ug/l)	MTBE ^(b) (ug/l)	DIPE ^(b) (ug/l)	ETBE ^(b) (ug/l)	TAME ^(b) (ug/l)	TBA ^(b) (ug/l)
ESLs ^(c)		100	1.0	40	30	20	5.0	NE ^(d)	NE	NE	12
MW-10 (cont.)	11/17/98	7,500	82	64	590	150	290	--	--	--	--
	2/18/99	4,700	41	16	270	79	ND<100	--	--	--	--
	6/24/99	9,400	27	74	280	160	300	--	--	--	--
	8/30/99	8,500	15	33	160	33	290	--	--	--	--
	11/9/99	7,600	3.9	11	60	14	120	--	--	--	--
	3/22/00	5,800	3.5	33	360	320	160	--	--	--	--
	6/12/00	7,200	4.3	47	370	210	270	--	--	--	--
	11/15/00	4,400	0.54	2.2	3.8	7.3	420	--	--	--	--
	2/26/01	5,000	ND<1	2.5	24	13	860	--	--	--	--
	5/21/01	3,500	ND<0.5	3.2	4.1	12	530	--	--	--	--
	9/5/01	3,400	ND<2	ND<2	ND<2	4.1	770	--	--	--	--
	11/7/01	3,600	ND<0.5	0.64	0.75	2.7	790	--	--	--	--
	2/11/02	4,100	ND<2	2.2	61	26	750	--	--	--	--
	6/3/02	4,100	ND<1	7.0	67	37	320	--	--	--	--
	8/6/02	4,500	ND<1	5.4	18	18	310	--	--	--	--
	11/14/02	5,200	ND<1	ND<1	2.2	6.4	280	ND<0.5	ND<0.5	ND<0.5	13
	2/20/03	6,300	ND<1.5	9.5	280	69	220	ND<2	ND<2	ND<2	--
	5/15/03	5,700	1.2	14	280	78	130	ND<1	ND<1	ND<1	11
	7/31/03	4,700	ND<0.5	4.5	20	17	110	ND<1.5	ND<1.5	ND<1.5	7.5
	10/28/03	1,900	ND<0.5	0.54	0.8	2.9	88	ND<1.5	ND<1.5	ND<1.5	5.9
	2/28/04	3,500	ND<1	ND<1	17	7.9	44	ND<1	ND<1	ND<1	ND<10
	4/16/04	6,000	ND<1.5	3.0	150	34	53	ND<0.5	ND<0.5	ND<0.5	ND<5
	7/16/04	6,300	ND<1	3.5	110	29	40	ND<0.5	ND<0.5	ND<0.5	ND<5
	11/13/04	4,900	ND<0.5	4.8	42	23	25	ND<0.5	ND<0.5	ND<0.5	ND<5
	2/4/05	5,000	ND<0.5	3.3	46	30	21	ND<0.5	ND<0.5	ND<0.5	ND<5
	4/13/05	4,000	0.81	6.5	200	120	29	ND<0.5	ND<0.5	ND<0.5	ND<5
	8/10/05	6,600	2.0	6.5	74	72	29	ND<0.5	ND<0.5	ND<0.5	ND<5
	11/5/05	6,000	3.0	9.7	17	56	5.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	1/30/06	3,800	1.8	3.9	61	29	16	ND<0.5	ND<0.5	ND<0.5	ND<5
	4/28/06	5,800	3.1	7	210	120	38	ND<0.5	ND<0.5	ND<0.5	8.4
	8/15/06	5,400	1.7	4.2	22	40	42	ND<0.5	ND<0.5	ND<0.5	7.3
	10/26/06	5,000	0.71	2.2	4.8	25	24	ND<0.5	ND<0.5	ND<0.5	5.0
	2/2/07	4,900	0.72	2.3	7.4	15	21	ND<0.5	ND<0.5	ND<0.5	ND<5
	4/30/07	4,300	ND<0.5	2.2	7.6	16	13	ND<0.5	ND<0.5	ND<0.5	ND<5
	7/18/07	2,700	ND<0.5	0.97	ND<0.5	3.4	4.8	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/30/07	3,400	ND<0.5	0.73	ND<0.5	2.1	1.9	ND<0.5	ND<0.5	ND<0.5	ND<5
	1/28/08	2,600	ND<0.5	0.88	ND<0.5	1.5	0.76	ND<0.5	ND<0.5	ND<0.5	ND<5
	5/13/08	4,100	ND<0.5	0.66	ND<0.5	3.0	1.1	ND<0.5	ND<0.5	ND<0.5	ND<5
	7/16/08	2,700	ND<0.5	ND<0.5	ND<0.5	1.4	0.8	ND<0.5	ND<0.5	ND<0.5	ND<5

TABLE D-1
HISTORICAL GROUNDWATER MONITORING ANALYTICAL RESULTS
TESORO - SAN LORENZO, 67107

Monitoring Well	Sample Date ^(a)	TPHg ^(b) (ug/l)	Benzene ^(b) (ug/l)	Toluene ^(b) (ug/l)	Ethylbenzene ^(b) (ug/l)	Total Xylenes ^(b) (ug/l)	MTBE ^(b) (ug/l)	DIPE ^(b) (ug/l)	ETBE ^(b) (ug/l)	TAME ^(b) (ug/l)	TBA ^(b) (ug/l)
ESLs ^(c)		100	1.0	40	30	20	5.0	NE ^(d)	NE	NE	12
MW-10 (cont.)	10/8/08	1,900	ND<0.5	ND<0.5	ND<0.5	0.63	0.63	ND<0.5	ND<0.5	ND<0.5	ND<5
	1/30/09	1,900	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.88	ND<0.5	ND<0.5	ND<0.5	ND<5
	1/30/09 (dup)	2,800	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.72	ND<0.5	ND<0.5	ND<0.5	ND<5
	4/15/09	2,400	ND<0.5	ND<0.5	0.67	1.4	1.7	ND<0.5	ND<0.5	ND<0.5	ND<5
	7/1/09	2,900	ND<0.5	ND<0.5	ND<0.5	1.4	1.4	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/7/09	2,800	ND<0.5	ND<0.5	ND<0.5	0.61	1.3	ND<0.5	ND<0.5	ND<0.5	ND<5
	2/17/10	3,300	ND<0.5	ND<0.5	0.58	0.9	1.0	ND<0.5	ND<0.5	ND<0.5	ND<5
	4/14/10	4,300	ND<0.5	ND<0.5	24	6.9	0.8	ND<0.5	ND<0.5	ND<0.5	ND<5
	7/7/10	3,600	ND<0.5	ND<0.5	2.0	9.1	1.8	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/27/10	2,900	ND<0.5	ND<0.5	ND<0.5	2.0	0.88	ND<0.5	ND<0.5	ND<0.5	ND<5
MW-11	2/18/92	2,400	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	5/14/92	1,600	ND<0.5	1.9	1.3	0.7	--	--	--	--	--
	8/27/92	2,100	15	2.0	0.6	1.2	--	--	--	--	--
	11/19/92	490	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	2/3/93	500	ND<0.5	ND<0.5	0.55	ND<0.5	--	--	--	--	--
	6/23/93	350	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	9/22/93	200	ND<0.5	0.65	ND<0.5	0.71	--	--	--	--	--
	1/24/94	450	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	4/7/94	500	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	6/7/94	560	ND<0.5	ND<0.5	ND<0.5	0.64	--	--	--	--	--
	9/28/94	600	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	12/14/94	340	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	3/15/95	340	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	6/13/95	210 ^(g)	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	9/28/95	93	4.1	0.5	ND<0.5	ND<0.5	--	--	--	--	--
	12/28/95	380 ^(g)	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--
	3/12/96	110	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--
	6/11/96	400 ^(g)	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--
	10/2/96	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--
	1/28/97	110 ^(g)	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--
	5/20/97	330	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--
	8/18/97	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--
	3/31/98	460	ND<0.5	2.8	12	16	ND<0.5	--	--	--	--
	5/28/98	1,100	14	24	88	75	24	--	--	--	--
	8/19/98	1,200	16	9.6	69	17	6.0	--	--	--	--
	11/17/98	580	15	4.4	14	ND<0.5	21	--	--	--	--
	2/18/99	390	8.0	ND<0.5	1.4	ND<0.5	44	--	--	--	--
	6/24/99	610	4.6	ND<0.5	0.66	ND<0.5	59	--	--	--	--
	11/9/99	250	0.87	ND<0.5	ND<0.5	ND<0.5	66	--	--	--	--

TABLE D-1
HISTORICAL GROUNDWATER MONITORING ANALYTICAL RESULTS
TESORO - SAN LORENZO, 67107

Monitoring Well	Sample Date ^(a)	TPHg ^(b) (ug/l)	Benzene ^(b) (ug/l)	Toluene ^(b) (ug/l)	Ethylbenzene ^(b) (ug/l)	Total Xylenes ^(b) (ug/l)	MTBE ^(b) (ug/l)	DIPE ^(b) (ug/l)	ETBE ^(b) (ug/l)	TAME ^(b) (ug/l)	TBA ^(b) (ug/l)
ESLs ^(c)		100	1.0	40	30	20	5.0	NE ^(d)	NE	NE	12
MW-11 (cont.)	3/22/00	330	ND<0.5	ND<0.5	ND<0.5	ND<0.5	100	--	--	--	--
	6/12/00	52	ND<0.5	ND<0.5	ND<0.5	ND<0.5	49	--	--	--	--
	11/15/00	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.8	--	--	--	--
	5/21/01	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	30	--	--	--	--
	11/7/01	360	ND<0.5	ND<0.5	ND<0.5	ND<0.5	330	--	--	--	--
	6/3/02	120	ND<0.5	ND<0.5	ND<0.5	ND<0.5	220	ND<0.5	ND<0.5	ND<0.5	13
	11/14/02	240	ND<1	ND<1	ND<1	ND<1	380	ND<0.5	ND<0.5	ND<0.5	ND<5
	5/15/03	160	ND<0.5	ND<0.5	ND<0.5	ND<0.5	170	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/28/03	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	35	ND<0.5	ND<0.5	ND<0.5	ND<5
	2/28/04	360	ND<0.5	ND<0.5	ND<0.5	ND<0.5	140	ND<0.5	ND<0.5	ND<0.5	ND<5
	4/16/04	440	ND<0.5	ND<0.5	ND<0.5	ND<0.5	110	ND<0.5	ND<0.5	ND<0.5	ND<5
	7/16/04	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	10	ND<0.5	ND<0.5	ND<0.5	ND<5
	11/13/04	230	ND<0.5	ND<0.5	ND<0.5	ND<0.5	49	ND<0.5	ND<0.5	ND<0.5	ND<5
	2/4/05	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	7	ND<0.5	ND<0.5	ND<0.5	ND<5
	4/13/05	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	12	ND<0.5	ND<0.5	ND<0.5	ND<5
	11/5/05	310	ND<0.5	0.71	ND<0.5	1.6	4.8	ND<0.5	ND<0.5	ND<0.5	ND<5
	1/30/06	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.0	ND<0.5	ND<0.5	ND<0.5	ND<5
	4/28/06	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.8	ND<0.5	ND<0.5	ND<0.5	ND<5
	8/15/06	65	ND<0.5	ND<0.5	ND<0.5	ND<0.5	9.1	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/26/06	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	2.3	ND<0.5	ND<0.5	ND<0.5	ND<5
	2/2/07	930	ND<0.5	ND<0.5	ND<0.5	0.72	27	ND<0.5	ND<0.5	ND<0.5	ND<5
	4/30/07	740	ND<0.5	0.58	ND<0.5	0.64	28	ND<0.5	ND<0.5	ND<0.5	ND<5
	7/18/07	490	ND<0.5	ND<0.5	ND<0.5	ND<0.5	19	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/30/07	420	ND<0.5	ND<0.5	ND<0.5	ND<0.5	28	ND<0.5	ND<0.5	ND<0.5	ND<5
	1/28/08	280	ND<0.5	ND<0.5	ND<0.5	ND<0.5	18	ND<0.5	ND<0.5	ND<0.5	ND<5
	5/13/08	480	ND<0.5	ND<0.5	ND<0.5	ND<0.5	9.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	7/16/08	370	ND<0.5	ND<0.5	ND<0.5	ND<0.5	13	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/8/08	320	ND<0.5	ND<0.5	ND<0.5	ND<0.5	13	ND<0.5	ND<0.5	ND<0.5	ND<5
	1/30/09	280	ND<0.5	ND<0.5	ND<0.5	ND<0.5	11	ND<0.5	ND<0.5	ND<0.5	ND<5
	1/30/09 (dup)	300	ND<0.5	ND<0.5	ND<0.5	ND<0.5	8.1	ND<0.5	ND<0.5	ND<0.5	ND<5
	4/15/09	300	ND<0.5	ND<0.5	ND<0.5	ND<0.5	5.2	ND<0.5	ND<0.5	ND<0.5	ND<5
	7/1/09	240	ND<0.5	ND<0.5	ND<0.5	ND<0.5	2.1	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/7/09	410	ND<0.5	ND<0.5	ND<0.5	ND<0.5	3.0	ND<0.5	ND<0.5	ND<0.5	ND<5
	2/17/10	460	ND<0.5	ND<0.5	ND<0.5	ND<0.5	2.0	ND<0.5	ND<0.5	ND<0.5	ND<5
	4/14/10	260	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.77	ND<0.5	ND<0.5	ND<0.5	ND<5
	7/7/10	400	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.8	1.9	ND<0.5	ND<0.5	ND<0.5
	10/27/10	130	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.74	ND<0.5	ND<0.5	ND<0.5
MW-12	7/18/07	68 ^(g)	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/30/07	70 ^(g)	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5

