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1:22 pm, Dec 04, 2008

Alameda County
Environmental Health

1 December 2008
Project No. 01LV

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

Subject: Third Quarter 2008 Status Report
1619 1st Street, Livermore, California
Tesoro No. 67076 (Former Beacon 3604); ACEH Case No. RO0434

Dear Mr. Wickham:

Arctos Environmental (Arctos), on behalf of Tesoro Companies, Inc. (Tesoro), has prepared this letter report summarizing project tasks completed during the third quarter 2008 at the subject site (Figure 1).

Executive Summary

Arctos conducted quarterly groundwater monitoring at the site on 23 July 2008. Only 9 of the 18 wells had sufficient water for groundwater monitoring due to a 9-foot decrease in water levels since May 2008. Arctos also conducted baseline sampling of injection wells, which were installed in the second quarter 2008. The highest total petroleum hydrocarbons as gasoline (TPHg) concentration of 62,000 micrograms per liter (µg/l) was at injection well IP-1 on site. The highest benzene concentration of 3,800 µg/l was at well MW-2 on site. The highest methyl tert-butyl ether (MTBE) concentration of 940 µg/l was at injection well IP-4 on site.

During the third quarter of 2008, Arctos also completed the following activities:

- Deployed biotrap samplers in selected monitoring wells on 10 and 12 September 2008 for baseline microbiological sampling
- Submitted a work plan for additional well installation to Alameda County Environmental Health on 18 September 2008.

The following activities are scheduled to be completed during the fourth quarter of 2008:

- Pull biotrap samplers in October 2008 to ship to Microbial Insights for analysis
- Installation and sampling of two additional oxygen injection wells and one shallow monitoring/soil vapor extraction well at the site
- Quarterly groundwater monitoring
- Survey of deep monitoring wells and injection wells
- Installation and start-up of source area remediation system.

Site Background

The site description and background are included in Arctos's IRAP dated 21 March 2008 (Arctos, 2008).

Field Activities

Arctos's subcontractor, Blaine Tech Services, Inc. (Blaine Tech), of San Jose, California, performed groundwater monitoring on 23 July 2008. Samples were collected from wells MW-1 through MW-4, MW-7, DW-1 through DW-4, and IP-1 through IP-7 (Figure 2). Groundwater monitoring was performed in accordance with the guidelines of the California Underground Storage Tank Regulations, Title 23, Division 3, Chapter 16, California Code of Regulations. Groundwater sampling quality assurance/quality control (QA/QC) procedures are in Attachment A. Field data sheets are in Attachment B.

Analytical Program

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

Groundwater Results

The groundwater elevations were recorded at approximately 427 to 430 feet above mean sea level (44 to 46 feet below ground surface). Water levels were 8.3 to 9.6 feet lower compared to the May 2008 event (Table 1). Only 9 of the 18 monitoring wells had sufficient water for groundwater monitoring due to the significant decrease in water levels during the third quarter. The water level data indicate that the general direction of water flow is toward the northwest with an estimated gradient of 0.019 (1 foot/53 feet; Figure 2).

Baseline injection well depth to water measurements can be found in Attachment B. Historical water elevations are in Attachment C.

The highest TPHg concentration of 62,000 µg/l was at injection well IP-1, located near the underground storage tanks. The highest MTBE concentration of 6,400 µg/l was at well TP-2, located downgradient of the dispenser islands. Groundwater analytical results are summarized in Table 2, and baseline injection well analytical results are summarized in Table 3. Elevated TPHg, benzene, and MTBE concentrations in groundwater (15,000, 1,700 and 540 µg/l, respectively) are also present approximately 140 feet downgradient of the site at well MW-6. Figures 3, 4, and 5 show the isoconcentration contours for TPHg, benzene, and MTBE, respectively. Historical analytical results are in Attachment D, and the laboratory report and the chain-of-custody form are in Attachment E.

Agency Correspondence

Arctos prepared a work plan for additional well installation and submitted it to ACEH on 18 September 2008. Arctos prepared this work plan following the installation and baseline sampling of oxygen injection wells at the site in July 2008. Baseline analytical results from injection well IP-1 (located furthest southwest; Figure 6) had the highest TPHg and benzene concentrations of 62,000 and 2,100 µg/l, respectively (Figure 3). Arctos proposed the installation of two addition injection wells to increase the oxygen injection system radius of influence approximately 30 feet to the southwest of IP-1. The work plan also included the installation of a shallow monitoring well to assist in saturated zone remediation. Figures 6 and 7 show proposed wells locations.

Conclusions

Results of the groundwater sampling and well installation indicate the following conclusions:

- Groundwater sampling results indicate that onsite remediation is required to decrease the mass flux from the source area
- Baseline sampling of injection wells indicate the need for additional oxygen injection wells southwest of IP-1
- Baseline sampling of the injection wells identify the major sources of TPHg and MTBE from former releases from the USTs and dispenser islands, respectively.

Recommendations

Based on the activities proposed in the IRAP and the results of the groundwater monitoring, Arctos will perform the following tasks during the fourth quarter of 2008:

- ☐ Pull biotrap samplers in October 2008 to ship to Microbial Insights for analysis
- ☐ Installation and sampling of two additional oxygen injection wells and one shallow monitoring/soil vapor extraction well at the site
- ☐ Quarterly groundwater monitoring
- ☐ Survey of deep monitoring wells and injection wells
- ☐ Installation and start-up of source area remediation system.

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

Very truly yours,

ARCTOS ENVIRONMENTAL

Matthew J. Nelson
Senior Staff Engineer

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

REGISTERED PROFESSIONAL ENGINEER
MICHAEL P. PURCHASE
No. C71230
Exp. 6/30/09
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STATE OF CALIFORNIA

Copy: Jeffrey M. Baker, P.E. – Tesoro Companies, Inc.
Colleen Winey – Zone 7 Water Agency

Attachments: Table 1 – Well and Groundwater Elevations
Table 2 – Groundwater Analytical Results
Table 3 – Groundwater Analytical Results – Injection Wells
Figure 1 – Site Location Map
Figure 2 – Grouwater Elevation Contours
Figure 3 – TPHg Concentration Contours
Figure 4 – Benzene Concentration Contours
Figure 5 – MTBE Concentration Contours
Figure 6 – Proposed Well Locations
Figure 7 – Geologic Cross Section A-A'

Attachment A – Groundwater Sampling QA/QC Procedures
Attachment B – Field Data Sheets
Attachment C – Historical Well and Groundwater Elevations
Attachment D – Historical Groundwater Analytical Results
Attachment E – Laboratory Analytical Report and Chain-of-Custody Form
Attachment F – Waste Manifests

References

Arctos Environmental, 2008. *Interim Remedial Action Plan for Groundwater, 1619 1st Street, Livermore, California, Tesoro Station No. 67076, Former Beacon Station No. 3604, ACEH Case No. RO0434*, 21 March.

TABLE 1

WELL AND GROUNDWATER ELEVATIONS
TESORO - LIVERMORE, 67076

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	8/2/07	40.00	474.29	434.29
	11/12/07	48.55		425.74
	2/14/08	34.74		439.55
	5/8/08	36.15		438.14
	7/23/08	45.76		428.53
MW-2	8/2/07	41.23	472.98	431.75
	11/12/07	48.22		424.76
	2/14/08	36.31		436.67
	5/8/08	36.70		436.28
	7/23/08	45.78		427.20
MW-3	8/2/07	41.74	473.37	431.63
	11/12/07	47.41		425.96
	2/14/08	34.73		438.64
	5/8/08	35.60		437.77
	7/23/08	45.00		428.37
MW-4	8/2/07	40.68	473.64	432.96
	11/12/07	Dry[c]		--
	2/14/08	34.53		439.11
	5/8/08	35.55		438.09
	7/23/08	43.87		429.77
MW-5	8/2/07	41.72	472.67	430.95
	11/12/07	Dry		--
	2/14/08	35.66		437.01
	5/8/08	36.60		436.07
	7/23/08	Dry		--
MW-6	8/2/07	42.24	471.93	429.69
	11/12/07	Dry		--
	2/14/08	38.67		433.26
	5/8/08	38.50		433.43
	7/23/08	Dry		--
MW-7	8/2/07	37.09	472.33	435.24
	11/12/07	Dry		--
	2/14/08	36.51		435.82

TABLE 1

WELL AND GROUNDWATER ELEVATIONS
TESORO - LIVERMORE, 67076

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	5/8/08	36.00	472.33	436.33
(cont.)	7/23/08	44.42		427.91
MW-8	8/2/07	41.24	471.18	429.94
	11/12/07	Dry		--
	2/14/08	35.55		435.63
	5/8/08	36.64		434.54
	7/23/08	Dry		--
MW-9	8/2/07	44.11	470.78	426.67
	11/12/07	Dry		--
	2/14/08	39.32		431.46
	5/8/08	38.90		431.88
	7/23/08	Dry		--
MW-10	8/2/07	43.46	471.63	428.17
	11/12/07	Dry		--
	2/14/08	39.71		431.92
	5/8/08	37.55		434.08
	7/23/08	Dry		--
VW-2	8/2/07	36.33	473.28	436.95
	11/12/07	Dry		--
	2/14/08	35.55		437.73
	5/8/08	35.31		437.97
	7/23/08	Dry		--
VW-3	8/2/07	35.55	474.38	438.83
	11/12/07	Dry		--
	2/14/08	Dry		--
	5/8/08	34.80		439.58
	7/23/08	Dry		--
TP-1	8/2/07	40.30	472.82	432.52
	11/12/07	Dry		--
	2/14/08	36.17		436.65
	5/8/08	36.17		436.65
	7/23/08	Dry		--
TP-2	8/2/07	39.35	472.93	433.58

TABLE 1

WELL AND GROUNDWATER ELEVATIONS
TESORO - LIVERMORE, 67076

Well No.	Date of Measurement	Depth to Water (feet below casing)	PVC Casing Elevation[(a)] (feet MSL)	Water Table Elevation[(b)] (feet MSL)
TP-2 (cont.)	11/12/07	Dry	472.93	--
	2/14/08	35.62		437.31
	5/8/08	36.62		436.31
	7/23/08	Dry		--
DW-1	5/22/08	37.30	TBD[(d)]	TBD
	7/23/08	45.55		TBD
DW-2	5/22/08	39.80	TBD	TBD
	7/23/08	48.25		TBD
DW-3	5/22/08	40.20	TBD	TBD
	7/23/08	49.09		TBD
DW-4	5/22/08	40.20	TBD	TBD
	7/23/08	49.50		TBD

(a) Elevation of PVC well casing (north edge) surveyed relative to mean sea level (MSL).
Wells were surveyed by Cross Land Surveying, Inc., per AB 2886 requirements on 31 August 2005.
Benchmark K2-741, elevation is 467.835 feet above MSL.

(b) Potentiometric Surface Elevation = (Casing Elevation - Depth to Water)

(c) Depth of groundwater assumed to be below screened interval; well had 6 inches or less of water.

(d) TBD - To be determined; Wells to be surveyed by a California-licensed surveyor.

TABLE 2

GROUNDWATER ANALYTICAL RESULTS
TESORO - LIVERMORE, 67076

Monitoring Well	Sample Date	TPHg[a] (ug/l)	Benzene[a] (ug/l)	Toluene[a] (ug/l)	Ethylbenzene[a] (ug/l)	Total Xylenes[a] (ug/l)	MTBE[a] (ug/l)	DIPE[a] (ug/l)	ETBE[a] (ug/l)	TAME[a] (ug/l)	TBA[a] (ug/l)	Methanol[a] (ug/l)	Ethanol[a] (ug/l)	1,2-DCA[a] (ug/l)	EDB[a] (ug/l)
MW-1	8/2/07	580	5.7	0.64	6.8	12	ND<0.5[b]	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	11/12/07	750	0.85	2.7	4.2	9.3	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<20	ND<0.5	ND<0.5
	2/14/08	1,700	3.3	17	38	83	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	5/8/08	620	1.8	ND<0.5	12	12	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	7/23/08	270	0.52	ND<0.5	3.9	1.8	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<80	ND<5	ND<0.5	ND<0.5
MW-2	8/2/07	37,000	4,200	500	1,800	2,200	1,300	ND<9	ND<9	18	1,200	ND<2,000	ND<90	ND<9	ND<9
	11/12/07	25,000	5,900	120	1,700	820	1,400	ND<15	ND<15	16	720	ND<1,500	ND<150	ND<15	ND<15
	2/14/08	31,000	5,400	450	1,900	2,000	1,200	ND<15	ND<15	16	410	ND<1,500	ND<150	ND<15	ND<15
	5/8/08	29,000	3,200	620	1,400	1,700	580	ND<5	ND<5	10	210	ND<1,000	ND<50	ND<5	ND<5
	7/23/08	25,000	3,800	220	1,600	1,000	780	ND<5	ND<5	14	470	ND<900	ND<50	ND<5	ND<5
MW-3	8/2/07	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	ND<50	ND<5	ND<0.5	ND<0.5
	11/12/07	190	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	ND<50	ND<5	ND<0.5	ND<0.5
	2/14/08	240	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.83	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	5/8/08	57	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	ND<50	ND<5	ND<0.5	ND<0.5
	7/23/08	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	ND<50	ND<5	ND<0.5	ND<0.5
MW-4	8/2/07	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	ND<50	ND<5	ND<0.5	ND<0.5
	11/12/07	NS[c]	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/14/08	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	ND<50	ND<5	ND<0.5	ND<0.5
	5/8/08	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	7/23/08	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	ND<50	ND<5	ND<0.5	ND<0.5
MW-5	8/2/07	85	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	ND<50	ND<5	ND<0.5	ND<0.5
	11/12/07	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/14/08	980	ND<0.5	ND<0.5	2.1	ND<0.5	1.0	ND<0.5	ND<0.5	ND<0.5	34	ND<50	ND<5	ND<0.5	ND<0.5
	5/8/08	580	ND<0.5	ND<0.5	1.8	ND<0.5	0.60	ND<0.5	ND<0.5	ND<0.5	6.1	ND<50	ND<5	ND<0.5	ND<0.5
	7/23/08	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-6	8/2/07	15,000	1,800	120	980	510	310	ND<2.5	ND<2.5	3.	180	ND<250	ND<25	ND<2.5	ND<2.5
	11/12/07	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/14/08	14,000	2,000	63	750	190	810	ND<2.5	ND<2.5	7.7	600	ND<250	ND<25	ND<2.5	ND<2.5
	5/8/08	15,000	1,700	59	700	130	540	ND<2.5	ND<2.5	5.9	410	ND<2,000	ND<25	ND<2.5	ND<2.5
	7/23/08	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-7	8/2/07	3,200	1.3	ND<0.5	50	120	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	11/12/07	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/14/08	1,600	1.2	ND<0.5	4.5	1.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	5/8/08	1,400	2.2	0.74	2.8	0.93	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	7/23/08	2,300	3.9	1.4	8.9	5.4	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5

TABLE 2

GROUNDWATER ANALYTICAL RESULTS
TESORO - LIVERMORE, 67076

Monitoring Well	Sample Date	TPHg[(a)] (ug/l)	Benzene[(a)] (ug/l)	Toluene[(a)] (ug/l)	Ethylbenzene[(a)] (ug/l)	Total Xylenes[(a)] (ug/l)	MTBE[(a)] (ug/l)	DIPE[(a)] (ug/l)	ETBE[(a)] (ug/l)	TAME[(a)] (ug/l)	TBA[(a)] (ug/l)	Methanol[(a)] (ug/l)	Ethanol[(a)] (ug/l)	1,2-DCA[(a)] (ug/l)	EDB[(a)] (ug/l)
MW-8	8/2/07	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	ND<50	ND<5	ND<0.5	ND<0.5
	11/12/07	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/14/08	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	ND<50	ND<5	ND<0.5	ND<0.5
	5/8/08	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	7/23/08	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-9	8/2/07	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/12/07	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/14/08	3,300	68	2.1	110	7.8	16	ND<0.5	ND<0.5	ND<0.5	13	ND<50	ND<5	ND<0.5	ND<0.5
	5/8/08	1,200	8.2	0.52	4.0	0.74	5.9	ND<0.5	ND<0.5	ND<0.5	5.4	ND<50	ND<5	ND<0.5	ND<0.5
	7/23/08	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-10	8/2/07	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	ND<50	ND<5	ND<0.5	ND<0.5
	11/12/07	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/14/08	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	ND<50	ND<5	ND<0.5	ND<0.5
	5/8/08	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	7/23/08	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
VW-2	8/2/07	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/12/07	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/14/08	5,700	180	14	150	120	530	ND<2.5	ND<2.5	4.1	5,000	ND<250	ND<25	ND<2.5	ND<2.5
	5/8/08	3,000	40	3.8	32	34	270	ND<1.5	ND<1.5	2.7	4,500	ND<250	ND<15	ND<1.5	ND<1.5
	7/23/08	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
VW-3	8/2/07	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	ND<50	ND<5	ND<0.5	ND<0.5
	11/12/07	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/14/08	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	5/8/08	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	7/23/08	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
TP-1	8/2/07	15,000	2,000	100	970	630	3,400	ND<7	ND<7	25	4,000	ND<700	ND<70	ND<7	ND<7
	11/12/07	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/14/08	18,000	1,100	49	1,200	910	7,000	ND<15	ND<15	58	4,200	ND<1,500	ND<150	ND<15	ND<15
	5/8/08	12,000	890	54	770	380	2,500	ND<5	ND<5	22	3,400	ND<2,500	ND<50	ND<5	ND<5
	7/23/08	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
TP-2	8/2/07	10,000	1,200	ND<25	640	140	14,000	ND<25	ND<25	110	16,000	ND<1,0000	ND<250	ND<25	ND<25
	11/12/07	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/14/08	12,000	920	28	850	740	17,000	ND<25	ND<25	120	5,900	ND<4,000	ND<250	ND<25	ND<25
	5/8/08	7,400	710	10	510	110	6,400	ND<8	ND<8	64	5,200	ND<1,2000	ND<80	ND<8	ND<8
	7/23/08	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

TABLE 2

GROUNDWATER ANALYTICAL RESULTS
TESORO - LIVERMORE, 67076

Monitoring Well	Sample Date	TPHg[(a)] (ug/l)	Benzene[(a)] (ug/l)	Toluene[(a)] (ug/l)	Ethylbenzene[(a)] (ug/l)	Total Xylenes[(a)] (ug/l)	MTBE[(a)] (ug/l)	DIPE[(a)] (ug/l)	ETBE[(a)] (ug/l)	TAME[(a)] (ug/l)	TBA[(a)] (ug/l)	Methanol[(a)] (ug/l)	Ethanol[(a)] (ug/l)	1,2-DCA[(a)] (ug/l)	EDB[(a)] (ug/l)
DW-1	5/22/08	5,100	470	150	210	570	100	ND<0.9	ND<0.9	0.98	76	ND<90	ND<9	ND<0.9	ND<0.9
	7/23/08	560	43	5.2	18	40	16	ND<0.5	ND<0.5	ND<0.5	21	ND<100	ND<5	ND<0.5	ND<0.5
DW-2	5/22/08	11,000	1,300	170	460	230	620	ND<2.5	ND<2.5	9.6	870	ND<400	ND<25	ND<2.5	ND<2.5
	7/23/08	7,600	980	44	180	55	420	ND<2	ND<2	5.7	720	ND<200	ND<20	ND<2	ND<2
DW-3	5/22/08	4,700	8.7	2.1	120	200	0.86	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	7/23/08	2,800	8.1	1.4	94	100	2.8	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
DW-4	5/22/08	1,200	4.2	8.6	16	200	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	7/23/08	91	0.79	ND<0.5	6.5	7.4	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5

(a) 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), 1,2-dichloroethane (1,2-DCA), and 1,2-dibromoethane (EDB) analyzed by EPA Method 8260; reported in micrograms per liter (µg/l).

