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30 April 2008
Project No. 01ZO

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

Subject: Oxygen Injection Pilot Test Work Plan
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 Companies, Inc. (Tesoro), has prepared this work plan to conduct an oxygen injection pilot test to remediate petroleum hydrocarbons in groundwater at the subject site (Figure 1).

Executive Summary

Arctos has prepared this work plan in response to an Alameda County Environmental Health (ACEH) letter to Tesoro dated 31 December 2007; the work plan also incorporates the consensus reached at our meeting on 12 March 2008. The work plan proposes the installation of four oxygen injection wells along the western property boundary to replace the existing groundwater extraction system (Figure 2). The effectiveness of the injection wells will be monitored by existing cross-gradient wells MW-3R and RW-2 and one new downgradient well.

After completion of a 6-month oxygen injection pilot test, Arctos will evaluate the analytical data to assess the effectiveness of the remedial technology. The status of the pilot test including system installation, start-up, and monitoring results will be included in the quarterly status reports.

Site Background

Previous investigations indicate that the groundwater beneath the site is impacted by petroleum hydrocarbons including total petroleum hydrocarbons as gasoline (TPHg); benzene, toluene, ethylbenzene, and total xylenes (BTEX); methyl tert-butyl ether (MTBE); and tert-butyl alcohol (TBA). Current groundwater monitoring and analytical results indicate that the highest TPHg, benzene, MTBE, and TBA concentrations of 4,500, 350, 48, and 22 micrograms per liter (µg/l), respectively, were reported at onsite well MW-3R during the first quarter 2008 monitoring event. Elevated TPHg and MTBE concentrations in groundwater (280 and 18 µg/l, respectively) were also reported approximately 200 feet downgradient of the site at well MW-11. Figures 3, 4, and 5 show the most recent isoconcentration contours for TPHg, benzene, and MTBE, respectively. Recent groundwater elevations and analytical results are in Tables 1 and 2, and historical groundwater elevations and analytical results are in Attachment A.

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.

Objectives and Scope of Work

The objectives of this oxygen injection pilot test are to install an in situ remedial technology to (1) develop aerobic groundwater conditions in the hydrocarbon-impacted groundwater, (2) promote the growth of microorganisms that metabolize petroleum hydrocarbons, and (3) mitigate the downgradient migration of petroleum hydrocarbons. To meet these objectives, Arctos will perform the following scope of work:

- Obtain ACEH approval of this work plan and well permits from the Alameda County Public Works Agency
- Mobilize for well installation including marking for Underground Service Alert and preparing a site-specific health and safety plan
- Install four injection wells designated as OS-1 to OS-4 and one observation well designated as PT-1 (Figure 6)
- Collect baseline groundwater samples and background groundwater quality data
- Survey the new wells and confirm elevations of the existing monitoring wells

- Install oxygen injection equipment and new conduits for tubing that will convey oxygen to the injection points
- Start up the injection system
- Conduct performance monitoring and reporting for 6 months to assess the effectiveness of the pilot test
- Incorporate the results of the oxygen injection pilot test data into the site quarterly status reports.

Oxygen Injection Pilot Test Design

Arctos will install an oxygen injection system to create aerobic groundwater conditions and stimulate the growth of microorganisms that break down petroleum hydrocarbons. The system includes the components listed below:

- Four oxygen injection points with injection equipment
- Treatment compound containing the compressed oxygen cylinders, manifold, regulators, control panel, and accessories
- One downgradient observation well.

Oxygen Injection Wells

Four injection wells will be installed along the western property boundary of the site to target the source area. The injection wells are designed to target saturated sands and sandy silts between approximately 18 to 28 feet below grade (Figure 7).

The injection wells will be installed using a hollow-stem auger rig to approximately 28 feet below grade. Soil samples will be collected continuously from the surface to the total depth of the boring for lithologic logging. The injection wells will be constructed using 4-inch-diameter Schedule 40 polyvinyl chloride (PVC) casing with a 10-foot section of 0.020-slotted screen from approximately 18 to 28 feet below grade. A Monterey No. 2/12 or equivalent sand pack will be installed from approximately 1 foot below the screened interval to 0.5 foot above the screened interval. A 2-foot-thick hydrated bentonite seal will be placed on top of the sand pack; the remaining annular space will be filled with Portland cement slurry. Each injection point will be completed at the surface with an 18-inch-diameter traffic-rated vault set in concrete. Figure 8 shows a typical oxygen injection well construction diagram. Arctos's field and quality assurance/quality control (QA/QC) procedures for the proposed field program are in Attachment B.

Oxygen Diffusion Equipment

At each injection point, compressed oxygen will be delivered to a downhole Waterloo Emitter to release dissolved oxygen into the groundwater. The Waterloo Emitter is manufactured by Solinst of Georgetown, Ontario, Canada. The Waterloo Emitter dissolves approximately 2.5 milliliters of oxygen per minute into the groundwater by supplying compressed oxygen through approximately 75 feet of 1/4-inch-diameter silicone tubing wrapped around a 3.8-inch-diameter and 51-inch-long Schedule 80 PVC frame. Oxygen will be delivered to each Waterloo Emitter unit through 1/4-inch-diameter polyurethane tubing within Schedule 40 PVC secondary containment conduit. The conduit has been previously installed during past groundwater treatment system upgrades. The polyurethane tubing will be connected to a manifold located in the treatment area.

The following oxygen injection equipment will be contained in the treatment area:

- Compressed oxygen cylinder
- Two-stage regulator
- Four-port manifold.

The oxygen injection system will continuously deliver over 1 standard cubic foot per day (scfd) of oxygen to the four injection wells through a manifold. At this delivery rate, an oxygen cylinder with 122-cubic-foot capacity should provide approximately 120 days of injection before a replacement is required. A two-stage regulator between the cylinder and manifold will reduce and maintain the oxygen pressure at 20 pounds per square inch (psi). Each port on the manifold will have a pressure gage to control the delivery pressure at each injection well.

Downgradient Observation Well

One new observation well (PT-1) will be installed to monitor the performance of the pilot test approximately 8 feet downgradient of injection well OS-4. The observation well will be installed using a hollow-stem auger rig to approximately 30 feet and be constructed of 4-inch-diameter PVC well casing. The well will be screened from approximately 10 to 30 feet below grade, using Monterey No. 2/12 sand filter pack and 0.020-inch slot-size screen. Soil samples will be collected at 5-foot intervals from a depth of approximately 5 to 30 feet for lithologic logging. Figure 9 shows a typical observation well construction diagram. Arctos's field procedures are in Attachment B.

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Groundwater Monitoring Plan

The effects of oxygen injection will be monitored at the following wells:

- Upgradient of Injection Wells: Monitoring well MW-6
- Injection Wells: Injection well OS-4
- Downgradient of Injection Wells: Monitoring well PT-1
- Cross Gradient of Injection Wells: Monitoring wells MW-3R and RW-2.

Monitoring data will be collected to (1) measure the change in hydrocarbon concentrations and (2) measure the general groundwater quality compared to baseline conditions.

Groundwater monitoring will be conducted at the above-referenced monitoring wells to establish baseline groundwater conditions before start-up of the injection system and during scheduled quarterly sampling events during operation. Groundwater samples will be collected following the procedures in Attachment B and analyzed for the following parameters:

- Field parameters including pH, temperature, conductivity, dissolved oxygen (DO), and oxidation reduction potential (ORP)
- TPHg, BTEX, MTBE, and TBA
- Inorganic compounds from selected wells including alkalinity, ammonia, nitrate, nitrite, phosphate, and sulfate
- Light gases (dissolved carbon dioxide and methane).

In addition to the chemical parameters, microbiological samples will be collected and analyzed from selected wells. The analyses will include testing for (1) universal bacteria, (2) PM-1 (an indicator of MTBE-degrading bacteria), and (3) toluene dioxygenase by polymerase chain reaction (PCR) methods. Toluene dioxygenase is an enzyme produced by bacteria containing a specific gene that triggers its production. Detection of the enzyme is an indirect method of determining the presence of bacteria capable of degrading dissolved hydrocarbons.

The following table summarizes the parameters, monitoring wells, sampling frequency, and anticipated results during monitoring to determine the remediation effectiveness.

Monitoring Wells	Sampling Frequency	Parameter	Anticipated Result
MW-6, OS-4, MW-3R, RW-2, and PT-1	Baseline and after 3 and 6 months of operation	Petroleum hydrocarbons	Decrease in target compounds (TPHg, BTEX, MTBE, TBA)
		DO and ORP	Increase due to influence of oxygen injection
		Conductivity	Increase due to mobilization of inorganic constituents responding to the change from an anaerobic to aerobic environment and to increased biological activity
MW-6, OS-4, MW-3R, RW-2, and PT-1	Baseline and after 6 months of operation	Inorganic compounds	Changes in geochemistry due to oxygen-enhanced biological processes
		Light gases	Increase in carbon dioxide and decrease in methane due to oxygen-enhanced biological processes
MW-6, OS-4, MW-3R, and PT-1	Baseline and after 6 months of operation	Microbiological testing	Increase in aerobic populations in response to oxygen injection; temporary increase in population of MTBE- and hydrocarbon-degrading bacteria (until MTBE and other dissolved hydrocarbons degrade)

Note – Monitoring wells and sampling frequency may be adjusted based on results.

Analytical Program

The groundwater and soil samples will be analyzed in accordance with the analytical plan in Attachment B.

Data Evaluation and Report Preparation

After completion of the 6-month oxygen injection pilot test, Arctos will evaluate the analytical data to assess the effectiveness of the test. The data will be incorporated into a quarterly monitoring report, which will summarize the following:

- Field tasks during system installation, start-up, and oxygen injection
- Groundwater sampling procedures
- Field and laboratory analytical results
- Conclusions and recommendations regarding the effectiveness of oxygen injection.

The report will also contain the following documentation:

- ☐ Tables summarizing the sample numbers with corresponding analytical methods and sample concentrations
- ☐ Figures showing the site location, site plan, and well locations
- ☐ Chain-of-custody forms
- ☐ Laboratory analytical reports.

Arctos appreciates your review of this work plan and will begin implementation upon receiving your approval. If you have questions or comments, please call Mike Purchase at 510/525-2180.

Very truly yours,

ARCTOS ENVIRONMENTAL

REGISTERED PROFESSIONAL ENGINEER
MICHAEL P. PURCHASE
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Sam Hirbod – Bedrock Oil, Inc.
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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
Figure 6 – Oxygen Injection Pilot Test Area
Figure 7 – Geologic Cross Section A-A'
Figure 8 – Oxygen Injection Well Construction Diagram
Figure 9 – Observation Well Construction Diagram
Attachment A – Historical Groundwater Elevations and Analytical Results
Attachment B – Field QA/QC Procedures

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	2/2/07	16.57	45.98	29.41
	4/30/07	16.17		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
MW-2	2/2/07	15.60	45.23	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
MW-3R	2/2/07	21.96	45.21	23.25
	4/30/07	19.40		25.81
	7/18/07	23.11		22.10
	10/30/07	22.71		22.50
	1/28/08	16.78		28.43
	3/14/08	14.38		30.83
MW-4	2/2/07	17.52	46.98	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
MW-5	2/2/07	16.49	46.12	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
MW-6	2/2/07	15.16	44.79	29.63
	4/30/07	14.76		30.03
	7/18/07	15.53		29.26
	10/30/07	16.00		28.79

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-6	1/28/08	14.09	44.79	30.70
(cont.)	3/14/08	14.12		30.67
MW-7	2/2/07	14.62	43.85	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
MW-8	2/2/07	15.52	44.58	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
MW-9	2/2/07	17.88	47.26	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
MW-10	2/2/07	15.60	44.65	29.05
	4/30/07	15.30		29.35
	7/18/07	15.91		28.74
	10/30/07	16.32		28.33
	1/28/08	14.93		29.72
	3/14/08	14.74		29.91
MW-11	2/2/07	18.50	47.36	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

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-12	7/18/07	18.00	46.88	28.88
	10/30/07	18.42		28.46
	1/28/08	16.96		29.92
	3/14/08	16.83		30.05
RW-1	2/2/07	16.62	45.47	28.85
	4/30/07	Dry		--[(c)]
	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
RW-2	2/2/07	14.27	45.00	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

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

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

(c) "--" Not calculated.

TABLE 2

GROUNDWATER MONITORING ANALYTICAL RESULTS
TESORO - SAN LORENZO, 67107

Monitoring Well	Sample Date[a]	TPHg[b] (µg/l)	Benzene[b] (µg/l)	Toluene[b] (µg/l)	Ethylbenzene[b] (µg/l)	Xylenes[b] (µg/l)	MTBE[b] (µg/l)	DIPE[b] (µg/l)	ETBE[b] (µg/l)	TAME[b] (µg/l)	TBA[b] (µg/l)
ESLs[c]		100	1.0	40	30	20	5.0	NE[d]	NE	NE	12
MW-1	10/26/06	110	ND<0.5[e]	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[f]	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[f]	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
MW-2	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
MW-3R	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
MW-4	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
	10/30/07	90[f]	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

TABLE 2

GROUNDWATER MONITORING ANALYTICAL RESULTS
TESORO - SAN LORENZO, 67107

Monitoring Well	Sample Date[a]	TPHg[b] (µg/l)	Benzene[b] (µg/l)	Toluene[b] (µg/l)	Ethylbenzene[b] (µg/l)	Xylenes[b] (µg/l)	MTBE[b] (µg/l)	DIPE[b] (µg/l)	ETBE[b] (µg/l)	TAME[b] (µg/l)	TBA[b] (µg/l)
ESLs[c]		100	1.0	40	30	20	5.0	NE[d]	NE	NE	12
MW-7	10/26/06	NS[g]	NS	NS	NS	NS	NS	NS	NS	NS	NS
	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
	7/18/07	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	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
	1/28/08	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
MW-8	10/26/06	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/2/07	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	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
	10/30/07	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-9	10/26/06	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/2/07	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	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
	10/30/07	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-10	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

TABLE 2

GROUNDWATER MONITORING ANALYTICAL RESULTS
TESORO - SAN LORENZO, 67107

Monitoring Well	Sample Date[a]	TPHg[b] (µg/l)	Benzene[b] (µg/l)	Toluene[b] (µg/l)	Ethylbenzene[b] (µg/l)	Xylenes[b] (µg/l)	MTBE[b] (µg/l)	DIPE[b] (µg/l)	ETBE[b] (µg/l)	TAME[b] (µg/l)	TBA[b] (µg/l)
ESLs[c]		100	1.0	40	30	20	5.0	NE[d]	NE	NE	12
MW-11	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
MW-12	7/18/07	68[f]	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[f]	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	60[f]	ND<0.5	ND<0.5	ND<0.5	0.57	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
RW-1	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
RW-2	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

TABLE 2

GROUNDWATER MONITORING ANALYTICAL RESULTS
TESORO - SAN LORENZO, 67107

Monitoring Well	Sample Date[a]	TPHg[b] (µg/l)	Benzene[b] (µg/l)	Toluene[b] (µg/l)	Ethylbenzene[b] (µg/l)	Xylenes[b] (µg/l)	MTBE[b] (µg/l)	DIPE[b] (µg/l)	ETBE[b] (µg/l)	TAME[b] (µg/l)	TBA[b] (µg/l)
ESLs[c]		100	1.0	40	30	20	5.0	NE[d]	NE	NE	12
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
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[i]
	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

(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.