TABLE D-1

HISTORICAL GROUNDWATER MONITORING ANALYTICAL RESULTS
TESORO - SAN LORENZO, 67107

Monitoring Well	Sample Date ^(a)	TPHg ^(b) (ug/l)	Benzene ^(b) (ug/l)	Toluene ^(b) (ug/l)	Ethylbenzene ^(b) (ug/l)	Total Xylenes ^(b) (ug/l)	MTBE ^(b) (ug/l)	DIPE ^(b) (ug/l)	ETBE ^(b) (ug/l)	TAME ^(b) (ug/l)	TBA ^(b) (ug/l)
ESLs ^(c)		100	1.0	40	30	20	5.0	NE ^(d)	NE	NE	12
MW-12 (cont.)	1/28/08	60 ^(g)	ND<0.5	ND<0.5	ND<0.5	0.57	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	5/13/08	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	7/16/08	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/8/08	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	1/29/09	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	4/14/09	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	7/1/09	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/7/09	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	2/17/10	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	4/13/10	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/27/10	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
RW-1	5/15/92	790	270	62	29	140	--	--	--	--	--
	8/27/92	24,000	1,300	200	68	810	--	--	--	--	--
	2/3/93	620	71	35	22	110	--	--	--	--	--
	6/23/93	220	30	33	9.8	35	--	--	--	--	--
	9/22/93	4,100	800	400	170	910	--	--	--	--	--
	1/24/94	190	33	6.0	6.9	23	--	--	--	--	--
	4/7/94	1,500	110	57	32	260	--	--	--	--	--
	6/7/94	1,700	130	51	45	180	--	--	--	--	--
	9/28/94	350	54	9.2	12	29	--	--	--	--	--
	12/14/94	79	6.8	2.1	1.2	3.4	--	--	--	--	--
	4/10/95	410	54	11	11	69	--	--	--	--	--
	6/13/95	8,200	1,600	780	340	1,400	--	--	--	--	--
	9/28/95	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--
	12/28/95	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--
	3/12/96	86	ND<0.5	ND<0.5	ND<0.5	ND<0.5	110	--	--	--	--
	6/11/96	230	38	11	4.7	50	68	--	--	--	--
	10/2/96	360	68	29	14	75	47	--	--	--	--
	1/28/97	ND<50	0.77	ND<0.5	ND<0.5	ND<0.5	9.0	--	--	--	--
	5/20/97	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	32	--	--	--	--
	8/18/97	220	25	ND<0.5	ND<0.5	3.6	170	--	--	--	--
	9/29/97	900	240	2.8	51	55	230	--	--	--	--
	11/5/97	1,300	340	3.2	59	78	220	--	--	--	--
	3/31/98	4,100	450	130	200	940	4,100	--	--	--	--
	5/28/98	14,000	830	210	170	720	14,000	--	--	--	--
	8/19/98	2,100	20	ND<2.5	7.1	15	2,100	--	--	--	--
	11/17/98	630	7.8	ND<2.5	5.6	ND<2.5	730	--	--	--	--
	2/18/99	180	6.7	1.6	3.2	15	100	--	--	--	--
	6/24/99	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	42	--	--	--	--

TABLE D-1
HISTORICAL GROUNDWATER MONITORING ANALYTICAL RESULTS
TESORO - SAN LORENZO, 67107

Monitoring Well	Sample Date ^(a)	TPHg ^(b) (ug/l)	Benzene ^(b) (ug/l)	Toluene ^(b) (ug/l)	Ethylbenzene ^(b) (ug/l)	Total Xylenes ^(b) (ug/l)	MTBE ^(b) (ug/l)	DIPE ^(b) (ug/l)	ETBE ^(b) (ug/l)	TAME ^(b) (ug/l)	TBA ^(b) (ug/l)
ESLs ^(c)		100	1.0	40	30	20	5.0	NE ^(d)	NE	NE	12
RW-1 (cont.)	8/30/99	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	79	--	--	--	--
	11/9/99	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	78	--	--	--	--
	3/22/00	ND<50	1.2	ND<0.5	ND<0.5	ND<0.5	17	--	--	--	--
	6/12/00	ND<50	ND<0.5	ND<0.5	ND<0.5	1.0	40	--	--	--	--
	11/15/00	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	290	--	--	--	--
	2/26/01	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	360	--	--	--	--
	5/21/01	100	4.1	1.6	1.8	23	170	--	--	--	--
	9/5/01	73	33	ND<0.5	ND<0.5	ND<0.5	310	--	--	--	--
	11/7/01	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	240	--	--	--	--
	2/11/02	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	21	--	--	--	--
	6/3/02	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	160	ND<0.5	ND<0.5	ND<0.5	7.7
	8/6/02	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	190	ND<0.5	ND<0.5	ND<0.5	6.0
	11/14/02	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	170	ND<0.5	ND<0.5	ND<0.5	ND<5
	2/20/03	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	120	ND<0.5	ND<0.5	ND<0.5	ND<5
	5/15/03	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	110	ND<0.5	ND<0.5	ND<0.5	ND<5
	7/31/03	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	99	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/28/03	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	88	ND<0.5	ND<0.5	ND<0.5	ND<5
	2/28/04	ND<50	1.3	ND<0.5	ND<0.5	ND<0.5	52	ND<0.5	ND<0.5	ND<0.5	ND<5
	4/16/04	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	57	ND<0.5	ND<0.5	ND<0.5	ND<5
	7/16/04	ND<50	0.72	ND<0.5	ND<0.5	ND<0.5	100	ND<0.5	ND<0.5	ND<0.5	4.2
	11/13/04	ND<50	1.0	ND<0.5	ND<0.5	ND<0.5	71	ND<0.5	ND<0.5	ND<0.5	ND<5
	2/4/05	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	45	ND<0.5	ND<0.5	ND<0.5	ND<5
	4/13/05	ND<50	1.1	ND<0.5	ND<0.5	ND<0.5	52	ND<0.5	ND<0.5	ND<0.5	12
	8/10/05	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	29	ND<0.5	ND<0.5	ND<0.5	ND<5
	11/5/05	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	27	ND<0.5	ND<0.5	ND<0.5	ND<5
	1/30/06	ND<50	0.61	ND<0.5	ND<0.5	1.3	23	ND<0.5	ND<0.5	ND<0.5	ND<5
	4/28/06	ND<50	0.69	ND<0.5	ND<0.5	1.6	16	ND<0.5	ND<0.5	ND<0.5	ND<5
	8/15/06	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	18	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/26/06	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	16	ND<0.5	ND<0.5	ND<0.5	ND<5
	2/2/07	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	12	ND<0.5	ND<0.5	ND<0.5	ND<5
	4/30/07	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	8.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	7/18/07	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	7.3	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/30/07	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	6.9	ND<0.5	ND<0.5	ND<0.5	ND<5
	1/28/08	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	5.3	ND<0.5	ND<0.5	ND<0.5	ND<5
	5/13/08	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	5.5	ND<0.5	ND<0.5	ND<0.5	6.8
	7/16/08	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	7.2	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/8/08	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	6.6	ND<0.5	ND<0.5	ND<0.5	ND<5
	1/29/09	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	7.2	ND<0.5	ND<0.5	ND<0.5	ND<5
	1/30/09 (dup)	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	8.7	ND<0.5	ND<0.5	ND<0.5	ND<5

TABLE D-1
HISTORICAL GROUNDWATER MONITORING ANALYTICAL RESULTS
TESORO - SAN LORENZO, 67107

Monitoring Well	Sample Date ^(a)	TPHg ^(b) (ug/l)	Benzene ^(b) (ug/l)	Toluene ^(b) (ug/l)	Ethylbenzene ^(b) (ug/l)	Total Xylenes ^(b) (ug/l)	MTBE ^(b) (ug/l)	DIPE ^(b) (ug/l)	ETBE ^(b) (ug/l)	TAME ^(b) (ug/l)	TBA ^(b) (ug/l)
ESLs ^(c)		100	1.0	40	30	20	5.0	NE ^(d)	NE	NE	12
RW-1 (cont.)	4/14/09	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	6.3	ND<0.5	ND<0.5	ND<0.5	6.6
	7/1/09	750	ND<0.5	ND<0.5	ND<0.5	0.67	1.7	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/7/09	ND<50	0.68	ND<0.5	ND<0.5	ND<0.5	23	ND<0.5	ND<0.5	ND<0.5	ND<5
	2/17/10	82	3.0	ND<0.5	4.0	1.4	10	ND<0.5	ND<0.5	ND<0.5	ND<5
	4/13/10	ND<50	4.2	ND<0.5	4.8	1.1	9.7	ND<0.5	ND<0.5	ND<0.5	7.5
	7/6/10	ND<50	0.8	ND<0.5	ND<0.5	ND<0.5	8.0	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/28/10	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	6.4	ND<0.5	ND<0.5	ND<0.5	6.6
RW-2	11/13/04	4,200	ND<0.5	ND<0.5	45	70	29	ND<0.5	ND<0.5	ND<0.5	ND<5
	2/4/05	2,900	ND<0.5	ND<0.5	24	24	41	ND<0.5	ND<0.5	ND<0.5	ND<5
	4/13/05	1,400	ND<0.5	ND<0.5	8.6	9.9	39	ND<0.5	ND<0.5	ND<0.5	ND<5
	8/10/05	2,900	ND<0.5	ND<0.5	26	33	29	ND<0.5	ND<0.5	ND<0.5	ND<5
	11/5/05	2,400	ND<0.5	ND<0.5	16	19	12	ND<0.5	ND<0.5	ND<0.5	ND<5
	1/30/06	1,200	ND<0.5	ND<0.5	4.6	5.3	17	ND<0.5	ND<0.5	ND<0.5	ND<5
	4/28/06	1,200	ND<0.5	ND<0.5	12	15	19	ND<0.5	ND<0.5	ND<0.5	ND<5
	8/15/06	1,200	ND<0.5	ND<0.5	6.7	7.0	18	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/26/06	760	ND<0.5	ND<0.5	0.81	7.5	7.6	ND<0.5	ND<0.5	ND<0.5	ND<5
	2/2/07	1,100	ND<0.5	ND<0.5	0.75	1.3	2.3	ND<0.5	ND<0.5	ND<0.5	ND<5
	4/30/07	3,300	190	13	230	230	32	ND<0.5	ND<0.5	ND<0.5	18
	7/18/07	810	ND<0.5	ND<0.5	1.1	3.2	2.2	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/30/07	290	29	0.6	2.7	6.5	15	ND<0.5	ND<0.5	ND<0.5	8.6
	1/28/08	3,300	250	7.9	190	170	33	ND<0.5	ND<0.5	ND<0.5	17
	5/13/08	190	ND<0.5	ND<0.5	ND<0.5	ND<0.5	5.8	ND<0.5	ND<0.5	ND<0.5	ND<5
	7/16/08	360	ND<0.5	ND<0.5	ND<0.5	ND<0.5	6.4	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/8/08	400	ND<0.5	ND<0.5	ND<0.5	ND<0.5	4.7	ND<0.5	ND<0.5	ND<0.5	ND<5
	1/29/09	100	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	1/30/09 (dup)	430	ND<0.5	ND<0.5	ND<0.5	0.74	0.74	ND<0.5	ND<0.5	ND<0.5	ND<5
	4/15/09	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.51	ND<0.5	ND<0.5	ND<0.5	ND<5
	7/1/09	52	1.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	14	ND<0.5	ND<0.5	ND<0.5
	10/7/09	350	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.85	ND<0.5	ND<0.5	ND<0.5	ND<5
	2/18/10	620	ND<0.5	ND<0.5	ND<0.5	0.92	0.84	ND<0.5	ND<0.5	ND<0.5	ND<5
	4/14/10	390	ND<0.5	ND<0.5	ND<0.5	1.1	0.97	ND<0.5	ND<0.5	ND<0.5	ND<5
	7/7/10	380	ND<0.5	ND<0.5	ND<0.5	0.79	0.82	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/28/10	220	ND<0.5	ND<0.5	ND<0.5	0.67	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
DW-15800 ^(h)	1/14/03	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.81	ND<0.5	ND<0.5	ND<0.5	ND<5
	3/20/03	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	9/19/06	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/5/07	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	5/29/07	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5