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

(c) Not sampled; well dry during sampling event.

TABLE 3

GROUNDWATER ANALYTICAL RESULTS - INJECTION WELLS
TESORO - LIVERMORE, 67076

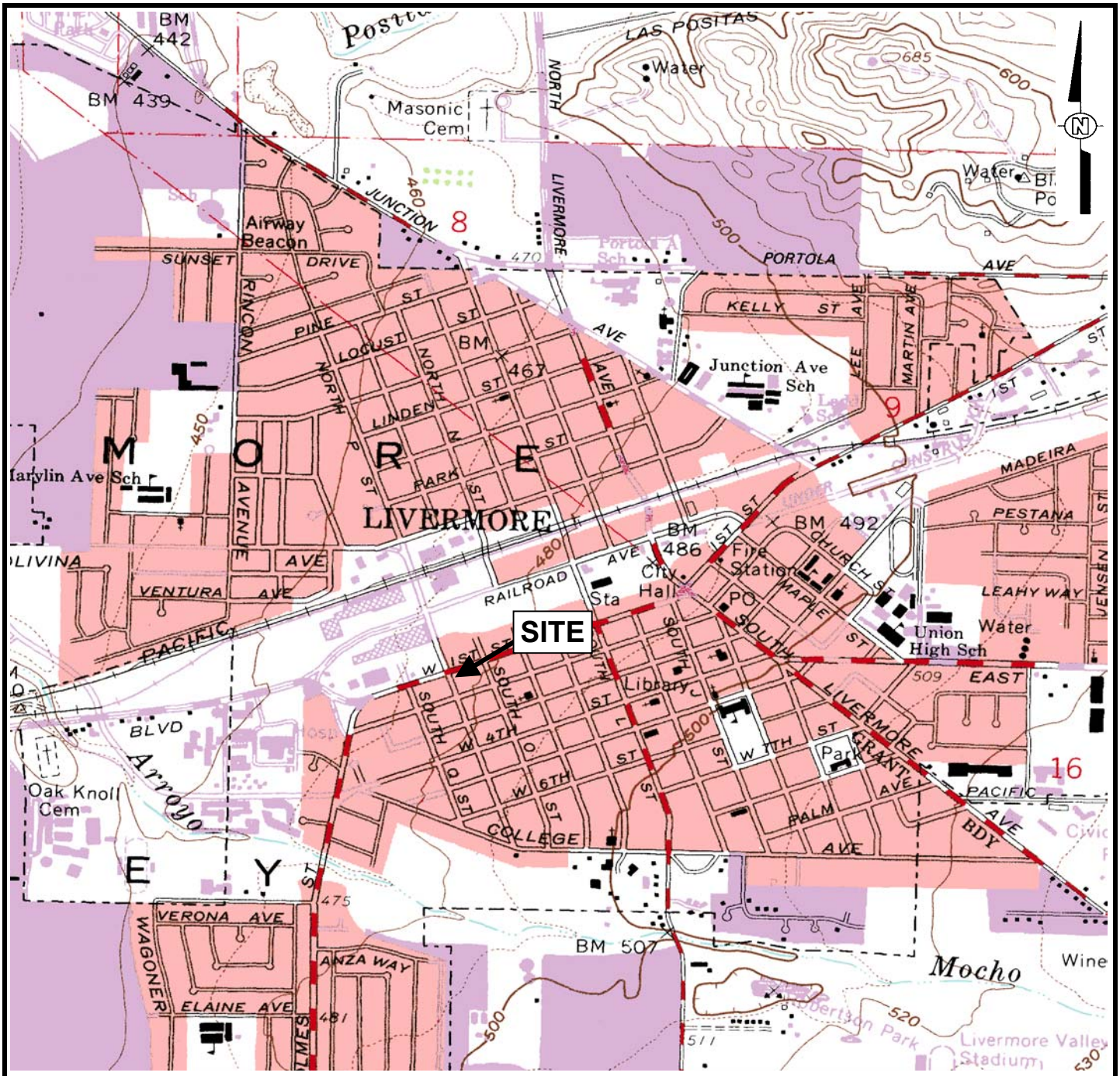
Monitoring Well	Sample Date	TPHg[a] (ug/l)	Benzene[a] (ug/l)	Toluene[a] (ug/l)	Ethylbenzene[a] (ug/l)	Total Xylenes[a] (ug/l)	MTBE[a] (ug/l)	DIPE[a] (ug/l)	ETBE[a] (ug/l)	TAME[a] (ug/l)	TBA[a] (ug/l)	Methanol[a] (ug/l)	Ethanol[a] (ug/l)	1,2-DCA[a] (ug/l)	EDB[a] (ug/l)
IP-1	7/23/08[b]	62,000	2,100	6,800	2,700	11,000	16	ND<15[c]	ND<15	ND<15	ND<70	ND<1,500	ND<150	ND<15	ND<15
IP-2	7/23/08[b]	5,500	160	43	130	350	10	ND<0.9	ND<0.9	ND<0.9	ND<5	ND<90	ND<9	ND<0.9	ND<0.9
IP-3	7/23/08[b]	1,100	23	14	7.5	90	32	ND<0.5	ND<0.5	ND<0.5	32	ND<50	ND<5	ND<0.5	ND<0.5
IP-4	7/23/08[b]	7,600	130	45	240	750	940	ND<1.5	ND<1.5	6.9	890	ND<150	ND<15	ND<1.5	ND<1.5
IP-5	7/23/08[b]	2,000[d]	3.0	17	5.1	31	4.4	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
IP-6	7/23/08[b]	4,400	260	78	98	340	180	ND<0.5	ND<0.5	1.6	190	ND<80	ND<9	ND<0.5	ND<0.5
IP-7	7/23/08[b]	4,200	190	12	99	190	49	ND<0.9	ND<0.9	1.1	58	ND<90	ND<9	ND<0.9	ND<0.9

(a) 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), 1,2-dichloroethane (1,2-DCA), and 1,2-dibromoethane (EDB) analyzed by EPA Method 8260; reported in micrograms per liter (ug/l).

(b) Baseline remediation system values.

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

(d) Primarily compounds not found in typical Gasoline



REFERENCE

7.5 MINUTE USGS TOPOGRAPHIC MAP OF
LIVERMORE, CALIFORNIA QUADRANGLE
DATE: 1961, PHOTOREVISED 1980
SCALE = 1:24,000

ARCTOS ENVIRONMENTAL			
TESORO - LIVERMORE			
SITE LOCATION MAP			
PROJECT NO. 01LV	DRAWN BY MP	CHECKED BY MP	APPROVED BY JG
FILE NO. Site Map.xls		**FIGURE 1**	

Legend

- MW-7 ⊕ Groundwater Monitoring Well With Groundwater Elevation (Feet, MSL) Measured 23 July 2008
- DW-1 ⊞ Deep Groundwater Monitoring Well
- IP-1 ▲ Injection Well
- IP-6 △ Angled Injection Well Screen Location
- VW-2 ⊞ Vapor Extraction Well
- TP-2 ⊗ Temporary Monitoring Well
- 429.00 — Goundwater Elevation Contour
- (TBD) To Be Determinded; Wells Will Be Surveyed By A California-Licensed Surveyor

0 30' 60'
SCALE

REVISION	NO.	BY	DATE	DESCRIPTION
1	0	MY	7/31/08	Second Quarter 2008 Monitoring Report
	1	MY	10/31/08	Third Quarter 2008 Monitoring Report

ARCTOS ENVIRONMENTAL

TESORO - LIVERMORE

GROUNDWATER ELEVATION CONTOURS

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

FILE NO. 01LV11B-20401.DWG

FIGURE 2

01LV11B-20401.dwg 10/28/2008 4:52PM

Legend

- MW-7 ⊕ Groundwater Monitoring Well With 8 May 2008 and 23 July 2008 Total Petroleum Hydrocarbons as Gasoline (TPHg) Results in µg/L
- DW-1 ⊞ Deep Groundwater Monitoring Well With 22 May 2008 and 23 July 2008 TPHg Results in µg/L
- IP-1 ▲ Injection Well With 23 July 2008 TPHg Results in µg/L
- IP-6 △ Angled Injection Well Screen Location
- VW-2 ⊞ Vapor Extraction Well
- TP-2 ⊗ Temporary Monitoring Well
- 1000 — TPHg Concentration Contour (µg/L), Queried Where Uncertain
- ND Not Detected
- NS Not Sampled
- (620/270) Previous Quarter/Current Quarter TPHg Results in µg/L

0 30' 60'
SCALE

REVISION	NO.	BY	DATE	DESCRIPTION
1	0	MY	7/31/08	Second Quarter 2008 Monitoring Report
	1	MY	10/31/08	Third Quarter 2008 Monitoring Report

ARCTOS ENVIRONMENTAL

TESORO - LIVERMORE

TPHg CONCENTRATION CONTOURS

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

FILE NO. 01LV11B-20501.DWG

FIGURE 3

10/28/2008 4:48PM 01LV11B-20501.dwg

Legend

- MW-7 ⊕ Groundwater Monitoring Well With 8 May 2008 and 23 July 2008 Benzene Results in µg/L
- DW-1 ⊞ Deep Groundwater Monitoring Well With 22 May 2008 and 23 July 2008 Benzene Results in µg/L
- IP-1 ▲ Injection Well With 23 July 2008 Benzene Results in µg/L
- IP-6 △ Angled Injection Well Screen Location
- VW-2 ⊞ Vapor Extraction Well
- TP-2 ⊗ Temporary Monitoring Well
- 1,000 ~ Benzene Concentration Contour (µg/L), Queried Where Uncertain
- ND Not Detected
- NS Not Sampled
- (1.8/0.52) Previous Quarter/Current Quarter Benzene Results in µg/L

0 30' 60'
SCALE

REVISION	NO.	BY	DATE	DESCRIPTION
1	0	MY	7/31/08	Second Quarter 2008 Monitoring Report
	1	MY	10/31/08	Third Quarter 2008 Monitoring Report

ARCTOS ENVIRONMENTAL

TESORO - LIVERMORE

BENZENE CONCENTRATION CONTOURS

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

FILE NO. 01LV11B-20601.DWG

FIGURE 4

01LV11B-20601.dwg 10/28/2008 5:06PM

Legend

- MW-7 ⊕ Groundwater Monitoring Well With 8 May 2008 and 23 July 2008 Methyl Tert-Butyl Ether (MTBE) Results in µg/L
- DW-1 ⊞ Deep Groundwater Monitoring Well With 22 May 2008 and 23 July 2008 MTBE Results in µg/L
- IP-1 ▲ Injection Well With 23 July 2008 MTBE Results in µg/L
- IP-6 △ Angled Injection Well Screen Location
- VW-2 ⊞ Vapor Extraction Well
- TP-2 ⊗ Temporary Monitoring Well
- 100 MTBE Concentration Contour (µg/L), Queried Where Uncertain
- ND Not Detected
- NS Not Sampled
- (ND<0.5/ND<0.5) Previous Quarter/Current Quarter MTBE Results in µg/L

0 30' 60'
SCALE

REVISION	NO.	BY	DATE	DESCRIPTION
1	0	MY	7/31/08	Second Quarter 2008 Monitoring Report
	1	MY	10/31/08	Third Quarter 2008 Monitoring Report

ARCTOS ENVIRONMENTAL

TESORO - LIVERMORE

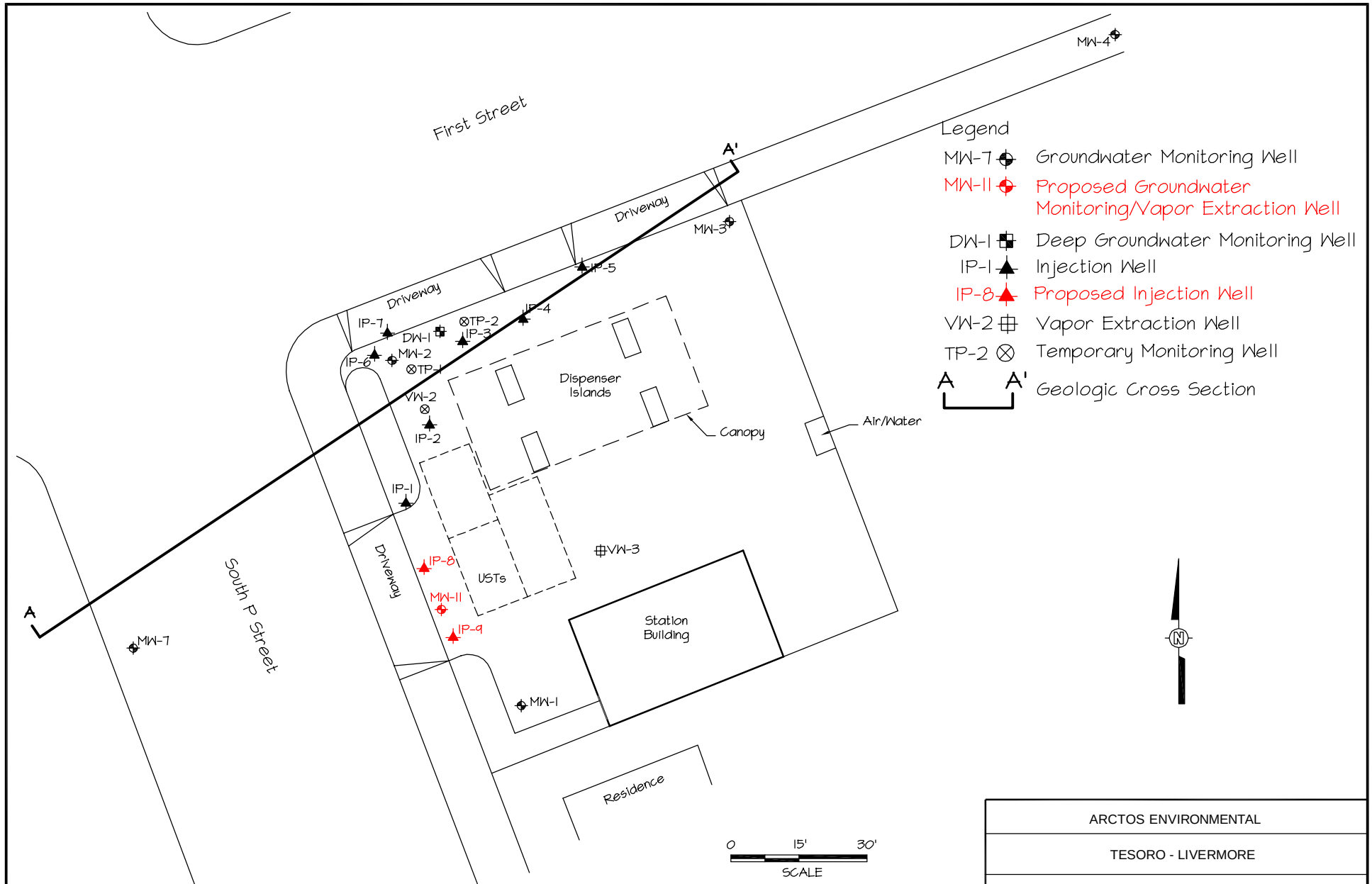
MTBE CONCENTRATION CONTOURS

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

FILE NO. 01LV11B-20701.DWG

FIGURE 5

01LV11B-20701.dwg 10/29/2008 2:58PM



REVISION	NO.	BY	DATE	DESCRIPTION
1	0	MY	8/29/08	Additional Well Installation Work Plan
	1	MY	10/31/08	Third Quarter 2008 Monitoring Report

ARCTOS ENVIRONMENTAL

TESORO - LIVERMORE

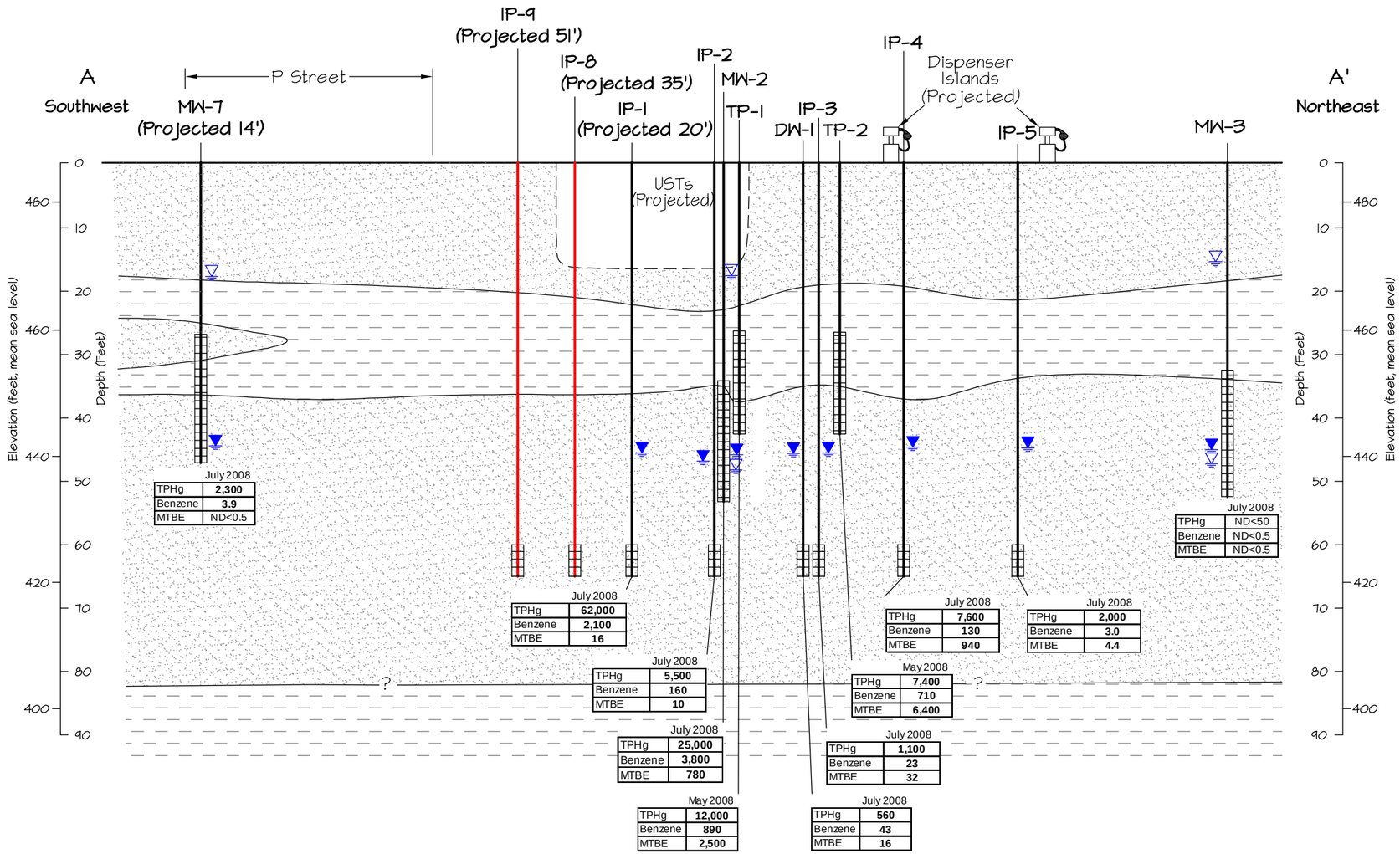
PROPOSED WELL LOCATIONS

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

FILE NO. 01LV11B0201.DWG

FIGURE 6

11/6/2008 2:15PM 01LV11B0201.dwg



Legend

Soil Classification

- Clayey and silty gravels, and gravelly sands with clay
- Silty clays, clayey sands, and silty clays with gravel

MW-3 — Well Identification

IP-1 — Injection Well

IP-8 — Proposed Injection Well

Groundwater elevation on 23 July 2008

Historical low and high groundwater elevation reported in November 2007 and March 1996, respectively

Screened interval groundwater wells sampled on 8 May 2008 and 23 July 2008

Groundwater Results

TPHg	5,500
Benzene	160
MTBE	10

- TPHg: Total Petroleum Hydrocarbons As Gasoline (µg/l)
- Benzene (µg/l)
- MTBE: Methyl Tert-Butyl Ether (MTBE) (µg/l)

0 10' 20' Horizontal Scale

0 10' 20' Vertical Scale

Note:
Depth of clay aquitard is estimated from soil lithology at the Livermore Arcade Shopping Center to the northwest.