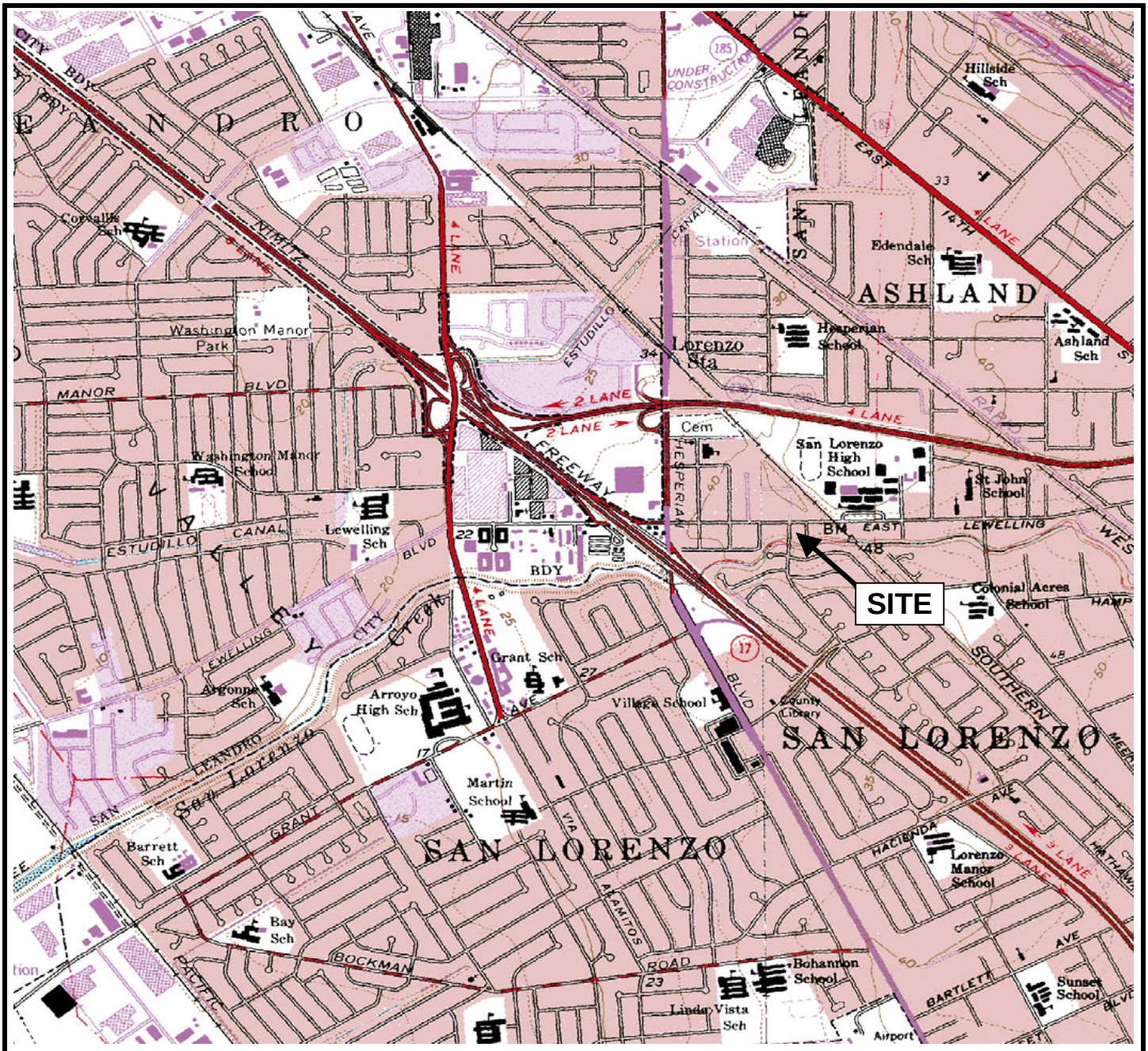
(e) ND - Not detected at the reporting limit listed; reporting limit not listed if not previosly reported.

(f) Not typical gasoline.

(g) NS - Not sampled.

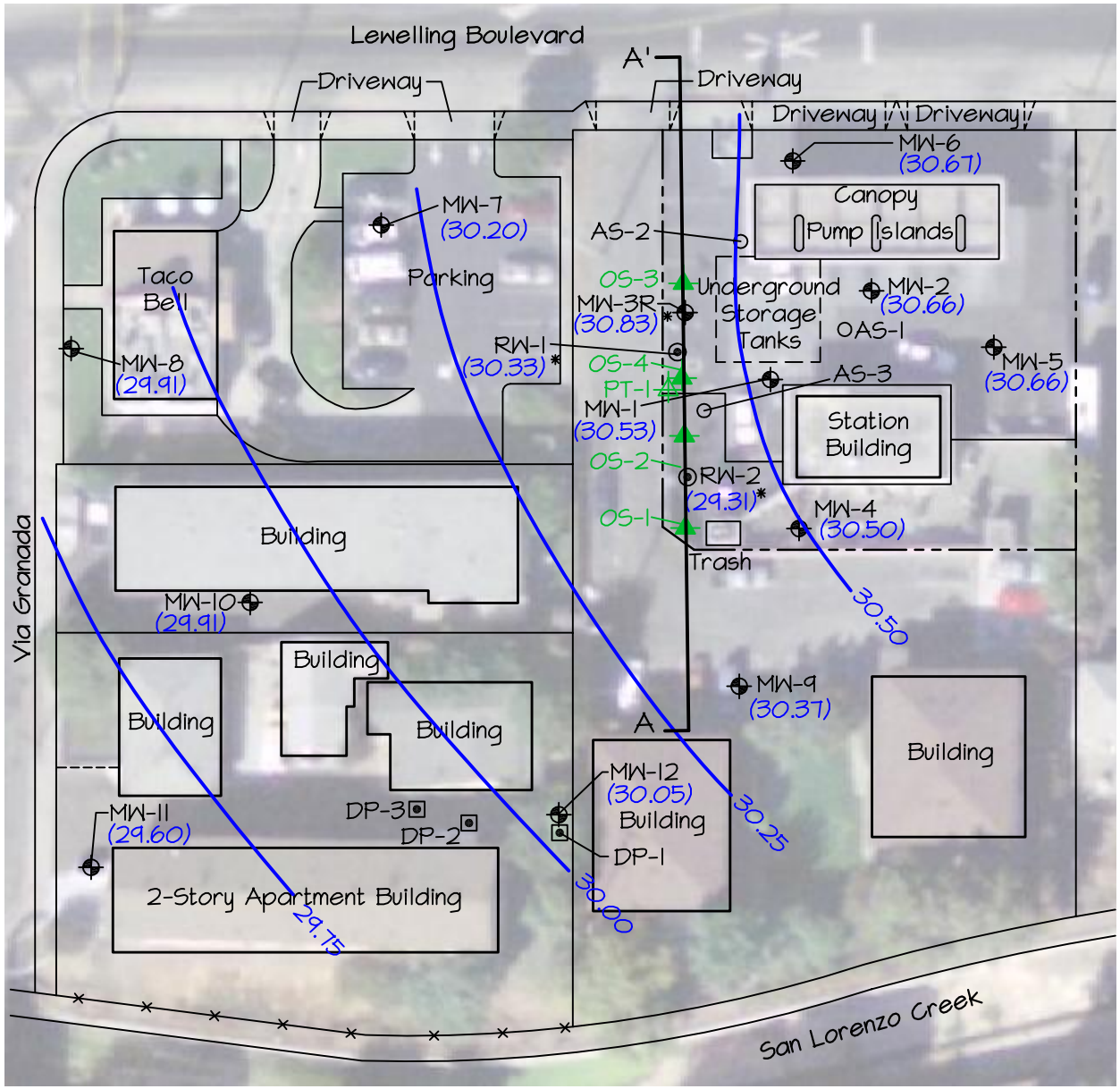
(h) Domestic water wells (used as irrigation wells); DW-15800 collected from well at 15800 Via Cordoba, DW-15808 collected from well at 15808 Via Cordoba, DW-246 collected from well at 246 Peach Drive in San Lorenzo, CA.

(i) Property owner had the RDM technician sample a faucet plumbed to city water. RDM resampled the 246 Peach well on 21 February 2007.



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**	



Legend

- MW-1 (30.53) — Monitoring Well with 14 March 2008 Groundwater Elevation (Feet MSL)
- RW-1 — Recovery Well
- AS-1 — Air Sparging Well
- DP-1 — Soil Boring
- OS-1 — Proposed Oxygen Injection Well
- PT-1 — Proposed Pilot Test Observation Well
- * — Recovery Well Elevations Not Used for Contours
- 30.00 — Groundwater Elevation Contour (Feet MSL)
- A A' — Axis for Geologic Section

0 25 50
Scale in Feet

REVISION	NO.	BY	DATE	DESCRIPTION
0	0	MY	4/30/08	OXYGEN INJECTION WORK PLAN

ARCTOS ENVIRONMENTAL

TESORO - SAN LORENZO

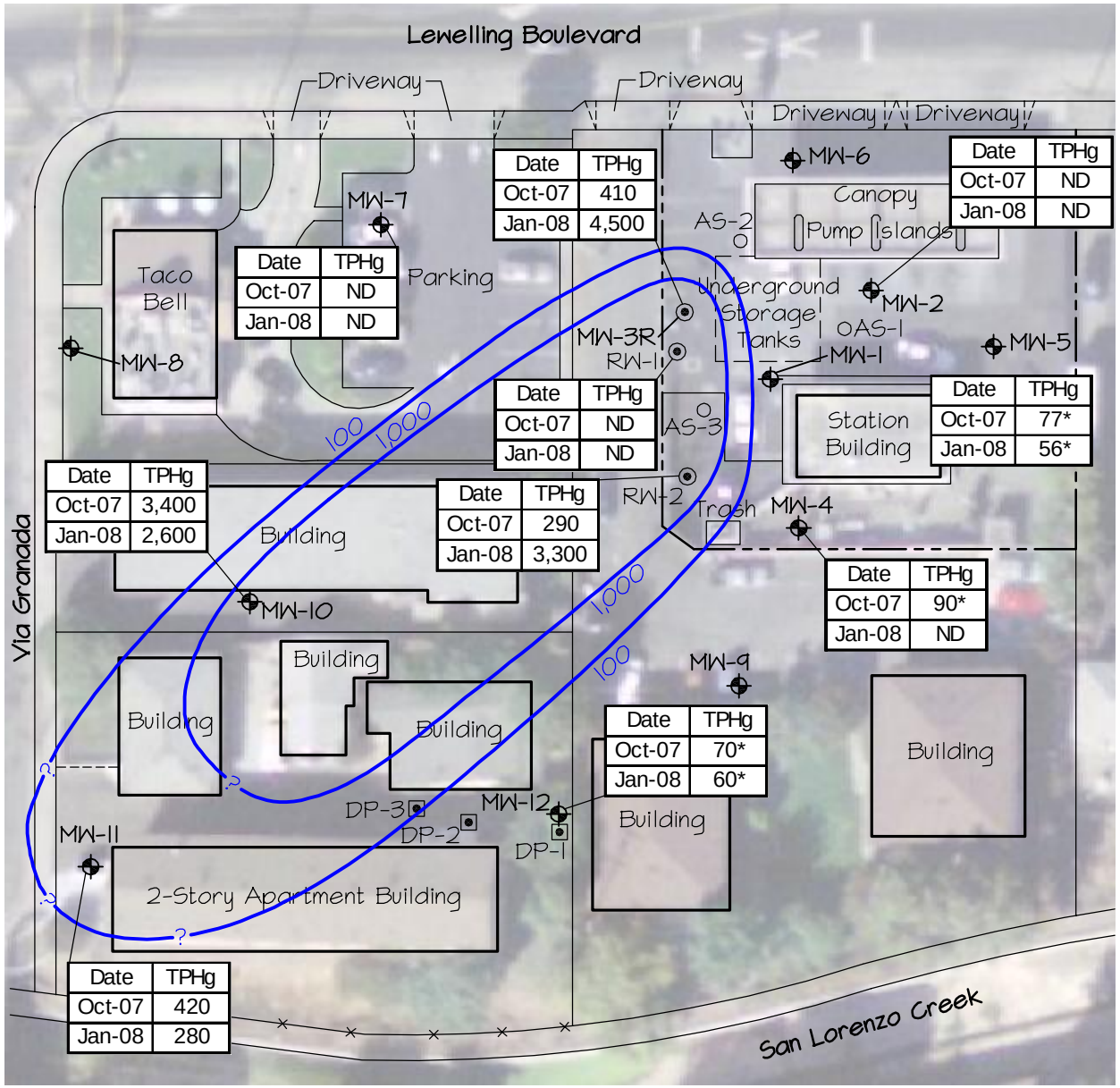
SITE PLAN

PROJECT NO.	DRAWN BY	CHECKED BY	APPROVED BY
01Z0	MY	MP	JPG

FILE NO. 01Z011B1000.DWG

FIGURE 2

4/24/2008 3:15PM 01Z011B1000.dwg



Legend

MW-1 ⊕	Monitoring Well with 30 October 2007 and 28 January 2008 Total Petroleum Hydorcarbons as Gasoline (THPg) Results in µg/l
RW-1 ⊙	Recovery Well
AS-1 ○	Air Sparging Well
DP-1 ⊡	Soil Boring
ND	Not Detected
*	Identified by laboratory as compounds not found in typical gasoline
100	TPHg Concentration Contour (µg/l), Queried Where Uncertain

0 25 50
Scale In Feet

REVISIONS			
NO.	BY	DATE	DESCRIPTION
0	MY	2/15/08	First Quarter 2008 Status Report