TABLE D-1
HISTORICAL GROUNDWATER MONITORING ANALYTICAL RESULTS
TESORO - SAN LORENZO, 67107

Monitoring Well	Sample Date ^(a)	TPHg ^(b) (ug/l)	Benzene ^(b) (ug/l)	Toluene ^(b) (ug/l)	Ethylbenzene ^(b) (ug/l)	Total Xylenes ^(b) (ug/l)	MTBE ^(b) (ug/l)	DIPE ^(b) (ug/l)	ETBE ^(b) (ug/l)	TAME ^(b) (ug/l)	TBA ^(b) (ug/l)
ESLs ^(c)		100	1.0	40	30	20	5.0	NE ^(d)	NE	NE	12
DW-15808 ^(h)	1/14/03	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	3/20/03	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	9/19/06	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	2/5/07	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	5/29/07	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
DW-246 ^(h)	9/19/06	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	2/5/07 ⁽ⁱ⁾	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	7.0
	2/21/07	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	5/29/07	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
OS-1	9/5/08	800	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/8/08	610	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	1/29/09	65	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	1/30/09 (dup)	150	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	4/15/09	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	7/1/09	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/7/09	60	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
OS-2	9/5/08	1,300	ND<0.5	0.56	ND<0.5	ND<0.5	0.99	ND<0.5	ND<0.5	ND<0.5	ND<5
	1/29/09	200	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
	1/30/09 (dup)	1,900	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.55	ND<0.5	ND<0.5	ND<0.5	ND<5
	4/15/09	1,200	ND<0.5	ND<0.5	0.72	ND<0.5	1.3	ND<0.5	ND<0.5	ND<0.5	ND<5
	7/1/09	1,500	ND<0.5	ND<0.5	0.69	ND<0.5	1.8	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/7/09	1,200	ND<0.5	ND<0.5	0.55	ND<0.5	1.4	ND<0.5	ND<0.5	ND<0.5	ND<5
OS-3	9/5/08	3,200	160	15	72	470	19	ND<0.5	ND<0.5	ND<0.5	23
	10/8/08	4,100	240	38	240	630	22	ND<0.5	ND<0.5	ND<0.5	20
	1/29/09	670	78	3.5	75	28	11	ND<0.5	ND<0.5	ND<0.5	7.8
	1/30/09 (dup)	1,400	140	5.3	120	120	11	ND<0.5	ND<0.5	ND<0.5	16
	4/15/09	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	32	ND<0.5	ND<0.5	ND<0.5	ND<5
	7/1/09	2,100	220	6.8	190	250	20	ND<0.5	ND<0.5	ND<0.5	18
	10/7/09	2,100	230	6.5	150	230	20	ND<0.5	ND<0.5	ND<0.5	16
OS-4	9/5/08	210	ND<0.5	ND<0.5	ND<0.5	3.6	16	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/8/08	170	4.2	ND<0.5	ND<0.5	2.4	12	ND<0.5	ND<0.5	ND<0.5	ND<5
	1/29/09	ND<50	1.4	ND<0.5	ND<0.5	ND<0.5	21	ND<0.5	ND<0.5	ND<0.5	ND<5
	1/30/09 (dup)	ND<50	ND<0.5	ND<0.5	0.79	ND<0.5	22	ND<0.5	ND<0.5	ND<0.5	ND<5
	4/15/09	88	12	ND<0.5	2.2	0.58	19	ND<0.5	ND<0.5	ND<0.5	28
	7/1/09	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	34	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/7/09	680	14	ND<0.5	8.6	12	38	ND<0.5	ND<0.5	ND<0.5	12
PT-1	9/5/08	240	ND<0.5	ND<0.5	ND<0.5	ND<0.5	5.9	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/8/08	140	ND<0.5	ND<0.5	ND<0.5	1.0	5.4	ND<0.5	ND<0.5	ND<0.5	ND<5

TABLE D-1
HISTORICAL GROUNDWATER MONITORING ANALYTICAL RESULTS
TESORO - SAN LORENZO, 67107

Monitoring Well	Sample Date ^(a)	TPHg ^(b) (ug/l)	Benzene ^(b) (ug/l)	Toluene ^(b) (ug/l)	Ethylbenzene ^(b) (ug/l)	Total Xylenes ^(b) (ug/l)	MTBE ^(b) (ug/l)	DIPE ^(b) (ug/l)	ETBE ^(b) (ug/l)	TAME ^(b) (ug/l)	TBA ^(b) (ug/l)
ESLs ^(c)		100	1.0	40	30	20	5.0	NE ^(d)	NE	NE	12
PT-1 (cont.)	1/29/09	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	7.3	ND<0.5	ND<0.5	ND<0.5	ND<5
	1/30/09 (dup)	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	7.6	ND<0.5	ND<0.5	ND<0.5	ND<5
	4/15/09	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	7.9	ND<0.5	ND<0.5	ND<0.5	ND<5
	7/1/09	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	13	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/7/09	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	13	ND<0.5	ND<0.5	ND<0.5	ND<5
	2/18/10	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	17	ND<0.5	ND<0.5	ND<0.5	ND<5
	4/14/10	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	13	ND<0.5	ND<0.5	ND<0.5	ND<5
	7/6/10	61	ND<0.5	ND<0.5	ND<0.5	ND<0.5	8.2	ND<0.5	ND<0.5	ND<0.5	ND<5
	10/28/10	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	9.4	ND<0.5	ND<0.5	ND<0.5	ND<5

- (a) Samples collected before January 2008 reported by others; data provided by RDM Environmental, Inc. (RDM), Fourth Quarter 2007 Groundwater Monitoring Report
- (b) Total petroleum hydrocarbons as gasoline (TPHg), benzene, toluene, ethylbenzene, xylenes, methyl tert-butyl ether (MTBE), di-isopropyl ether (DIPE), ethyl tert-butyl ether (ETBE), tert-amyl methyl ether (TAME), tert-butyl alcohol (TBA), analyzed by EPA Method 8260; reported in micrograms per liter (μg/l).
- (c) Environmental Screening Levels (ESLs) taken from Regional Water Quality Control Board, San Francisco Bay Region, Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, Volume 1: Summary Tier 1 Lookup tables dated November 2007.
- (d) NE - Not established.
- (e) "--" - Not analyzed.
- (f) ND - Not detected at the reporting limit listed; reporting limit not listed if not previously reported.
- (g) Not typical gasoline.
- (h) Domestic water wells (used as irrigation wells); DW-15800 collected from well at 15800 Via Cordoba, DW-15808 collected from well at 15808 Via Cordoba, DW-246 collected from well at 246 Peach Drive in San Lorenzo, CA.
- (i) Property owner had the RDM technician sample a faucet plumbed to city water. RDM resampled the 246 Peach well on 21 February 2007.

ATTACHMENT E

**LABORATORY ANALYTICAL REPORT AND
CHAIN-OF-CUSTODY FORM**



Report Number : 75120

Date : 11/01/2010

Laboratory Results

Mike Purchase
Arctos Environmental
1332 Peralta Avenue
Berkeley, CA 94702

Subject : 15 Water Samples
Project Name : Tesoro - San Lorenzo #67107
Project Number : 01ZO

Dear Mr. Purchase,

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 standard. All soil samples are reported on a total weight (wet weight) basis unless noted otherwise in the case narrative. 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, appearing to read "Joel Kiff".

Joel Kiff



Report Number : 75120

Date : 11/01/2010

Subject : 15 Water Samples
Project Name : Tesoro - San Lorenzo #67107
Project Number : 01ZO

Case Narrative

California Laboratory Services provided analytical testing associated with these samples, but is not accredited by the National Environmental Laboratory Accreditation Program (NELAP).

Matrix Spike/Matrix Spike Duplicate results associated with samples MW-3R, MW-6, MW-9, MW-10, MW-11, RW-2, and PT-1 for the analyte Iron were affected by the analyte concentrations already present in the un-spiked sample.

Matrix Spike/Matrix Spike Duplicate results associated with samples MW-1, MW-2, MW-3R, MW-4, MW-5, MW-6, MW-7, MW-8, MW-9, MW-10, and MW-11 for the analytes Benzene and Ethylbenzene were affected by the analyte concentrations already present in the un-spiked sample.



Report Number : 75120

Date : 11/01/2010

Project Name : **Tesoro - San Lorenzo #67107**Project Number : **01ZO**Sample : **MW-1**

Matrix : Water

Lab Number : 75120-01

Sample Date : 10/27/2010

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	10/28/10 22:38
Toluene	< 0.50	0.50	ug/L	EPA 8260B	10/28/10 22:38
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	10/28/10 22:38
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	10/28/10 22:38
Methyl-t-butyl ether (MTBE)	4.7	0.50	ug/L	EPA 8260B	10/28/10 22:38
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	10/28/10 22:38
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	10/28/10 22:38
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	10/28/10 22:38
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	10/28/10 22:38
Methanol	< 50	50	ug/L	EPA 8260B	10/28/10 22:38
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	10/28/10 22:38
TPH as Gasoline	200	50	ug/L	EPA 8260B	10/28/10 22:38
1,2-Dichloroethane-d4 (Surr)	98.7		% Recovery	EPA 8260B	10/28/10 22:38
Toluene - d8 (Surr)	99.1		% Recovery	EPA 8260B	10/28/10 22:38



Report Number : 75120

Date : 11/01/2010

Project Name : **Tesoro - San Lorenzo #67107**Project Number : **01ZO**Sample : **MW-2**

Matrix : Water

Lab Number : 75120-02

Sample Date : 10/27/2010

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	10/28/10 23:13
Toluene	< 0.50	0.50	ug/L	EPA 8260B	10/28/10 23:13
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	10/28/10 23:13
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	10/28/10 23:13
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	10/28/10 23:13
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	10/28/10 23:13
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	10/28/10 23:13
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	10/28/10 23:13
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	10/28/10 23:13
Methanol	< 50	50	ug/L	EPA 8260B	10/28/10 23:13
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	10/28/10 23:13
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	10/28/10 23:13
1,2-Dichloroethane-d4 (Surr)	99.2		% Recovery	EPA 8260B	10/28/10 23:13
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	10/28/10 23:13



Report Number : 75120

Date : 11/01/2010

Project Name : **Tesoro - San Lorenzo #67107**Project Number : **01ZO**Sample : **MW-3R**

Matrix : Water

Lab Number : 75120-03

Sample Date : 10/28/2010

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Nitrate as N	< 0.10	0.10	mg/L	EPA 300.0	10/28/10 23:30
Sulfate	18	0.50	mg/L	EPA 300.0	10/28/10 23:30
Iron	11	0.10	mg/L	EPA 6010B	10/29/10 14:16
Benzene	24	0.50	ug/L	EPA 8260B	10/28/10 23:48
Toluene	0.56	0.50	ug/L	EPA 8260B	10/28/10 23:48
Ethylbenzene	2.1	0.50	ug/L	EPA 8260B	10/28/10 23:48
Total Xylenes	0.83	0.50	ug/L	EPA 8260B	10/28/10 23:48
Methyl-t-butyl ether (MTBE)	12	0.50	ug/L	EPA 8260B	10/28/10 23:48
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	10/28/10 23:48
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	10/28/10 23:48
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	10/28/10 23:48
Tert-Butanol	14	5.0	ug/L	EPA 8260B	10/28/10 23:48
Methanol	< 50	50	ug/L	EPA 8260B	10/28/10 23:48
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	10/28/10 23:48
TPH as Gasoline	420	50	ug/L	EPA 8260B	10/28/10 23:48
1,2-Dichloroethane-d4 (Surr)	96.5		% Recovery	EPA 8260B	10/28/10 23:48
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	10/28/10 23:48