REVISION	NO.	BY	DATE	DESCRIPTION
1	0	MY	8/29/08	Additional Injection Well Installation Work Plan
	1	MY	10/31/08	Third Quarter 2008 Monitoring Report

ARCTOS ENVIRONMENTAL

TESORO - LIVERMORE

GEOLOGIC CROSS SECTION A-A'

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

FILE NO. 01LV11B-10101.DWG

FIGURE 7

10/29/2008 2:44PM 01LV11B-10101.dwg

ATTACHMENT A

GROUNDWATER SAMPLING QA/QC PROCEDURES

ATTACHMENT A
GROUNDWATER SAMPLING QA/QC PROCEDURES

A.1 Groundwater Sampling

Before groundwater sampling, the depth to groundwater of each well is measured and recorded on field data sheets. Depth to groundwater and groundwater elevations are summarized in the attached tables.

During groundwater sampling, field observations of the groundwater are recorded on the field data sheets. Groundwater samples are collected after the temperature, pH, and specific conductivity of the groundwater have stabilized to within approximately 10 percent of the previous reading and at least 3 casing volumes of groundwater are removed from the well, unless the well purges dry. Well purge water is stored temporarily on site in 55-gallon drums.

Sampling is performed using new disposable polyethylene bailers suspended from new nylon line. The bailers are equipped with a bottom-release device. Water samples are collected from the wells in new 40-milliliter glass bottles with Teflon-lined caps provided by the analytical laboratory.

A.2 Analytical Program

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

Arctos, as Tesoro's Authorized Responsible Party for the site, also electronically submits the groundwater monitoring results to the State Water Resources Control Board (SWRCB). The data are submitted in the State-mandated Electronic Data Format (EDF), in accordance with Assembly Bill 2886 requirements for underground storage tank (UST) sites in California.

ATTACHMENT B

FIELD DATA SHEETS

1/3

WELL GAUGING DATA

Project # 080723-mw1 Date 07-23-08 Client SHELL

Site 1619 1st St. LIVERMORE, CA

Well ID	Time	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or ~~TOC~~	Notes
IP-1	0900	2					45.49	64.53		
IP-2	0855	2	ODOR				46.83	64.56		
IP-3	0902	2					45.47	64.60		
IP-4	0904	2					44.55	64.60		
IP-5	0909	2					44.70	64.23		
IP-6	0849	2					49.91	71.62		Angle
IP-7	0852	2					51.45	71.93		Angle

WELL GAUGING DATA

2/3

Project # 080723-WW1 Date 7/23/08 Client Actos

Site 1619 1st St Livermore

Well ID	Time	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	Notes
VW-3	0850	2				DRY	~~36.25~~	36.31		
MW-1	0842	4					45.76	54.43		
MW-4	0855	2					43.87	46.72		
MW-8	1038	2				DRY	~~44.12~~	44.37		
MW-10	0804	2				DRY	~~44.69~~	45.03		
MW-3	0916	4					45.00	52.72		
MW-5	0920	2				DRY	~~45.38~~	46.24		
MW-7	1049	2					44.42	46.72		
MW-9	0910	2				DRY	~~44.29~~	44.63		

WELL GAUGING DATA

Project # 080723-WW1 Date 7/23/08 Client Arcos Inc

Site 1619 1st St. Livermore CA

Well ID	Time	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	Notes
DW-4	0850	4					49.50	70.12		
DW-3	0857	4					49.09	60.00		
MW-6	0905	2	* insufficient		H_2O	WELL IS DRY *	47.60	47.60		
DW-2	0910	4					48.25	59.88		
MW-2	0918	4	strong ODOR				45.78	54.10		
DW-1	0925	4					45.55	65.00		
VW-2	0934	2	* WELL DRY *				36.70	36.70		
TP-1	0940	2	ODOR	* insufficient		H_2O *	42.96	43.10		
TP-2	0945	2	* No H_2O detected		WELL DRY *		~~44.20~~ —	41.20		

WELL MONITORING DATA SHEET

Project #: 080723-WW1	Client: Arctos
Sampler: WL	Date: 7/23/08
Well I.D.: MW-1	Well Diameter: 2 3 (4) 6 8 ____
Total Well Depth (TD): 54.43	Depth to Water (DTW): 45.76
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 47.49	

Purge Method: Bailer; Disposable Bailer; Positive Air Displacement; X Electric Submersible; Waterra; Peristaltic; Extraction Pump; Other_____

Sampling Method: (Bailer); X Disposable Bailer; Extraction Port; Dedicated Tubing; Other: _____

5.6 (Gals.) X 3 = 16.8 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius^2 * 0.163

Time	Temp (°F or (°C))	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
0931	20.6	7.6	980	153	5.6	
0932	20.2	7.3	954	260	11.2	
	Well dewatered @		15 gallons		DTW=52.58	
1210	22.3	7.3	974	91	—	

Did well dewater? (Yes) No Gallons actually evacuated: 15

Sampling Date: 7/23/08 Sampling Time: 1210 Depth to Water: 45.84

Sample I.D.: MW-1 Laboratory: (Kiff) CalScience Other_____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: See COC

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #: 080723 - WW1	Client: Arcadis Env.
Sampler: BD	Date: 7/23/08
Well I.D.: MW-2	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth (TD): 54.10	Depth to Water (DTW): 45.78
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column 8.32 x 0.20) + DTW]: 47.44	

Purge Method: Bailer, Disposable Bailer, Positive Air Displacement, (X) Electric Submersible, Waterra, Peristaltic, Extraction Pump, Other_____

Sampling Method: Bailer, (X) Disposable Bailer, Extraction Port, Dedicated Tubing, Other: _____

5.4 (Gals.) X 3 = 16.2 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1230	24.0	7.26	1214	316	5.4	cloudy / strong odor
1231	25.1	6.35	1222	660	10.8	Grey /
~~1232~~ BD	* WELL DEWATERED @ ~ 10.8 gals *					
1245	24.1	6.87	1271	201	-	clear /

Did well dewater? (Yes) No Gallons actually evacuated: 10.8

Sampling Date: 7/23/08 Sampling Time: 1245 Depth to Water: 47.44

Sample I.D.: MW-2 Laboratory: (Kiff) CalScience Other_____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: see COC

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #: 080723-WW1	Client: Arctos
Sampler: WL	Date: 7/23/08
Well I.D.: MW-3	Well Diameter: 2 3 (4) 6 8 ____
Total Well Depth (TD): 52.72	Depth to Water (DTW): 45.00
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 46.54	

Purge Method: Bailer; Disposable Bailer; Positive Air Displacement; X Electric Submersible; Waterra; Peristaltic; Extraction Pump; Other_____

Sampling Method: Bailer; X Disposable Bailer; Extraction Port; Dedicated Tubing; Other: _____

5	(Gals.) X	3	=	15	Gals.
1 Case Volume		Specified Volumes		Calculated Volume	

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F or (°C))	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
0957	21.5	7.8	940	208	5	
0958	21.4	7.5	943	260	10	
0959	21.2	7.5	934	71000	15	

Did well dewater? Yes (No) Gallons actually evacuated: 15

Sampling Date: 7/23/08 Sampling Time: 1005 Depth to Water: 46.46

Sample I.D.: MW-3 Laboratory: (Kiff) CalScience Other_____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: See COC

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #: 080723-WW1	Client: Arcos
Sampler: WL	Date: 7/23/08
Well I.D.: MW-4	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth (TD): 46.72	Depth to Water (DTW): 43.87
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 44.44	

Purge Method: Bailer / (X) Disposable Bailer / Positive Air Displacement / Electric Submersible / Waterra / Peristaltic / Extraction Pump / Other_____

Sampling Method: Bailer / (X) Disposable Bailer / Extraction Port / Dedicated Tubing / Other: _____

.4 (Gals.) X	3	=	1.2 Gals.
1 Case Volume	Specified Volumes		Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius^2 * 0.163

Time	Temp (°F or (°C))	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1026	22.5	7.6	1033	72	.4	clear
1027	21.5	7.5	1043	692	.8	cloudy
1028	21.3	7.4	1047	71000	1.2	↓

Did well dewater? Yes (No) Gallons actually evacuated: 1.2

Sampling Date: 7/23/08 Sampling Time: 1035 Depth to Water: 43.99

Sample I.D.: MW-4 Laboratory: (Kiff) CalScience Other_____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: See CoC

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable): ~

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

W..LL MONITORING DATA SHE..T

Project #: 080723-WW1	Client: Arctos
Sampler: WL	Date: 7/23/08
Well I.D.: MW-5	Well Diameter: ② 3 4 6 8 ___
Total Well Depth (TD): 46.24	Depth to Water (DTW): 45.38
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: Bailer, Disposable Bailer, Positive Air Displacement, Electric Submersible, Waterra, Peristaltic, Extraction Pump, Other_____

Sampling Method: Bailer, Disposable Bailer, Extraction Port, Dedicated Tubing, Other: _____

_____(Gals.) X _____ = _____ Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius^2 * 0.163

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
Unable to purge + Sample - insufficient water						

Did well dewater? Yes No Gallons actually evacuated:

Sampling Date: Sampling Time: Depth to Water:

Sample I.D.: Laboratory: Kiff CalScience Other_____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #: 080723-WW1	Client: Aretos Env
Sampler: BD	Date: 7/23/08
Well I.D.: MW-6	Well Diameter: Ø 3 4 6 8 ___
Total Well Depth (TD): 47.60	Depth to Water (DTW): —
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: Bailer / Disposable Bailer / Positive Air Displacement / Electric Submersible / Waterra / Peristaltic / Extraction Pump / Other ____

Sampling Method: Bailer / Disposable Bailer / Extraction Port / Dedicated Tubing / Other: ____

— (Gals.) X — = — Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
	unable to purge / sample insufficient WATER					

Did well dewater? Yes / No — Gallons actually evacuated:

Sampling Date: — Sampling Time: — Depth to Water:

Sample I.D.: — Laboratory: Kiff / CalScience / Other ____

Analyzed for: TPH-G / BTEX / MTBE / TPH-D / Oxygenates (5) / Other:

EB I.D. (if applicable): @ Time — Duplicate I.D. (if applicable):

Analyzed for: TPH-G / BTEX / MTBE / TPH-D / Oxygenates (5) / Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

W L MONITORING DATA SHE

Project #: 080723-WW1	Client: Arcos
Sampler: WL	Date: 7/23/08
Well I.D.: MW-7	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth (TD): 46.72	Depth to Water (DTW): 44.42
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 44.88	

Purge Method: Bailer; X Disposable Bailer; Positive Air Displacement; Electric Submersible; Waterra; Peristaltic; Extraction Pump; Other_____

Sampling Method: Bailer; X Disposable Bailer; Extraction Port; Dedicated Tubing; Other: _____

.4 (Gals.) X 3 = 1.2 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius^2 * 0.163

Time	Temp (°F or (°C))	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1054	24.3	7.4	957	123	.4	Cloudy
1055	24.5	7.2	972	181	.8	↓
1056	24.8	7.2	970	248	1.2	

Did well dewater? Yes (No) Gallons actually evacuated: 1.2

Sampling Date: 7/23/08 Sampling Time: 1100 Depth to Water: 44.83

Sample I.D.: MW-7 Laboratory: (Kiff) CalScience Other_____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: See CoC

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #: 080723-WW1	Client: Arctos
Sampler: WL	Date: 7/23/08
Well I.D.: MW-8	Well Diameter: ② 3 4 6 8 ____
Total Well Depth (TD): 44.37	Depth to Water (DTW): 44.12
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: Bailer, Disposable Bailer, Positive Air Displacement, Electric Submersible, Waterra, Peristaltic, Extraction Pump, Other_____

Sampling Method: Bailer, Disposable Bailer, Extraction Port, Dedicated Tubing, Other: _____

_____ (Gals.) X _____ = _____ Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
Unable to Purge + Sample - insufficient Water —						

Did well dewater? Yes No Gallons actually evacuated:

Sampling Date: Sampling Time: Depth to Water:

Sample I.D.: Laboratory: Kiff CalScience Other_____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #: 080728 WW1	Client: Arcos
Sampler: WL	Date: 7/23/08
Well I.D.: MW-9	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth (TD): 44.63	Depth to Water (DTW): 44.29
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: Bailer / Disposable Bailer / Positive Air Displacement / Electric Submersible / Waterra / Peristaltic / Extraction Pump / Other____

Sampling Method: Bailer / Disposable Bailer / Extraction Port / Dedicated Tubing / Other: ____

____ (Gals.) X ____ = ____ Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
Unable to Purge + Sample - insufficient Water -						

Did well dewater? Yes No Gallons actually evacuated:

Sampling Date: Sampling Time: Depth to Water:

Sample I.D.: Laboratory: Kiff CalScience Other____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #: 080723-WW1	Client: Arcos
Sampler: WL	Date: 7/23/08
Well I.D.: MW-10	Well Diameter: ② 3 4 6 8 ___
Total Well Depth (TD): 45.03	Depth to Water (DTW): 44.69
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: Bailer / Disposable Bailer / Positive Air Displacement / Electric Submersible / Waterra / Peristaltic / Extraction Pump / Other_____

Sampling Method: Bailer / Disposable Bailer / Extraction Port / Dedicated Tubing / Other: _____

_____(Gals.) X _____ = _____ Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius^2 * 0.163

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
Unable to purge + sample - insufficient water-						

Did well dewater? Yes No Gallons actually evacuated:

Sampling Date: Sampling Time: Depth to Water:

Sample I.D.: Laboratory: Kiff CalScience Other_____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #: 080723-MW1	Client: Arcadis ENV
Sampler: BD	Date: 7/23/08
Well I.D.: DW-1	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth (TD): 65.00	Depth to Water (DTW): 45.55
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 49.44	

Purge Method: Bailer; Disposable Bailer; Positive Air Displacement; (X) Electric Submersible; Waterra; Peristaltic; Extraction Pump; Other_____

Sampling Method: Bailer; (X) Disposable Bailer; Extraction Port; Dedicated Tubing; Other: _____

12.6 (Gals.) X	3	= 37.8 Gals.
1 Case Volume	Specified Volumes	Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius^2 * 0.163

Time	Temp (°F or °C)	pH	Cond. (mS or uS)	Turbidity (NTUs)	Gals. Removed	Observations
1308	25.4	7.20	1015	284	12.6	clear
1311	25.1	7.12	1022	>1000	25.2	Brown
1314	24.0	6.89	1026	>1000	37.8	↓
1316	24.8	6.87	1024	>1000	50.4	↓

Did well dewater? Yes (No) Gallons actually evacuated: 50.4

Sampling Date: 7/23/08 Sampling Time: 1440 Depth to Water: 45.48

Sample I.D.: DW-1 Laboratory: (Kiff) CalScience Other_____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: See COC

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #: 080723 - WW1	Client: Arcadis Env
Sampler: BD	Date: 7/23/08
Well I.D.: DW - 2	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth (TD): 59.88	Depth to Water (DTW): 48.25
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column 11.63 x 0.20) + DTW]: 50.57	

Purge Method: Bailer; Disposable Bailer; Positive Air Displacement; (X) Electric Submersible; Waterra; Peristaltic; Extraction Pump; Other_____

Sampling Method: Bailer; (X) Disposable Bailer; Extraction Port; Dedicated Tubing; Other: _____

7.5 (Gals.) X 3 = 22.5 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1108	23.8	6.42	1096	>1000	7.5	Brown / odor
1109	22.9	6.43	1103	>1000	15	↓
1111	22.9	6.42	1105	>1000	22.5	↓

30

Did well dewater? Yes (No) Gallons actually evacuated: 22.5

Sampling Date: 7/23/08 Sampling Time: 1125 Depth to Water: 50.50

Sample I.D.: DW - 2 Laboratory: (Kiff) CalScience Other_____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: See COC

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #: 080723-WW1	Client: Arcadis Env
Sampler: BD	Date: 7/23/08
Well I.D.: DW-3	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth (TD): 60.00	Depth to Water (DTW): 49.09
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column 10.91 x 0.20) + DTW]: 51.27	

Purge Method: Bailer; Disposable Bailer; Positive Air Displacement; (X) Electric Submersible; Waterra; Peristaltic; Extraction Pump; Other_____

Sampling Method: Bailer; (X) Disposable Bailer; Extraction Port; Dedicated Tubing; Other: _____

7.0 (Gals.) X 3 = 21 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F or °C)	pH	Cond. (mS or uS)	Turbidity (NTUs)	Gals. Removed	Observations
1042	23.9	6.60	1043	>1000	7	Brown / odor
1043	22.9	6.66	1084	>1000	14	↓
1045	22.6	6.64	1084	>1000	21	↓

Did well dewater? Yes (No) Gallons actually evacuated: 21

Sampling Date: 7/23/08 Sampling Time: 1055 Depth to Water: 51.27

Sample I.D.: DW-3 Laboratory: (Kiff) CalScience Other_____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: See COC

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #: 080723-WW1	Client: Arcadis Env
Sampler: BD	Date: 7/23/08
Well I.D.: DW-4	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth (TD): 70.12	Depth to Water (DTW): 49.50
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column 20.62 x 0.20) + DTW]: 53.62	

Purge Method: Bailer; Disposable Bailer; Positive Air Displacement; X Electric Submersible; Waterra; Peristaltic; Extraction Pump; Other_____

Sampling Method: Bailer; X Disposable Bailer; Extraction Port; Dedicated Tubing; Other: _____

13.4 (Gals.) X 3 = 40.2 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F or (°C))	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1010	23.7	7.07	918	>1000	13.4	TAN & CLOUDY
40 1012	23.2	7.04	911	>1000	26.8	↓
1015	23.9	6.99	913	>1000	40.2	↓

Did well dewater? Yes (No) Gallons actually evacuated: 40.2

Sampling Date: 7/23/08 Sampling Time: 1028 Depth to Water: 53.62

Sample I.D.: DW-4 Laboratory: (Kiff) CalScience Other KIFF

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: see COC

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

...L MONITORING DATA SHEET

Project #: 080723-WW1	Client: Arcfos Env
Sampler: BD	Date: 7/23/08
Well I.D.: VW-2	Well Diameter: ② 3 4 6 8 ___
Total Well Depth (TD): 36.70	Depth to Water (DTW): —
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: Bailer / Disposable Bailer / Positive Air Displacement / Electric Submersible / Waterra / Peristaltic / Extraction Pump / Other_____

Sampling Method: Bailer / Disposable Bailer / Extraction Port / Dedicated Tubing / Other: _____

— (Gals.) X — = — Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
*	unable to purge/sample insufficient H2O					

Did well dewater? Yes No Gallons actually evacuated:

Sampling Date: Sampling Time: Depth to Water:

Sample I.D.: Laboratory: Kiff CalScience Other_____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #: 080723-WW1	Client: Arcos
Sampler: WL	Date: 7/23/08
Well I.D.: VW-3	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth (TD): 36.31	Depth to Water (DTW): 36.25
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: Bailer, Disposable Bailer, Positive Air Displacement, Electric Submersible, Waterra, Peristaltic, Extraction Pump, Other_____

Sampling Method: Bailer, Disposable Bailer, Extraction Port, Dedicated Tubing, Other: _____

_____ (Gals.) X _____ = _____ Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
Insufficient water - unable to take grab sample -						

Did well dewater? Yes No Gallons actually evacuated:

Sampling Date: Sampling Time: Depth to Water:

Sample I.D.: Laboratory: Kiff CalScience Other_____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

...L MONITORING DATA SHE...