REVISION 0

ARCTOS ENVIRONMENTAL

TESORO - SAN LORENZO

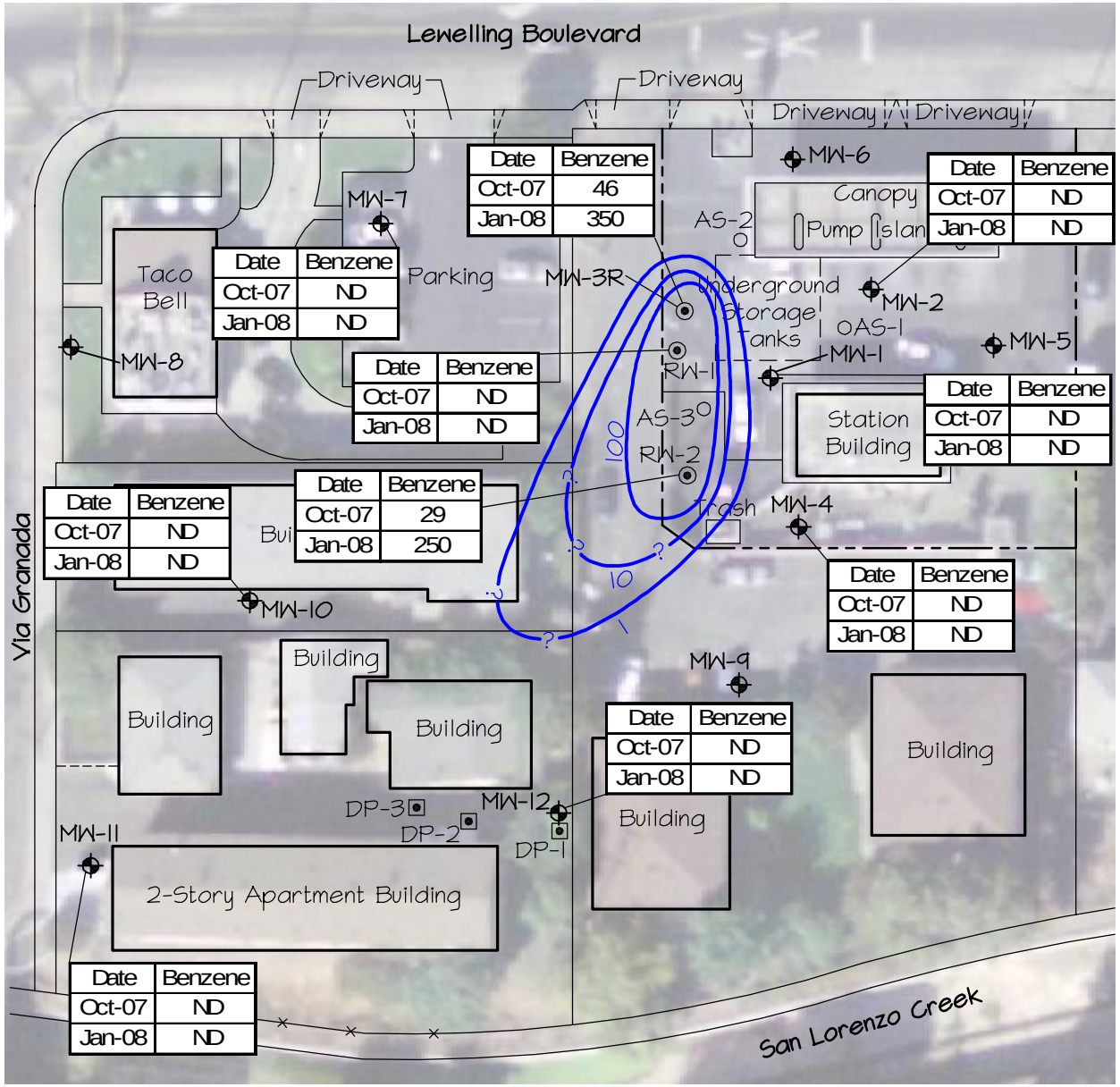
TPHg CONCENTRATION CONTOURS IN GROUNDWATER

PROJECT NO.	DRAWN BY	CHECKED BY	APPROVED BY
01ZO	MY	MP	JPG

FILE NO. 01ZO11B0200.DWG

FIGURE 3

3/30/2008 2:45PM 01ZO11B0200.dwg



Legend

MW-1 ⊕ Monitoring Well with 30 October 2007 and 28 January 2008 Benzene Results in µg/l

RW-1 ⊙ Recovery Well

AS-1 ○ Air Sparging Well

DP-1 ⊡ Soil Boring

ND Not Detected

100 Benzene Concentration Contour (µg/l), Queried Where Uncertain

N

0 25 50

Scale In Feet

REVISION	REVISIONS			
	NO.	BY	DATE	DESCRIPTION
0	0	MY	2/15/08	First Quarter 2008 Status Report

ARCTOS ENVIRONMENTAL

TESORO - SAN LORENZO

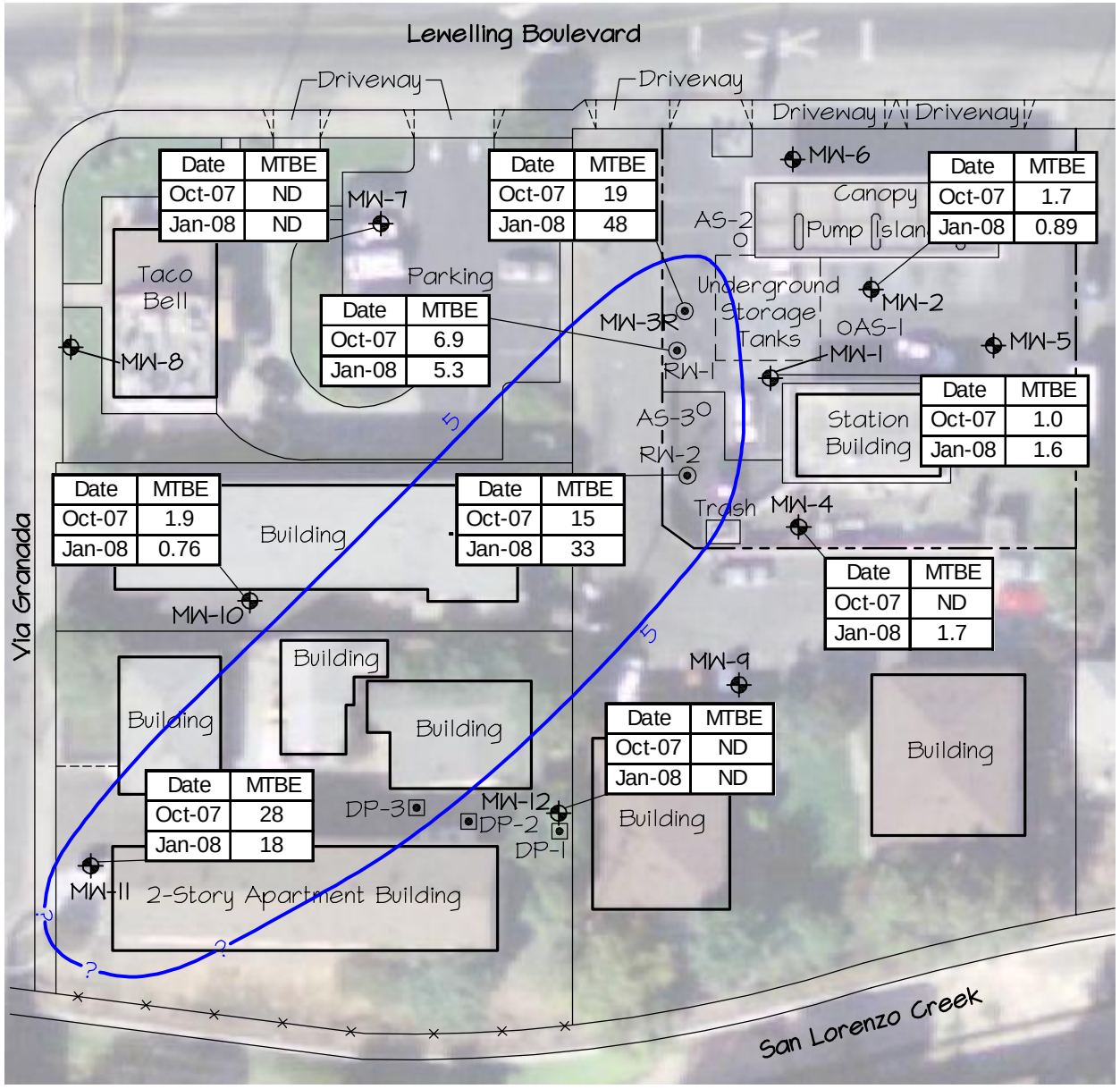
BENZENE CONCENTRATION CONTOURS IN GROUNDWATER

PROJECT NO.	DRAWN BY	CHECKED BY	APPROVED BY
01ZO	MY	MP	JPG

FILE NO. 01ZO11B0300.DWG

FIGURE 4

3/30/2008 2:48PM 01ZO11B0300.dwg



Legend

MW-1 ⊕	Monitoring Well with 30 October 2007 and 28 January 2008 Methyl Tert-Butyl Ether (MTBE) Results in µg/l
RW-1 ⊙	Recovery Well
AS-1 ○	Air Sparging Well
DP-1 ⊡	Soil Boring
ND	Not Detected
5	MTBE Concentration Contour (µg/l), Queried Where Uncertain

0 25 50
Scale In Feet

REVISION	NO.	BY	DATE	DESCRIPTION
0	0	MY	2/15/08	First Quarter 2008 Status Report

ARCTOS ENVIRONMENTAL

TESORO - SAN LORENZO

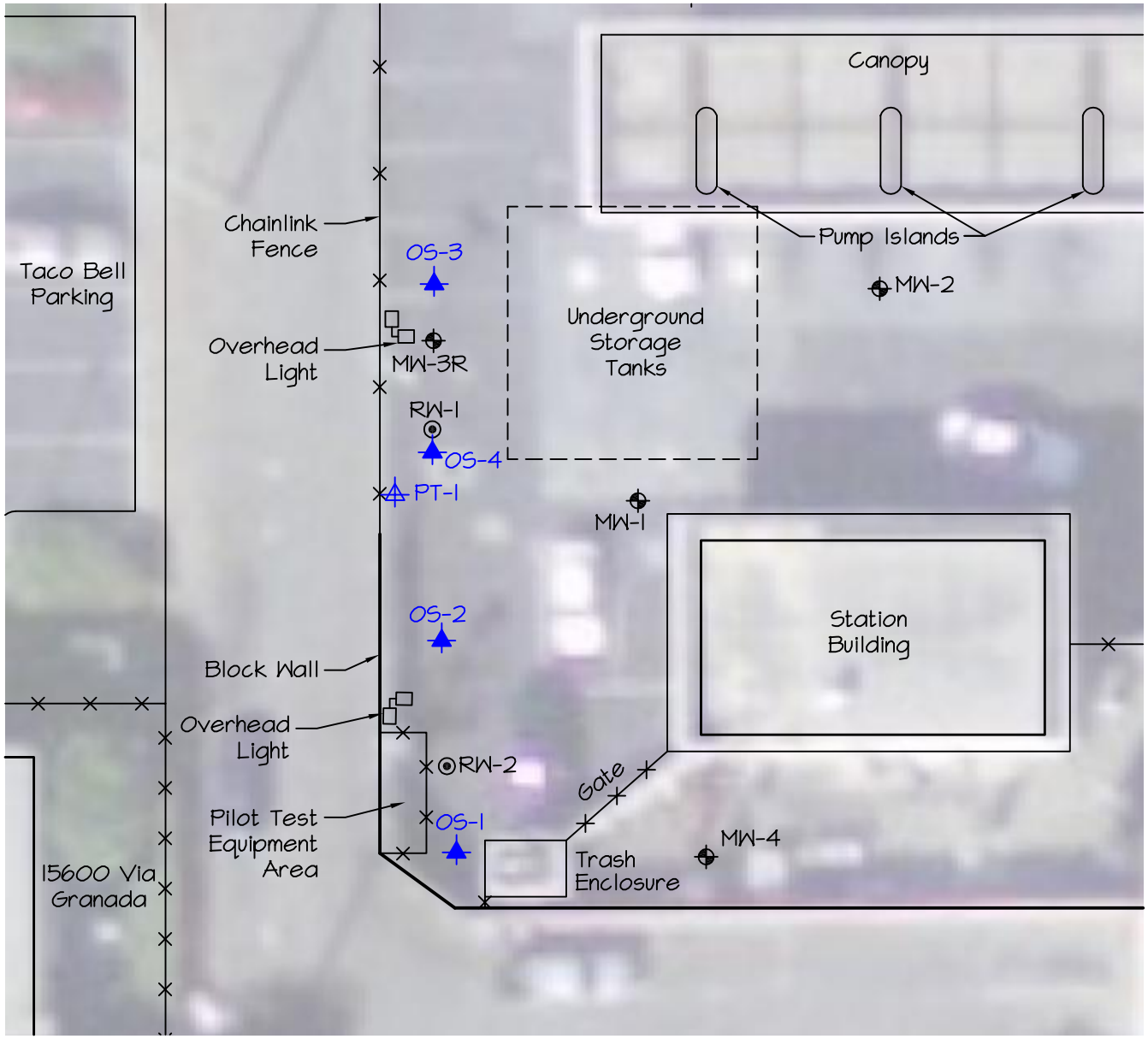
MTBE CONCENTRATION CONTOUR IN GROUNDWATER

PROJECT NO.	DRAWN BY	CHECKED BY	APPROVED BY
01Z0	MY	MP	JPG

FILE NO. 01Z011B0400.DWG

FIGURE 5

3/30/2008 2:52PM 01Z011B0400.dwg



Legend

- MW-1 Monitoring Well
- RW-1 Recovery Well
- OS-1 Proposed Oxygen Injection Well
- PT-1 Proposed Pilot Test Observation Well