Report Number : 75120

Date : 11/01/2010

Project Name : **Tesoro - San Lorenzo #67107**Project Number : **01ZO**Sample : **MW-4**

Matrix : Water

Lab Number : 75120-04

Sample Date : 10/27/2010

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 00:22
Toluene	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 00:22
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 00:22
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 00:22
Methyl-t-butyl ether (MTBE)	0.65	0.50	ug/L	EPA 8260B	10/29/10 00:22
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 00:22
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 00:22
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 00:22
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	10/29/10 00:22
Methanol	< 50	50	ug/L	EPA 8260B	10/29/10 00:22
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	10/29/10 00:22
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	10/29/10 00:22
1,2-Dichloroethane-d4 (Surr)	98.0		% Recovery	EPA 8260B	10/29/10 00:22
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	10/29/10 00:22



Report Number : 75120

Date : 11/01/2010

Project Name : **Tesoro - San Lorenzo #67107**Project Number : **01ZO**Sample : **MW-5**

Matrix : Water

Lab Number : 75120-05

Sample Date : 10/27/2010

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 00:57
Toluene	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 00:57
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 00:57
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 00:57
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 00:57
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 00:57
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 00:57
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 00:57
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	10/29/10 00:57
Methanol	< 50	50	ug/L	EPA 8260B	10/29/10 00:57
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	10/29/10 00:57
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	10/29/10 00:57
1,2-Dichloroethane-d4 (Surr)	95.3		% Recovery	EPA 8260B	10/29/10 00:57
Toluene - d8 (Surr)	99.7		% Recovery	EPA 8260B	10/29/10 00:57



Report Number : 75120

Date : 11/01/2010

Project Name : **Tesoro - San Lorenzo #67107**Project Number : **01ZO**Sample : **MW-6**

Matrix : Water

Lab Number : 75120-06

Sample Date : 10/28/2010

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Nitrate as N	18	1.0	mg/L	EPA 300.0	10/29/10 12:38
Sulfate	51	1.0	mg/L	EPA 300.0	10/29/10 01:23
Iron	6.0	0.10	mg/L	EPA 6010B	11/01/10 09:40
Benzene	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 01:32
Toluene	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 01:32
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 01:32
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 01:32
Methyl-t-butyl ether (MTBE)	0.64	0.50	ug/L	EPA 8260B	10/29/10 01:32
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 01:32
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 01:32
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 01:32
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	10/29/10 01:32
Methanol	< 50	50	ug/L	EPA 8260B	10/29/10 01:32
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	10/29/10 01:32
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	10/29/10 01:32
1,2-Dichloroethane-d4 (Surr)	101		% Recovery	EPA 8260B	10/29/10 01:32
Toluene - d8 (Surr)	99.9		% Recovery	EPA 8260B	10/29/10 01:32



Report Number : 75120

Date : 11/01/2010

Project Name : **Tesoro - San Lorenzo #67107**Project Number : **01ZO**Sample : **MW-7**

Matrix : Water

Lab Number : 75120-07

Sample Date : 10/27/2010

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 02:06
Toluene	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 02:06
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 02:06
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 02:06
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 02:06
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 02:06
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 02:06
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 02:06
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	10/29/10 02:06
Methanol	< 50	50	ug/L	EPA 8260B	10/29/10 02:06
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	10/29/10 02:06
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	10/29/10 02:06
1,2-Dichloroethane-d4 (Surr)	96.5		% Recovery	EPA 8260B	10/29/10 02:06
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	10/29/10 02:06



Report Number : 75120

Date : 11/01/2010

Project Name : **Tesoro - San Lorenzo #67107**Project Number : **01ZO**Sample : **MW-8**

Matrix : Water

Lab Number : 75120-08

Sample Date : 10/27/2010

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 02:41
Toluene	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 02:41
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 02:41
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 02:41
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 02:41
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 02:41
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 02:41
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 02:41
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	10/29/10 02:41
Methanol	< 50	50	ug/L	EPA 8260B	10/29/10 02:41
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	10/29/10 02:41
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	10/29/10 02:41
1,2-Dichloroethane-d4 (Surr)	102		% Recovery	EPA 8260B	10/29/10 02:41
Toluene - d8 (Surr)	98.6		% Recovery	EPA 8260B	10/29/10 02:41



Report Number : 75120

Date : 11/01/2010

Project Name : **Tesoro - San Lorenzo #67107**Project Number : **01ZO**Sample : **MW-9**

Matrix : Water

Lab Number : 75120-09

Sample Date : 10/28/2010

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Nitrate as N	7.2	1.0	mg/L	EPA 300.0	10/29/10 13:06
Sulfate	39	0.50	mg/L	EPA 300.0	10/29/10 00:55
Iron	5.4	0.10	mg/L	EPA 6010B	11/01/10 09:44
Benzene	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 03:15
Toluene	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 03:15
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 03:15
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 03:15
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 03:15
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 03:15
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 03:15
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 03:15
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	10/29/10 03:15
Methanol	< 50	50	ug/L	EPA 8260B	10/29/10 03:15
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	10/29/10 03:15
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	10/29/10 03:15
1,2-Dichloroethane-d4 (Surr)	102		% Recovery	EPA 8260B	10/29/10 03:15
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	10/29/10 03:15



Report Number : 75120

Date : 11/01/2010

Project Name : **Tesoro - San Lorenzo #67107**Project Number : **01ZO**Sample : **MW-10**

Matrix : Water

Lab Number : 75120-10

Sample Date : 10/28/2010

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Nitrate as N	< 0.10	0.10	mg/L	EPA 300.0	10/28/10 22:03
Sulfate	0.58	0.50	mg/L	EPA 300.0	10/28/10 22:03
Iron	6.6	0.10	mg/L	EPA 6010B	11/01/10 09:48
Benzene	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 03:50
Toluene	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 03:50
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 03:50
Total Xylenes	2.0	0.50	ug/L	EPA 8260B	10/29/10 03:50
Methyl-t-butyl ether (MTBE)	0.88	0.50	ug/L	EPA 8260B	10/29/10 03:50
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 03:50
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 03:50
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 03:50
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	10/29/10 03:50
Methanol	< 50	50	ug/L	EPA 8260B	10/29/10 03:50
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	10/29/10 03:50
TPH as Gasoline	2900	50	ug/L	EPA 8260B	10/29/10 03:50
1,2-Dichloroethane-d4 (Surr)	91.6		% Recovery	EPA 8260B	10/29/10 03:50
Toluene - d8 (Surr)	94.6		% Recovery	EPA 8260B	10/29/10 03:50



Report Number : 75120

Date : 11/01/2010

Project Name : **Tesoro - San Lorenzo #67107**Project Number : **01ZO**Sample : **MW-11**

Matrix : Water

Lab Number : 75120-11

Sample Date : 10/28/2010

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Nitrate as N	1.8	0.10	mg/L	EPA 300.0	10/29/10 00:27
Sulfate	10	0.50	mg/L	EPA 300.0	10/29/10 00:27
Iron	6.9	0.10	mg/L	EPA 6010B	11/01/10 09:52
Benzene	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 04:25
Toluene	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 04:25
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 04:25
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 04:25
Methyl-t-butyl ether (MTBE)	0.74	0.50	ug/L	EPA 8260B	10/29/10 04:25
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 04:25
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 04:25
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 04:25
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	10/29/10 04:25
Methanol	< 50	50	ug/L	EPA 8260B	10/29/10 04:25
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	10/29/10 04:25
TPH as Gasoline	130	50	ug/L	EPA 8260B	10/29/10 04:25
1,2-Dichloroethane-d4 (Surr)	99.4		% Recovery	EPA 8260B	10/29/10 04:25
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	10/29/10 04:25



Report Number : 75120

Date : 11/01/2010

Project Name : **Tesoro - San Lorenzo #67107**Project Number : **01ZO**Sample : **MW-12**

Matrix : Water

Lab Number : 75120-12

Sample Date : 10/27/2010

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	10/28/10 23:41
Toluene	< 0.50	0.50	ug/L	EPA 8260B	10/28/10 23:41
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	10/28/10 23:41
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	10/28/10 23:41
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	10/28/10 23:41
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	10/28/10 23:41
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	10/28/10 23:41
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	10/28/10 23:41
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	10/28/10 23:41
Methanol	< 50	50	ug/L	EPA 8260B	10/28/10 23:41
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	10/28/10 23:41
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	10/28/10 23:41
1,2-Dichloroethane-d4 (Surr)	99.6		% Recovery	EPA 8260B	10/28/10 23:41
Toluene - d8 (Surr)	99.6		% Recovery	EPA 8260B	10/28/10 23:41



Report Number : 75120

Date : 11/01/2010

Project Name : **Tesoro - San Lorenzo #67107**Project Number : **01ZO**Sample : **RW-1**

Matrix : Water

Lab Number : 75120-13

Sample Date : 10/28/2010

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 00:16
Toluene	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 00:16
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 00:16
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 00:16
Methyl-t-butyl ether (MTBE)	6.4	0.50	ug/L	EPA 8260B	10/29/10 00:16
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 00:16
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 00:16
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 00:16
Tert-Butanol	6.6	5.0	ug/L	EPA 8260B	10/29/10 00:16
Methanol	< 50	50	ug/L	EPA 8260B	10/29/10 00:16
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	10/29/10 00:16
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	10/29/10 00:16
1,2-Dichloroethane-d4 (Surr)	98.9		% Recovery	EPA 8260B	10/29/10 00:16
Toluene - d8 (Surr)	99.2		% Recovery	EPA 8260B	10/29/10 00:16



Report Number : 75120

Date : 11/01/2010

Project Name : **Tesoro - San Lorenzo #67107**Project Number : **01ZO**Sample : **RW-2**

Matrix : Water

Lab Number : 75120-14

Sample Date : 10/28/2010

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Nitrate as N	3.1	0.20	mg/L	EPA 300.0	10/29/10 01:52
Sulfate	53	1.0	mg/L	EPA 300.0	10/29/10 01:52
Iron	6.9	0.10	mg/L	EPA 6010B	11/01/10 10:02
Benzene	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 00:51
Toluene	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 00:51
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 00:51
Total Xylenes	0.67	0.50	ug/L	EPA 8260B	10/29/10 00:51
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 00:51
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 00:51
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 00:51
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 00:51
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	10/29/10 00:51
Methanol	< 50	50	ug/L	EPA 8260B	10/29/10 00:51
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	10/29/10 00:51
TPH as Gasoline	220	50	ug/L	EPA 8260B	10/29/10 00:51
1,2-Dichloroethane-d4 (Surr)	98.9		% Recovery	EPA 8260B	10/29/10 00:51
Toluene - d8 (Surr)	99.8		% Recovery	EPA 8260B	10/29/10 00:51



Report Number : 75120

Date : 11/01/2010

Project Name : **Tesoro - San Lorenzo #67107**Project Number : **01ZO**Sample : **PT-1**

Matrix : Water

Lab Number : 75120-15

Sample Date : 10/28/2010

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Nitrate as N	0.38	0.10	mg/L	EPA 300.0	10/28/10 23:58
Sulfate	40	0.50	mg/L	EPA 300.0	10/28/10 23:58
Iron	13	0.10	mg/L	EPA 6010B	11/01/10 10:06
Benzene	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 01:26
Toluene	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 01:26
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 01:26
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 01:26
Methyl-t-butyl ether (MTBE)	9.4	0.50	ug/L	EPA 8260B	10/29/10 01:26
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 01:26
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 01:26
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	10/29/10 01:26
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	10/29/10 01:26
Methanol	< 50	50	ug/L	EPA 8260B	10/29/10 01:26
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	10/29/10 01:26
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	10/29/10 01:26
1,2-Dichloroethane-d4 (Surr)	99.2		% Recovery	EPA 8260B	10/29/10 01:26
Toluene - d8 (Surr)	99.2		% Recovery	EPA 8260B	10/29/10 01:26

Report Number : 75120

Date : 11/01/2010

QC Report : Method Blank Data**Project Name : Tesoro - San Lorenzo #67107****Project Number : 01ZO**