Project #: 080723-WW1	Client: Aetos ENV
Sampler: BD	Date: 7/23/08
Well I.D.: TP-1	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth (TD): 43.10	Depth to Water (DTW): 42.96
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: Bailer / Disposable Bailer / Positive Air Displacement / Electric Submersible / Waterra / Peristaltic / Extraction Pump / Other ____

Sampling Method: Bailer / Disposable Bailer / Extraction Port / Dedicated Tubing / Other: ____

____ (Gals.) X ____ = ____ Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius^2 * 0.163

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
unable to purge / sample insufficient H_2O						

Did well dewater? Yes No Gallons actually evacuated:

Sampling Date: Sampling Time: Depth to Water:

Sample I.D.: Laboratory: Kiff CalScience Other ____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #: 080723-WW	Client: Arcos Env
Sampler: BD	Date: 7/23/08
Well I.D.: TP - 2	Well Diameter: Ø 3 4 6 8 ___
Total Well Depth (TD): 41.20	Depth to Water (DTW): —
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: —	

Purge Method: Bailer / Disposable Bailer / Positive Air Displacement / Electric Submersible / Waterra / Peristaltic / Extraction Pump / Other

Sampling Method: Bailer / Disposable Bailer / Extraction Port / Dedicated Tubing / Other

___ (Gals.) X	___	= ___ Gals.
1 Case Volume	Specified Volumes	Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
unable to purge / sample insufficient H_2O						

Did well dewater? Yes / No Gallons actually evacuated:

Sampling Date: Sampling Time: Depth to Water:

Sample I.D.: Laboratory: Kiff CalScience Other

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #: 080723-WW1	Client: ARCTOS ENVIR.
Sampler: WW	Date: 07-23-08
Well I.D.: 1P-1	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth (TD): 64.53	Depth to Water (DTW): 45.49
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): (YSI) HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 49.30	

Purge Method: Bailer; Disposable Bailer; Positive Air Displacement; X Electric Submersible 2"; Waterra; Peristaltic; Extraction Pump; Other_____

Sampling Method: Bailer; (Disposable Bailer); Extraction Port; Dedicated Tubing; Other: _____

3.0 (Gals.) X	3	=	9.0 Gals.
1 Case Volume	Specified Volumes		Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius^2 * 0.163

Time	Temp (°F or (°C))	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
0950	21.6	6.11	835	>1000	3	odor
~~0951~~	WELL	DEWATERED @			3.5 GALLONS	
1300	24.0	6.34	891	498	—	

Did well dewater? (Yes) No Gallons actually evacuated: 3.5

Sampling Date: 07/23/08 Sampling Time: 1300 Depth to Water: 47.39

Sample I.D.: 1P-1 Laboratory: (Kiff) CalScience Other_____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: Sell WC

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:		mg/L	(Post-purge:)	1.15 mg/L
O.R.P. (if req'd):	Pre-purge:		mV	(Post-purge:)	-168 mV

WELL MONITORING DATA SHEET

Project #: 080723-MW1	Client: ARCTOS ENVIR.
Sampler: MW	Date: 07-23-08
Well I.D.: IP-2	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth (TD): 64.56	Depth to Water (DTW): 46.83
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): (YSI) HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 50.38	

Purge Method: Bailer; Disposable Bailer; Positive Air Displacement; (X) Electric Submersible 2"; Waterra; Peristaltic; Extraction Pump; Other_____

Sampling Method: Bailer; (X) Disposable Bailer; Extraction Port; Dedicated Tubing; Other: _____

2.8 (Gals.) X	3	= 8.4 Gals.
1 Case Volume	Specified Volumes	Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius^2 * 0.163

Time	Temp (°F or (°C))	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1343	25.2	7.78	975	>1000	2.8	odor
1346	24.2	7.79	978	>1000	5.6	"
1349	25.4	7.72	975	>1000	8.4	"

Did well dewater? Yes (No) Gallons actually evacuated: 8.4

Sampling Date: 07-23-08 Sampling Time: 1448 Depth to Water: 46.92

Sample I.D.: IP-2 Laboratory: (Kiff) CalScience Other_____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: see wc

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:		mg/L	Post-purge:	0.52 mg/L
O.R.P. (if req'd):	Pre-purge:		mV	Post-purge:	80 mV

WELL MONITORING DATA SHEET

Project #: 80723-MW1	Client: ARCTOS ENVIR.
Sampler: MW	Date: 07-23-08
Well I.D.: IP-3	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth (TD): 64.60	Depth to Water (DTW): 45.47
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): (YSI) HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 49.30	

Purge Method: Bailer; Disposable Bailer; Positive Air Displacement; (X) Electric Submersible 2" — Waterra; Peristaltic; Extraction Pump; Other ____

Sampling Method: ~~X~~ Bailer (MW); (X) Disposable Bailer; Extraction Port; Dedicated Tubing; Other: ____

1 Case Volume		Specified Volumes		Calculated Volume
3.1	(Gals.) X	3	=	9.3 Gals.

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1214	22.2	8.14	993	>1000	3.1	
1217	21.3	7.84	987	>1000	6.2	odor
1220	21.4	7.95	983	>1000	9.3	"

Did well dewater? Yes (No) Gallons actually evacuated: 9.3

Sampling Date: 07/23/08 Sampling Time: 1224 Depth to Water: 47.30

Sample I.D.: IP-3 Laboratory: (Kiff) CalScience Other ____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: see COC

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: (MW)

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	~~5.0~~ 4.3 mg/L
O.R.P. (if req'd):	Pre-purge:	mV	~~Post-purge:~~	10.56 mV

WELL MONITORING DATA SHEET

Project #: 080723-WW1	Client: ARCTOS ENVIR.
Sampler: MW	Date: 07-23-08
Well I.D.: IP-4	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth (TD): 64.60	Depth to Water (DTW): 44.55
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): (YSI) HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 48.56	

Purge Method: Bailer; Disposable Bailer; Positive Air Displacement; (X) Electric Submersible 2"; Waterra; Peristaltic; Extraction Pump; Other_____

Sampling Method: Bailer; (X) Disposable Bailer; Extraction Port; Dedicated Tubing; Other: _____

3.2 (Gals.) X	3	= 9.60 Gals.
1 Case Volume	Specified Volumes	Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius^2 * 0.163

Time	Temp (°F or (°C))	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1255	22.0	8.02	1021	>1000	3.2	
1257	21.7	7.76	1010	>1000	6.4	
1302	21.4	7.59	998	>1000	9.6	

Did well dewater? Yes (No) Gallons actually evacuated: 9.6

Sampling Date: 07-23-08 Sampling Time: 1307 Depth to Water: 48.48

Sample I.D.: IP-4 Laboratory: (Kiff) CalScience Other_____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: SEE COC

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	(Post-purge):	1.38	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	(Post-purge):	147	mV

WELL MONITORING DATA SHEET

Project #: 080723-MW1	Client: ARCTOS ENVIR.
Sampler: MW	Date: 07-23-08
Well I.D.: MP-5	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth (TD): 64.23	Depth to Water (DTW): 44.70
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): (YSI) HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 48.61	

Purge Method: Bailer; Disposable Bailer; Positive Air Displacement; X Electric Submersible 2"; Waterra; Peristaltic; Extraction Pump; Other_____

Sampling Method: Bailer; X Disposable Bailer; Extraction Port; Dedicated Tubing; Other: _____

3.1 (Gals.) X 3 = 9.3 Gals.		
1 Case Volume	Specified Volumes	Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F or °C)	pH	Cond. (mS or uS)	Turbidity (NTUs)	Gals. Removed	Observations
1017	20.8	7.48	919	>1000	3.1	
to	WELL	DEWATERED @			3.5 GALLONS	
1325	24.0	7.62	915	491	—	

Did well dewater? Yes No Gallons actually evacuated: 3.5 (max) 4.5

Sampling Date: 07/23/08 Sampling Time: 1325 Depth to Water: 45.81

Sample I.D.: MP-5 Laboratory: (Kiff) CalScience Other_____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: see wc

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	(Post-purge):	1.27 mg/L
O.R.P. (if req'd):	Pre-purge:	mV	(Post-purge):	6 mV

WELL MONITORING DATA SHEET

Project #: 080723-WW1	Client: ARCTOS ENVIR.
Sampler: WW	Date: 07-23-08
Well I.D.: IP-6	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth (TD): 71.62	Depth to Water (DTW): 49.91
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): (YSI) HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 54.25	

Purge Method: Bailer; Disposable Bailer; Positive Air Displacement; X Electric Submersible 211; Waterra; Peristaltic; Extraction Pump; Other_____

Sampling Method: Bailer; X Disposable Bailer; Extraction Port; Dedicated Tubing; Other: _____

3.5 (Gals.) X	3	=	10.5 Gals.
1 Case Volume	Specified Volumes		Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius^2 * 0.163

Time	Temp (°F or (°C))	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1030	20.7	9.33	852	>1000	3.5	odor
1032	20.7	8.83	941	>1000	7	"
1034	20.7	8.49	981	>1000	10.5	"

Did well dewater? Yes (No) Gallons actually evacuated: 10.5

Sampling Date: 07/23/08 Sampling Time: 1039 Depth to Water: 54.17

Sample I.D.: IP-6 Laboratory: (Kiff) CalScience Other_____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: see COC

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	~~Post-purge~~:	82	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	1.20	mV

WELL MONITORING DATA SHEET

Project #: 080723-MW1	Client: ARCTOS ENVIR.
Sampler: MW	Date: 07-23-08
Well I.D.: IP-7	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth (TD): 71.93	Depth to Water (DTW): 51.45
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): (YSI) HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 55.55	

Purge Method: Bailer; Disposable Bailer; Positive Air Displacement; (Electric Submersible) 2"; Waterra; Peristaltic; Extraction Pump; Other_____

Sampling Method: Bailer; (X) Disposable Bailer; Extraction Port; Dedicated Tubing; Other: _____

3.3 (Gals.) X	3 =	9.9 Gals.
1 Case Volume	Specified Volumes	Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius^2 * 0.163

Time	Temp (°F or (°C))	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1101	21.0	8.75	1023	>1000	3.3	
WELL	DEWATERED	@			6 GALLONS	
1335	25.0	7.65	1066	253	—	

Did well dewater? (Yes) No — Gallons actually evacuated: 6

Sampling Date: 07/23/08 — Sampling Time: 1335 — Depth to Water: 52.00 (12 hr recharge)

Sample I.D.: IP-7 — Laboratory: (Kiff) CalScience Other_____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: SEE COC

EB I.D. (if applicable): @ Time — Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:		mg/L	Post-purge:	4.06 mg/L
O.R.P. (if req'd):	Pre-purge:		mV	Post-purge:	40 mV

ATTACHMENT C

HISTORICAL WELL AND GROUNDWATER ELEVATIONS

TABLE C-1

HISTORICAL WELL AND GROUNDWATER ELEVATIONS
TESORO - LIVERMORE, 67076

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	6/1/93	37.50	474.29	436.79
	6/22/93	38.46		435.83
	10/6/93	42.22		432.07
	1/13/94	34.52		439.77
	3/30/94	31.93		442.36
	4/25/94	33.49		440.80
	8/12/94	41.03		433.26
	12/14/94	38.63		435.66
	2/10/95	30.80		443.49
	6/15/95	25.46		448.83
	9/26/95	31.05		443.24
	12/15/95	28.11		446.18
	3/21/96	17.67		456.62
	6/13/96	22.86		451.43
	9/16/96	30.04		444.25
	12/2/96	26.74		447.55
	3/7/97	20.84		453.45
	6/12/97	28.71		445.58
	9/29/97	33.91		440.38
	12/1/97	34.88		439.41
	3/19/98	19.83		454.46
	5/29/98	21.57		452.72
	9/15/98	31.68		442.61
	11/30/98	36.80		437.49
	1/17/99	30.02		444.27
	6/10/99	29.30		444.99
	9/7/99	31.41		442.88
	12/13/99	32.95		441.34
	3/13/00	25.74		448.55
	6/12/00	28.24		446.05
	11/10/00	30.56		443.73
	12/31/00	31.71		442.58

TABLE C-1

HISTORICAL WELL AND GROUNDWATER ELEVATIONS
TESORO - LIVERMORE, 67076

Well No.	Date of Measurement	Depth to Water (feet below casing)	PVC Casing Elevation[(a)] (feet MSL)	Water Table Elevation[(b)] (feet MSL)
MW-1 (cont.)	3/27/01	30.43	474.29	443.86
	6/30/01	36.61		437.68
	9/26/01	45.10		429.19
	12/18/01	39.39		434.90
	3/18/02	38.24		436.05
	8/21/02	36.71		437.58
	12/3/02	36.85		437.44
	3/4/03	33.72		440.57
	6/10/03	31.31		442.98
	9/9/03	35.05		439.24
	12/23/03	30.15		444.14
	3/23/04	26.61		447.68
	5/10/04	30.31		443.98
	8/4/04	34.77		439.52
	11/4/04	33.93		440.36
	1/12/05	27.82		446.47
	5/2/05	24.87		449.42
	7/19/05	29.26		445.03
	11/21/05	31.15		443.14
	2/9/06	26.24		448.05
	5/16/06	24.87		449.42
	8/9/06	31.64		442.65
	11/8/06	31.16		443.13
	2/14/07	30.00		444.29
	5/17/07	33.75		440.54
	8/2/07	40.00		434.29
	11/12/07	48.55		425.74
	2/14/08	34.74		438.55
	5/8/08	36.15		438.14
	7/23/08	45.76		428.53
MW-2	6/1/93	38.02	472.98	434.96
	6/22/93	39.07		433.91

TABLE C-1

HISTORICAL WELL AND GROUNDWATER ELEVATIONS
TESORO - LIVERMORE, 67076

Well No.	Date of Measurement	Depth to Water (feet below casing)	PVC Casing Elevation[(a)] (feet MSL)	Water Table Elevation[(b)] (feet MSL)
MW-2 (cont.)	10/6/93	43.72	472.98	429.26
	1/13/94	35.85		437.13
	3/30/94	32.82		440.16
	4/25/94	34.76		438.22
	8/12/94	44.33		428.65
	12/14/94	40.00		432.98
	2/10/95	32.16		440.82
	6/15/95	25.93		447.05
	9/26/95	32.42		440.56
	12/15/95	29.41		443.57
	3/21/96	17.47		455.51
	6/13/96	23.69		449.29
	9/16/96	31.24		441.74
	12/2/96	26.90		446.08
	3/7/97	21.33		451.65
	6/12/97	29.94		443.04
	9/29/97	34.22		438.76
	12/1/97	35.94		437.04
	3/19/98	20.34		452.64
	5/29/98	22.63		450.35
	9/15/98	32.30		440.68
	11/30/98	36.90		436.08
	1/17/99	30.17		442.81
	6/10/99	29.98		443.00
	9/7/99	31.85		441.13
	12/13/99	33.72		439.26
	3/13/00	26.54		446.44
	6/12/00	28.44		444.54
	11/10/00	31.31		441.67
	12/31/00	32.68		440.30
	3/27/01	30.81		442.17
	6/30/01	37.58		435.40

TABLE C-1

HISTORICAL WELL AND GROUNDWATER ELEVATIONS
TESORO - LIVERMORE, 67076

Well No.	Date of Measurement	Depth to Water (feet below casing)	PVC Casing Elevation[(a)] (feet MSL)	Water Table Elevation[(b)] (feet MSL)
MW-2 (cont.)	9/26/01	44.97	472.98	428.01
	12/18/01	40.67		432.31
	3/18/02	38.94		434.04
	6/5/02	36.45		436.53
	8/21/02	37.15		435.83
	12/3/02	36.76		436.22
	3/4/03	33.60		439.38
	6/10/03	32.89		440.09
	9/9/03	35.45		437.53
	12/23/03	31.79		441.19
	3/23/04	28.25		444.73
	5/10/04	30.91		442.07
	8/4/04	35.36		437.62
	11/4/04	34.92		438.06
	1/12/05	29.46		443.52
	5/2/05	25.61		447.37
	7/19/05	30.11		442.87
	11/21/05	32.04		440.94
	2/9/06	27.11		445.87
	5/17/06	25.18		447.80
	8/9/06	32.69		440.29
	11/8/06	33.21		439.77
	2/14/07	31.27		441.71
	5/17/07	34.40		438.58
	8/2/07	41.23		431.75
	11/12/07	48.22		424.76
	2/14/08	36.31		436.67
	5/8/08	36.70		436.28
	7/23/08	45.78		427.20
MW-3	6/1/93	36.18	473.37	437.19
	6/22/93	37.11		436.26
	10/6/93	41.15		432.22

TABLE C-1

HISTORICAL WELL AND GROUNDWATER ELEVATIONS
TESORO - LIVERMORE, 67076

Well No.	Date of Measurement	Depth to Water (feet below casing)	PVC Casing Elevation[(a)] (feet MSL)	Water Table Elevation[(b)] (feet MSL)
MW-3 (cont.)	1/13/94	33.95	473.37	439.42
	3/30/94	30.97		442.40
	4/25/94	32.46		440.91
	8/12/94	41.72		431.65
	12/14/94	37.62		435.75
	2/10/95	29.96		443.41
	6/15/95	23.66		449.71
	9/26/95	29.62		443.75
	12/15/95	27.10		446.27
	3/21/96	15.85		457.52
	6/13/96	21.31		452.06
	9/16/96	28.62		444.75
	12/2/96	25.55		447.82
	3/7/97	19.77		453.60
	6/12/97	27.67		445.70
	9/29/97	29.60		443.77
	12/1/97	33.37		440.00
	3/19/98	18.76		454.61
	5/29/98	20.64		452.73
	9/15/98	30.70		442.67
	11/30/98	34.96		438.41
	1/17/99	28.81		444.56
	6/10/99	28.10		445.27
	9/7/99	30.38		442.99
	12/13/99	31.46		441.91
	3/13/00	24.28		449.09
	6/12/00	26.80		446.57
	11/10/00	29.47		443.90
	12/31/00	31.38		441.99
	3/27/01	29.94		443.43
	6/30/01	37.54		435.83
	9/26/01	45.17		428.20

TABLE C-1

HISTORICAL WELL AND GROUNDWATER ELEVATIONS
TESORO - LIVERMORE, 67076

Well No.	Date of Measurement	Depth to Water (feet below casing)	PVC Casing Elevation[(a)] (feet MSL)	Water Table Elevation[(b)] (feet MSL)
MW-3 (cont.)	12/18/01	39.41	473.37	433.96
	3/18/02	37.73		435.64
	6/5/02	35.35		438.02
	8/21/02	36.21		437.16
	12/3/02	35.62		437.75
	3/4/03	32.75		440.62
	6/10/03	31.26		442.11
	9/9/03	34.72		438.65
	12/23/03	30.47		442.90
	3/23/04	26.67		446.70
	5/10/04	30.25		443.12
	8/4/04	34.70		438.67
	11/4/04	33.94		439.43
	1/12/05	28.21		445.16
	5/2/05	24.56		448.81
	7/19/05	29.39		443.98
	11/21/05	31.30		442.07
	2/9/06	26.21		447.16
	5/16/06	24.36		449.01
	8/9/06	31.90		441.47
	11/8/06	31.30		442.07
	2/14/07	30.20		443.17
	5/17/07	33.64		439.73
	8/2/07	41.74		431.63
	11/12/07	47.41		425.96
	2/14/08	34.73		438.64
	5/8/08	35.60		437.77
	7/23/08	45.00		428.37
MW-4	3/30/94	31.56	473.64	442.08
	4/25/94	32.73		440.91
	8/12/94	41.61		432.03
	12/14/94	38.11		435.53