N

0 10 20

Scale In Feet

REVISION	NO.	BY	DATE	DESCRIPTION
0	0	MY	4/15/08	Oxygen Injection Work Plan

ARCTOS ENVIRONMENTAL

TESORO - SAN LORENZO

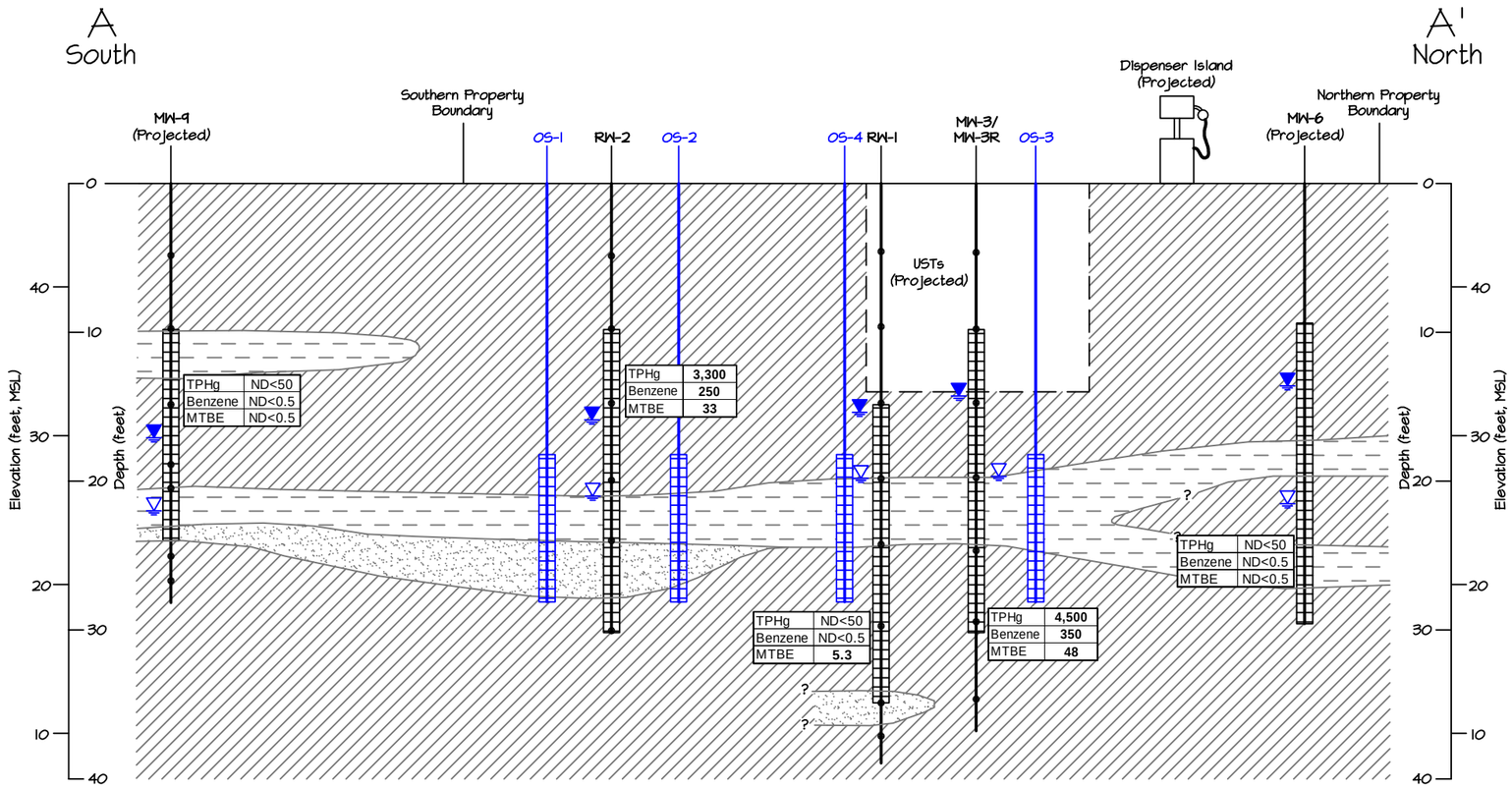
OXYGEN INJECTION PILOT TEST AREA

PROJECT NO.	DRAWN BY	CHECKED BY	APPROVED BY
01Z0	MY	MP	JPG

FILE NO. 01Z011B0600.DWG

FIGURE 6

4/24/2008 3:16PM 01Z011B0600.dwg



Legend

Soil Classification

- Clays, silts
- Sands and Increased Sand Content
- Gravels, Sandy Gravels, Gravelly Sands
- MW-9 — Well Identification
- Groundwater Elevation on 14 March 2008
- First Encountered Groundwater During Well Installation
- Screened Interval

Groundwater Results

TPHg	ND<50 — Total Petroleum Hydrocarbons as Gasoline (µg/l)
Benzene	ND<0.5 — Benzene (µg/l)
MTBE	ND<0.5 — Methyl Tert-Butyl Ether (µg/l)

- ND — Not Detected at Reporting Limit Listed
- OS-3 — Proposed Oxygen Injection Well

Horizontal Scale: 0 10 20

Vertical Scale: 0 5 10

REVISION	NO.	BY	DATE	DESCRIPTION
0	0	MY	4/30/08	OXYGEN INJECTION WORK PLAN

ARCTOS ENVIRONMENTAL INC.

TESORO - SAN LORENZO

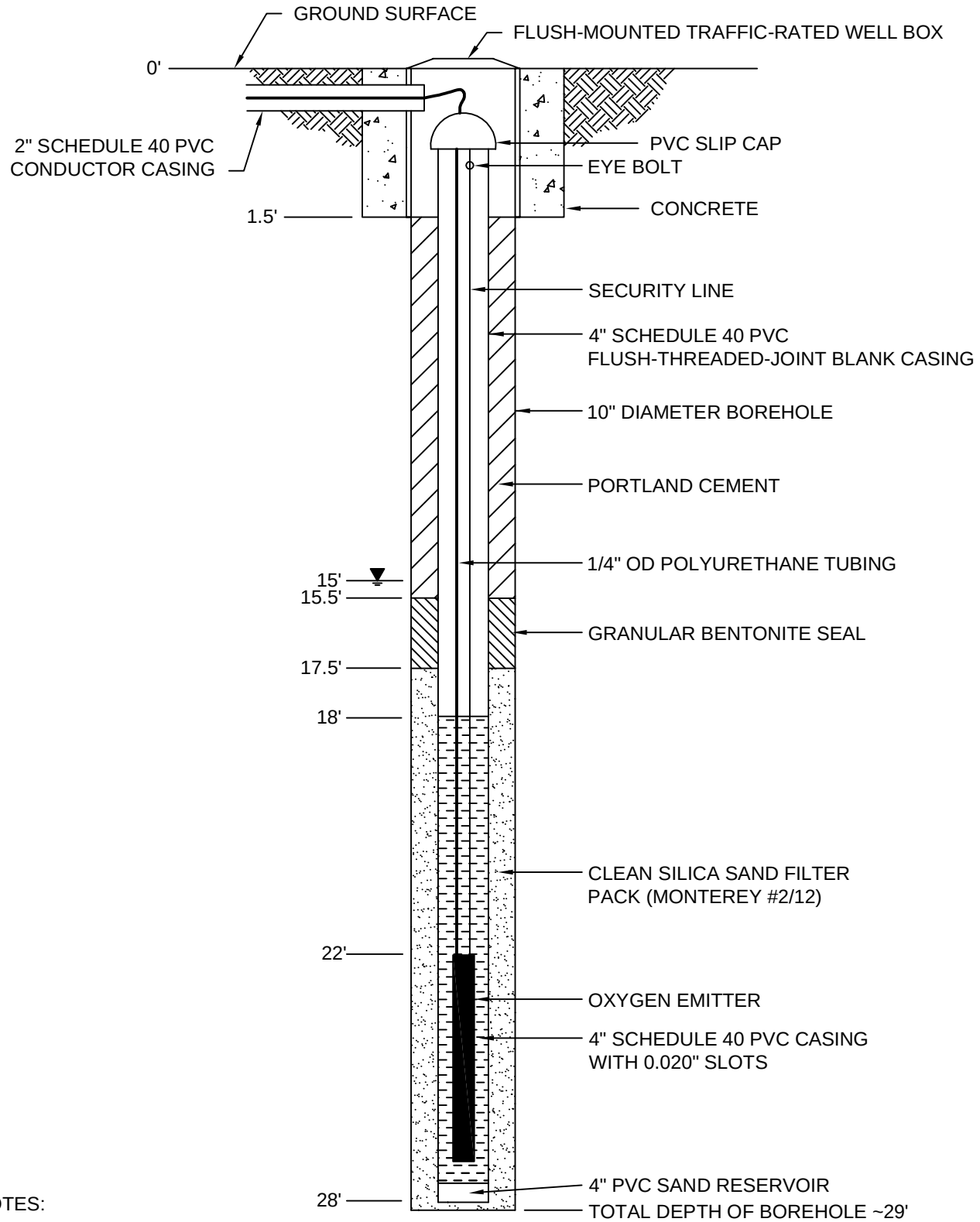
GEOLOGIC CROSS SECTION A-A'

PROJECT NO.	DRAWN BY	CHECKED BY	APPROVED BY
01ZO	MY	MP	JPG

FILE NO. 01ZO11B0700.DWG

FIGURE 7

01ZO11B0700.dwg 4/24/2008 3:19PM



NOTES:

1. DRAWING NOT TO SCALE.
2. ACTUAL WELL CONSTRUCTION MAY VARY BASED ON FIELD INVESTIGATION.

REVISION	REVISIONS			
	NO.	BY	DATE	DESCRIPTION
0	0	MY	4/30/08	OXYGEN INJECTION WORK PLAN

ARCTOS ENVIRONMENTAL

TESORO - SAN LORENZO

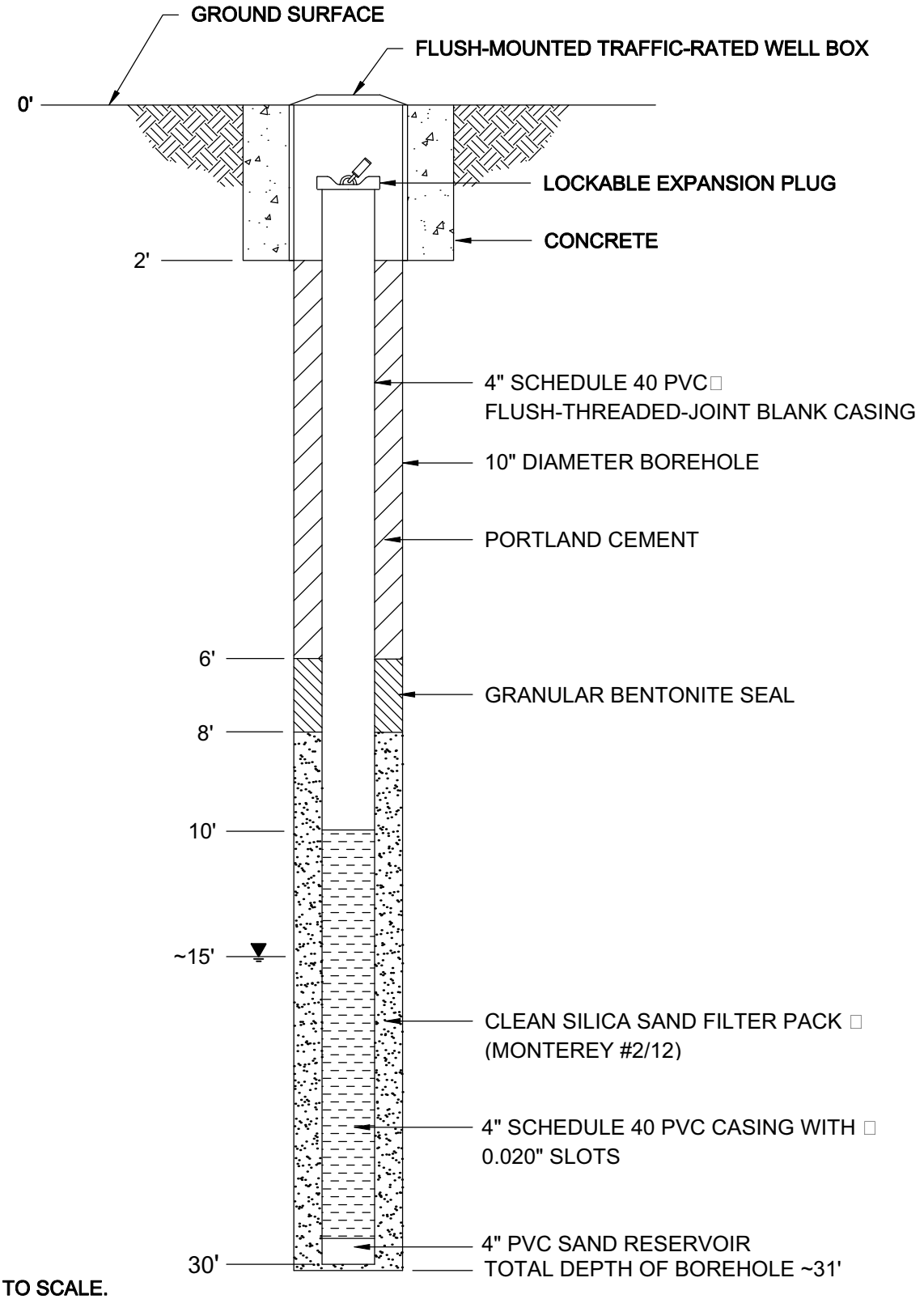
OXYGEN INJECTION WELL CONSTRUCTION DIAGRAM

PROJECT NO.	DRAWN BY	CHECKED BY	APPROVED BY
01ZO	MY	MP	JPG

FILE NO. 01ZO11B0900.DWG

FIGURE 8

4/24/2008 3:21PM 01ZO11B0900.dwg



NOTES:

1. DRAWING NOT TO SCALE.
2. ACTUAL WELL CONSTRUCTION MAY VARY BASED ON FIELD INVESTIGATION.

REVISION	REVISIONS			
	NO.	BY	DATE	DESCRIPTION
0	0	MP	4/30/08	OXYGEN INJECTION WORK PLAN

ARCTOS ENVIRONMENTAL

TESORO - SAN LORENZO

OBSERVATION WELL CONSTRUCTION DIAGRAM

PROJECT NO.	DRAWN BY	CHECKED BY	APPROVED BY
01ZO	MY	MP	JPG

FILE NO. WELL CONST PT1.PDF

FIGURE 9

ATTACHMENT A

HISTORICAL GROUNDWATER ELEVATIONS AND ANALYTICAL RESULTS

TABLE A-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
	2/18/99	13.52		30.15
	6/24/99	15.02		28.65

TABLE A-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	8/30/99	15.87	43.67	27.80
(cont.)	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	45.98	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
	4/30/07	16.17		29.81
	7/18/07	16.90		29.08
	10/30/07	17.34		28.64

TABLE A-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	1/28/08	15.61	45.98	30.37
(cont.)	3/14/08	15.45		30.53
MW-2	2/18/92	16.65	43.09	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
	3/12/96	13.11		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

TABLE A-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	11/9/99	16.03	43.09	26.81
(cont.)	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	45.23	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
	2/28/04	13.56		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

TABLE A-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	2/18/92	16.89	43.10	26.21
	5/14/92	16.60		26.50
	5/15/92	NM		--
	8/27/92	18.96		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

TABLE A-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	2/18/99	13.30	43.10	29.80
(cont.)	6/24/99	14.44		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	45.21	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
	7/18/07	23.11		22.10

TABLE A-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	10/30/07	22.71	45.21	22.50
(cont.)	1/28/08	16.78		28.43
	3/14/08	14.38		30.83
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
	3/12/96	14.77		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

TABLE A-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	6/24/99	16.35	44.66	28.31
(cont.)	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	46.98	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
	2/28/04	15.82		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

TABLE A-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	1/28/08	16.65	46.98	30.33
(cont.)	3/14/08	16.48		30.50
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
	11/19/92	20.68		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

TABLE A-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	11/9/99	16.61	43.79	27.18
(cont.)	3/22/00	13.81		29.98
	6/12/00	15.08		28.71
	11/15/00	16.71		27.08
	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

TABLE A-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	2/18/92	15.87	42.47	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
	8/18/97	15.54		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

TABLE A-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	3/22/00	12.30	42.47	30.17
(cont.)	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	44.79	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
	4/13/05	15.59		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