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Iron	< 0.10	0.10	mg/L	EPA 6010B	10/29/2010
Benzene	< 0.50	0.50	ug/L	EPA 8260B	10/28/2010
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	10/28/2010
Toluene	< 0.50	0.50	ug/L	EPA 8260B	10/28/2010
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	10/28/2010
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	10/28/2010
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	10/28/2010
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	10/28/2010
Methanol	< 50	50	ug/L	EPA 8260B	10/28/2010
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	10/28/2010
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	10/28/2010
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	10/28/2010
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	10/28/2010
1,2-Dichloroethane-d4 (Surr)	99.1		%	EPA 8260B	10/28/2010
Toluene - d8 (Surr)	98.4		%	EPA 8260B	10/28/2010
Benzene	< 0.50	0.50	ug/L	EPA 8260B	10/28/2010
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	10/28/2010
Toluene	< 0.50	0.50	ug/L	EPA 8260B	10/28/2010
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	10/28/2010
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	10/28/2010
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	10/28/2010
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	10/28/2010
Methanol	< 50	50	ug/L	EPA 8260B	10/28/2010
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	10/28/2010
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	10/28/2010
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	10/28/2010
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	10/28/2010
1,2-Dichloroethane-d4 (Surr)	100		%	EPA 8260B	10/28/2010
Toluene - d8 (Surr)	99.5		%	EPA 8260B	10/28/2010

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Nitrate as N	< 0.10	0.10	mg/L	EPA 300.0	10/28/2010
Sulfate	< 0.50	0.50	mg/L	EPA 300.0	10/28/2010

Project Name : **Tesoro - San Lorenzo #67107**Project Number : **01ZO**

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
Nitrate as N														
Sulfate														
75120-10 <0.10 0.500 0.500 0.458 0.465 mg/L EPA 300.0 10/28/10 87.6 88.9 1.47 85.0-115 10														
Iron														
75120-03 11 0.400 0.400 10.9 12.2 mg/L EPA 6010B 10/29/10 0.00 308 11.1 75-125 20														
Benzene														
Diisopropyl ether 75117-01 280 40.0 40.0 312 308 ug/L EPA 8260B 10/28/10 66.4 55.7 17.5 80-120 25														
Ethanol 75117-01 2.8 40.1 40.1 41.0 39.9 ug/L EPA 8260B 10/28/10 95.2 92.5 2.95 80-120 25														
Ethyl-tert-butyl ether 75117-01 <5.0 100 100 76.7 80.5 ug/L EPA 8260B 10/28/10 76.4 80.1 4.75 55.1-159 25														
Ethylbenzene														
Methanol 75117-01 200 40.0 40.0 233 230 ug/L EPA 8260B 10/28/10 82.0 74.4 9.66 80-120 25														
75117-01 <50 1000 1000 980 914 ug/L EPA 8260B 10/28/10 97.9 91.3 6.92 53.2-147 25														

Project Name : **Tesoro - San Lorenzo #67107**Project Number : **01ZO**

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
Methyl-t-butyl ether														
P + M Xylene	75117-01	<0.50	40.0	40.0	37.6	37.1	ug/L	EPA 8260B	10/28/10	94.1	92.7	1.51	69.7-121	25
Tert-Butanol	75117-01	66	40.0	40.0	103	102	ug/L	EPA 8260B	10/28/10	90.2	90.1	0.139	76.8-120	25
Tert-amyl-methyl ether	75117-01	14	200	200	218	216	ug/L	EPA 8260B	10/28/10	102	101	0.899	80-120	25
Toluene	75117-01	0.94	40.2	40.2	40.1	39.2	ug/L	EPA 8260B	10/28/10	97.5	95.2	2.34	78.9-120	25
Benzene	75117-01	3.0	40.0	40.0	41.2	40.6	ug/L	EPA 8260B	10/28/10	95.6	94.0	1.67	80-120	25
Diisopropyl ether	75121-07	<0.50	40.0	40.0	39.8	39.4	ug/L	EPA 8260B	10/28/10	99.4	98.4	0.933	80-120	25
Ethanol	75121-07	<0.50	40.1	40.1	39.7	39.2	ug/L	EPA 8260B	10/28/10	99.0	97.7	1.37	80-120	25
Ethyl-tert-butyl ether	75121-07	<5.0	100	100	108	115	ug/L	EPA 8260B	10/28/10	108	114	5.85	55.1-159	25
	75121-07	<0.50	40.1	40.1	39.0	38.7	ug/L	EPA 8260B	10/28/10	97.3	96.7	0.670	76.5-120	25

Project Name : **Tesoro - San Lorenzo #67107**Project Number : **01ZO**

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														
	75121-07	84	40.0	40.0	125	123	ug/L	EPA 8260B	10/28/10	101	97.5	3.97	80-120	25
Methanol														
	75121-07	<50	1000	1000	1210	1250	ug/L	EPA 8260B	10/28/10	121	125	3.29	53.2-147	25
Methyl-t-butyl ether														
	75121-07	0.65	40.0	40.0	37.8	37.6	ug/L	EPA 8260B	10/28/10	92.9	92.5	0.471	69.7-121	25
P + M Xylene														
	75121-07	47	40.0	40.0	85.1	84.2	ug/L	EPA 8260B	10/28/10	94.7	92.4	2.43	76.8-120	25
Tert-Butanol														
	75121-07	<5.0	200	200	206	208	ug/L	EPA 8260B	10/28/10	103	104	0.730	80-120	25
Tert-amyl-methyl ether														
	75121-07	<0.50	40.2	40.2	39.1	38.9	ug/L	EPA 8260B	10/28/10	97.2	96.6	0.547	78.9-120	25
Toluene														
	75121-07	0.59	40.0	40.0	40.3	39.8	ug/L	EPA 8260B	10/28/10	99.3	98.1	1.23	80-120	25

Project Name : **Tesoro - San Lorenzo #67107**Project Number : **01ZO**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Iron	0.400	mg/L	EPA 6010B	10/29/10	102	85-115
Benzene	39.9	ug/L	EPA 8260B	10/28/10	93.2	80-120
Diisopropyl ether	40.0	ug/L	EPA 8260B	10/28/10	98.1	80-120
Ethanol	100	ug/L	EPA 8260B	10/28/10	83.4	55.1-159
Ethyl-tert-butyl ether	40.0	ug/L	EPA 8260B	10/28/10	97.3	76.5-120
Ethylbenzene	39.9	ug/L	EPA 8260B	10/28/10	104	80-120
Methanol	999	ug/L	EPA 8260B	10/28/10	101	53.2-147
Methyl-t-butyl ether	39.9	ug/L	EPA 8260B	10/28/10	98.6	69.7-121
P + M Xylene	39.9	ug/L	EPA 8260B	10/28/10	100	76.8-120
TPH as Gasoline	503	ug/L	EPA 8260B	10/28/10	91.6	70.0-130
Tert-Butanol	200	ug/L	EPA 8260B	10/28/10	102	80-120
Tert-amyl-methyl ether	40.1	ug/L	EPA 8260B	10/28/10	105	78.9-120
Toluene	39.9	ug/L	EPA 8260B	10/28/10	97.6	80-120
Benzene	40.2	ug/L	EPA 8260B	10/28/10	103	80-120
Diisopropyl ether	40.3	ug/L	EPA 8260B	10/28/10	103	80-120
Ethanol	101	ug/L	EPA 8260B	10/28/10	107	55.1-159
Ethyl-tert-butyl ether	40.2	ug/L	EPA 8260B	10/28/10	102	76.5-120
Ethylbenzene	40.2	ug/L	EPA 8260B	10/28/10	103	80-120
Methanol	1000	ug/L	EPA 8260B	10/28/10	130	53.2-147
Methyl-t-butyl ether	40.2	ug/L	EPA 8260B	10/28/10	98.7	69.7-121

Project Name : **Tesoro - San Lorenzo #67107**Project Number : **01ZO**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
P + M Xylene	40.2	ug/L	EPA 8260B	10/28/10	104	76.8-120
TPH as Gasoline	503	ug/L	EPA 8260B	10/28/10	97.6	70.0-130
Tert-Butanol	201	ug/L	EPA 8260B	10/28/10	105	80-120
Tert-amyl-methyl ether	40.4	ug/L	EPA 8260B	10/28/10	101	78.9-120
Toluene	40.2	ug/L	EPA 8260B	10/28/10	104	80-120
<hr/>						
Nitrate as N	0.500	mg/L	EPA 300.0	10/28/10	93.0	85.0-115
Sulfate	2.50	mg/L	EPA 300.0	10/28/10	96.2	85.0-115



2795 2nd Street, Suite 300
Davis, CA 95618
Lab: 530.297.4800
Fax: 530.297.4802

SRG # / Lab No.

Yes No

75120

Page

1 of 2

Project Contact (Hardcopy or PDF To):

Mike Purchase

Company / Address: Arctos Environmental
1332 Peralta Avenue, Berkley, CA. 90806

Phone Number:
(510) 525-2180

Fax Number:
(510) 525-2392

Project #: P.O. #:
M27101027

Project Name:
Tesoro - San Lorenzo #67107

Project Address:
44 Lewelling Blvd
San Lorenzo, CA

Sample Designation	Sampling		Containers & Preservatives			Matrix					
	Date	Time	40 ml HCl VOA	250 mL HDPE unpres.	500 mL HDPE unpres.	250 mL HDPE HNO ₃	250 mL glass H ₂ SO ₄	125 mL Amber glass w/ sepiate	Water	Soil	Air
MW-1	10/27	1300	3						X	X	
MW-2	10/27	1245	3						X	X	
MW-3E	10/28	1010	34	12					X	X	X X X X X X X X
MW-4	10/27	1230	3						X	X	
MW-5	10/27	1135	3						X	X	
MW-6	10/28	755	34	12					X	X	X X X X X X X X
MW-7	10/27	1220	3						X	X	
MW-8	10/27	1205	3						X	X	
MW-9	10/28	815	34	12					X	X	X X X X X X X X
MW-10	10/28	1058	34	12					X	X	X X X X X X X X

Relinquished by:

Date: 10/28/10 Time: 1240 Received by:

Date: Time: Received by:

Date: Time: Received by Laboratory:

Date: 10/28/10 Time: 1300 Received by Laboratory:

Chain-of-Custody Record and Analysis Request												
Analysis Request												TAT
											circle method	
TPH-G, BTEX (8260B)												
7 Oxigenates (MTBE, DiE, ETBE, TAME, TBA, EIOH, MeOH) (EPA 626B)												
Nitrate & Sulfate												
Carbon Dioxide (SM4500-CO2D)												
COD												
TOC												
Total Alkalinity (SM2320 B)												
Total Iron (EPA 6010)												
Ferrous Iron (SM 350-Fe D)												
Total Organic Carbon (EPA 415.1)												
Total Lead (EPA 200.7 / 6010)												
Carbon Dioxide (SM 4500-CO2D)												
Phosphorus, Nitrate, Nitrite and Sulfate (EPA 300.0/365.3)												
Methane (RSK 175M)												
For Lab Use Only												
12 hr	<input type="checkbox"/>											
24 hr	<input type="checkbox"/>											
48hr	<input type="checkbox"/>											
72hr	<input type="checkbox"/>											
1 wk	<input checked="" type="checkbox"/>											
For Lab Use Only												

For Lab Use Only: Sample Receipt						
Temp °C	Initials	Date	Time	Therm. ID #	Coolant Present	Yes / No



2795 2nd Street, Suite 300
Davis, CA 95618
Lab: 530.297.4800
Fax: 530.297.4802

SRG # / Lab No.

75120

Page

2 of 2

Leaders in Analytical Science and Service



Subcontract Laboratory Report Attachments

2795 Second Street, Suite 300 Davis, CA 95618
tel 530.297.4800 fax 530.297.4808
www.kiffanalytical.com

CALIFORNIA LABORATORY SERVICES

3249 Fitzgerald Road Rancho Cordova, CA 95742

November 04, 2010

**CLS Work Order #: CTJ1132
COC #: 75120**

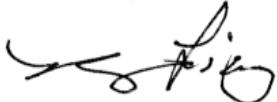
Scott Forbes
KIFF Analytical
2795 Second St. Suite 300
Davis, CA 95616

Project Name: Tesoro - San Lorenzo #67107

Enclosed are the results of analyses for samples received by the laboratory on 10/28/10 14:25. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that the results are in compliance both technically and for completeness.

Analytical results are attached to this letter. Please call if we can provide additional assistance.