TABLE C-1

HISTORICAL WELL AND GROUNDWATER ELEVATIONS
TESORO - LIVERMORE, 67076

Well No.	Date of Measurement	Depth to Water (feet below casing)	PVC Casing Elevation[(a)] (feet MSL)	Water Table Elevation[(b)] (feet MSL)
MW-4 (cont.)	2/10/95	30.50	473.64	443.14
	6/15/95	23.63		450.01
	9/26/95	29.70		443.94
	12/15/95	27.56		446.08
	3/21/96	15.63		458.01
	6/13/96	21.07		452.57
	9/16/96	28.99		444.65
	12/2/96	26.04		447.60
	3/7/97	19.69		453.95
	6/12/97	28.04		445.60
	9/29/97	29.91		443.73
	12/1/97	33.88		439.76
	3/19/98	18.67		454.97
	5/29/98	20.16		453.48
	9/15/98	30.46		443.18
	11/30/98	34.50		439.14
	1/17/99	28.30		445.34
	6/10/99	27.60		446.04
	9/7/99	30.79		442.85
	12/13/99	31.60		442.04
	3/13/00	24.35		449.29
	6/12/00	26.91		446.73
	11/10/00	29.71		443.93
	12/31/00	31.79		441.85
	3/27/01	29.98		443.66
	6/30/01	36.88		436.76
	9/26/01	43.87		429.77
	12/18/01	39.30		434.34
	3/18/02	37.75		435.89
	6/5/02	35.68		437.96
	8/21/02	36.58		437.06
	12/3/02	35.90		437.74

TABLE C-1

HISTORICAL WELL AND GROUNDWATER ELEVATIONS
TESORO - LIVERMORE, 67076

Well No.	Date of Measurement	Depth to Water (feet below casing)	PVC Casing Elevation[a] (feet MSL)	Water Table Elevation[b] (feet MSL)
MW-4 (cont.)	3/4/03	32.73	473.64	440.91
	6/10/03	31.20		442.44
	9/9/03	34.64		439.00
	12/23/03	31.30		442.34
	3/23/04	26.71		446.93
	5/10/04	30.33		443.31
	8/4/04	34.87		438.77
	11/4/04	34.28		439.36
	1/12/05	28.67		444.97
	5/2/05	24.46		449.18
	7/19/05	29.36		444.28
	11/21/05	31.80		441.84
	2/9/06	26.34		447.30
	5/16/06	24.30		449.34
	8/9/06	32.05		441.59
	11/8/06	32.85		440.79
	2/14/07	30.46		443.18
	5/17/07	33.92		439.72
	8/2/07	40.68		432.96
	11/12/07	Dry[c]		--
	2/14/08	34.53		439.11
	5/8/08	35.55		438.09
	7/23/08	43.87		429.77
MW-5	3/30/94	32.07	472.67	440.60
	4/25/94	33.65		439.02
	8/12/94	42.73		429.94
	12/14/94	38.89		433.78
	2/10/95	31.44		441.23
	6/15/95	24.99		447.68
	9/26/95	30.20		442.47
	12/15/95	28.56		444.11
	3/21/96	16.82		455.85

TABLE C-1

HISTORICAL WELL AND GROUNDWATER ELEVATIONS
TESORO - LIVERMORE, 67076

Well No.	Date of Measurement	Depth to Water (feet below casing)	PVC Casing Elevation[(a)] (feet MSL)	Water Table Elevation[(b)] (feet MSL)
MW-5 (cont.)	6/13/96	22.61	472.67	450.06
	9/16/96	29.78		442.89
	12/2/96	26.51		446.16
	3/7/97	21.91		450.76
	9/29/97	31.74		440.93
	12/1/97	34.05		438.62
	3/19/98	20.93		451.74
	5/29/98	21.30		451.37
	9/15/98	31.32		441.35
	11/30/98	35.44		437.23
	1/17/99	29.59		443.08
	6/10/99	28.05		444.62
	9/7/99	31.11		441.56
	12/13/99	32.66		440.01
	3/13/00	25.87		446.80
	6/12/00	28.15		444.52
	11/10/00	30.05		442.62
	12/31/00	31.81		440.86
	3/27/01	30.57		442.10
	6/30/01	37.24		435.43
	9/26/01	44.53		428.14
	12/18/01	40.65		432.02
	3/18/02	38.75		433.92
	6/5/02	36.21		436.46
	8/21/02	36.76		435.91
	12/3/02	36.12		436.55
	3/4/03	32.90		439.77
	6/10/03	33.04		439.63
	9/9/03	34.20		438.47
	12/23/03	31.38		441.29
	3/23/04	27.51		445.16
	5/10/04	31.12		441.55

TABLE C-1

HISTORICAL WELL AND GROUNDWATER ELEVATIONS
TESORO - LIVERMORE, 67076

Well No.	Date of Measurement	Depth to Water (feet below casing)	PVC Casing Elevation[(a)] (feet MSL)	Water Table Elevation[(b)] (feet MSL)
MW-5 (cont.)	8/4/04	35.09	472.67	437.58
	11/4/04	34.34		438.33
	1/12/05	29.19		443.48
	5/2/05	25.31		447.36
	7/19/05	30.49		442.18
	11/21/05	32.35		440.32
	2/9/06	27.19		445.48
	5/16/06	25.30		447.37
	8/9/06	32.68		439.99
	11/8/06	32.22		440.45
	2/14/07	34.00		438.67
	5/17/07	34.29		438.38
	8/2/07	41.72		430.95
	11/12/07	Dry		--
	2/14/08	35.66		437.01
	5/8/08	36.60		436.07
	7/23/08	Dry		--
MW-6	3/30/94	33.38	471.93	438.55
	4/25/94	35.49		436.44
	8/12/94	45.14		426.79
	12/14/94	40.99		430.94
	2/10/95	33.34		438.59
	6/15/95	26.88		445.05
	9/26/95	33.55		438.38
	12/15/95	30.32		441.61
	3/21/96	18.89		453.04
	6/13/96	24.62		447.31
	9/16/96	32.64		439.29
	12/2/96	27.42		444.51
	3/7/97	22.13		449.80
	6/12/97	31.02		440.91
	9/29/97	35.77		436.16

TABLE C-1

HISTORICAL WELL AND GROUNDWATER ELEVATIONS
TESORO - LIVERMORE, 67076

Well No.	Date of Measurement	Depth to Water (feet below casing)	PVC Casing Elevation[(a)] (feet MSL)	Water Table Elevation[(b)] (feet MSL)
MW-6 (cont.)	12/1/97	37.14	471.93	434.79
	3/19/98	21.10		450.83
	5/29/98	23.26		448.67
	9/15/98	33.50		438.43
	11/30/98	38.73		433.20
	1/17/99	32.05		439.88
	6/10/99	31.44		440.49
	9/7/99	33.94		437.99
	12/13/99	35.84		436.09
	3/13/00	28.45		443.48
	6/12/00	30.52		441.41
	11/10/00	32.99		438.94
	12/31/00	34.95		436.98
	3/27/01	32.72		439.21
	6/30/01	39.86		432.07
	9/26/01	Dry		--
	12/18/01	43.36		428.57
	3/18/02	41.29		430.64
	6/5/02	38.85		433.08
	8/21/02	39.02		432.91
	12/3/02	38.76		433.17
	3/4/03	35.13		436.80
	6/10/03	34.15		437.78
	9/9/03	37.66		434.27
	12/23/03	33.43		438.50
	3/23/04	29.96		441.97
	5/10/04	32.98		438.95
	8/4/04	37.02		434.91
	11/4/04	37.03		434.90
	1/12/05	32.01		439.92
	5/2/05	27.30		444.63
	7/19/05	32.27		439.66

TABLE C-1

HISTORICAL WELL AND GROUNDWATER ELEVATIONS
TESORO - LIVERMORE, 67076

Well No.	Date of Measurement	Depth to Water (feet below casing)	PVC Casing Elevation[(a)] (feet MSL)	Water Table Elevation[(b)] (feet MSL)
MW-6 (cont.)	11/21/05	33.23	471.93	438.70
	2/9/06	29.07		442.86
	5/17/06	27.23		444.70
	8/9/06	35.22		436.71
	11/8/06	33.41		438.52
	2/14/07	33.43		438.50
	5/17/07	36.50		435.43
	8/2/07	42.24		429.69
	11/12/07	Dry		--
	2/14/08	38.67		433.26
	5/8/08	38.50		433.43
	7/23/08	Dry		--
MW-7	3/30/94	31.98	472.33	440.35
	4/25/94	33.56		438.77
	8/12/94	43.35		428.98
	12/14/94	39.34		432.99
	2/10/95	32.11		440.22
	6/15/95	25.51		446.82
	9/26/95	31.43		440.90
	12/15/95	28.97		443.36
	3/21/96	17.36		454.97
	6/13/96	23.47		448.86
	9/16/96	31.35		440.98
	12/2/96	27.11		445.22
	3/7/97	21.33		451.00
	6/12/97	29.90		442.43
	9/29/97	34.37		437.96
	12/1/97	36.46		435.87
	3/19/98	20.33		452.00
	5/29/98	22.30		450.03
	9/15/98	32.54		439.79
	11/30/98	37.96		434.37

TABLE C-1

HISTORICAL WELL AND GROUNDWATER ELEVATIONS
TESORO - LIVERMORE, 67076

Well No.	Date of Measurement	Depth to Water (feet below casing)	PVC Casing Elevation[(a)] (feet MSL)	Water Table Elevation[(b)] (feet MSL)
MW-7 (cont.)	1/17/99	31.04	472.33	441.29
	6/10/99	29.89		442.44
	9/7/99	32.38		439.95
	12/13/99	33.98		438.35
	3/13/00	27.09		445.24
	6/12/00	28.76		443.57
	11/10/00	31.54		440.79
	12/31/00	32.76		439.57
	3/27/01	30.97		441.36
	6/30/01	37.50		434.83
	9/26/01	45.11		427.22
	12/18/01	41.13		431.20
	3/18/02	39.22		433.11
	6/5/02	36.55		435.78
	8/21/02	36.81		435.52
	12/3/02	36.52		435.81
	3/4/03	32.60		439.73
	6/10/03	31.33		441.00
	9/9/03	34.71		437.62
	12/23/03	30.80		441.53
	3/23/04	26.41		445.92
	5/10/04	29.86		442.47
	8/4/04	34.06		438.27
	11/4/04	34.12		438.21
	1/12/05	28.83		443.50
	5/2/05	24.66		447.67
	7/19/05	29.07		443.26
	11/21/05	30.42		441.91
	2/9/06	26.15		446.18
	5/16/06	24.44		447.89
	8/9/06	31.77		440.56
	11/8/06	31.14		441.19

TABLE C-1

HISTORICAL WELL AND GROUNDWATER ELEVATIONS
TESORO - LIVERMORE, 67076

Well No.	Date of Measurement	Depth to Water (feet below casing)	PVC Casing Elevation[(a)] (feet MSL)	Water Table Elevation[(b)] (feet MSL)
MW-7 (cont.)	2/14/07	30.39	472.33	441.94
	5/17/07	33.31		439.02
	8/2/07	37.09		435.24
	11/12/07	Dry		--
	2/14/08	36.51		435.82
	5/8/08	36.00		436.33
	7/23/08	44.42		427.91
MW-8	12/23/03	32.01	471.18	439.17
	3/23/04	28.50		442.68
	5/10/04	31.44		439.74
	8/4/04	35.11		436.07
	11/4/04	34.77		436.41
	1/12/05	29.66		441.52
	5/2/05	25.91		445.27
	7/19/05	30.56		440.62
	11/21/05	32.48		438.70
	2/9/06	27.40		443.78
	5/16/06	25.60		445.58
	8/9/06	32.77		438.41
	11/8/06	32.10		439.08
	2/14/07	30.94		440.24
	5/17/07	34.14		437.04
	8/2/07	41.24		429.94
	11/12/07	Dry		--
	2/14/08	35.55		435.63
	5/8/08	36.64		434.54
	7/23/08	Dry		--
MW-9	12/23/03	34.03	470.78	436.75
	3/23/04	30.01		440.77
	5/10/04	33.61		437.17
	8/4/04	37.47		433.31
	11/4/04	37.44		433.34

TABLE C-1

HISTORICAL WELL AND GROUNDWATER ELEVATIONS
TESORO - LIVERMORE, 67076

Well No.	Date of Measurement	Depth to Water (feet below casing)	PVC Casing Elevation[(a)] (feet MSL)	Water Table Elevation[(b)] (feet MSL)
MW-9 (cont.)	5/2/05	27.73	470.78	443.05
	7/19/05	32.90		437.88
	11/21/05	34.15		436.63
	2/9/06	29.44		441.34
	5/16/06	27.50		443.28
	8/9/06	35.85		434.93
	11/8/06	34.18		436.60
	2/14/07	34.00		436.78
	5/17/07	36.88		433.90
	8/2/07	44.11		426.67
	11/12/07	Dry		--
	2/14/08	39.32		431.46
	5/8/08	38.90		431.88
	7/23/08	Dry		--
MW-10	12/23/03	33.80	471.63	437.83
	3/23/04	28.68		442.95
	5/10/04	32.15		439.48
	8/4/04	36.40		435.23
	11/4/04	36.21		435.42
	1/12/05	31.64		439.99
	5/2/05	27.01		444.62
	7/19/05	31.59		440.04
	11/21/05	32.96		438.67
	2/9/06	28.56		443.07
	5/16/06	26.83		444.80
	8/9/06	34.37		437.26
	11/8/06	33.41		438.22
	2/14/07	32.81		438.82
	5/17/07	35.85		435.78
	8/2/07	43.46		428.17
	11/12/07	Dry		--
	2/14/08	39.71		431.92

TABLE C-1

HISTORICAL WELL AND GROUNDWATER ELEVATIONS
TESORO - LIVERMORE, 67076

Well No.	Date of Measurement	Depth to Water (feet below casing)	PVC Casing Elevation[(a)] (feet MSL)	Water Table Elevation[(b)] (feet MSL)
MW-10 (cont.)	5/8/08	37.55	471.63	434.08
	7/23/08	Dry		--
VW-2	8/4/04	34.13	473.28	439.15
	11/4/04	34.75		438.53
	1/12/05	29.35		443.93
	5/2/05	25.34		447.94
	7/19/05	29.76		443.52
	11/21/05	31.81		441.47
	2/9/06	27.21		446.07
	5/17/06	25.26		448.02
	8/9/06	31.74		441.54
	11/8/06	33.52		439.76
	2/14/07	30.77		442.51
	5/17/07	33.17		440.11
	8/2/07	36.33		436.95
	11/12/07	Dry		--
	2/14/08	35.55		437.73
	5/8/08	35.31		437.97
	7/23/08	Dry		--
VW-3	8/4/04	32.89	474.38	441.49
	11/4/04	34.78		439.60
	1/12/05	29.51		444.87
	5/2/05	24.79		449.59
	7/19/05	28.91		445.47
	11/21/05	31.07		443.31
	2/9/06	26.60		447.78
	5/16/06	24.19		450.19
	8/9/06	30.53		443.85
	11/8/06	31.62		442.76
	2/14/07	30.48		443.90
	5/17/07	31.70		442.68
	8/2/07	35.55		438.83

TABLE C-1

HISTORICAL WELL AND GROUNDWATER ELEVATIONS
TESORO - LIVERMORE, 67076

Well No.	Date of Measurement	Depth to Water (feet below casing)	PVC Casing Elevation[(a)] (feet MSL)	Water Table Elevation[(b)] (feet MSL)
VW-3 (cont.)	11/12/07	Dry	474.38	--
	2/14/08	Dry		--
	5/8/08	34.80		439.58
	7/23/08	Dry		--
TP-1	7/19/05	29.91	472.82	442.91
	11/21/05	32.28		440.54
	2/9/06	28.02		444.80
	5/17/06	25.18		447.64
	8/9/06	32.81		440.01
	11/8/06	32.02		440.80
	2/14/07	33.59		439.23
	5/17/07	33.52		439.30
	8/2/07	40.30		432.52
	11/12/07	Dry		--
	2/14/08	36.17		436.65
	5/8/08	36.17		436.65
	7/23/08	Dry		--
TP-2	7/19/05	29.67	472.93	443.26
	11/21/05	31.43		441.50
	2/9/06	27.27		445.66
	5/17/06	25.00		447.93
	8/9/06	31.74		441.19
	11/8/06	32.80		440.13
	2/14/07	30.32		442.61
	5/17/07	33.28		439.65
	8/2/07	39.35		433.58
	11/12/07	Dry		--
	2/14/08	35.62		437.31
	5/8/08	36.62		436.31
	7/23/08	Dry		--
DW-1	5/22/08	37.30	TBD[(d)]	TBD
	7/23/08	45.55		TBD

TABLE C-1

HISTORICAL WELL AND GROUNDWATER ELEVATIONS
TESORO - LIVERMORE, 67076

Well No.	Date of Measurement	Depth to Water (feet below casing)	PVC Casing Elevation[(a)] (feet MSL)	Water Table Elevation[(b)] (feet MSL)
DW-2	5/22/08	39.80	TBD	TBD
	7/23/08	48.25		TBD
DW-3	5/22/08	40.20	TBD	TBD
	7/23/08	49.09		TBD
DW-4	5/22/08	40.20	TBD	TBD
	7/23/08	49.50		TBD
MW-A	1/17/99	30.13	NM[(e)]	NM
MW-B	1/17/99	30.29	NM	NM
MW-C	1/17/99	30.60	NM	NM
MW-D	1/17/99	31.32	NM	NM
MW-E	1/17/99	31.36	NM	NM
MW-W	1/17/99	30.91	NM	NM

(a) Elevation of PVC well casting (north edge) surveyed relative to mean sea level (MSL).
Wells were surveyed by Cross Land Surveying, Inc., per AB 2886 requirements on 31 August 2005.
Benchmark K2-741, elevation is 467.835 feet above MSL.

(b) Potentiometric Surface Elevation = (Casing Elevation - Depth to Water)

(c) Depth of groundwater assumed to be below screened interval; well had 6 inches or less of water.

(d) TBD - To be determined; Wells to be surveyed by a Claifornia-licensed surveyor.

(e) NM = Well not surveyed.