TABLE A-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	2/18/92	15.51	41.54	26.03
	5/14/92	15.41		26.13
	8/27/92	17.45		24.09
	11/19/92	18.54		23.00
	2/3/93	14.10		27.44
	6/23/93	14.33		27.21
	9/22/93	15.92		25.62
	1/24/94	16.07		25.47
	4/7/94	15.10		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

TABLE A-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	6/12/00	13.28	41.54	28.26
(cont.)	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
	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		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

TABLE A-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	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		--
	8/19/98	14.15		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

TABLE A-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	6/12/00	14.19	42.26	28.07
(cont.)	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	44.58	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
	10/26/06	15.32		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

TABLE A-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	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
	9/28/95	18.04		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

TABLE A-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	6/12/00	16.70	44.94	28.24
(cont.)	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	47.26	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
	7/31/03	17.58		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

TABLE A-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
	8/30/99	15.26		27.08

TABLE A-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	11/9/99	15.72	42.34	26.62
(cont.)	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	44.65	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
	10/30/07	16.32		28.33
	1/28/08	14.93		29.72
	3/14/08	14.74		29.91

TABLE A-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	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
	10/2/96	18.20		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

TABLE A-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	6/12/00	17.44	45.00	27.56
(cont.)	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	47.36	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
	7/16/04	18.01		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

TABLE A-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	7/18/07	18.00	46.88	28.88
	10/30/07	18.42		28.46
	1/28/08	16.96		29.92
	3/14/08	16.83		30.05
RW-1	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
	8/18/97	16.19		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

TABLE A-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	2/18/99	13.75	43.17	29.42
(cont.)	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	45.47	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
	4/13/05	24.21		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	Dry		--
	7/18/07	30.72		14.75

TABLE A-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	10/30/07	31.15	45.47	14.32
(cont.)	1/28/08	26.79		18.68
	3/14/08	15.14		30.33
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
	10/26/06	23.50		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

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

TABLE A-2

HISTORICAL GROUNDWATER MONITORING ANALYTICAL RESULTS
TESORO - SAN LORENZO, 67107

Monitoring Well	Sample Date[a]	TPHg[b] (µg/l)	Benzene[b] (µg/l)	Toluene[b] (µg/l)	Ethylbenzene[b] (µg/l)	Xylenes[b] (µg/l)	MTBE[b] (µg/l)	DIPE[b] (µg/l)	ETBE[b] (µg/l)	TAME[b] (µg/l)	TBA[b] (µg/l)
ESLs[c]		100	1.0	40	30	20	5.0	NE[d]	NE	NE	12
MW-1	2/18/92	NS[e]	NS	NS	NS	NS	NS	NS	NS	NS	NS
	5/14/92	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	5/15/92	41,000	2,000	47	1,200	400	NA[f]	NA	NA	NA	NA
	8/27/92	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	8/28/92	110,000	3,800	54	850	970	NA	NA	NA	NA	NA
	11/19/92	3,600	200	ND<0.5[g]	90	140	NA	NA	NA	NA	NA
	2/3/93	3,000	180	22	79	130	NA	NA	NA	NA	NA
	6/23/93	12,000	2,400	74	650	510	NA	NA	NA	NA	NA
	9/22/93	23,000	3,000	290	1,100	1,200	NA	NA	NA	NA	NA
	1/24/94	18,000	2,400	280	1,100	1,700	NA	NA	NA	NA	NA
	4/7/94	20,000	4,200	820	1,600	2,100	NA	NA	NA	NA	NA
	6/7/94	26,000	1,800	510	1,100	1,600	NA	NA	NA	NA	NA
	9/28/94	18,000	1,700	210	970	870	NA	NA	NA	NA	NA
	12/14/94	31,000	4,400	2,400	2,300	4,300	NA	NA	NA	NA	NA
	3/15/95	17,000	830	310	840	1,200	NA	NA	NA	NA	NA
	6/13/95	22,000	1,300	99	1,500	1,100	NA	NA	NA	NA	NA
	9/28/95	8,800	580	ND<25	780	410	NA	NA	NA	NA	NA
	12/28/95	4,800	4.9	ND<1.3	ND<1.3	290	74	NA	NA	NA	NA
	1/30/96	1,500	17	7.1	20	45	63	NA	NA	NA	NA
	3/12/96	110	ND<0.5	ND<0.5	ND<0.5	ND<0.5	44	NA	NA	NA	NA
	9/11/96	600	48	0.9	37	26	75	NA	NA	NA	NA
	10/2/96	210	16	ND<0.5	6.0	0.92	11	NA	NA	NA	NA
	1/28/97	150	ND<0.5	ND<0.5	ND<0.5	ND<0.5	160	NA	NA	NA	NA
	5/20/97	680	ND<2.5	ND<2.5	ND<2.5	ND<2.5	640	NA	NA	NA	NA
	8/18/97	ND<250	ND<2.5	ND<2.5	ND<2.5	ND<2.5	540	NA	NA	NA	NA
	9/29/97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/5/97	ND<250	2.8	ND<2.5	ND<2.5	ND<2.5	400/390[h]	NA	NA	NA	NA
	3/31/98	3,300	260	13	110	150	7,900	NA	NA	NA	NA
	5/26/98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	5/28/98	7,800	120	ND<10	39	55	9,300	NA	NA	NA	NA
	8/19/98	ND<250	12	ND<2.5	6.0	3.8	2,200	NA	NA	NA	NA
	11/17/98	860	8.3	ND<2.5	9.2	7.6	4,200	NA	NA	NA	NA
	2/18/99	310	2.7	ND<2.5	ND<2.5	3.9	4,200	NA	NA	NA	NA
	6/24/99	860	10	ND<2.5	12	6.5	3,400	NA	NA	NA	NA
	8/30/99	140	2.0	ND<0.5	3.9	2.0	2,800	NA	NA	NA	NA
	11/9/99	170	ND<0.5	ND<0.5	3.1	2.0	1,500	NA	NA	NA	NA
	3/22/00	<200	2.8	ND<2	3.6	ND<2	1,200	NA	NA	NA	NA
	6/12/00	190	1.3	ND<1	ND<1	ND<1	640	NA	NA	NA	NA
	11/15/00	240	ND<1	ND<1	ND<1	ND<1	960	NA	NA	NA	NA
	2/26/01	ND<100	1.2	ND<1	ND<1	ND<1	2,800	NA	NA	NA	NA
	5/21/01	ND<200	ND<2	ND<2	ND<2	ND<2	540	NA	NA	NA	NA

TABLE A-2

HISTORICAL GROUNDWATER MONITORING ANALYTICAL RESULTS
TESORO - SAN LORENZO, 67107

Monitoring Well	Sample Date[a]	TPHg[b] (µg/l)	Benzene[b] (µg/l)	Toluene[b] (µg/l)	Ethylbenzene[b] (µg/l)	Xylenes[b] (µg/l)	MTBE[b] (µg/l)	DIPE[b] (µg/l)	ETBE[b] (µg/l)	TAME[b] (µg/l)	TBA[b] (µg/l)
ESLs[c]		100	1.0	40	30	20	5.0	NE[d]	NE	NE	12
MW-1	9/5/01	ND<200	7.0	ND<2	ND<2	ND<2	550	NA	NA	NA	NA
(cont.)	11/7/01	290	ND<2	ND<2	ND<2	ND<2	750	NA	NA	NA	NA
	2/11/02	270	ND<1	ND<1	ND<1	ND<1	450	ND	ND	ND	26
	6/3/02	310	ND<2	ND<2	ND<2	ND<2	610	ND	ND	ND	20
	8/6/02	170	ND<0.5	ND<0.5	ND<0.5	ND<0.5	540	ND	ND	ND	ND
	11/14/02	490	ND<2	ND<2	ND<2	ND<2	900	ND	ND	ND	ND
	2/20/03	210	ND<1	ND<1	ND<1	ND<1	320	ND	ND	ND	ND
	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[i]	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[i]	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
MW-2	2/18/92	1,600	ND<0.5	ND<0.5	1.9	ND<0.5	NA	NA	NA	NA	NA
	5/14/92	740	1.2	1	1.3	ND<0.5	NA	NA	NA	NA	NA
	8/27/92	1,400	6.5	1.1	0.6	ND<0.5	NA	NA	NA	NA	NA
	11/19/92	360	ND<0.5	ND<0.5	2.7	ND<0.5	NA	NA	NA	NA	NA
	2/3/93	590	1.2	1.6	4.5	6.4	NA	NA	NA	NA	NA
	6/23/93	160	ND<0.5	ND<0.5	0.52	0.5	NA	NA	NA	NA	NA
	9/22/93	290	ND<0.5	0.59	1.2	0.59	NA	NA	NA	NA	NA
	1/24/94	330	ND<0.5	ND<0.5	0.68	ND<0.5	NA	NA	NA	NA	NA
	4/7/94	490	ND<0.5	ND<0.5	ND<0.5	4.4	NA	NA	NA	NA	NA
	6/7/94	550	ND<0.5	ND<0.5	1.5	ND<0.5	NA	NA	NA	NA	NA
	9/28/94	190	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	12/14/94	1,400	7.2	0.84	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	3/15/95	730	39	ND<0.5	0.53	ND<0.5	NA	NA	NA	NA	NA
	6/13/95	750[i]	8.3	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA

TABLE A-2

HISTORICAL GROUNDWATER MONITORING ANALYTICAL RESULTS
TESORO - SAN LORENZO, 67107

Monitoring Well	Sample Date[a]	TPHg[b] (µg/l)	Benzene[b] (µg/l)	Toluene[b] (µg/l)	Ethylbenzene[b] (µg/l)	Xylenes[b] (µg/l)	MTBE[b] (µg/l)	DIPE[b] (µg/l)	ETBE[b] (µg/l)	TAME[b] (µg/l)	TBA[b] (µg/l)
ESLs[c]		100	1.0	40	30	20	5.0	NE[d]	NE	NE	12
MW-2	9/28/95	670[i]	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
(cont.)	12/28/95	3,100	9.5	ND<5	ND<5	5.2	4,600	NA	NA	NA	NA
	3/12/96	710	ND<1.3	ND<1.3	ND<1.3	ND<1.3	3,200	NA	NA	NA	NA
	6/13/92	1,900[i]	1.6	1.6	ND<1.3	ND<1.3	5,100	NA	NA	NA	NA
	10/2/96	2,800	ND<2.5	ND<2.5	ND<2.5	ND<2.5	7,900	NA	NA	NA	NA
	1/28/97	130	ND<0.5	ND<0.5	ND<0.5	ND<0.5	210	NA	NA	NA	NA
	5/20/97	1,400	120	16	ND<2.5	4.0	390	NA	NA	NA	NA
	8/18/97	ND<250	ND<2.5	ND<2.5	ND<2.5	ND<2.5	2,000	NA	NA	NA	NA
	9/29/97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/5/97	ND<250	ND<2.5	ND<2.5	ND<2.5	ND<2.5	2,900[h]	NA	NA	NA	NA
	3/31/98	ND<10,000	ND<0.5	ND<0.5	ND<0.5	ND<0.5	85,000	NA	NA	NA	NA
	5/26/98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	5/28/98	ND<50,000	ND<500	ND<500	ND<500	ND<500	97,000	NA	NA	NA	NA
	8/19/98	210	ND<0.5	ND<0.5	ND<0.5	ND<0.5	22,000	NA	NA	NA	NA
	11/17/98	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	17,000	NA	NA	NA	NA
	2/18/99	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	13,000	NA	NA	NA	NA
	6/24/99	180	ND<15	ND<15	ND<15	ND<15	39,000	NA	NA	NA	NA
	8/30/99	ND<2,500	ND<25	ND<25	ND<25	ND<25	18,000	NA	NA	NA	NA
	11/9/99	ND<500	ND<5	ND<5	ND<5	ND<5	14,000	NA	NA	NA	NA
	3/22/00	ND<500	ND<5	ND<5	ND<5	ND<5	54,000	NA	NA	NA	NA
	6/12/00	ND<2,000	ND<20	ND<20	ND<20	ND<20	53,000	NA	NA	NA	NA
	11/15/00	ND<5,000	ND<50	ND<50	ND<50	ND<50	35,000	NA	NA	NA	NA
	2/26/01	ND<2,000	ND<20	ND<20	ND<20	ND<20	2,800	NA	NA	NA	NA
	5/21/01	ND<5,000	ND<25	ND<25	ND<25	ND<25	20,000	NA	NA	NA	NA
	9/5/01	ND<2,000	ND<20	ND<20	ND<20	ND<20	12,000	NA	NA	NA	NA
	11/7/01	ND<2,000	ND<20	ND<20	ND<20	ND<20	7,600	NA	NA	NA	NA
	2/11/02	ND<500	ND<5	ND<5	ND<5	ND<5	1,500	NA	NA	NA	NA
	6/3/02	ND<500	ND<5	ND<5	ND<5	ND<5	2,200	ND	ND	ND	190
	8/6/02	ND<500	ND<5	ND<5	ND<5	ND<5	3,300	ND	ND	ND	110
	11/14/02	ND<1,000	ND<10	ND<10	ND<10	ND<10	3,200	ND	ND	ND	120
	2/20/03	ND<50	ND<2	ND<2	ND<2	ND<2	160	ND	ND	ND	ND
	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

TABLE A-2

HISTORICAL GROUNDWATER MONITORING ANALYTICAL RESULTS
TESORO - SAN LORENZO, 67107

Monitoring Well	Sample Date[a]	TPHg[b] (µg/l)	Benzene[b] (µg/l)	Toluene[b] (µg/l)	Ethylbenzene[b] (µg/l)	Xylenes[b] (µg/l)	MTBE[b] (µg/l)	DIPE[b] (µg/l)	ETBE[b] (µg/l)	TAME[b] (µg/l)	TBA[b] (µg/l)
ESLs[c]		100	1.0	40	30	20	5.0	NE[d]	NE	NE	12
MW-2	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
(cont.)	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
MW-3	2/18/92	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	5/14/92	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	5/15/92	160,000	6,300	5,900	1,700	6,100	NA	NA	NA	NA	NA
	8/27/92	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	8/28/92	1,300,000	2,500	40,000	6,700	44,000	NA	NA	NA	NA	NA
	11/18/92	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/19/92	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/3/93	82,000	7,200	11,000	2,900	13,000	NA	NA	NA	NA	NA
	6/23/93	61,000	3,200	5,300	2,500	9,100	NA	NA	NA	NA	NA
	9/22/93	94,000	12,000	14,000	3,900	18,000	NA	NA	NA	NA	NA
	1/24/94	110,000	14,000	17,000	4,200	14,000	NA	NA	NA	NA	NA
	4/7/94	28,000	6,500	1,800	1,700	4,100	NA	NA	NA	NA	NA
	6/7/94	27,000	6,400	2,300	1,500	3,500	NA	NA	NA	NA	NA
	9/28/94	40,000	7,400	4,300	1,500	4,600	NA	NA	NA	NA	NA
	12/14/94	140,000	17,000	21,000	3,900	22,000	NA	NA	NA	NA	NA
	3/15/95	58,000	4,900	1,900	1,800	7,100	NA	NA	NA	NA	NA
	6/13/95	44,000	7,200	2,900	1,200	4,600	NA	NA	NA	NA	NA
	9/28/95	30,000	5,600	2,100	1,900	6,900	NA	NA	NA	NA	NA
	12/28/95	16,000	32	5.8	18	4,700	360	NA	NA	NA	NA
	1/30/96	8,700	850	800	190	1,700	430	NA	NA	NA	NA
	3/12/96	2,400	48	64	5.3	630	97	NA	NA	NA	NA
	6/11/96	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10/2/96	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	1/28/97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	5/20/97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	7/10/97	300	ND<0.5	ND<0.5	ND<0.5	4.8	40	NS	NS	NS	NS
	8/18/97	3,600	480	8.4	100	230	170	NA	NA	NA	NA
	9/29/97	3,500	740	8.6	160	240	210	NA	NA	NA	NA
	11/5/97	4,100	870	15	180	210	240/210[h]	NA	NA	NA	NA
	3/31/98	12,000	1,800	600	410	1400	510	NA	NA	NA	NA
	5/26/98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