Sincerely,



James Liang, Ph.D.
Laboratory Director

CA DOHS ELAP Accreditation/Registration number 1233

CALIFORNIA LABORATORY SERVICES

Page 1 of 4

11/04/10 13:27

KIFF Analytical
2795 Second St. Suite 300
Davis, CA 95616

Project: Tesoro - San Lorenzo #67107
Project Number: 01ZO
Project Manager: Scott Forbes

CLS Work Order #: CTJ1132
COC #: 75120



2795 Second Street, Suite 300
Davis, CA 95618
Lab: 530.297.4800
Fax: 530.297.4808

California Laboratory Services
3249 Fitzgerald Road
Rancho Cordova, CA 95742
916-638-7301
COC No. **75120**

Page 1 of 1

Project Contact (Hardcopy or PDF to): Scott Forbes		EDF Report? YES		Chain-of-Custody Record and Analysis Request									
Company/Address: Kiff Analytical		Sampling Company Log Code: CESC		Analysis Request					TAT				
Phone No.: 530-297-4800	FAX No.: 530-297-4808	Global ID: T0600101414											
Project Number: 01ZO	P.O. No.: 75120	Deliverables to (Email Address): inbox@kiffanalytical.com											
Project Name: Tesoro - San Lorenzo #67107		Container / Preservative		Matrix									
Project Address:		Sampling		250ml Poly/None	Water	Carbon Dioxide	Iron, Dissolved Iron/Dissolved	Standard	For Lab Use Only				
Sample Designation		Date	Time										
MW-3R	10/28/10	10:10	2		X	X X				X			
MW-6	10/28/10	07:55	2		X	X X				X			
MW-9	10/28/10	08:15	2		X	X X				X			
MW-10	10/28/10	10:58	2		X	X X				X			
MW-11	10/28/10	10:30	2		X	X X				X			
RW-2	10/28/10	09:40	2		X	X X				X			
PT-1	10/28/10	08:45	2		X	X X				X			
Relinquished by: <i>Scott Forbes Kiff Analytical</i>	Date 10/28/10	Time 14:25	Received by:				Remarks:						
Relinquished by:	Date	Time	Received by:				<i>3.2°C</i>						
Relinquished by:	Date	Time	Received by Laboratory: <i>Don R 10-28-10 14:25</i>				Bill to: Accounts Payable						

CALIFORNIA LABORATORY SERVICES

Page 2 of 4

11/04/10 13:27

KIFF Analytical
2795 Second St. Suite 300
Davis, CA 95616

Project: Tesoro - San Lorenzo #67107
Project Number: 01ZO CLS Work Order #: CTJ1132
Project Manager: Scott Forbes COC #: 75120

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-3R (CTJ1132-01) Water Sampled: 10/28/10 10:10 Received: 10/28/10 14:25									
Carbon Dioxide as CO2	70	5.0	mg/L	1	CT08053	10/29/10	10/29/10	SM 4500C	
Ferrous Iron, Dissolved	ND	0.10	"	"	CT08041	10/29/10	10/29/10	SM3500-Fe D	
MW-6 (CTJ1132-02) Water Sampled: 10/28/10 07:55 Received: 10/28/10 14:25									
Carbon Dioxide as CO2	44	5.0	mg/L	1	CT08053	10/29/10	10/29/10	SM 4500C	
Ferrous Iron, Dissolved	ND	0.10	"	"	CT08041	10/29/10	10/29/10	SM3500-Fe D	
MW-9 (CTJ1132-03) Water Sampled: 10/28/10 08:15 Received: 10/28/10 14:25									
Carbon Dioxide as CO2	36	5.0	mg/L	1	CT08053	10/29/10	10/29/10	SM 4500C	
Ferrous Iron, Dissolved	ND	0.10	"	"	CT08041	10/29/10	10/29/10	SM3500-Fe D	
MW-10 (CTJ1132-04) Water Sampled: 10/28/10 10:58 Received: 10/28/10 14:25									
Carbon Dioxide as CO2	40	5.0	mg/L	1	CT08053	10/29/10	10/29/10	SM 4500C	
Ferrous Iron, Dissolved	0.16	0.10	"	"	CT08041	10/29/10	10/29/10	SM3500-Fe D	
MW-11 (CTJ1132-05) Water Sampled: 10/28/10 10:30 Received: 10/28/10 14:25									
Carbon Dioxide as CO2	42	5.0	mg/L	1	CT08053	10/29/10	10/29/10	SM 4500C	
Ferrous Iron, Dissolved	ND	0.10	"	"	CT08041	10/29/10	10/29/10	SM3500-Fe D	
RW-2 (CTJ1132-06) Water Sampled: 10/28/10 09:40 Received: 10/28/10 14:25									
Carbon Dioxide as CO2	36	5.0	mg/L	1	CT08053	10/29/10	10/29/10	SM 4500C	
Ferrous Iron, Dissolved	ND	0.10	"	"	CT08041	10/29/10	10/29/10	SM3500-Fe D	
PT-1 (CTJ1132-07) Water Sampled: 10/28/10 08:45 Received: 10/28/10 14:25									
Carbon Dioxide as CO2	22	5.0	mg/L	1	CT08053	10/29/10	10/29/10	SM 4500C	
Ferrous Iron, Dissolved	ND	0.10	"	"	CT08041	10/29/10	10/29/10	SM3500-Fe D	

CALIFORNIA LABORATORY SERVICES

Page 3 of 4

11/04/10 13:27

KIFF Analytical
2795 Second St. Suite 300
Davis, CA 95616

Project: Tesoro - San Lorenzo #67107
Project Number: 01ZO
Project Manager: Scott Forbes

CLS Work Order #: CTJ1132
COC #: 75120

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	-----------	--------	---------	-----------	-------

Batch CT08041 - General Preparation

<u>Blank (CT08041-BLK1)</u>		Prepared & Analyzed: 10/29/10								
Ferrous Iron, Dissolved	ND	0.10	mg/L							
<u>LCS (CT08041-BS1)</u>		Prepared & Analyzed: 10/29/10								
Ferrous Iron, Dissolved	0.237	0.10	mg/L	0.250		95	80-120			
<u>LCS Dup (CT08041-BSD1)</u>		Prepared & Analyzed: 10/29/10								
Ferrous Iron, Dissolved	0.232	0.10	mg/L	0.250		93	80-120	2	25	
<u>Matrix Spike (CT08041-MS1)</u>		<u>Source: CTJ1132-01</u>		Prepared & Analyzed: 10/29/10						
Ferrous Iron, Dissolved	0.254	0.10	mg/L	0.250	0.0197	94	75-125			
<u>Matrix Spike Dup (CT08041-MSD1)</u>		<u>Source: CTJ1132-01</u>		Prepared & Analyzed: 10/29/10						
Ferrous Iron, Dissolved	0.254	0.10	mg/L	0.250	0.0197	94	75-125	0	30	

Batch CT08053 - General Preparation

<u>Blank (CT08053-BLK1)</u>		Prepared & Analyzed: 10/29/10								
Carbon Dioxide as CO ₂	ND	5.0	mg/L							

CALIFORNIA LABORATORY SERVICES

Page 4 of 4

11/04/10 13:27

KIFF Analytical
2795 Second St. Suite 300
Davis, CA 95616

Project: Tesoro - San Lorenzo #67107
Project Number: 01ZO
Project Manager: Scott Forbes
CLS Work Order #: CTJ1132
COC #: 75120

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference



November 04, 2010

Joel Kiff
Kiff Analytical
2795 2nd Street, Suite 300
Davis, CA 95616-6593

Subject: **Calscience Work Order No.: 10-10-2320**

Client Reference: **Tesoro - San Lorenzo #67107**

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 10/29/2010 and analyzed in accordance with the attached chain-of-custody.

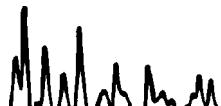
Calscience Environmental Laboratories certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

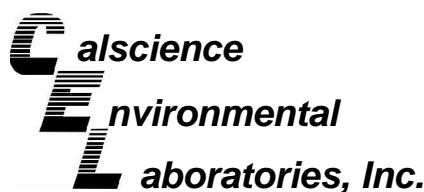
A handwritten signature in black ink that reads "Amanda Porter".

Calscience Environmental
Laboratories, Inc.
Amanda Porter
Project Manager



NELAP ID: 03220CA · DoD-ELAP ID: L10-41 · CSDLAC ID: 10109 · SCAQMD ID: 93LA0830

7440 Lincoln Way, Garden Grove, CA 92841-1427 · TEL:(714) 895-5494 · FAX: (714) 894-7501



Analytical Report



Kiff Analytical
2795 2nd Street, Suite 300
Davis, CA 95616-6593

Date Received: 10/29/10
Work Order No: 10-10-2320

Project: Tesoro - San Lorenzo #67107

Page 1 of 2

Client Sample Number	Lab Sample Number	Date Collected	Matrix
MW-3R	10-10-2320-1	10/28/10	Aqueous

Parameter	Result	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Chemical Oxygen Demand	8.0	5.0	1		mg/L	11/02/10	11/02/10	EPA 410.4
Alkalinity, Total (as CaCO ₃)	529	5.0	1		mg/L	N/A	11/04/10	SM 2320B
Carbon, Total Organic	2.6	0.50	1		mg/L	N/A	11/01/10	SM 5310 D

MW-6	10-10-2320-2	10/28/10	Aqueous
------	--------------	----------	---------

Parameter	Result	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Chemical Oxygen Demand	ND	5.0	1		mg/L	11/02/10	11/02/10	EPA 410.4
Alkalinity, Total (as CaCO ₃)	365	5.0	1		mg/L	N/A	11/04/10	SM 2320B
Carbon, Total Organic	1.5	0.50	1		mg/L	N/A	11/01/10	SM 5310 D

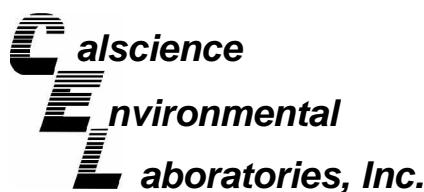
MW-9	10-10-2320-3	10/28/10	Aqueous
------	--------------	----------	---------

Parameter	Result	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Chemical Oxygen Demand	ND	5.0	1		mg/L	11/02/10	11/02/10	EPA 410.4
Alkalinity, Total (as CaCO ₃)	256	5.0	1		mg/L	N/A	11/04/10	SM 2320B
Carbon, Total Organic	1.2	0.50	1		mg/L	N/A	11/01/10	SM 5310 D

MW-10	10-10-2320-4	10/28/10	Aqueous
-------	--------------	----------	---------

Parameter	Result	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Chemical Oxygen Demand	13	5.0	1		mg/L	11/02/10	11/02/10	EPA 410.4
Alkalinity, Total (as CaCO ₃)	345	5.0	1		mg/L	N/A	11/04/10	SM 2320B
Carbon, Total Organic	2.2	0.50	1		mg/L	N/A	11/01/10	SM 5310 D

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



Kiff Analytical
2795 2nd Street, Suite 300
Davis, CA 95616-6593

Date Received: 10/29/10
Work Order No: 10-10-2320

Project: Tesoro - San Lorenzo #67107

Page 2 of 2

Client Sample Number	Lab Sample Number	Date Collected	Matrix
MW-11	10-10-2320-5	10/28/10	Aqueous

Parameter	Result	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Chemical Oxygen Demand	ND	5.0	1		mg/L	11/02/10	11/02/10	EPA 410.4
Alkalinity, Total (as CaCO ₃)	286	5.0	1		mg/L	N/A	11/04/10	SM 2320B
Carbon, Total Organic	1.6	0.50	1		mg/L	N/A	11/01/10	SM 5310 D

RW-2	10-10-2320-6	10/28/10	Aqueous
------	--------------	----------	---------

Parameter	Result	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Chemical Oxygen Demand	ND	5.0	1		mg/L	11/02/10	11/02/10	EPA 410.4
Alkalinity, Total (as CaCO ₃)	359	5.0	1		mg/L	N/A	11/04/10	SM 2320B
Carbon, Total Organic	1.5	0.50	1		mg/L	N/A	11/01/10	SM 5310 D

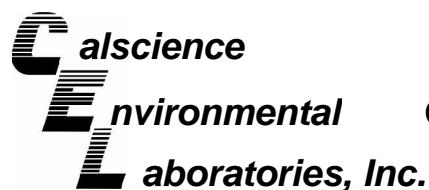
PT-1	10-10-2320-7	10/28/10	Aqueous
------	--------------	----------	---------

Parameter	Result	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Chemical Oxygen Demand	ND	5.0	1		mg/L	11/02/10	11/02/10	EPA 410.4
Alkalinity, Total (as CaCO ₃)	380	5.0	1		mg/L	N/A	11/04/10	SM 2320B
Carbon, Total Organic	1.4	0.50	1		mg/L	N/A	11/01/10	SM 5310 D