ATTACHMENT D

HISTORICAL GROUNDWATER ANALYTICAL RESULTS

TABLE D-1

HISTORICAL GROUNDWATER ANALYTICAL RESULTS
TESORO - LIVERMORE, 67076

Monitoring Well	Sample Date[a]	TPHg[b] (ug/l)	Benzene[b] (ug/l)	Toluene[b] (ug/l)	Ethylbenzene[b] (ug/l)	Xylenes[b] (ug/l)	MTBE[b] (ug/l)	DIPE[b] (ug/l)	ETBE[b] (ug/l)	TAME[b] (ug/l)	TBA[b] (ug/l)	Methanol[b] (ug/l)	Ethanol[b] (ug/l)	1,2-DCA[b] (ug/l)	EDB[b] (ug/l)
MW-1	6/1/93	27,000	2,200	400	ND<0.5[c]	4,900	--[d]	--	--	--	--	--	--	--	--
	6/22/93	87,000	8,000	10,000	260	10,000	--	--	--	--	--	--	--	--	--
	10/6/93	40,000	4,700	6,500	740	5,300	--	--	--	--	--	--	--	--	--
	1/13/94	9,400	1,300	9,500	110	850	--	--	--	--	--	--	--	--	--
	3/30/94	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	4/25/94	11,000	1,500	1,800	290	1,700	--	--	--	--	--	--	--	--	--
	8/12/94	11,000	550	330	260	1,400	--	--	--	--	--	--	--	--	--
	12/14/94	11,000	1,000	1,200	320	1,500	--	--	--	--	--	--	--	--	--
	2/10/95	9,300	1,200	1,500	280	1,500	--	--	--	--	--	--	--	--	--
	6/15/95	140	5.6	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--	--	--	--	--
	9/26/95	410	140	ND<0.5	ND<0.5	43	--	--	--	--	--	--	--	--	--
	12/15/95	740	250	ND<1.3	ND<1.3	87	--	--	--	--	--	--	--	--	--
	3/21/96	ND<50	0.52	ND<0.5	ND<0.5	0.51	--	--	--	--	--	--	--	--	--
	6/13/96	240	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--	--	--	--	--
	9/16/96	720	70	ND<0.5	1.0	5.1	ND<5	--	--	--	--	--	--	--	--
	12/2/96	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--	--	--	--	--
	3/7/97	600	6.7	ND<0.5	1.2	1.8	ND<5	--	--	--	--	--	--	--	--
	6/12/97	18,000	180	800	410	1,800	ND<5	--	--	--	--	--	--	--	--
	9/29/97	350	120	1.5	ND<0.5	12	ND<5	--	--	--	--	--	--	--	--
	12/1/97	ND<50	7.0	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--	--	--	--	--
	3/19/98	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--	--	--	--	--
	5/29/98	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--	--	--	--	--
	9/15/98	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--	--	--	--	--
	11/30/98	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--	--	--	--	--
	1/17/99	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--	--	--	--	--
	6/10/99	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--	--	--	--	--
	9/7/99	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--	--	--	--	--
	12/13/99	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--	--	--	--	--
	3/13/00	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--	--	--	--	--
	6/12/00	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--	--	--	--	--
	11/10/00	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--	--	--	--
	12/31/00	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--	--	--	--
	3/27/01	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--	--	--	--
	6/30/01	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--	--	--	--
	9/26/01	90	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--	--	--	--
	12/18/01	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--	--	--	--
	11/4/04	4,500	2.5	5.8	79	140	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5

TABLE D-1

HISTORICAL GROUNDWATER ANALYTICAL RESULTS
TESORO - LIVERMORE, 67076

Monitoring Well	Sample Date[a]	TPHg[b] (ug/l)	Benzene[b] (ug/l)	Toluene[b] (ug/l)	Ethylbenzene[b] (ug/l)	Xylenes[b] (ug/l)	MTBE[b] (ug/l)	DIPE[b] (ug/l)	ETBE[b] (ug/l)	TAME[b] (ug/l)	TBA[b] (ug/l)	Methanol[b] (ug/l)	Ethanol[b] (ug/l)	1,2-DCA[b] (ug/l)	EDB[b] (ug/l)
MW-1 (cont.)	1/12/05	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	ND<50	ND<5	ND<0.5	ND<0.5
	5/2/05	78	0.80	0.70	0.86	2.4	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<40	ND<5	ND<0.5	ND<0.5
	7/19/05	290	ND<0.5	ND<0.5	4.0	4.1	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	11/21/05	370	ND<0.5	ND<0.5	0.75	1.3	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	2/9/06	140	ND<0.5	ND<0.5	0.67	1.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	5/16/06	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	ND<50	ND<5	ND<0.5	ND<0.5
	8/9/06	100	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	11/8/06	400	ND<0.5	ND<0.5	1.7	1.9	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	2/14/07	410	ND<0.5	ND<0.5	2.2	2.2	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	5/17/07	2,300	ND<0.5	0.66	17	21	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<8	--	--
	8/2/07	580	5.7	0.64	6.8	12	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	11/12/07	750	0.85	2.7	4.2	9.3	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<20	ND<0.5	ND<0.5
	2/14/08	1,700	3.3	17	38	83	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	5/8/08	620	1.8	ND<0.5	12	12	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	7/23/08	270	0.52	ND<0.5	3.9	1.8	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<80	ND<5	ND<0.5	ND<0.5
MW-2	6/1/93	170,000	20,000	21,000	3,300	18,000	--	--	--	--	--	--	--	--	--
	6/22/93	160,000	19,000	22,000	3,500	18,000	--	--	--	--	--	--	--	--	--
	10/6/93	110,000	17,000	17,000	3,000	15,000	--	--	--	--	--	--	--	--	--
	1/13/94	93,000	20,000	19,000	2,300	14,000	--	--	--	--	--	--	--	--	--
	3/30/94	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	4/25/94	41,000	9,600	7,300	840	7,800	--	--	--	--	--	--	--	--	--
	8/12/94	59,000	11,000	11,000	2,300	11,000	--	--	--	--	--	--	--	--	--
	12/14/94	63,000	13,000	13,000	2,200	12,000	--	--	--	--	--	--	--	--	--
	2/10/95	63,000	12,000	12,000	2,200	11,000	--	--	--	--	--	--	--	--	--
	6/15/95	61,000	11,000	12,000	1,900	11,000	--	--	--	--	--	--	--	--	--
	9/26/95	61,000	9,400	11,000	2,300	12,000	--	--	--	--	--	--	--	--	--
	12/15/95	48,000	8,000	8,300	2,200	12,000	--	--	--	--	--	--	--	--	--
	3/21/96	48,000	8,000	7,700	2,400	12,000	--	--	--	--	--	--	--	--	--
	6/13/96	33,000	7,300	8,800	1,900	12,000	ND<250	--	--	--	--	--	--	--	--
	9/16/96	8,600	510	640	180	1,300	ND<250	--	--	--	--	--	--	--	--
	12/2/96	29,000	4,400	4,000	1,300	6,100	ND<130	--	--	--	--	--	--	--	--
	3/7/97	13,000	1,800	1,100	270	2,000	ND<250	--	--	--	--	--	--	--	--
	6/12/97	68,000	7,800	6,600	2,300	11,000	ND<500	--	--	--	--	--	--	--	--
	9/29/97	15,000	1,500	97	740	1,800	ND<250	--	--	--	--	--	--	--	--
	12/1/97	13,000	900	37	860	2,400	ND<250	--	--	--	--	--	--	--	--
	3/19/98	42,000	5,000	3,600	2,000	8,300	ND<250	--	--	--	--	--	--	--	--
	5/29/98	68,000	5,600	4,700	2,400	11,000	ND<250	--	--	--	--	--	--	--	--
	9/15/98	36,000	3,900	1,200	1,400	7,800	ND<250	--	--	--	--	--	--	--	--

TABLE D-1

HISTORICAL GROUNDWATER ANALYTICAL RESULTS
TESORO - LIVERMORE, 67076

Monitoring Well	Sample Date[a]	TPHg[b] (ug/l)	Benzene[b] (ug/l)	Toluene[b] (ug/l)	Ethylbenzene[b] (ug/l)	Xylenes[b] (ug/l)	MTBE[b] (ug/l)	DIPE[b] (ug/l)	ETBE[b] (ug/l)	TAME[b] (ug/l)	TBA[b] (ug/l)	Methanol[b] (ug/l)	Ethanol[b] (ug/l)	1,2-DCA[b] (ug/l)	EDB[b] (ug/l)
MW-2 (cont.)	11/30/98	16,000	2,200	59	1,200	1,500	ND<250	--	--	--	--	--	--	--	--
	1/17/99	30,000	4,000	2,200	2,100	9,500	ND<250	--	--	--	--	--	--	--	--
	6/10/99	70,000	6,300	1,800	3,600	14,000	ND<500	--	--	--	--	--	--	--	--
	9/7/99	42,000	3,800	840	1,900	8,000	150	--	--	--	--	--	--	--	--
	12/13/99	14,000	1,400	87	690	110	34	--	--	--	--	--	--	--	--
	3/13/00	38,000	2,400	2,300	1,600	6,400	2,400	--	--	--	--	--	--	--	--
	6/12/00	56,000	4,000	950	2,300	7,200	ND<50	--	--	--	--	--	--	--	--
	11/10/00	35,000	5,100	850	1,500	3,200	230	--	--	--	--	--	--	--	--
	12/31/00	21,000	3,200	420	1,300	1,200	440	--	--	--	--	--	--	--	--
	3/27/01	3,500	420	64	16	280	120	--	--	--	--	--	--	--	--
	6/30/01	1,200	88	4.5	65	37	29	--	--	--	--	--	--	--	--
	9/26/01	53,000	8,500	1,500	2,400	4,600	270	--	--	--	--	--	--	--	--
	12/18/01	26,000	5,400	900	1,500	2,200	430	--	--	--	--	--	--	--	--
	1/22/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/18/02	4,200	240	7.3	200	53	89	--	--	--	--	--	--	--	--
	6/5/02	25,000	3,500	390	1,400	2,400	550	--	--	--	--	--	--	--	--
	8/21/02	10,000	1,200	32	620	300	160	--	--	--	--	--	--	--	--
	12/3/02	3,700	110	2.5	130	11	29	--	--	--	--	--	--	--	--
	3/4/03	8,700	1,100	77	350	540	230	ND<0.5	ND<0.5	ND<10	21	ND<150	ND<5	ND<0.5	ND<0.5
	6/10/03	6,300	660	35	190	120	410	ND<2.5	ND<2.5	ND<5	ND<25	ND<250	ND<25	ND<2.5	ND<2.5
	9/9/03	6,900	500	ND<20	360	29	9,500	ND<20	ND<20	60	ND<200	ND<2,000	ND<200	ND<20	ND<20
	12/23/03	22,000	4,900	1,300	720	2,300	1,700	ND<20	ND<20	21	ND<200	ND<2,000	ND<200	ND<20	ND<20
	3/23/04	45,000	5,200	1,500	1,800	5,000	750	ND<20	ND<20	34	ND<200	ND<2,000	ND<200	ND<20	ND<20
	5/10/04	7,300	1,000	51	240	290	1,800	ND<5	ND<5	14	ND<50	ND<500	ND<50	ND<5	ND<5
	8/4/04	45,000	7,200	1,900	1,800	5,100	2,500	ND<25	ND<25	31	ND<250	ND<2,500	ND<250	ND<25	ND<25
	11/4/04	27,000	4,400	1,100	840	2,200	3,500	ND<9	ND<9	29	ND<50	ND<900	ND<90	ND<9	ND<9
	1/12/05	16,000	1,900	640	570	1,500	1,900	ND<4	ND<4	19	28[e]	ND<400	ND<40	ND<4	ND<4
	5/2/05	44,000	5,200	1,100	1,800	4,800	2,200	ND<20	ND<20	30	ND<200	ND<2,000	ND<200	ND<20	ND<20
	7/20/05	21,000	3,000	500	1,000	1,500	4,400	ND<7	ND<7	32	74[e]	ND<700	ND<70	ND<7	ND<7
	11/22/05	33,000	4,400	880	1,200	2,600	2,200	ND<9	ND<9	19	480	ND<900	ND<90	ND<9	ND<9
	2/9/06	25,000	3,300	720	1,300	2,200	2,500	ND<7	ND<7	27	490	ND<700	ND<70	ND<7	ND<7
	5/17/06	22,000	3,200	240	1,200	2,100	4,600	ND<7	ND<7	46	1,000	ND<700	ND<70	ND<7	ND<7
	8/9/06	34,000	4,200	830	1,300	2,400	2,900	ND<9	ND<9	25	1,600	ND<900	ND<90	ND<9	ND<9
	11/8/06	27,000	3,600	300	1,200	1,800	1,500	ND<9	ND<9	15	1,100	ND<900	ND<90	ND<9	ND<9
	2/14/07	36,000	4,600	740	1,600	2,100	1,800	ND<5	ND<5	20	910	ND<700	ND<50	ND<5	ND<5
	5/17/07	37,000	7,400	680	1,900	2,400	3,000	ND<9	ND<9	24	2,600	ND<4,000	ND<90	--	--
	8/2/07	37,000	4,200	500	1,800	2,200	1,300	ND<9	ND<9	18	1,200	ND<2,000	ND<90	ND<9	ND<9

TABLE D-1

HISTORICAL GROUNDWATER ANALYTICAL RESULTS
TESORO - LIVERMORE, 67076

Monitoring Well	Sample Date[a]	TPHg[b] (ug/l)	Benzene[b] (ug/l)	Toluene[b] (ug/l)	Ethylbenzene[b] (ug/l)	Xylenes[b] (ug/l)	MTBE[b] (ug/l)	DIPE[b] (ug/l)	ETBE[b] (ug/l)	TAME[b] (ug/l)	TBA[b] (ug/l)	Methanol[b] (ug/l)	Ethanol[b] (ug/l)	1,2-DCA[b] (ug/l)	EDB[b] (ug/l)
MW-2 (cont.)	11/12/07	25,000	5,900	120	1,700	820	1,400	ND<15	ND<15	16	720	ND<1,500	ND<150	ND<15	ND<15
	2/14/08	31,000	5,400	450	1,900	2,000	1,200	ND<15	ND<15	16	410	ND<1,500	ND<150	ND<15	ND<15
	5/8/08	29,000	3,200	620	1,400	1,700	580	ND<5	ND<5	10	210	ND<1,000	ND<50	ND<5	ND<5
	7/23/08	25,000	3,800	220	1,600	1,000	780	ND<5	ND<5	14	470	ND<900	ND<50	ND<5	ND<5
MW-3	6/1/93	270	4.6	ND<0.5	ND<0.5	1.9	--	--	--	--	--	--	--	--	--
	6/22/93	160	8.2	ND<0.5	ND<0.5	0.72	--	--	--	--	--	--	--	--	--
	10/6/93	740	57	110	24	120	--	--	--	--	--	--	--	--	--
	1/13/94	83	2.6	0.67	0.78	4.2	--	--	--	--	--	--	--	--	--
	3/30/94	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	4/25/94	60	0.75	3.2	0.50	3.6	--	--	--	--	--	--	--	--	--
	8/12/94	310	7.3	14	2.6	13	--	--	--	--	--	--	--	--	--
	12/14/94	75	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--	--	--	--	--
	2/10/95	96	1.4	ND<0.5	ND<0.5	1.8	--	--	--	--	--	--	--	--	--
	6/15/95	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--	--	--	--	--
	9/26/95	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--	--	--	--	--
	12/15/95	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--	--	--	--	--
	11/4/04	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	6.4	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	1/12/05	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	4.4	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	5/2/05	140	ND<0.5	ND<0.5	ND<0.5	0.81	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	7/19/05	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.6	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	11/21/05	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	3.4	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	2/9/06	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	2.9	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	5/16/06	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	ND<50	ND<5	ND<0.5	ND<0.5
	8/9/06	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.4	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	11/8/06	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.71	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	2/14/07	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.4	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	5/17/07	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.54	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	--	--
	8/2/07	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	ND<50	ND<5	ND<0.5	ND<0.5
	11/12/07	190	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	ND<50	ND<5	ND<0.5	ND<0.5
	2/14/08	240	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.83	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	5/8/08	57	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	ND<50	ND<5	ND<0.5	ND<0.5
	7/23/08	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	ND<50	ND<5	ND<0.5	ND<0.5
MW-4	3/30/94	120	4.2	15	2.5	26	--	--	--	--	--	--	--	--	--
	4/25/94	65	ND<0.5	1.8	ND<0.5	2.1	--	--	--	--	--	--	--	--	--
	8/12/94	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--	--	--	--	--
	12/14/94	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--	--	--	--	--
	2/10/95	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--	--	--	--	--
	6/15/95	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--	--	--	--	--
	9/26/95	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--	--	--	--	--

TABLE D-1

HISTORICAL GROUNDWATER ANALYTICAL RESULTS
TESORO - LIVERMORE, 67076

Monitoring Well	Sample Date[a]	TPHg[b] (ug/l)	Benzene[b] (ug/l)	Toluene[b] (ug/l)	Ethylbenzene[b] (ug/l)	Xylenes[b] (ug/l)	MTBE[b] (ug/l)	DIPE[b] (ug/l)	ETBE[b] (ug/l)	TAME[b] (ug/l)	TBA[b] (ug/l)	Methanol[b] (ug/l)	Ethanol[b] (ug/l)	1,2-DCA[b] (ug/l)	EDB[b] (ug/l)
MW-4 (cont.)	12/15/95	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--	--	--	--	--
	11/4/04	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	ND<50	ND<5	ND<0.5	ND<0.5
	1/12/05	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	ND<50	ND<5	ND<0.5	ND<0.5
	5/2/05	ND<50	1.8	1.1	1.4	4.4	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	7/19/05	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	ND<50	ND<5	ND<0.5	ND<0.5
	11/21/05	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	ND<50	ND<5	ND<0.5	ND<0.5
	2/9/06	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	ND<50	ND<5	ND<0.5	ND<0.5
	5/16/06	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	ND<50	ND<5	ND<0.5	ND<0.5
	8/9/06	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	ND<50	ND<5	ND<0.5	ND<0.5
	11/8/06	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	ND<50	ND<5	ND<0.5	ND<0.5
	2/14/07	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	ND<50	ND<5	ND<0.5	ND<0.5
	5/17/07	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	ND<50	ND<5	--	--
	8/2/07	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	ND<50	ND<5	ND<0.5	ND<0.5
	11/12/07	NS[f]	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/14/08	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	ND<50	ND<5	ND<0.5	ND<0.5
	5/8/08	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	7/23/08	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	ND<50	ND<5	ND<0.5	ND<0.5
MW-5	3/30/94	7,500	1,300	20	ND<13	160	--	--	--	--	--	--	--	--	--
	4/25/94	6,500	1,100	41	130	740	--	--	--	--	--	--	--	--	--
	8/12/94	4,000	420	2.9	41	98	--	--	--	--	--	--	--	--	--
	12/14/94	4,800	660	ND<2.5	33	13	--	--	--	--	--	--	--	--	--
	2/10/95	5,200	490	ND<13	23	19	--	--	--	--	--	--	--	--	--
	6/15/95	460	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--	--	--	--	--
	9/26/95	1,400	61	ND<0.5	3.1	ND<0.5	--	--	--	--	--	--	--	--	--
	12/15/95	2,100	77	1.5	10	1.5	--	--	--	--	--	--	--	--	--
	3/21/96	930	35	2.0	2.0	18	--	--	--	--	--	--	--	--	--
	6/13/96	610	38	0.72	1.9	2.0	ND<5	--	--	--	--	--	--	--	--
	9/16/96	380	29	ND<0.5	0.95	ND<0.5	ND<5	--	--	--	--	--	--	--	--
	12/2/96	200	1.1	0.64	ND<0.5	ND<0.5	ND<5	--	--	--	--	--	--	--	--
	3/7/97	520	74	ND<0.5	0.58	1.5	ND<5	--	--	--	--	--	--	--	--
	6/12/97	140	5.3	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--	--	--	--	--
	9/29/97	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--	--	--	--	--
	12/1/97	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--	--	--	--	--
	3/19/98	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--	--	--	--	--
	5/29/98	540	4.1	ND<0.5	ND<0.5	0.52	ND<5	--	--	--	--	--	--	--	--
	9/15/98	67	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--	--	--	--	--
	11/30/98	430	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--	--	--	--	--
	1/17/99	500	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--	--	--	--	--