TABLE A-2

HISTORICAL GROUNDWATER MONITORING ANALYTICAL RESULTS
TESORO - SAN LORENZO, 67107

Monitoring Well	Sample Date[a]	TPHg[b] (µg/l)	Benzene[b] (µg/l)	Toluene[b] (µg/l)	Ethylbenzene[b] (µg/l)	Xylenes[b] (µg/l)	MTBE[b] (µg/l)	DIPE[b] (µg/l)	ETBE[b] (µg/l)	TAME[b] (µg/l)	TBA[b] (µg/l)
ESLs[c]		100	1.0	40	30	20	5.0	NE[d]	NE	NE	12
MW-3	5/28/98	6,500	1,500	400	280	870	480	NA	NA	NA	NA
(cont.)	8/19/98	1,400	130	11	24	60	140	NA	NA	NA	NA
	11/17/98	510	48	3.5	9.9	14	120	NA	NA	NA	NA
	2/18/99	690	67	28	24	81	88	NA	NA	NA	NA
	6/24/99	540	27	21	8.6	32	61	NA	NA	NA	NA
	8/30/99	250	12	12	3.2	13	50	NA	NA	NA	NA
	11/9/99	230	9.8	5.3	3.4	10	48	NA	NA	NA	NA
	3/22/00	1,500	180	47	46	100	80	NA	NA	NA	NA
	6/12/00	920	100	6.2	20	25	76	NA	NA	NA	NA
	11/15/00	1,100	280	5.0	21	20	140	NA	NA	NA	NA
	2/26/01	140	14	4.3	3.1	11	230	ND	ND	ND	190
	5/21/01	510	36	0.72	1.0	2.2	280	ND	ND	ND	110
	9/5/01	390	59	0.53	0.75	0.57	620	ND	ND	ND	120
	11/7/01	830	170	2.3	4.9	4.8	900	ND	ND	ND	ND
	2/11/02	370	17	ND<2.5	4.7	7.9	1,200	ND	ND	ND	ND
	6/3/02	460	120	ND<2.5	5.6	8.4	1,400	ND	ND	ND	140
	8/6/02	800	110	ND<5	ND<5	ND<5	2,200	ND	ND	ND	170
	11/14/02	1,400	89	ND<10	ND<10	ND<10	2,800	ND	ND	ND	210
	2/20/03	ND<500	14	ND<5	ND<5	ND<5	2,300	ND	ND	ND	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
	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

TABLE A-2

HISTORICAL GROUNDWATER MONITORING ANALYTICAL RESULTS
TESORO - SAN LORENZO, 67107

Monitoring Well	Sample Date[a]	TPHg[b] (µg/l)	Benzene[b] (µg/l)	Toluene[b] (µg/l)	Ethylbenzene[b] (µg/l)	Xylenes[b] (µg/l)	MTBE[b] (µg/l)	DIPE[b] (µg/l)	ETBE[b] (µg/l)	TAME[b] (µg/l)	TBA[b] (µg/l)
ESLs[c]		100	1.0	40	30	20	5.0	NE[d]	NE	NE	12
MW-4	2/18/92	5,100	ND<0.5	ND<0.5	12	21	NA	NA	NA	NA	NA
	5/14/92	4,600	ND<0.5	5.6	1.8	2.2	NA	NA	NA	NA	NA
	8/27/92	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	8/28/92	1700	6.6	1.3	1.6	3.1	NA	NA	NA	NA	NA
	11/19/92	400	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	2/3/93	1,100	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	6/23/93	120	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	9/22/93	110	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	1/24/94	260	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	4/7/94	430	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	6/7/94	150	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	9/28/94	75	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	12/14/94	160	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	3/15/95	500	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	6/13/95	210[i]	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	9/28/95	140[i]	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	12/28/95	510[i]	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	NA	NA	NA	NA
	3/12/96	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	NA	NA	NA	NA
	6/11/96	50[i]	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	NA	NA	NA	NA
	10/2/96	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	NA	NA	NA	NA
	1/28/97	270[i]	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	NA	NA	NA	NA
	5/20/97	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	NA	NA	NA	NA
	8/18/97	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	NA	NA	NA	NA
	9/29/97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/5/97	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5/ND<0.5[h]	NA	NA	NA	NA
	3/31/98	110	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	NA	NA	NA	NA
	5/26/98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	5/28/98	94	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	NA	NA	NA	NA
	8/19/98	120[i]	ND<0.5	ND<0.5	ND<0.5	ND<0.5	46	NA	NA	NA	NA
	11/17/98	ND<50	1.3	ND<0.5	ND<0.5	ND<0.5	780	NA	NA	NA	NA
	2/18/99	130	8.2	ND<0.5	ND<0.5	ND<0.5	240	NS	NS	NS	NS
	6/24/99	ND<50	ND<1	ND<0.5	ND<0.5	ND<0.5	2,100	NA	NA	NA	NA
	8/30/99	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/9/99	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	2,500	NA	NA	NA	NA
	3/22/00	69	ND<0.5	ND<0.5	ND<0.5	ND<0.5	12,000	NA	NA	NA	NA
	6/12/00	ND<2,000	ND<20	ND<20	ND<20	ND<20	17,000	NA	NA	NA	NA
	11/15/00	ND<100	ND<1	ND<1	ND<1	ND<1	17,000	NA	NA	NA	NA
	2/26/01	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	5/21/01	ND<5,000	ND<25	ND<25	ND<25	ND<25	13,000	NA	NA	NA	NA
	9/5/01	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/7/01	ND<1,000	ND<10	ND<10	ND<10	ND<10	3,800	NA	NA	NA	NA

TABLE A-2

HISTORICAL GROUNDWATER MONITORING ANALYTICAL RESULTS
TESORO - SAN LORENZO, 67107

Monitoring Well	Sample Date[a]	TPHg[b] (µg/l)	Benzene[b] (µg/l)	Toluene[b] (µg/l)	Ethylbenzene[b] (µg/l)	Xylenes[b] (µg/l)	MTBE[b] (µg/l)	DIPE[b] (µg/l)	ETBE[b] (µg/l)	TAME[b] (µg/l)	TBA[b] (µg/l)
ESLs[c]		100	1.0	40	30	20	5.0	NE[d]	NE	NE	12
MW-4	2/11/02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
(cont.)	6/3/02	ND<200	ND<2	ND<2	ND<2	ND<2	1,100	ND	ND	2.0	38
	8/6/02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/14/02	ND<200	ND<2	ND<2	ND<2	ND<2	700	ND	ND	ND	ND
	2/20/03	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	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
	7/31/03	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	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
	2/28/04	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	4/16/04	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	6	ND<0.5	ND<0.5	ND<0.5	ND<5
	7/16/04	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	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
	2/4/05	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	4/13/05	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	8/10/05	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/5/05	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	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
	10/30/07	90[i]	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
MW-5	2/18/92	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	5/14/92	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	8/27/92	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	11/19/92	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	2/3/93	55	3.0	2.7	8.0	9.9	NA	NA	NA	NA	NA
	6/23/93	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	9/22/93	ND<50	0.66	1.1	ND<0.5	0.6	NA	NA	NA	NA	NA
	1/24/94	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	4/7/94	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	6/7/94	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	9/28/94	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	12/14/94	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	3/15/95	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	6/13/95	ND<50	ND<0.5	0.52	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	9/28/95	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	12/28/95	120	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	NA	NA	NA	NA

TABLE A-2

HISTORICAL GROUNDWATER MONITORING ANALYTICAL RESULTS
TESORO - SAN LORENZO, 67107

Monitoring Well	Sample Date[a]	TPHg[b] (µg/l)	Benzene[b] (µg/l)	Toluene[b] (µg/l)	Ethylbenzene[b] (µg/l)	Xylenes[b] (µg/l)	MTBE[b] (µg/l)	DIPE[b] (µg/l)	ETBE[b] (µg/l)	TAME[b] (µg/l)	TBA[b] (µg/l)
ESLs[c]		100	1.0	40	30	20	5.0	NE[d]	NE	NE	12
MW-5	3/12/96	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	9	NA	NA	NA	NA
(cont.)	6/11/96	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	NA	NA	NA	NA
	10/2/96	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	NA	NA	NA	NA
	1/28/97	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	NA	NA	NA	NA
	5/20/97	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	NA	NA	NA	NA
	8/18/97	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	NA	NA	NA	NA
	9/29/97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/5/97	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5/ND<0.5[h]	NA	NA	NA	NA
	3/31/98	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	NA	NA	NA	NA
	5/26/98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	5/28/98	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	NA	NA	NA	NA
	8/19/98	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	7.1	NA	NA	NA	NA
	11/17/98	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	6.3	NA	NA	NA	NA
	2/18/99	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	NA	NA	NA	NA
	6/24/99	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	8/30/99	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
no longer sampled as of 3/22/00	11/9/99	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	3/22/00	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	NA	NA	NA	NA
MW-6	2/18/92	370	4.8	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	5/14/92	120	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	8/27/92	ND<50	1.2	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	11/19/92	66	1.3	ND<0.5	1	1.1	NA	NA	NA	NA	NA
	2/3/93	100	1.9	2.6	23	12	NA	NA	NA	NA	NA
	6/23/93	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	9/22/93	81	2.2	3.8	0.53	2.7	NA	NA	NA	NA	NA
	1/24/94	98	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	4/7/94	150	0.71	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	6/7/94	180	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	9/28/94	100	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	12/14/94	140	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	3/15/95	110	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	6/13/95	150[i]	ND<0.5	0.87	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	9/28/95	ND<50	0.78	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	12/28/95	410	ND<0.5	ND<0.5	ND<0.5	ND<0.5	70	NA	NA	NA	NA
	1/30/96	81	1.0	ND<0.5	ND<0.5	ND<0.5	46	NA	NA	NA	NA
	3/12/96	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	7	NA	NA	NA	NA
	6/11/96	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	NA	NA	NA	NA
	10/2/96	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	NA	NA	NA	NA
	1/28/97	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	NA	NA	NA	NA
	5/20/97	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	NA	NA	NA	NA
	8/18/97	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	NA	NA	NA	NA

TABLE A-2

HISTORICAL GROUNDWATER MONITORING ANALYTICAL RESULTS
TESORO - SAN LORENZO, 67107

Monitoring Well	Sample Date[a]	TPHg[b] (µg/l)	Benzene[b] (µg/l)	Toluene[b] (µg/l)	Ethylbenzene[b] (µg/l)	Xylenes[b] (µg/l)	MTBE[b] (µg/l)	DIPE[b] (µg/l)	ETBE[b] (µg/l)	TAME[b] (µg/l)	TBA[b] (µg/l)
ESLs[c]		100	1.0	40	30	20	5.0	NE[d]	NE	NE	12
MW-6	9/29/97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
(cont.)	11/5/97	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5/2.8[i]	NA	NA	NA	NA
	3/31/98	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	NA	NA	NA	NA
	5/26/98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	5/28/98	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	NA	NA	NA	NA
	8/19/98	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	NA	NA	NA	NA
	11/17/98	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	NA	NA	NA	NA
	2/18/99	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	NA	NA	NA	NA
	6/24/99	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	8/30/99	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
no longer sampled as of 3/22/00	11/9/99	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	3/22/00	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	NA	NA	NA	NA
MW-7	2/18/92	670	16	ND<0.5	10	16	NA	NA	NA	NA	NA
	5/14/92	1,500	44	ND<0.5	38	88	NA	NA	NA	NA	NA
	8/27/92	23,000	400	5.8	290	1,400	NA	NA	NA	NA	NA
	11/19/92	330	29	ND<0.5	10	53	NA	NA	NA	NA	NA
	2/3/93	2,000	200	ND<0.5	110	480	NA	NA	NA	NA	NA
	6/23/93	280	20	ND<0.5	16	16	NA	NA	NA	NA	NA
	9/22/93	860	71	2.2	33	210	NA	NA	NA	NA	NA
	1/24/94	900	61	ND<1.3	10	160	NA	NA	NA	NA	NA
	4/7/94	630	53	ND<0.5	7.1	49	NA	NA	NA	NA	NA
	6/7/94	730	55	ND<0.5	14	24	NA	NA	NA	NA	NA
	9/28/94	300	21	ND<0.5	2.3	3.1	NA	NA	NA	NA	NA
	12/14/94	430	19	ND<0.5	3.3	32	NA	NA	NA	NA	NA
	3/15/95	70	0.88	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	6/13/95	190	7.3	0.79	7.6	8.9	NA	NA	NA	NA	NA
	9/28/95	60	1.5	ND<0.5	1.2	0.84	NA	NA	NA	NA	NA
	12/28/95	60	ND<0.5	ND<0.5	0.91	0.69	10	NA	NA	NA	NA
	3/12/96	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	11	NA	NA	NA	NA
	6/11/96	79	ND<0.5	ND<0.5	ND<0.5	ND<0.5	16	NA	NA	NA	NA
	10/2/96	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	26	NA	NA	NA	NA
	1/28/97	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	13	NA	NA	NA	NA
	5/20/97	78	ND<0.5	0.85	ND<0.5	ND<0.5	40	NA	NA	NA	NA
	8/18/97	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	18	NA	NA	NA	NA
	9/29/97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/5/97	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	8.9/8.0[h]	NA	NA	NA	NA
	3/31/98	ND<50	ND<0.5	ND<0.5	ND<0.5	1.3	6	NA	NA	NA	NA
	5/26/98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	5/28/98	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	10	NA	NA	NA	NA
	8/19/98	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	27	NA	NA	NA	NA
	11/17/98	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	30	NA	NA	NA	NA