Method Blank	N/A	Aqueous
--------------	-----	---------

Parameter	Result	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Chemical Oxygen Demand	ND	5.0	1		mg/L	11/02/10	11/02/10	EPA 410.4
Alkalinity, Total (as CaCO ₃)	ND	1.0	1		mg/L	N/A	11/04/10	SM 2320B
Carbon, Total Organic	ND	0.50	1		mg/L	N/A	11/01/10	SM 5310 D

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Quality Control - Spike/Spike Duplicate



Kiff Analytical
2795 2nd Street, Suite 300
Davis, CA 95616-6593

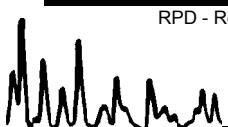
Date Received: N/A
Work Order No: 10-10-2320

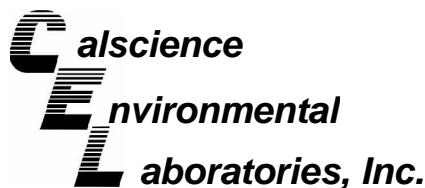
Project: Tesoro - San Lorenzo #67107

Matrix: Aqueous or Solid

<u>Parameter</u>	<u>Method</u>	<u>Quality Control Sample ID</u>	<u>Date Analyzed</u>	<u>Date Extracted</u>	<u>MS% REC</u>	<u>MSD % REC</u>	<u>%REC CL</u>	<u>RPD CL</u>	<u>RPD Qualifiers</u>
Carbon, Total Organic	SM 5310 D	MW-3R	11/01/10	N/A	95	95	75-125	0	0-25

RPD - Relative Percent Difference , CL - Control Limit





Quality Control - Duplicate



Kiff Analytical
2795 2nd Street, Suite 300
Davis, CA 95616-6593

Date Received: N/A
Work Order No: 10-10-2320

Project: Tesoro - San Lorenzo #67107

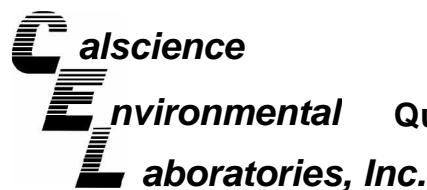
Matrix: Aqueous or Solid

<u>Parameter</u>	<u>Method</u>	<u>QC Sample ID</u>	<u>Date Analyzed</u>	<u>Sample Conc</u>	<u>DUP Conc</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Alkalinity, Total (as CaCO ₃)	SM 2320B	10-10-2029-5	11/04/10	139	140	1	0-25	
Chemical Oxygen Demand	EPA 410.4	MW-3R	11/02/10	8.0	8.0	0	0-25	

RPD - Relative Percent Difference , CL - Control Limit



7440 Lincoln Way, Garden Grove, CA 92841-1427 . TEL:(714) 895-5494 . FAX: (714) 894-7501



Quality Control - Laboratory Control Sample



Kiff Analytical
2795 2nd Street, Suite 300
Davis, CA 95616-6593

Date Received:

N/A

Work Order No:

10-10-2320

Project: Tesoro - San Lorenzo #67107

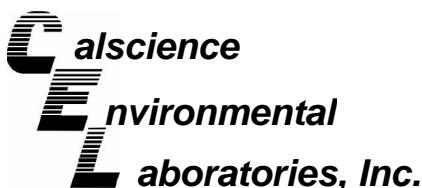
Matrix: Aqueous or Solid

Parameter	Method	Quality Control Sample ID	Date Analyzed	Date Extracted	Conc Added	Conc Recovered	LCS %Rec	%Rec CL	Qualifiers
Carbon, Total Organic	SM 5310 D	099-05-097-4,056	11/01/10	N/A	5.000	4.820	96	80-120	

RPD - Relative Percent Difference , CL - Control Limit



7440 Lincoln Way, Garden Grove, CA 92841-1427 . TEL:(714) 895-5494 . FAX: (714) 894-7501

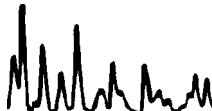


Glossary of Terms and Qualifiers



Work Order Number: 10-10-2320

<u>Qualifier</u>	<u>Definition</u>
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported without further clarification.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS Recovery Percentage is within LCS ME Control Limit range.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture.	





2795 Second Street, Suite 300
Davis, CA 95618
Lab: 530.297.4800
Fax: 530.297.4808

Calscience
7440 Lincoln Way
Garden Grove, CA 92841-1427
714-895-5494

COC No. 75120

2320
Page 1 of 1

Project Contact (Hardcopy or PDF to):

Scott Forbes

Company/Address:

Kiff Analytical

Phone No.:
530-297-4800

FAX No.:
530-297-4808

Project Number:
01ZO

P.O. No.:
75120

Project Name:

Tesoro - San Lorenzo #67107

Project Address:

Sampling

Sample Designation

Date

Time

EDF Report? YES

Chain-of-Custody Record and Analysis Request

Recommended but not mandatory to complete this section:

Sampling Company Log Code: CESC

Global ID: T0600101414

Deliverables to (Email Address):

inbox@kiffanalytical.com

Analysis Request

TAT

4-Days

For Lab Use Only

Sample Designation			Container / Preservative		Matrix		Alkalinity SM 2320 (1)	Chemical Oxygen Demand	Total Organic Carbon	Water	4-Days	For Lab Use Only
	Date	Time	250ml Glass H ₂ SO ₄	250ml Poly None								
MW-3R	10/28/10	10:10	2	1			X		X X X			X 1
MW-6	10/28/10	07:55	2	1			X		X X X			X 2
MW-9	10/28/10	08:15	2	1			X		X X X			X 3
MW-10	10/28/10	10:58	2	1			X		X X X			X 4
MW-11	10/28/10	10:30	2	1			X		X X X			X 5
RW-2	10/28/10	09:40	2	1			X		X X X			X 6
PT-1	10/28/10	08:45	2	1			X		X X X			X 7

Relinquished by: <i>Alex Kiff Analytical</i>	Date 10/28/10	Time 1900	Received by: <i>[Signature]</i>	Remarks: Please refer to attached Test Detail.
Relinquished by: <i>[Signature]</i>	Date 	Time 	Received by: 	
Relinquished by: <i>[Signature]</i>	Date 10/28/10	Time 0800	Received by Laboratory: <i>prey 1 - 00</i>	Bill to: Accounts Payable

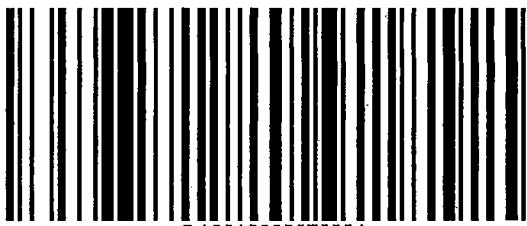
Test Detail for Kiff Work Order: 75120

Alkalinity SM 2320 (1)

Alkalinity, Total (as CaCO₃)



800.334.5000
ontrac.com



D10010326950204

Date Printed 10/28/2010

Tracking#D10010326950204

Shipped From:
KIFF ANALYTICAL
2795 2ND STREET 300
DAVIS, CA 95616

Sent By: SAMPLE RECEIVING
Phone#: (530)297-4800
wgt(lbs): 10
Reference: SUB SAMPLES
Reference 2:

Ship To Company:
CALSCIENCE ENVIRONMENTAL LABS
7440 LINCOLN WAY
GARDEN GROVE, CA 92841
SAMPLE RECEIVING (714)895-5494

Service: **S**
Sort Code: **ORG**
Special Services:
Signature Required

WORK ORDER #: 10-10-2 3 2 0

SAMPLE RECEIPT FORM

Cooler / of /

CLIENT: KIFF

DATE: 10/29/10

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen)

Temperature 1.0 °C + 0.5°C (CF) = 1.5 °C Blank Sample

- Sample(s) outside temperature criteria (PM/APM contacted by: _____).
- Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.
- Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: Air Filter

Initial: PS

CUSTODY SEALS INTACT:

<input checked="" type="checkbox"/> Cooler	<input type="checkbox"/>	<input type="checkbox"/> No (Not Intact)	<input type="checkbox"/> Not Present	<input type="checkbox"/> N/A	Initial: <u>PS</u>
<input type="checkbox"/> Sample	<input type="checkbox"/>	<input type="checkbox"/> No (Not Intact)	<input checked="" type="checkbox"/> Not Present	<input type="checkbox"/>	Initial: <u>K</u>

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COC document(s) received complete.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
<input type="checkbox"/> No analysis requested. <input type="checkbox"/> Not relinquished. <input type="checkbox"/> No date/time relinquished.			
Sampler's name indicated on COC.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Sample container label(s) consistent with COC.....	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Sample container(s) intact and good condition.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper containers and sufficient volume for analyses requested.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Analyses received within holding time.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
pH / Residual Chlorine / Dissolved Sulfide received within 24 hours.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Proper preservation noted on COC or sample container.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Tedlar bag(s) free of condensation.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CONTAINER TYPE:

Solid: 4ozCGJ 8ozCGJ 16ozCGJ Sleeve (_____) EnCores® TerraCores® _____

Water: VOA VOAh VOAna₂ 125AGB 125AGBh 125AGBp 1AGB 1AGBna₂ 1AGBs 500AGB 500AGJ 500AGJs 250AGB 250CGB 250CGBs 1PB 500PB 500PBna 250PB 250PBn 125PB 125PBznna 100PJ 100PJna₂ 250 PS _____

Air: Tedlar® Summa® **Other:** _____ **Trip Blank Lot#:** _____ **Labeled/Checked by:** PS

Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope **Reviewed by:** WSC

Preservative: h: HCL n: HNO₃ na₂:Na₂S₂O₃ na: NaOH p: H₃PO₄ s: H₂SO₄ znna: ZnAc₂+NaOH f: Field-filtered **Scanned by:** WSC

WORK ORDER #: 10-10-**2 3 2 0**

SAMPLE ANOMALY FORM

SAMPLES - CONTAINERS & LABELS:

Comments:

- Sample(s)/Container(s) NOT RECEIVED but listed on COC
- Sample(s)/Container(s) received but NOT LISTED on COC
- Holding time expired – list sample ID(s) and test
- Insufficient quantities for analysis – list test
- Improper container(s) used – list test
- Improper preservative used – list test
- No preservative noted on COC or label – list test & notify lab
- Sample labels illegible – note test/container type
- Sample label(s) do not match COC – Note in comments

- Sample ID
- Date and/or Time Collected
- Project Information
- # of Container(s)
- Analysis

(-4) COLLECTION TIME PER LABEL

15 10:50

- Sample container(s) compromised – Note in comments
 - Water present in sample container
 - Broken
- Sample container(s) not labeled
- Air sample container(s) compromised – Note in comments
 - Flat
 - Very low in volume
 - Leaking (Not transferred - duplicate bag submitted)
 - Leaking (transferred into Calscience Tedlar® Bag*)
 - Leaking (transferred into Client's Tedlar® Bag*)
- Other: _____

HEADSPACE – Containers with Bubble > 6mm or ¼ inch:

Sample #	Container ID(s)	# of Vials Received	Sample #	Container ID(s)	# of Vials Received	Sample #	Container ID(s)	# of Cont. received	Analysis

Comments: _____

*Transferred at Client's request.

Initial / Date: ps 10/27/10

SOP T100_090 (09/17/10)

ATTACHMENT F

TREND ANALYSIS

ATTACHMENT F

TREND ANALYSIS

Arctos conducted a statistical trend analysis of historical groundwater monitoring data for groundwater wells with petroleum hydrocarbon impacts above the Regional Water Quality Control Board, San Francisco Bay Region's (RWQCB), Environmental Screening Levels (ESLs). The objective of the analysis was to determine if there were any statistically significant trends in the total petroleum hydrocarbons as gasoline (TPHg), benzene, methyl tert-butyl ether (MTBE), or tert-butyl alcohol (TBA) results that would require additional remedial activities. In accordance with U.S. Environmental Protection Agency (EPA) guidance for data quality evaluation, a Mann-Kendall nonparametric trend test was used to identify decreasing, stable, or increasing concentration trends at individual wells and, by extension, identify a decreasing, stable, or increasing plume within a 95 percent confidence interval (EPA, 2000). The results of the trend analysis are summarized in the following table.