TABLE D-1

HISTORICAL GROUNDWATER ANALYTICAL RESULTS
TESORO - LIVERMORE, 67076

Monitoring Well	Sample Date[a]	TPHg[b] (ug/l)	Benzene[b] (ug/l)	Toluene[b] (ug/l)	Ethylbenzene[b] (ug/l)	Xylenes[b] (ug/l)	MTBE[b] (ug/l)	DIPE[b] (ug/l)	ETBE[b] (ug/l)	TAME[b] (ug/l)	TBA[b] (ug/l)	Methanol[b] (ug/l)	Ethanol[b] (ug/l)	1,2-DCA[b] (ug/l)	EDB[b] (ug/l)
MW-5 (cont.)	6/10/99	66	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--	--	--	--	--
	9/7/99	820	46	1.7	10	21	ND<5	--	--	--	--	--	--	--	--
	12/13/99	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--	--	--	--	--
	3/13/00	270	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--	--	--	--	--
	6/12/00	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	--	--	--	--	--	--	--	--
	11/10/00	2,200	42	1.1	25	30	8.6	--	--	--	--	--	--	--	--
	12/31/00	1,300	21	ND<0.5	4.3	2.6	10	--	--	--	--	--	--	--	--
	3/27/01	1,200	11	ND<0.5	2.6	ND<0.5	21	--	--	--	--	--	--	--	--
	6/30/01	1,400	4.8	ND<0.5	1.5	0.56	14	--	--	--	--	--	--	--	--
	9/26/01	660	ND<0.5	ND<0.5	ND<0.5	ND<0.5	3.0	--	--	--	--	--	--	--	--
	12/18/01	240	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--	--	--	--
	1/22/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/18/02	890	0.65	ND<0.5	ND<0.5	ND<0.5	3.1	--	--	--	--	--	--	--	--
	6/5/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	8/21/02	2,100	20	ND<0.5	63	4.0	7.0	--	--	--	--	--	--	--	--
	12/3/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/4/03	490	10	ND<0.5	2.2	ND<0.5	1.0	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	6/10/03	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	9/9/03	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	ND<50	ND<5	ND<0.5	ND<0.5
	12/23/03	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/23/04	440	2.3	ND<0.5	1.0	5.9	2.4	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	5/10/04	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	8/4/04	160	ND<0.5	ND<0.5	ND<0.5	0.71	0.94	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	11/4/04	290	0.74	ND<0.5	0.58	1.3	0.61	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	1/12/05	300	ND<0.5	ND<0.5	0.51	1.6	0.73	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	5/2/05	120	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	ND<50	ND<5	ND<0.5	ND<0.5
	7/20/05	330	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	ND<50	ND<5	ND<0.5	ND<0.5
	11/21/05	210	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	ND<50	ND<5	ND<0.5	ND<0.5
	2/9/06	ND<50	ND<0.5	ND<0.5	0.63	1.0	1.0	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	5/16/06	140	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.79	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	8/9/06	220	ND<0.5	ND<0.5	ND<0.5	ND<0.5	7.8	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	11/8/06	120	ND<0.5	ND<0.5	ND<0.5	ND<0.5	2.4	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	2/14/07	200	ND<0.5	ND<0.5	ND<0.5	1.1	2.1	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	5/17/07	140	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.4	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	--	--
	8/2/07	85	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	ND<50	ND<5	ND<0.5	ND<0.5
	11/12/07	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/14/08	980	ND<0.5	ND<0.5	2.1	ND<0.5	1.0	ND<0.5	ND<0.5	ND<0.5	34	ND<50	ND<5	ND<0.5	ND<0.5
	5/8/08	580	ND<0.5	ND<0.5	1.8	ND<0.5	0.60	ND<0.5	ND<0.5	ND<0.5	6.1	ND<50	ND<5	ND<0.5	ND<0.5
	7/23/08	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

TABLE D-1

HISTORICAL GROUNDWATER ANALYTICAL RESULTS
TESORO - LIVERMORE, 67076

Monitoring Well	Sample Date[a]	TPHg[b] (ug/l)	Benzene[b] (ug/l)	Toluene[b] (ug/l)	Ethylbenzene[b] (ug/l)	Xylenes[b] (ug/l)	MTBE[b] (ug/l)	DIPE[b] (ug/l)	ETBE[b] (ug/l)	TAME[b] (ug/l)	TBA[b] (ug/l)	Methanol[b] (ug/l)	Ethanol[b] (ug/l)	1,2-DCA[b] (ug/l)	EDB[b] (ug/l)
MW-6	3/30/94	63,000	21,000	8,600	1,700	12,000	--	--	--	--	--	--	--	--	--
	4/25/94	77,000	22,000	12,000	2,300	16,000	--	--	--	--	--	--	--	--	--
	8/12/94	65,000	12,000	8,100	2,200	16,000	--	--	--	--	--	--	--	--	--
	12/14/94	65,000	18,000	9,500	2,200	14,000	--	--	--	--	--	--	--	--	--
	2/10/95	63,000	21,000	8,400	2,000	14,000	--	--	--	--	--	--	--	--	--
	6/15/95	75,000	20,000	11,000	2,100	15,000	--	--	--	--	--	--	--	--	--
	9/26/95	62,000	15,000	9,600	1,700	12,000	--	--	--	--	--	--	--	--	--
	12/15/95	61,000	15,000	9,000	2,300	15,000	--	--	--	--	--	--	--	--	--
	3/21/96	65,000	18,000	9,800	2,400	16,000	--	--	--	--	--	--	--	--	--
	6/13/96	29,000	8,600	3,300	2,200	12,000	ND<250	--	--	--	--	--	--	--	--
	9/16/96	42,000	6,400	1,800	2,100	11,000	ND<250	--	--	--	--	--	--	--	--
	12/2/96	28,000	3,000	1,100	970	8,300	ND<500	--	--	--	--	--	--	--	--
	3/7/97	12,000	2,000	190	520	2,300	ND<250	--	--	--	--	--	--	--	--
	6/12/97	37,000	3,900	470	1,600	6,200	ND<100	--	--	--	--	--	--	--	--
	9/29/97	34,000	3,500	370	1,600	5,200	ND<100	--	--	--	--	--	--	--	--
	12/1/97	20,000	2,100	ND<10	1,200	2,200	ND<100	--	--	--	--	--	--	--	--
	3/19/98	24,000	2,900	460	1,100	3,400	ND<100	--	--	--	--	--	--	--	--
	5/29/98	38,000	3,500	700	1,800	5,200	ND<100	--	--	--	--	--	--	--	--
	9/15/98	22,000	1,900	110	1,400	3,000	ND<100	--	--	--	--	--	--	--	--
	11/30/98	9,900	770	16	820	710	ND<100	--	--	--	--	--	--	--	--
	1/17/99	14,000	2,200	160	1,700	3,600	ND<100	--	--	--	--	--	--	--	--
	6/10/99	22,000	1,600	160	1,400	2,900	5.5	--	--	--	--	--	--	--	--
	9/7/99	17,000	1,400	33	1,300	1,800	ND<50	--	--	--	--	--	--	--	--
	12/13/99	16,000	790	9.2	840	780	ND<25	--	--	--	--	--	--	--	--
	3/13/00	16,000	790	85	780	1,600	ND<25	--	--	--	--	--	--	--	--
	6/12/00	24,000	1,100	150	1,300	2,300	5,600	--	--	--	--	--	--	--	--
	11/10/00	13,000	440	7.0	760	350	1,000	--	--	--	--	--	--	--	--
	12/31/00	12,000	680	8.0	820	190	1,400	--	--	--	--	--	--	--	--
	3/27/01	14,000	330	17	940	670	380	--	--	--	--	--	--	--	--
	6/30/01	750	45	0.93	47	14	54	--	--	--	--	--	--	--	--
	9/26/01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/18/01	43,000	3,800	350	1,900	3,000	900	--	--	--	--	--	--	--	--
	1/22/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/18/02	33,000	2,600	120	1,800	2,800	740	--	--	--	--	--	--	--	--
	6/5/02	10,000	1,100	16	700	180	600	--	--	--	--	--	--	--	--
	8/21/02	10,000	1,200	23	710	290	370	--	--	--	--	--	--	--	--
	12/3/02	16,000	1,700	63	970	630	1,500	--	--	--	--	--	--	--	--

TABLE D-1

HISTORICAL GROUNDWATER ANALYTICAL RESULTS
TESORO - LIVERMORE, 67076

Monitoring Well	Sample Date[a]	TPHg[b] (ug/l)	Benzene[b] (ug/l)	Toluene[b] (ug/l)	Ethylbenzene[b] (ug/l)	Xylenes[b] (ug/l)	MTBE[b] (ug/l)	DIPE[b] (ug/l)	ETBE[b] (ug/l)	TAME[b] (ug/l)	TBA[b] (ug/l)	Methanol[b] (ug/l)	Ethanol[b] (ug/l)	1,2-DCA[b] (ug/l)	EDB[b] (ug/l)
MW-6 (cont.)	3/4/03	16,000	1,700	25	1,200	40	7,700	ND<20	ND<20	ND<70	ND<200	ND<2,000	ND<200	ND<20	ND<20
	6/10/03	9,500	860	15	380	47	2,600	ND<5	ND<5	18	ND<50	ND<500	ND<50	ND<5	ND<5
	9/9/03	11,000	1,000	16	630	120	2,500	ND<5	ND<5	20	52	ND<500	ND<50	ND<5	ND<5
	12/23/03	18,000	2,100	41	1,100	390	4,900	ND<10	ND<10	42	ND<100	ND<1,000	ND<100	ND<10	ND<10
	3/23/04	24,000	1,400	71	1,500	2,000	7,500	ND<20	ND<20	66	ND<200	ND<2,000	ND<200	ND<20	ND<20
	5/10/04	6,500	550	ND<10	71	43	3,700	ND<10	ND<10	31	ND<100	ND<1,000	ND<100	ND<10	ND<10
	8/4/04	8,200	990	19	300	120	3,300	ND<5	ND<5	23	ND<50	ND<500	ND<50	ND<5	ND<5
	11/4/04	9,600	1,100	30	320	160	2,200	ND<4	ND<4	18	22	ND<400	ND<40	ND<4	ND<4
	1/12/05	12,000	1,100	34	600	500	3,600	ND<4	ND<4	31	30	ND<400	ND<40	ND<4	ND<4
	5/2/05	14,000	630	22	610	920	4,000	ND<10	ND<10	32	120	ND<3,000	ND<100	ND<10	ND<10
	7/20/05	9,800	1,200	21	340	150	1800	ND<2.5	ND<2.5	14	140	ND<500	ND<25	ND<2.5	ND<2.5
	11/21/05	6,600	150	26	580	640	100	ND<1	ND<1	ND<1	13	ND<100	ND<10	ND<1	ND<1
	2/9/06	7,100	340	11	370	360	910	ND<2	ND<2	9.3	120	ND<200	ND<20	ND<2	ND<2
	5/17/06	7,100	270	5.1	320	290	930	ND<2	ND<2	8.4	260	ND<200	ND<20	ND<2	ND<2
	8/9/06	5,800	440	7.5	120	45	670	ND<2	ND<2	7.3	380	ND<2,000	ND<50	ND<2	ND<2
	11/8/06	9,200	990	37	390	140	310	ND<2	ND<2	3.2	110	ND<200	ND<20	ND<2	ND<2
	2/14/07	5,900	480	10	73	23	1,600	ND<2	ND<2	14	1,100	ND<500	ND<20	ND<2	ND<2
	5/17/07	3,700	240	3.4	30	10	770	ND<0.5	ND<0.5	9.2	800	ND<2,000	ND<5	--	--
	8/2/07	15,000	1,800	120	980	510	310	ND<2.5	ND<2.5	3.	180	ND<250	ND<25	ND<2.5	ND<2.5
	11/12/07	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/14/08	14,000	2,000	63	750	190	810	ND<2.5	ND<2.5	7.7	600	ND<250	ND<25	ND<2.5	ND<2.5
	5/8/08	15,000	1,700	59	700	130	540	ND<2.5	ND<2.5	5.9	410	ND<2,000	ND<25	ND<2.5	ND<2.5
	7/23/08	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-7	3/30/94	43,000	7,200	2,400	1,600	11,000	--	--	--	--	--	--	--	--	--
	4/25/94	30,000	3,900	1,000	940	6,900	--	--	--	--	--	--	--	--	--
	8/12/94	30,000	3,800	1,400	1,300	7,500	--	--	--	--	--	--	--	--	--
	12/14/94	31,000	3,600	1,200	900	6,400	--	--	--	--	--	--	--	--	--
	2/10/95	27,000	4,000	900	890	5,100	--	--	--	--	--	--	--	--	--
	6/15/95	17,000	920	680	740	4,100	--	--	--	--	--	--	--	--	--
	9/26/95	7,000	200	150	170	810	--	--	--	--	--	--	--	--	--
	12/15/95	11,000	350	170	540	1,900	--	--	--	--	--	--	--	--	--
	3/21/96	12,000	320	100	730	2,500	--	--	--	--	--	--	--	--	--
	6/13/96	5,900	98	19	370	620	ND<50	--	--	--	--	--	--	--	--
	9/16/96	7,800	140	43	440	590	ND<25	--	--	--	--	--	--	--	--
	12/2/96	6,300	87	29	290	430	ND<50	--	--	--	--	--	--	--	--
	3/7/97	4,500	35	19	360	470	ND<25	--	--	--	--	--	--	--	--
	6/12/97	3,900	29	5.2	170	48	ND<5	--	--	--	--	--	--	--	--
	9/29/97	6,100	56	9.0	340	190	ND<25	--	--	--	--	--	--	--	--
	12/1/97	6,500	24	ND<2.5	400	250	ND<25	--	--	--	--	--	--	--	--

TABLE D-1

HISTORICAL GROUNDWATER ANALYTICAL RESULTS
TESORO - LIVERMORE, 67076

Monitoring Well	Sample Date[a]	TPHg[b] (ug/l)	Benzene[b] (ug/l)	Toluene[b] (ug/l)	Ethylbenzene[b] (ug/l)	Xylenes[b] (ug/l)	MTBE[b] (ug/l)	DIPE[b] (ug/l)	ETBE[b] (ug/l)	TAME[b] (ug/l)	TBA[b] (ug/l)	Methanol[b] (ug/l)	Ethanol[b] (ug/l)	1,2-DCA[b] (ug/l)	EDB[b] (ug/l)
MW-7 (cont.)	3/19/98	2,000	20	ND<2.5	73	79	ND<25	--	--	--	--	--	--	--	--
	5/29/98	5,700	22	7.3	290	350	ND<25	--	--	--	--	--	--	--	--
	9/15/98	1,700	15	ND<2.5	44	5.1	ND<25	--	--	--	--	--	--	--	--
	11/30/98	4,800	42	12	270	640	ND<25	--	--	--	--	--	--	--	--
	1/17/99	3,400	33	ND<5	200	190	ND<50	--	--	--	--	--	--	--	--
	6/10/99	1,700	7.8	1.5	23	4.1	ND<5	--	--	--	--	--	--	--	--
	9/7/99	1,900	9.7	2.1	70	2.9	ND<5	--	--	--	--	--	--	--	--
	12/13/99	1,900	8.0	1.1	10	1.1	ND<5	--	--	--	--	--	--	--	--
	3/13/00	1,500	7.5	ND<0.5	6.7	2.9	ND<5	--	--	--	--	--	--	--	--
	6/12/00	1,200	5.4	ND<0.5	5.2	1.0	ND<5	--	--	--	--	--	--	--	--
	11/10/00	1,000	3.9	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--	--	--	--
	12/31/00	620	1.8	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--	--	--	--	--
	3/27/01	1,200	4.8	ND<0.5	6.7	0.94	ND<0.5	--	--	--	--	--	--	--	--
	6/30/01	2,800	10	1.7	75	170	ND<0.5	--	--	--	--	--	--	--	--
	9/26/01	1,900	16	0.89	2.3	25	ND<0.5	--	--	--	--	--	--	--	--
	12/18/01	3,000	13	0.88	3.4	3.4	ND<0.5	--	--	--	--	--	--	--	--
	1/22/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/18/02	3,100	7.3	1.5	38	110	ND<0.5	--	--	--	--	--	--	--	--
	6/5/02	1,800	7.6	1.0	39	20	ND<0.5	--	--	--	--	--	--	--	--
	8/21/02	3,300	7.6	0.70	85	36	ND<0.5	--	--	--	--	--	--	--	--
	12/3/02	1,700	5.4	ND<0.5	15	5.5	ND<0.5	--	--	--	--	--	--	--	--
	3/4/03	440	1.8	ND<0.5	0.54	2.9	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	6/10/03	550	0.80	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	9/9/03	120	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	ND<50	ND<5	ND<0.5	ND<0.5
	12/23/03	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	ND<50	ND<5	ND<0.5	ND<0.5
	3/23/04	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	ND<50	ND<5	ND<0.5	ND<0.5
	5/10/04	67	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	ND<50	ND<5	ND<0.5	ND<0.5
	8/4/04	2,600	2.5	ND<0.5	36	31	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	11/4/04	1,600	2.	ND<0.5	16	16	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	1/12/05	830	1.6	ND<0.5	15	12	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	5/2/05	710	ND<0.5	ND<0.5	0.75	0.52	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	7/20/05	1,400	1.1	ND<0.5	9.2	8.6	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	11/21/05	1,100	0.6	ND<0.5	3.4	23	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	2/9/06	270	ND<0.5	ND<0.5	1.2	0.98	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	5/16/06	930	0.84	ND<0.5	10	7.9	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	8/9/06	650	ND<0.5	ND<0.5	1.2	1.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	11/8/06	800	ND<0.5	ND<0.5	1.0	0.62	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5

TABLE D-1

HISTORICAL GROUNDWATER ANALYTICAL RESULTS
TESORO - LIVERMORE, 67076

Monitoring Well	Sample Date[a]	TPHg[b] (ug/l)	Benzene[b] (ug/l)	Toluene[b] (ug/l)	Ethylbenzene[b] (ug/l)	Xylenes[b] (ug/l)	MTBE[b] (ug/l)	DIPE[b] (ug/l)	ETBE[b] (ug/l)	TAME[b] (ug/l)	TBA[b] (ug/l)	Methanol[b] (ug/l)	Ethanol[b] (ug/l)	1,2-DCA[b] (ug/l)	EDB[b] (ug/l)
MW-7 (cont.)	2/14/07	800	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	5/17/07	700	ND<0.5	ND<0.5	ND<0.5	0.71	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	--	--
	8/2/07	3,200	1.3	ND<0.5	50	120	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	11/12/07	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/14/08	1,600	1.2	ND<0.5	4.5	1.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	5/8/08	1,400	2.2	0.74	2.8	0.93	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	7/23/08	2,300	3.9	1.4	8.9	5.4	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
MW-8	9/5/03	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	--	--	--	--
	12/23/03	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	ND<50	7.3	ND<0.5	ND<0.5
	3/23/04	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	ND<50	ND<5	ND<0.5	ND<0.5
	5/10/04	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	ND<50	ND<5	ND<0.5	ND<0.5
	8/4/04	ND<50	ND<0.5	ND<0.5	ND<0.5	0.86	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	11/4/04	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	ND<50	ND<5	ND<0.5	ND<0.5
	1/12/05	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	ND<50	ND<5	ND<0.5	ND<0.5
	5/2/05	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	ND<50	ND<5	ND<0.5	ND<0.5
	7/19/05	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	ND<50	ND<5	ND<0.5	ND<0.5
	11/21/05	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	ND<50	ND<5	ND<0.5	ND<0.5
	2/9/06	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.57	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	5/16/06	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	ND<50	ND<5	ND<0.5	ND<0.5
	8/9/06	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	ND<50	ND<5	ND<0.5	ND<0.5
	11/8/06	ND<50	1.2	1.9	ND<0.5	0.66	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	2/14/07	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	ND<50	ND<5	ND<0.5	ND<0.5
	5/17/07	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	ND<50	ND<5	--	--
	8/2/07	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	ND<50	ND<5	ND<0.5	ND<0.5
	11/12/07	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/14/08	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	ND<50	ND<5	ND<0.5	ND<0.5
	5/8/08	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	7/23/08	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-9	9/5/03	3,400	23	1.5	110	10	10	ND<0.5[b]	ND<0.5	ND<0.5	ND<5	--	--	--	--
	12/23/03	1,100	2.4	ND<0.5	0.80	0.80	2.1	ND<0.5	ND<0.5	ND<0.5	5.9	ND<50	ND<5	ND<0.5	ND<0.5
	3/23/04	760	8.5	ND<0.5	4.9	0.95	18.00	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	5/10/04	1,100	4.4	ND<0.5	1.3	0.67	11	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	8/4/04	1,200	3.4	0.59	16	7.6	6.1	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	11/4/04	610	0.52	ND<0.5	1.3	ND<0.5	2	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	1/12/05	1,400	1.6	0.55	5.5	1.1	2.4	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	5/2/05	1,500	10	0.55	6.7	1.1	27	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	7/20/05	1,800	5.5	0.69	12	1.6	10	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	11/21/05	1,200	0.94	ND<0.5	1.4	ND<0.5	3.3	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	2/9/06	1,200	2.8	0.51	6.4	0.84	4.4	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5