TABLE A-2

HISTORICAL GROUNDWATER MONITORING ANALYTICAL RESULTS
TESORO - SAN LORENZO, 67107

Monitoring Well	Sample Date[a]	TPHg[b] (µg/l)	Benzene[b] (µg/l)	Toluene[b] (µg/l)	Ethylbenzene[b] (µg/l)	Xylenes[b] (µg/l)	MTBE[b] (µg/l)	DIPE[b] (µg/l)	ETBE[b] (µg/l)	TAME[b] (µg/l)	TBA[b] (µg/l)
ESLs[c]		100	1.0	40	30	20	5.0	NE[d]	NE	NE	12
MW-7	2/18/99	51	ND<0.5	ND<0.5	ND<0.5	ND<0.5	22	NA	NA	NA	NA
(cont.)	6/24/99	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	8/30/99	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/9/99	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	16	NA	NA	NA	NA
	3/22/00	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	18	NA	NA	NA	NA
	6/12/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/15/00	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	17	NA	NA	NA	NA
	2/26/01	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	5/21/01	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	9/5/01	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/7/01	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	5.4	NA	NA	NA	NA
	2/11/02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	6/3/02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	8/6/02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	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
	2/20/03	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	5/15/03	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	7/31/03	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	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
	2/28/04	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	4/16/04	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	7/16/04	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	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
	2/4/05	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	4/13/05	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	8/10/05	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/5/05	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	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
	4/28/06	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	8/15/06	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10/26/06	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	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
	7/18/07	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	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
MW-8	2/18/92	1,200	ND<0.5	ND<0.5	9.5	ND<0.5	NA	NA	NA	NA	NA
	5/14/92	130	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	8/27/92	140	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	11/19/92	320	ND<0.5	ND<0.5	2.0	ND<0.5	NA	NA	NA	NA	NA
	2/3/93	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	6/23/93	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA

TABLE A-2

HISTORICAL GROUNDWATER MONITORING ANALYTICAL RESULTS
TESORO - SAN LORENZO, 67107

Monitoring Well	Sample Date[a]	TPHg[b] (µg/l)	Benzene[b] (µg/l)	Toluene[b] (µg/l)	Ethylbenzene[b] (µg/l)	Xylenes[b] (µg/l)	MTBE[b] (µg/l)	DIPE[b] (µg/l)	ETBE[b] (µg/l)	TAME[b] (µg/l)	TBA[b] (µg/l)
ESLs[c]		100	1.0	40	30	20	5.0	NE[d]	NE	NE	12
MW-8	9/22/93	ND<50	ND<0.5	0.67	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
(cont.)	1/24/94	290	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	4/7/94	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	6/7/94	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	9/28/94	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	12/14/94	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	3/15/95	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	6/13/95	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	9/28/95	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	12/28/95	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	NA	NA	NA	NA
	3/12/96	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	NA	NA	NA	NA
	6/11/96	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	NA	NA	NA	NA
	10/2/96	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	NA	NA	NA	NA
	1/28/97	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	NA	NA	NA	NA
	5/20/97	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	NA	NA	NA	NA
	8/18/97	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	NA	NA	NA	NA
	9/29/97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/5/97	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5/ND<0.5[h]	NA	NA	NA	NA
	3/31/98	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	NA	NA	NA	NA
	5/26/98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	5/28/98	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	NA	NA	NA	NA
	8/19/98	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	NA	NA	NA	NA
	11/17/98	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	NA	NA	NA	NA
	2/18/99	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	NA	NA	NA	NA
	6/24/99	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	8/30/99	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/9/99	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	3/22/00	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	NA	NA	NA	NA
	6/12/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/15/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/26/01	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	5/21/01	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	9/5/01	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/7/01	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/11/02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	6/3/02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	8/6/02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/14/02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/20/03	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	5/15/03	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	7/31/03	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

TABLE A-2

HISTORICAL GROUNDWATER MONITORING ANALYTICAL RESULTS
TESORO - SAN LORENZO, 67107

Monitoring Well	Sample Date[a]	TPHg[b] (µg/l)	Benzene[b] (µg/l)	Toluene[b] (µg/l)	Ethylbenzene[b] (µg/l)	Xylenes[b] (µg/l)	MTBE[b] (µg/l)	DIPE[b] (µg/l)	ETBE[b] (µg/l)	TAME[b] (µg/l)	TBA[b] (µg/l)
ESLs[c]		100	1.0	40	30	20	5.0	NE[d]	NE	NE	12
MW-8	10/28/03	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
(cont.)	2/28/04	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	4/16/04	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	7/16/04	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/13/04	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/4/05	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	4/13/05	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	8/10/05	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/5/05	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	1/30/06	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	4/28/06	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	8/15/06	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10/26/06	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/2/07	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	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
	10/30/07	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-9	2/18/92	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	5/14/92	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	8/27/92	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	11/19/92	ND<50	ND<0.5	ND<0.5	ND<0.5	1.3	NA	NA	NA	NA	NA
	2/3/93	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	6/23/93	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	9/22/93	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	1/24/94	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	4/7/94	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	6/7/94	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	9/28/94	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	12/14/94	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	3/15/95	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	6/13/95	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	9/28/95	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	12/28/95	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	NA	NA	NA	NA
	3/12/96	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	6/11/96	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	NA	NA	NA	NA
	10/2/96	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	NA	NA	NA	NA
	1/28/97	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	NA	NA	NA	NA
	5/20/97	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	NA	NA	NA	NA
	8/18/97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	9/29/97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/5/97	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5/ND<0.5[h]	NA	NA	NA	NA

TABLE A-2

HISTORICAL GROUNDWATER MONITORING ANALYTICAL RESULTS
TESORO - SAN LORENZO, 67107

Monitoring Well	Sample Date[a]	TPHg[b] (µg/l)	Benzene[b] (µg/l)	Toluene[b] (µg/l)	Ethylbenzene[b] (µg/l)	Xylenes[b] (µg/l)	MTBE[b] (µg/l)	DIPE[b] (µg/l)	ETBE[b] (µg/l)	TAME[b] (µg/l)	TBA[b] (µg/l)
ESLs[c]		100	1.0	40	30	20	5.0	NE[d]	NE	NE	12
MW-9	3/31/98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
(cont.)	5/26/98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	5/28/98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	8/19/98	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	NA	NA	NA	NA
	11/17/98	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	NA	NA	NA	NA
	2/18/99	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	NA	NA	NA	NA
	6/24/99	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	8/30/99	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/9/99	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	3/22/00	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	NA	NA	NA	NA
	6/12/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/15/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/26/01	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	5/21/01	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	9/5/01	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/7/01	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/11/02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	6/3/02	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA
	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
	11/14/02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/20/03	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	5/15/03	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	7/31/03	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10/28/03	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/28/04	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	4/16/04	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	7/16/04	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/13/04	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/4/05	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	4/13/05	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	8/10/05	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/5/05	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	1/30/06	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	4/28/06	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	8/15/06	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10/26/06	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/2/07	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	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
	10/30/07	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

TABLE A-2

HISTORICAL GROUNDWATER MONITORING ANALYTICAL RESULTS
TESORO - SAN LORENZO, 67107

Monitoring Well	Sample Date[a]	TPHg[b] (µg/l)	Benzene[b] (µg/l)	Toluene[b] (µg/l)	Ethylbenzene[b] (µg/l)	Xylenes[b] (µg/l)	MTBE[b] (µg/l)	DIPE[b] (µg/l)	ETBE[b] (µg/l)	TAME[b] (µg/l)	TBA[b] (µg/l)
ESLs[c]		100	1.0	40	30	20	5.0	NE[d]	NE	NE	12
MW-10	2/18/92	18,000	110	57	440	53	NA	NA	NA	NA	NA
	5/14/92	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	5/15/92	8,500	24	9.8	97	ND<0.5	NA	NA	NA	NA	NA
	8/27/92	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	8/29/92	9,600	20	2.8	40	3.5	NA	NA	NA	NA	NA
	11/19/92	5,700	36	21	330	31	NA	NA	NA	NA	NA
	2/3/93	2,200	15	4.6	36	9.6	NA	NA	NA	NA	NA
	6/23/93	8,100	21	24	540	45	NA	NA	NA	NA	NA
	9/22/93	6,200	22	17	350	16	NA	NA	NA	NA	NA
	1/24/94	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	4/7/94	4,000	6.4	2.9	150	4.7	NA	NA	NA	NA	NA
	6/7/94	6,700	5.6	ND<2.5	150	5.7	NA	NA	NA	NA	NA
	9/28/94	5,700	2.2	2.6	110	44	NA	NA	NA	NA	NA
	12/14/94	3,500	ND<1.3	ND<1.3	77	27	NA	NA	NA	NA	NA
	3/15/95	7,200	ND<5	6.7	150	23	NA	NA	NA	NA	NA
	6/13/95	8,400	9	48	610	130	NA	NA	NA	NA	NA
	9/28/95	6,300	22	17	360	24	NA	NA	NA	NA	NA
	12/28/95	5,000	4.4	5.6	340	11	37	NA	NA	NA	NA
	3/12/96	4,500	1.4	5.9	41	73	120	NA	NA	NA	NA
	6/11/96	7,500	ND<5	25	350	81	ND<25	NA	NA	NA	NA
	10/2/96	2,600	18	ND<2.5	ND<2.5	ND<2.5	ND<25	NA	NA	NA	NA
	1/28/97	2,800	5.9	ND<2.5	29	19	ND<25	NA	NA	NA	NA
	5/20/97	6,000	ND<20	34	290	74	ND<100	NS	NS	NS	NS
	8/18/97	5,900	ND<20	7.7	94	15	ND<50	NA	NA	NA	NA
	9/29/97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/5/97	5,400	1.1	0.86	47	1.6	ND<50/2.3[h]	NS	NS	NS	NS
	3/31/98	20,000	56	180	1,400	3,700	250	NA	NA	NA	NA
	5/26/98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	5/28/98	16,000	76	200	1,600	3,900	190	NA	NA	NA	NA
	8/19/98	14,000	95	160	1,300	1,700	ND<100	NA	NA	NA	NA
	11/17/98	7,500	82	64	590	150	290	NA	NA	NA	NA
	2/18/99	4,700	41	16	270	79	ND<100	NA	NA	NA	NA
	6/24/99	9,400	27	74	280	160	300	NA	NA	NA	NA
	8/30/99	8,500	15	33	160	33	290	NA	NA	NA	NA
	11/9/99	7,600	3.9	11	60	14	120	NA	NA	NA	NA
	3/22/00	5,800	3.5	33	360	320	160	NA	NA	NA	NA
	6/12/00	7,200	4.3	47	370	210	270	NA	NA	NA	NA
	11/15/00	4,400	0.54	2.2	3.8	7.3	420	NA	NA	NA	NA
	2/26/01	5,000	ND<1	2.5	24	13	860	NA	NA	NA	NA
	5/21/01	3,500	ND<0.5	3.2	4.1	12	530	NA	NA	NA	NA
	9/5/01	3,400	ND<2	ND<2	ND<2	4.1	770	NA	NA	NA	NA

TABLE A-2

HISTORICAL GROUNDWATER MONITORING ANALYTICAL RESULTS
TESORO - SAN LORENZO, 67107

Monitoring Well	Sample Date[a]	TPHg[b] (µg/l)	Benzene[b] (µg/l)	Toluene[b] (µg/l)	Ethylbenzene[b] (µg/l)	Xylenes[b] (µg/l)	MTBE[b] (µg/l)	DIPE[b] (µg/l)	ETBE[b] (µg/l)	TAME[b] (µg/l)	TBA[b] (µg/l)
ESLs[c]		100	1.0	40	30	20	5.0	NE[d]	NE	NE	12
MW-10	11/7/01	3,600	ND<0.5	0.64	0.75	2.7	790	NA	NA	NA	NA
(cont.)	2/11/02	4,100	ND<2	2.2	61	26	750	NA	NA	NA	NA
	6/3/02	4,100	ND<1	7.0	67	37	320	ND	ND	ND	26
	8/6/02	4,500	ND<1	5.4	18	18	310	ND	ND	ND	18
	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	ND
	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	0.80	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	7.0	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
MW-11	2/18/92	2,400	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	5/14/92	1,600	ND<0.5	1.9	1.3	0.7	NA	NA	NA	NA	NA
	8/27/92	2,100	15	2	0.6	1.2	NA	NA	NA	NA	NA
	11/19/92	490	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	2/3/93	500	ND<0.5	ND<0.5	0.55	ND<0.5	NA	NA	NA	NA	NA
	6/23/93	350	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	9/22/93	200	ND<0.5	0.65	ND<0.5	0.71	NA	NA	NA	NA	NA
	1/24/94	450	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	4/7/94	500	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	6/7/94	560	ND<0.5	ND<0.5	ND<0.5	0.64	NA	NA	NA	NA	NA
	9/28/94	600	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	12/14/94	340	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	3/15/95	340	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	6/13/95	210[i]	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	9/28/95	93	4.1	0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA

TABLE A-2

HISTORICAL GROUNDWATER MONITORING ANALYTICAL RESULTS
TESORO - SAN LORENZO, 67107

Monitoring Well	Sample Date[a]	TPHg[b] (µg/l)	Benzene[b] (µg/l)	Toluene[b] (µg/l)	Ethylbenzene[b] (µg/l)	Xylenes[b] (µg/l)	MTBE[b] (µg/l)	DIPE[b] (µg/l)	ETBE[b] (µg/l)	TAME[b] (µg/l)	TBA[b] (µg/l)
ESLs[c]		100	1.0	40	30	20	5.0	NE[d]	NE	NE	12
MW-11	12/28/95	380[i]	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	NA	NA	NA	NA
(cont.)	3/12/96	110	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	NA	NA	NA	NA
	6/11/96	400[i]	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	NA	NA	NA	NA
	10/2/96	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	NA	NA	NA	NA
	1/28/97	110[i]	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	NA	NA	NA	NA
	5/20/97	330	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	NA	NA	NA	NA
	8/18/97	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA
	9/29/97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/5/97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	3/31/98	460	ND<0.5	2.8	12	16	ND<0.5	NA	NA	NA	NA
	5/26/98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	5/28/98	1,100	14	24	88	75	24	NA	NA	NA	NA
	8/19/98	1,200	16	9.6	69	17	6	NA	NA	NA	NA
	11/17/98	580	15	4.4	14	ND<0.5	21	NA	NA	NA	NA
	2/18/99	390	8.0	ND<0.5	1.4	ND<0.5	44	NA	NA	NA	NA
	6/24/99	610	4.6	ND<0.5	0.66	ND<0.5	59	NA	NA	NA	NA
	8/30/99	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/9/99	250	0.87	ND<0.5	ND<0.5	ND<0.5	66	NA	NA	NA	NA
	3/22/00	330	ND<0.5	ND<0.5	ND<0.5	ND<0.5	100	NA	NA	NA	NA
	6/12/00	52	ND<0.5	ND<0.5	ND<0.5	ND<0.5	49	NA	NA	NA	NA
	11/15/00	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.8	NA	NA	NA	NA
	2/26/01	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	5/21/01	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	30	NA	NA	NA	NA
	9/5/01	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/7/01	360	ND<0.5	ND<0.5	ND<0.5	ND<0.5	330	NA	NA	NA	NA
	2/11/02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	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
	8/6/02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/14/02	240	ND<1	ND<1	ND<1	ND<1	380	ND<0.5	ND<0.5	ND<0.5	ND<5
	2/20/03	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	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
	7/31/03	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	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	7.0	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
	8/10/05	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	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