Well	Number of Sampling Events	Trend			
		TPHg	Benzene	MTBE	TBA
Onsite Wells					
MW-1	74	Decreasing	Below ESL	Decreasing (below ESL)	Below ESL
MW-3R	25	Decreasing	Decreasing	Decreasing	Decreasing
RW-1	60	Below ESL	Below ESL	Decreasing	Below ESL
RW-2	25	Decreasing	Below ESL	Below ESL	Below ESL
PT-1	10	Below ESL	Below ESL	Stable	Below ESL
Offsite Wells					
MW-10	73	Decreasing	Below ESL	Below ESL	Below ESL
MW-11	65	Decreasing	Below ESL	Below ESL	Below ESL

All of the onsite groundwater monitoring wells with greater than 10 sampling events show decreasing trends for TPHg, benzene, MTBE, and TBA. Only well PT-1 shows a stable trend for MTBE over the past 10 monitoring events. Well PT-1 is located directly downgradient of the current groundwater remediation system, so dissolved-phase hydrocarbons will be addressed by the continued operation of the system. Both offsite wells MW-10 and MW-11 show decreasing trends for TPHg.

Reference

U.S. Environmental Protection Agency (EPA), 2000. *Practical Methods for Data Analysis, EPA QA/G-9, QA00 Update*, July.

ATTACHMENT G

OXYGEN INJECTION PERFORMANCE MONITORING

TABLE G-1
OXYGEN INJECTION PERFORMANCE MONITORING
TESORO - SAN LORENZO, 67107

Well	Sample Date	DO ^(a) (mg/l)	ORP ^(a) (mV)	Temperature ^(a) (°F)	pH ^(a)	Conductivity ^(a) (µS/cm)
OS-1 ^(b)	10/8/08	0.20	-26	68.54	6.8	799
	1/29/09	0.48	170	65.66	7.2	773
	3/5/09	12.54	180	67.78	7.21	607
	3/25/09	-- ^(c)	161	66.87	7.45	577
	4/14/09	16.3	106	66.56	8.3	736
	4/24/09	35.89	180	66.62	7.38	588
	5/21/09	38.57	192	66.87	7.51	496
	6/19/09	36.58	150	66.92	7.39	655
	7/1/09	>20.0	-4	68.72	7.9	735
	7/16/09	19.60	225	67.47	7.42	454
	8/11/09	35.98	201	67.08	7.48	358
	11/16/09	38.93	--	68.19	7.49	500
	1/28/10	40.59	--	67.35	7.48	338
	2/26/10	15.20	--	67.6	--	--
OS-2 ^(b)	1/29/09	0.31	82	67.28	7.6	789
	3/5/09	5.10	99	68.46	7.63	624
	3/25/09	--	132	67.93	7.85	587
	4/14/09	16.40	118	66.56	8.5	750
	4/24/09	34.51	168	67.42	7.33	699
	5/21/09	35.69	267	67.39	7.37	585
	6/19/09	33.77	156	67.29	7.38	734
	7/1/09	>20.0	1	70.7	8.3	743
	7/16/09	10.77	235	67.44	7.4	501
	8/11/09	36.44	128	67.62	7.8	370
	11/16/09	41.43	--	69.12	7.71	536
	1/28/10	37.96	--	68.29	7.68	353
	2/26/10	22.09	--	65.5	--	--
OS-3 ^(b)	10/8/09	0.40	-299	71.78	7	1,086
	1/29/09	0.24	-167	70.34	7.2	973
	3/5/09	11.19	86	69.93	7.16	876
	3/25/09	--	74	69.14	7.65	809
	4/14/09	17.90	129	66.74	8.2	751
	4/24/09	37.67	64	68.67	7.54	838

TABLE G-1

OXYGEN INJECTION PERFORMANCE MONITORING
TESORO - SAN LORENZO, 67107

Well	Sample Date	DO ^(a) (mg/l)	ORP ^(a) (mV)	Temperature ^(a) (°F)	pH ^(a)	Conductivity ^(a) (µS/cm)
OS-3 ^(b) (cont.)	5/21/09	37.51	98	68.62	7.53	702
	6/19/09	36.34	68	68.65	7.51	899
	7/1/09	>20.0	-93	69.8	8.0	992
	7/16/09	30.00	228	69.02	7.51	612
	8/11/09	--	--	--	--	--
	11/16/09	37.75	--	71.16	7.28	662
	1/28/10	40.19	--	70.34	7.43	508
	2/26/10	35.77	--	69.9	--	--
OS-4 ^(b)	10/8/08	0.50	-62	69.08	6.8	971
	1/29/09	0.28	65	69.8	7.5	815
	3/5/09	12.47	121	69.07	7.35	668
	3/25/09	--	147	68.51	7.84	606
	4/14/09	20.10	128	68	8	1,010
	4/24/09	38.41	134	67.92	7.77	598
	5/21/09	38.63	294	67.87	7.89	496..8
	6/19/09	36.70	174	67.78	7.79	668
	7/1/09	>20.0	28	69.98	8.3	759
	7/16/09	31.06	241	68.06	7.8	468
	8/11/09	--	--	--	--	--
	11/16/09	43.85	--	70.29	7.39	550
	1/28/10	42.48	--	69.33	7.72	377
	2/26/10	28.84	--	68.9	--	--
PT-1	10/8/08	0.20	-42	70.52	7	1,271
	1/29/09	0.26	5	69.44	7.5	925
	3/5/09	0.37	75	69.36	7.27	667
	3/25/09	--	133	68.97	7.34	611
	4/14/09	0.40	90	66.74	8.1	776
	4/24/09	0.50	162	68.46	7.22	625
	5/21/09	0.40	218	68.75	7.44	520
	6/19/09	0.21	161	66.11	7.3	1,246
	7/1/09	1.10	43	70.52	7.9	832
	7/16/09	0.76	138	68.23	7.49	471

TABLE G-1

OXYGEN INJECTION PERFORMANCE MONITORING
TESORO - SAN LORENZO, 67107

Well	Sample Date	DO ^(a) (mg/l)	ORP ^(a) (mV)	Temperature ^(a) (°F)	pH ^(a)	Conductivity ^(a) (µS/cm)
PT-1 (cont.)	8/11/09	--	--	--	--	--
	11/16/09	0.41	--	68.73	7.12	534
	1/28/10	0.79	--	69.62	7.45	386
	2/26/10	--	--	--	--	--
	3/3/10	0.05	--	68.92	7.38	725
	3/5/10	0.27	--	68.9	7.37	--
	3/10/10	1.44	--	68.84	7.22	--
	3/17/10	1.65	--	68.79	7.17	--
	3/31/10	3.26	-25	68.64	7.17	758
	4/16/10	0.04	-105	68.46	7.34	716
	4/26/10	5.37	-112	68.35	7.18	760
	5/10/10	5.48	-62	68.21	7.08	810
	7/30/10	6.65	-10	68.13	7.2	754
	8/27/10	1.18	-50	68.18	7.16	771
	9/10/10	1.90	80	68.18	7.13	764
RW-1	10/28/10	3.55	-10	68.72	7.34	739
	11/10/10	4.53	52	68.58	7.24	748
	12/15/10	2.08	-12	68.80	7.17	773
	1/28/10	0.50	--	69.75	7.34	412
	2/26/10	0.27	--	69.3	--	--
	3/3/10	0.04	--	68.34	6.92	772
	3/5/10	0.03	--	68.45	6.90	--
	3/10/10	1.77	--	68.48	6.83	--
	3/17/10	1.47	--	68.42	6.77	--
	3/31/10	3.18	-15	68.4	6.68	799
	4/16/10	1.17	-149	68.27	6.79	760
	4/26/10	7.10	-85	68.22	6.61	795
	5/10/10	8.39	-45	68.1	6.64	799

TABLE G-1
OXYGEN INJECTION PERFORMANCE MONITORING
TESORO - SAN LORENZO, 67107

Well	Sample Date	DO ^(a) (mg/l)	ORP ^(a) (mV)	Temperature ^(a) (°F)	pH ^(a)	Conductivity ^(a) (µS/cm)
RW-1 (cont.)	11/10/10	0.01	-174	68.16	6.99	779
	12/15/10	0.01	-277	68.35	6.99	800
RW-2	10/8/08	0.30	-86	69.26	6.5	901
	1/29/09	0.53	-49	68.36	7	799
	3/5/09	0.19	87	67.9	7.21	620
	3/25/09	--	131	67.43	7.19	555
	4/14/09	0.50	13	67.1	8.1	734
	4/24/09	0.66	174	66.94	7.04	614
	5/21/09	0.34	229	67.06	7.14	558
	6/19/09	0.51	125	66.93	6.99	827
	7/1/09	0.80	-15	69.8	7.7	836
	7/16/09	0.34	206	66.98	7.12	546
	8/11/09	0.31	-29	66.99	7.17	458
	11/16/09	--	--	--	--	--
	1/28/10	1.37	--	67.86	7.39	346
	2/26/10	0.33	--	67.7	--	--
	3/3/10	0.04	--	68.34	6.92	772
	3/5/10	5.37	--	67.59	7.25	--
	3/10/10	6.72	--	67.55	7.17	--
	3/17/10	1.62	--	67.46	6.81	--
	3/31/10	1.03	-72	67.05	6.81	610
	4/16/10	0.04	-348	67.07	7.18	654
	4/26/10	0.11	-203	66.92	6.97	865
	5/10/10	0.80	-149	66.76	6.94	973
	7/30/10	0.00	-370	67	6.92	926
	8/27/10	0.16	-100	67.18	6.93	895
	9/10/10	0.01	60	67.25	6.93	873
	10/28/10	0.96	-30	67.72	7.03	737
	11/10/10	1.33	17	67.75	6.96	803
	12/15/10	0.01	-387	67.93	7.14	724

TABLE G-1
OXYGEN INJECTION PERFORMANCE MONITORING
TESORO - SAN LORENZO, 67107

Well	Sample Date	DO ^(a) (mg/l)	ORP ^(a) (mV)	Temperature ^(a) (°F)	pH ^(a)	Conductivity ^(a) (µS/cm)
MW-3R	11/16/09	1.38	-190	69.38	6.94	644
	1/28/10	0.29	--	69.92	7.33	424
	2/26/10	0.44	--	69.5	--	--
	3/3/10	0.04	--	69.19	7.04	817
	3/5/10	0.03	--	69.18	7.01	--
	3/10/10	0.04	--	69.07	7.04	--
	3/17/10	0.01	--	68.95	7.00	--
	3/31/10	0.06	-193	68.71	7.03	807
	4/16/10	0.11	-431	68.46	7.07	812
	4/26/10	0.01	-463	68.33	6.99	831
	5/10/10	0.00	-450	68.24	6.95	821
	7/30/10	0.00	-420	68.31	6.89	981
	8/27/10	0.01	-130	68.42	6.8	1,034
	9/10/10	0.01	20	68.44	6.85	1,011
	10/28/10	5.06	-30	69.08	6.93	928
	11/10/10	0.01	-395	69.01	6.79	1,027
	12/15/10	0.01	-407	69.23	6.91	906

(a) Parameters measured in the field using a downhole instrument; dissolved oxygen (DO) reported milligrams per liter (mg/l); oxidation reduction potential (ORP) reported in millivolts (mV); temperature reported in degrees fahrenheit (°F); and conductivity measured in microsiemens per centimeter (µS/cm).

(b) No measurement collected.

ATTACHMENT H
WASTE MANIFESTS

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		Tescro #67107 44 Levington Blvd. San Lorenzo CA				
	4. Generator's Phone ()		5. Transporter 1 Company Name		6. US EPA ID Number		
	6. US EPA ID Number		7. Transporter 2 Company Name		8. US EPA ID Number		
	8. US EPA ID Number		9. Designated Facility Name and Site Address		10. US EPA ID Number		
	10. US EPA ID Number				E. State Facility's ID		
					F. Facility's Phone <i>707-374-3834</i>		
	11. WASTE DESCRIPTION		12. Containers No.	Type	13. Total Quantity		
	a. <i>NON HAZ PURGEWATER</i>		1	Poly	260 GAL		
	b.						
	c.						
	d.						
	G. Additional Descriptions for Materials Listed Above		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		Signature				
			Date	Month	Day	Year	
	17. Transporter 1 Acknowledgement of Receipt of Materials					Date	
	Printed/Typed Name		Signature				
	<i>BRANDON MYERS</i>		<i>B. Myers</i>			Month	Day
18. Transporter 2 Acknowledgement of Receipt of Materials					Date		
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					
<i>InStrat</i>		<i>Matt Belcher</i>			Month	Day	Year
		Date	11	29	10		