TABLE A-2

HISTORICAL GROUNDWATER MONITORING ANALYTICAL RESULTS
TESORO - SAN LORENZO, 67107

Monitoring Well	Sample Date[a]	TPHg[b] (µg/l)	Benzene[b] (µg/l)	Toluene[b] (µg/l)	Ethylbenzene[b] (µg/l)	Xylenes[b] (µg/l)	MTBE[b] (µg/l)	DIPE[b] (µg/l)	ETBE[b] (µg/l)	TAME[b] (µg/l)	TBA[b] (µg/l)
ESLs[c]		100	1.0	40	30	20	5.0	NE[d]	NE	NE	12
MW-11	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
(cont.)	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
MW-12	7/18/07	68[i]	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[i]	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	60[i]	ND<0.5	ND<0.5	ND<0.5	0.57	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
RW-1	5/14/92	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	5/15/92	790	270	62	29	140	NA	NA	NA	NA	NA
	8/27/92	24,000	1,300	200	68	810	NA	NA	NA	NA	NA
	11/19/92	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/3/93	620	71	35	22	110	NA	NA	NA	NA	NA
	6/23/93	220	30	33	9.8	35	NA	NA	NA	NA	NA
	9/22/93	4,100	800	400	170	910	NA	NA	NA	NA	NA
	1/24/94	190	33	6	6.9	23	NA	NA	NA	NA	NA
	4/7/94	1,500	110	57	32	260	NA	NA	NA	NA	NA
	6/7/94	1,700	130	51	45	180	NA	NA	NA	NA	NA
	9/28/94	350	54	9.2	12	29	NA	NA	NA	NA	NA
	12/14/94	79	6.8	2.1	1.2	3.4	NA	NA	NA	NA	NA
	3/15/95	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	4/10/95	410	54	11	11	69	NA	NA	NA	NA	NA
	6/13/95	8,200	1,600	780	340	1,400	NA	NA	NA	NA	NA
	9/28/95	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA	NA	NA	NA	NA
	12/28/95	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	NA	NA	NA	NA
	3/12/96	86	ND<0.5	ND<0.5	ND<0.5	ND<0.5	110	NA	NA	NA	NA
	6/11/96	230	38	11	4.7	50	68	NA	NA	NA	NA
	10/2/96	360	68	29	14	75	47	NA	NA	NA	NA
	1/28/97	ND<50	0.77	ND<0.5	ND<0.5	ND<0.5	9	NA	NA	NA	NA
	5/20/97	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	32	NA	NA	NA	NA
	8/18/97	220	25	ND<0.5	ND<0.5	3.6	170	NA	NA	NA	NA
	9/29/97	900	240	2.8	51	55	230	NA	NA	NA	NA
	11/5/97	1,300	340	3.2	59	78	240/220[h]	NA	NA	NA	NA
	3/31/98	4,100	450	130	200	940	4,100	NA	NA	NA	NA
	5/26/98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	5/28/98	14,000	830	210	170	720	14,000	NA	NA	NA	NA
	8/19/98	2,100	20	ND<2.5	7.1	15	2,100	NA	NA	NA	NA

TABLE A-2

HISTORICAL GROUNDWATER MONITORING ANALYTICAL RESULTS
TESORO - SAN LORENZO, 67107

Monitoring Well	Sample Date[a]	TPHg[b] (µg/l)	Benzene[b] (µg/l)	Toluene[b] (µg/l)	Ethylbenzene[b] (µg/l)	Xylenes[b] (µg/l)	MTBE[b] (µg/l)	DIPE[b] (µg/l)	ETBE[b] (µg/l)	TAME[b] (µg/l)	TBA[b] (µg/l)
ESLs[c]		100	1.0	40	30	20	5.0	NE[d]	NE	NE	12
RW-1	11/17/98	630	7.8	ND<2.5	5.6	ND<2.5	730	NA	NA	NA	NA
(cont.)	2/18/99	180	6.7	1.6	3.2	15	100	NA	NA	NA	NA
	6/24/99	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	42	NA	NA	NA	NA
	8/30/99	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	79	NA	NA	NA	NA
	11/9/99	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	78	NA	NA	NA	NA
	3/22/00	ND<50	1.2	ND<0.5	ND<0.5	ND<0.5	17	NA	NA	NA	NA
	6/12/00	ND<50	ND<0.5	ND<0.5	ND<0.5	1.0	40	NA	NA	NA	NA
	11/15/00	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	290	NA	NA	NA	NA
	2/26/01	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	360	NA	NA	NA	NA
	5/21/01	100	4.1	1.6	1.8	23	170	NA	NA	NA	NA
	9/5/01	73	33	ND<0.5	ND<0.5	ND<0.5	310	NA	NA	NA	NA
	11/7/01	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	240	NA	NA	NA	NA
	2/11/02	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	21	NA	NA	NA	NA
	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
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

TABLE A-2

HISTORICAL GROUNDWATER MONITORING ANALYTICAL RESULTS
TESORO - SAN LORENZO, 67107

Monitoring Well	Sample Date[a]	TPHg[b] (µg/l)	Benzene[b] (µg/l)	Toluene[b] (µg/l)	Ethylbenzene[b] (µg/l)	Xylenes[b] (µg/l)	MTBE[b] (µg/l)	DIPE[b] (µg/l)	ETBE[b] (µg/l)	TAME[b] (µg/l)	TBA[b] (µg/l)
ESLs[c]		100	1.0	40	30	20	5.0	NE[d]	NE	NE	12
RW-2	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
(cont.)	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
DW-15800[j]	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
DW-15808[j]	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[j]	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[k]	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

(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) NS - Not sampled.

(f) NA - Not analyzed.

(g) ND - Not detected at the reporting limit listed; reporting limit not listed if not previosly reported.

(h) MTBE analyzed by EPA Method 8020/EPA Method 8260.

(I) Not typical gasoline.

(j) 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.

(k) Property owner had the RDM technician sample a faucet plumbed to city water. RDM resampled the 246 Peach well on 21 February 2007.

ATTACHMENT B

FIELD QA/QC PROCEDURES

ATTACHMENT B
FIELD QA/QC PROCEDURES

Health and Safety

Arctos will modify the site-specific Health and Safety Plan (HSP) for the field program outlined in this interim remedial action plan. The HSP presents procedures for personnel and equipment safety, medical surveillance, personal protection, air-quality monitoring, exposure control, emergency response procedures, and general work practices.

Before beginning work at the site, a site safety meeting will be conducted. Field personnel will review the HSP and sign the accompanying acknowledgment form. Field personnel will be required to comply with the HSP throughout performance of the field program.

Based on the site history and potential chemicals of concern, field tasks will be initiated in Level D personal protective equipment (PPE). During the field program, the breathing zone of field personnel will be monitored using a field photoionization detector (PID). If breathing zone PID readings indicate elevated levels of organic vapors, PPE will be upgraded accordingly. Breathing zone readings will be recorded on the boring logs.

The following sections provide a description of Arctos's proposed drilling, soil sampling, and well installation program.

Drilling and Soil Sampling Procedures for Groundwater Wells

Before initiating drilling activities, Arctos will mark the well locations and contact Underground Service Alert (USA) to clear the area of subsurface lines and utilities. Arctos will also obtain boring and well permits from the Alameda County Public Works Agency.

The soil borings for the installation of the monitoring wells will be drilled with a 10-inch-diameter hollow-stem continuous-flight auger. Soil samples will be collected with a split-spoon sampler containing three brass tubes, each 2 inches in diameter and 6 inches in length. The sampler will be driven to the sampling depth by dropping a 140-pound hammer approximately 30 inches. Samples will be collected at 5-foot intervals, beginning at ground surface at the observation well and continuously at the injection wells.

Immediately after the sampler is retrieved from the auger, it will be placed on a portable field stand near the boring and the brass tubes removed. The ends of one of the tubes will be covered with Teflon liners and capped with polyvinyl chloride (PVC) end caps. The sealed tubes will be labeled or marked, placed in a resealable plastic bag, and placed on ice in a cooler until delivery to the analytical laboratory. The information on the label

or marked on the brass tube will include project identification, sample number, sample depth, date, time, and name of the person preparing the samples.

A portion of the soil from one of the tubes will be extruded and placed in a sealable plastic bag, which will then be closed and allowed to equilibrate for approximately 10 minutes. The organic vapor levels in the headspace will be measured using a field PID. The same sample will be visually examined and the results of the visual observation and headspace reading will be recorded on the boring or well installation log. The soil type will be classified using the Unified Soil Classification System (USCS) as described in American Society for Testing and Materials (ASTM) Standards D2487 and D2488.

Groundwater Well Installation

The wells will be constructed using new 4-inch-diameter, flush-threaded, Schedule 40 PVC casing. A 0.020-inch slot size and #2/12 Monterey sand filter pack will be used for the new wells. The annular space around the well will be filled with filter pack to about 0.5 to 1 foot above the top of the screen.

An approximately 2-foot-thick layer of bentonite will be placed above the filter pack to provide an annular seal. The wells will be surged before placing the annular seal to allow for filter pack settlement. After placement, the seal will be hydrated with potable water. The remainder of the annulus to near ground surface will be filled with cement. A locking cap and traffic-rated cover will be installed at the surface.

Screen intervals will be from 18 to 28 feet below grade for the injection wells and 10 to 30 feet below grade for the observation well. Well construction diagrams are shown on Figures 8 and 9. Field personnel may adjust actual well depths and screen placements as required by the field conditions encountered. A drawing showing the as-built well construction will be included on the boring/well installation log. A registered geologist or registered civil engineer will supervise or direct the well construction and installation.

The wells will be developed at least 72 hours after well installation by surging and bailing to remove fines from the filter pack and well screen to reduce sediment in the groundwater. Development will be considered complete when at least 10 to 12 casing volumes are removed or until the pH, temperature, and specific conductivity measurements of the evacuated groundwater stabilize to within 10 percent of the previous readings.

Groundwater Sampling Procedures

Groundwater samples will be collected from the new wells at least 48 hours after development. The depth to groundwater will be measured to the nearest 1/100 foot before sampling using an electric water-level sounder. Approximately 3 casing volumes will be purged from the wells before sampling. Throughout purging and just before sampling the wells, the pH, specific conductivity, and temperature of the purged

groundwater will be measured and recorded. These measurements will be made to confirm that the well is purged sufficiently. Groundwater samples will be collected after the measurements stabilize to within 10 percent of the previous readings.

Sampling will be performed using a 1-inch-diameter disposable polyethylene bailer suspended from a nylon line. The bailer will be equipped with a bottom-release device. Samples will be collected from just below the water surface after the water level has recovered to at least 80 percent of the pre-purge level.

Water samples will be transferred from the bailer to new 40-milliliter glass bottles with Teflon-lined caps provided by the analytical laboratory. The bottles will be filled so that no air bubbles (i.e., headspace) will be present in the vial. A field (equipment) blank will be collected after decontamination of the sampling equipment. A field blank will not be collected if the wells are sampled using disposable bailers.

Well Surveying

A licensed surveyor will survey the elevation and location of the new wells following the requirements of State Assembly Bill 2886. The locations will be measured to the nearest 1/10 foot and the elevations to the nearest 1/100 foot relative to mean sea level.

Field QA/QC Procedures

Procedures for preserving and transporting soil and groundwater samples, decontaminating field equipment, managing wastes generated, and documenting the field program are described below.

Preservation and Delivery of Samples

The analytical laboratory will provide the preservatives necessary for the groundwater samples. The samples will be stored on ice in the field and transported in a portable ice chest to the analytical laboratory. The samples will be delivered to the analytical laboratory by courier within 24 to 48 hours of sample collection.

Chain-of-Custody Records

Chain-of-custody records will be completed before packaging the samples for shipment. One copy of these records will accompany the samples during transportation to the laboratory. The person in the analytical laboratory who accepts responsibility for the samples will sign and date the original chain-of-custody form.

Equipment Decontamination Procedures

Soil and groundwater sampling equipment will be decontaminated between sampling events using the following procedures:

1. Rinse with water using a brush to remove soil and mud.
2. Wash with non-phosphate detergent and water using a brush.
3. Rinse with deionized or distilled water.
4. Rinse again with deionized or distilled water.
5. Air dry.

Drill augers will be steam-cleaned before each boring is drilled.

Management of Drill Cuttings and Wastewater

Soil cuttings and wastewater will be placed in 55-gallon drums that meet U.S. Department of Transportation specifications and stored on site pending the results of the laboratory analyses. Each drum will be labeled with the date and drum contents. When a drum is filled with soil, the depths of collection will be noted on the drum. Analytical results will determine if the soil samples are impacted and the cuttings will be managed accordingly. Wastewater will be treated on site and discharged under the existing sanitary sewer permit.

Documentation Procedures

Arctos personnel will follow documentation procedures developed for site investigation to (1) provide a record of the activities performed in the field and (2) identify samples and track their status in the field, during shipment, and at the laboratory.

Arctos field personnel will be on site to observe the progress of each boring. The information recorded on the boring log will include drilling equipment used, boring location, nature of the materials encountered, backfill material, and other pertinent data. The boring logs will be drafted for presentation in the final report.

Analytical Program

The following laboratories will analyze the groundwater samples:

Kiff Analytical LLC
2795 2nd Street, Suite 300
Davis, California 95616
Phone: 530/297-4800
Fax: 530/297-4808

Microbial Insights, Inc.
2340 Stock Creek Boulevard
Rockford, Tennessee 37853
Phone: 865/573-8188
Fax: 865/573-8133

Groundwater samples will be analyzed using the following test methods, within the appropriate holding times, and following U.S. Environmental Protection Agency (EPA) methods, as appropriate:

- Total petroleum hydrocarbons as gasoline; benzene, toluene, ethylbenzene, and total xylenes; methyl tert-butyl ether; and tert-butyl alcohol by EPA Method 8260
- Dissolved oxygen, oxygen reduction potential, conductivity, pH, and temperature using a downhole field meter
- Alkalinity by EPA Method 310.1
- Ammonia, nitrate, nitrite, sulfate, and phosphate using EPA Method 300
- Dissolved carbon dioxide and methane using EPA Methods D1945 or equivalent
- Biotraps analyzed at the laboratory for total bacteria, MTBE-degrading bacteria, and dissolved hydrocarbon-degrading bacteria by polymerase chain reaction methods.

Analytical QA/QC Procedures

Laboratory analytical QA/QC procedures to be used for this work will include (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. QA/QC samples prepared by the laboratory will include method blanks, matrix spike and matrix spike duplicates, and laboratory control samples.

The laboratory results will be reviewed in general accordance with EPA guidelines for data validation. The data validation process will include 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.