TABLE D-1

HISTORICAL GROUNDWATER ANALYTICAL RESULTS
TESORO - LIVERMORE, 67076

Monitoring Well	Sample Date[a]	TPHg[b] (ug/l)	Benzene[b] (ug/l)	Toluene[b] (ug/l)	Ethylbenzene[b] (ug/l)	Xylenes[b] (ug/l)	MTBE[b] (ug/l)	DIPE[b] (ug/l)	ETBE[b] (ug/l)	TAME[b] (ug/l)	TBA[b] (ug/l)	Methanol[b] (ug/l)	Ethanol[b] (ug/l)	1,2-DCA[b] (ug/l)	EDB[b] (ug/l)
MW-9 (cont.)	5/16/06	1,600	3.8	0.57	12	1.8	4.9	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	8/9/06	760	ND<0.5	ND<0.5	1.	ND<0.5	2.6	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	11/8/06	1,700	1.7	0.53	6.7	1.4	1.7	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	2/14/07	1,000	ND<0.5	ND<0.5	0.51	ND<0.5	0.51	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	5/17/07	870	ND<0.5	ND<0.5	0.54	ND<0.5	0.93	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	--	--
	8/2/07	NS[f]	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/12/07	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/14/08	3,300	68	2.1	110	7.8	16	ND<0.5	ND<0.5	ND<0.5	13	ND<50	ND<5	ND<0.5	ND<0.5
	5/8/08	1,200	8.2	0.52	4.0	0.74	5.9	ND<0.5	ND<0.5	ND<0.5	5.4	ND<50	ND<5	ND<0.5	ND<0.5
	7/23/08	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-10	9/5/03	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	--	--	--	--
	12/23/03	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	ND<50	ND<5	ND<0.5	ND<0.5
	3/23/04	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	ND<50	ND<5	ND<0.5	ND<0.5
	5/10/04	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	ND<50	ND<5	ND<0.5	ND<0.5
	8/4/04	ND<50	ND<0.5	ND<0.5	ND<0.5	0.61	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	11/4/04	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	ND<50	ND<5	ND<0.5	ND<0.5
	1/12/05	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	ND<50	ND<5	ND<0.5	ND<0.5
	5/2/05	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	ND<50	ND<5	ND<0.5	ND<0.5
	7/19/05	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	ND<50	ND<5	ND<0.5	ND<0.5
	11/21/05	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	ND<50	ND<5	ND<0.5	ND<0.5
	2/9/06	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	ND<50	ND<5	ND<0.5	ND<0.5
	5/16/06	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	ND<50	ND<5	ND<0.5	ND<0.5
	8/9/06	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	ND<50	ND<5	ND<0.5	ND<0.5
	11/8/06	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	ND<50	ND<5	ND<0.5	ND<0.5
	2/14/07	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	ND<50	ND<5	ND<0.5	ND<0.5
	5/17/07	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	ND<50	ND<5	--	--
	8/2/07	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	ND<50	ND<5	ND<0.5	ND<0.5
	11/12/07	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/14/08	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	ND<50	ND<5	ND<0.5	ND<0.5
	5/8/08	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	7/23/08	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
VW-2	8/4/04	5,700	480	ND<20	600	ND<20	12,000	ND<20	ND<20	110	ND<90	ND<2,000	ND<200	ND<20	ND<20
	11/4/04	5,800	340	ND<20	38	ND<20	10,000	ND<20	ND<20	120	ND<90	ND<2,000	ND<200	ND<20	ND<20
	1/12/05	3,800	210	ND<5	90	54	2,900	ND<5	ND<5	33	26[e]	ND<500	ND<50	ND<5	ND<5
	5/2/05	2,600	84	ND<2	13	7.0	960	ND<2	ND<2	12	57	ND<500	ND<20	ND<2	ND<2
	7/20/05	6,200	240	13	290	480	6,600	ND<2	ND<2	56	59[e]	ND<2,000	ND<20	ND<2	ND<2
	11/21/05	3,100	100	ND<9	22	10	5,300	ND<9	ND<9	54	76[e]	ND<900	ND<90	ND<9	ND<9
	2/9/06	3,500	140	ND<25	130	36	12,000	ND<25	ND<25	65	2,800	ND<2,500	ND<250	ND<25	ND<25
	5/17/06	1,800	90	2.6	39	11	1,200	ND<2.5	ND<2.5	12	700	ND<250	ND<25	ND<2.5	ND<2.5

TABLE D-1

HISTORICAL GROUNDWATER ANALYTICAL RESULTS
TESORO - LIVERMORE, 67076

Monitoring Well	Sample Date[a]	TPHg[b] (ug/l)	Benzene[b] (ug/l)	Toluene[b] (ug/l)	Ethylbenzene[b] (ug/l)	Xylenes[b] (ug/l)	MTBE[b] (ug/l)	DIPE[b] (ug/l)	ETBE[b] (ug/l)	TAME[b] (ug/l)	TBA[b] (ug/l)	Methanol[b] (ug/l)	Ethanol[b] (ug/l)	1,2-DCA[b] (ug/l)	EDB[b] (ug/l)
W-2 (cont.)	8/9/06	4,300	86	3.5	200	16.	2,500	ND<2.5	ND<2.5	28	2,800	ND<5,000	ND<25	ND<2.5	ND<2.5
	11/8/06	3,200	46.	3.1	10.	4.8	1,500	ND<3	ND<3	11	7,100	ND<800	ND<30	ND<3	ND<3
	2/14/07	3,300	75	4.6	50	82	580	ND<2	ND<2	7.	4,100	ND<500	ND<20	ND<2	ND<2
	5/17/07	3,500	51	7.3	17	24	100	ND<2.5	ND<2.5	ND<2.5	7,100	ND<250	ND<25	--	--
	8/2/07	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/12/07	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/14/08	5,700	180	14	150	120	530	ND<2.5	ND<2.5	4.1	5,000	ND<250	ND<25	ND<2.5	ND<2.5
	5/8/08	3,000	40	3.8	32	34	270	ND<1.5	ND<1.5	2.7	4,500	ND<250	ND<15	ND<1.5	ND<1.5
	7/23/08	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
VW-3	8/4/04	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	ND<50	ND<5	ND<0.5	ND<0.5
	11/4/04	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	ND<50	ND<5	ND<0.5	ND<0.5
	1/12/05	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	ND<50	ND<5	ND<0.5	ND<0.5
	5/2/05	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	ND<50	ND<5	ND<0.5	ND<0.5
	7/20/05	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	ND<50	ND<5	ND<0.5	ND<0.5
	11/21/05	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	ND<50	ND<5	ND<0.5	ND<0.5
	2/9/06	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	ND<50	ND<5	ND<0.5	ND<0.5
	5/16/06	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	ND<50	ND<5	ND<0.5	ND<0.5
	8/9/06	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	ND<50	ND<5	ND<0.5	ND<0.5
	11/8/06	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	ND<50	ND<5	ND<0.5	ND<0.5
	2/14/07	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	ND<50	ND<5	ND<0.5	ND<0.5
	5/17/07	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	ND<50	ND<5	--	--
	8/2/07	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	ND<50	ND<5	ND<0.5	ND<0.5
	11/12/07	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/14/08	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	5/8/08	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	7/23/08	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
TP-1	7/20/05	42,000	2,800	1,100	1,700	4,800	12,000	ND<20	ND<20	92	130	ND<2,000	ND<200	ND<20	ND<20
	11/22/05	36,000	2,100	290	1,400	2,600	11,000	ND<20	ND<20	70	810	ND<2,000	ND<200	ND<20	ND<20
	2/9/06	19,000	1,400	230	990	1,700	8,900	ND<15	ND<15	72	2,200	ND<1,500	ND<150	ND<15	ND<15
	5/17/06	20,000	1,400	200	920	1,800	9,200	ND<20	ND<20	37	2,500	ND<10,000	ND<200	ND<20	ND<20
	8/9/06	28,000	1,600	150	1,200	2,200	13,000	ND<15	ND<15	84	4,900	ND<2,500	ND<150	ND<15	ND<15
	11/8/06	20,000	1,100	78	990	1,600	6800	ND<15	ND<15	47	4,400	ND<8,000	ND<150	ND<15	ND<15
	2/14/07	15,000	820	37	810	1,000	8,300	ND<15	ND<15	58	8,500	ND<4,000	ND<150	ND<15	ND<15
	5/17/07	16,000	850	35	810	1,200	6,700	ND<10	ND<10	42	12,000	ND<2,000	ND<100	--	--
	8/2/07	15,000	2,000	100	970	630	3,400	ND<7	ND<7	25	4,000	ND<700	ND<70	ND<7	ND<7
	11/12/07	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/14/08	18,000	1,100	49	1,200	910	7,000	ND<15	ND<15	58	4,200	ND<1,500	ND<150	ND<15	ND<15
	5/8/08	12,000	890	54	770	380	2,500	ND<5	ND<5	22	3,400	ND<2,500	ND<50	ND<5	ND<5
	7/23/08	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

TABLE D-1

HISTORICAL GROUNDWATER ANALYTICAL RESULTS
TESORO - LIVERMORE, 67076

Monitoring Well	Sample Date[a]	TPHg[b] (ug/l)	Benzene[b] (ug/l)	Toluene[b] (ug/l)	Ethylbenzene[b] (ug/l)	Xylenes[b] (ug/l)	MTBE[b] (ug/l)	DIPE[b] (ug/l)	ETBE[b] (ug/l)	TAME[b] (ug/l)	TBA[b] (ug/l)	Methanol[b] (ug/l)	Ethanol[b] (ug/l)	1,2-DCA[b] (ug/l)	EDB[b] (ug/l)
TP-2	7/20/05	26,000	1,800	1,100	1,100	2,500	63,000	ND<150	ND<150	400	ND<700	ND<15,000	ND<1,500	ND<150	ND<150
	11/22/05	16,000	1,200	140	840	820	52,000	ND<90	ND<90	340	1,200	ND<9,000	ND<900	ND<90	ND<90
	2/9/06	2,700	94	2.9	28	14	1,200	ND<2.5	ND<2.5	13	1,600	ND<250	ND<25	ND<2.5	ND<2.5
	5/17/06	31,000	2,200	1,100	1,500	3,300	87,000	ND<90	ND<90	680	4,800	ND<15,000	ND<1,500	ND<90	ND<90
	8/9/06	14,000	1,400	86	1,200	830	56,000	ND<2.5	ND<2.5	350	2,800	ND<4,000	ND<25	ND<2.5	ND<2.5
	11/8/06	16,000	1,300	ND<90	930	370	38,000	ND<90	ND<90	280	3,600	ND<40,000	ND<900	ND<90	ND<90
	2/14/07	22,000	1,900	230	1,700	1,600	53,000	ND<90	ND<90	400	2,800	ND<20,000	ND<900	ND<90	ND<90
	5/17/07	ND<25,000	2,400	51	1,500	510	69,000	ND<2	ND<0.5	550	4,300	ND<25,000	ND<5	--	--
	8/2/07	10,000	1,200	ND<25	640	140	14,000	ND<25	ND<25	110	16,000	ND<10,000	ND<250	ND<25	ND<25
	11/12/07	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/14/08	12,000	920	28	850	740	17,000	ND<25	ND<25	120	5,900	ND<4,000	ND<250	ND<25	ND<25
	5/8/08	7,400	710	10	510	110	6,400	ND<8	ND<8	64	5,200	ND<12,000	ND<80	ND<8	ND<8
	7/23/08	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
DW-1	5/22/08	5,100	470	150	210	570	100	ND<0.9	ND<0.9	0.98	76	ND<90	ND<9	ND<0.9	ND<0.9
	7/23/08	560	43	5.2	18	40	16	ND<0.5	ND<0.5	ND<0.5	21	ND<100	ND<5	ND<0.5	ND<0.5
DW-2	5/22/08	11,000	1,300	170	460	230	620	ND<2.5	ND<2.5	9.6	870	ND<400	ND<25	ND<2.5	ND<2.5
	7/23/08	7,600	980	44	180	55	420	ND<2	ND<2	5.7	720	ND<200	ND<20	ND<2	ND<2
DW-3	5/22/08	4,700	8.7	2.1	120	200	0.86	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	7/23/08	2,800	8.1	1.4	94	100	2.8	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
DW-4	5/22/08	1,200	4.2	8.6	16	200	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
	7/23/08	91	0.79	ND<0.5	6.5	7.4	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5	ND<50	ND<5	ND<0.5	ND<0.5
MW-A	1/17/99	5,800	1,700	85	65	320	ND<5	--	--	--	--	--	--	--	--
MW-B	1/17/99	4,400	240	30	21	39	ND<5	--	--	--	--	--	--	--	--
MW-C	1/17/99	1,800	0.80	ND<0.5	ND<0.5	0.55	ND<5	--	--	--	--	--	--	--	--
MW-D	1/17/99	5,600	1,600	130	66	220	ND<5	--	--	--	--	--	--	--	--
MW-E	1/17/99	5,700	1,600	180	180	310	ND<50	--	--	--	--	--	--	--	--
	6/10/99	5,000	1,300	130	320	450	ND<25	--	--	--	--	--	--	--	--
MW-W	1/17/99	23,000	7,600	760	1,400	5,000	ND<50	--	--	--	--	--	--	--	--
	6/10/99	16,000	4,100	420	1,300	4,000	ND<50	--	--	--	--	--	--	--	--

(a) Samples collected before July 2005 collected by others; data provided by Delta Environmental Consultants, Inc., Second Quarter 2005 Groundwater Monitoring Report dated 31 July 2005.

(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), 1,2-dichloroethane (1,2-DCA), and 1,2-dibromoethane (EDB) analyzed by EPA Method 8260; reported in micrograms per liter (ug/l).

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

(d) "-" Not analyzed.

(e) TBA results may be biased slightly high. A fraction of MTBE (typically less than 10 percent) converts to TBA during the analysis of water samples. This conversion effect is considered to be mathematically significant in samples that contain MTBE/TBA ratios of over 20:1.

(f) Not sampled; well dry during sampling event.

ATTACHMENT E

LABORATORY ANALYTICAL REPORTS AND CHAIN-OF-CUSTODY FORMS

KIFF Analytical LLC

Report Number : 63855
Date : 07/30/2008

Mike Purchase
Arctos Environmental
1332 Peralta Avenue
Berkeley, CA 94702

Subject : 16 Water Samples
Project Name : Tesoro - Livermore
Project Number : 01LV

Dear Mr. Purchase,

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

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

Sincerely,

Joel Kiff

KIFF Analytical LLC

Report Number : 63855
Date : 07/30/2008

Subject : 16 Water Samples
Project Name : Tesoro - Livermore
Project Number : 01LV

Case Narrative

The Method Reporting Limit for Methanol has been increased due to the presence of an interfering compound for samples IP-6, MW-1 and DW-1.

Matrix Spike/Matrix Spike Duplicate results associated with sample IP-3 for the analyte Toluene were outside of control limits. This may indicate a bias for the sample that was spiked. Since the LCS recoveries were within control limits, no data are flagged.

KIFF Analytical LLC

Report Number : 63855
Date : 07/30/2008

Project Name : **Tesoro - Livermore**
Project Number : **01LV**

Sample : **IP-2** Matrix : Water Lab Number : 63855-01
Sample Date :07/23/2008

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**160**	0.90	ug/L	EPA 8260B	07/29/2008
Toluene	**43**	0.90	ug/L	EPA 8260B	07/29/2008
Ethylbenzene	**130**	0.90	ug/L	EPA 8260B	07/29/2008
Total Xylenes	**350**	0.90	ug/L	EPA 8260B	07/29/2008
Methyl-t-butyl ether (MTBE)	**10**	0.90	ug/L	EPA 8260B	07/29/2008
Diisopropyl ether (DIPE)	**< 0.90**	0.90	ug/L	EPA 8260B	07/29/2008
Ethyl-t-butyl ether (ETBE)	**< 0.90**	0.90	ug/L	EPA 8260B	07/29/2008
Tert-amyl methyl ether (TAME)	**< 0.90**	0.90	ug/L	EPA 8260B	07/29/2008
Tert-Butanol	**< 5.0**	5.0	ug/L	EPA 8260B	07/29/2008
Methanol	**< 90**	90	ug/L	EPA 8260B	07/29/2008
Ethanol	**< 9.0**	9.0	ug/L	EPA 8260B	07/29/2008
TPH as Gasoline	**5500**	90	ug/L	EPA 8260B	07/29/2008
1,2-Dichloroethane	**< 0.90**	0.90	ug/L	EPA 8260B	07/29/2008
1,2-Dibromoethane	**< 0.90**	0.90	ug/L	EPA 8260B	07/29/2008
1,2-Dichloroethane-d4 (Surr)	96.2		% Recovery	EPA 8260B	07/29/2008
Toluene - d8 (Surr)	98.0		% Recovery	EPA 8260B	07/29/2008

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Project Name : **Tesoro - Livermore**
Project Number : **01LV**

Sample : **IP-3** Matrix : Water Lab Number : 63855-02
Sample Date :07/23/2008

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**23**	0.50	ug/L	EPA 8260B	07/28/2008
Toluene	**14**	0.50	ug/L	EPA 8260B	07/28/2008
Ethylbenzene	**7.5**	0.50	ug/L	EPA 8260B	07/28/2008
Total Xylenes	**90**	0.50	ug/L	EPA 8260B	07/28/2008
Methyl-t-butyl ether (MTBE)	**32**	0.50	ug/L	EPA 8260B	07/28/2008
Diisopropyl ether (DIPE)	**< 0.50**	0.50	ug/L	EPA 8260B	07/28/2008
Ethyl-t-butyl ether (ETBE)	**< 0.50**	0.50	ug/L	EPA 8260B	07/28/2008
Tert-amyl methyl ether (TAME)	**< 0.50**	0.50	ug/L	EPA 8260B	07/28/2008
Tert-Butanol	**32**	5.0	ug/L	EPA 8260B	07/28/2008
Methanol	**< 50**	50	ug/L	EPA 8260B	07/28/2008
Ethanol	**< 5.0**	5.0	ug/L	EPA 8260B	07/28/2008
TPH as Gasoline	**1100**	50	ug/L	EPA 8260B	07/28/2008
1,2-Dichloroethane	**< 0.50**	0.50	ug/L	EPA 8260B	07/28/2008
1,2-Dibromoethane	**< 0.50**	0.50	ug/L	EPA 8260B	07/28/2008
1,2-Dichloroethane-d4 (Surr)	100		% Recovery	EPA 8260B	07/28/2008
Toluene - d8 (Surr)	105		% Recovery	EPA 8260B	07/28/2008

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Report Number : 63855
Date : 07/30/2008

Project Name : **Tesoro - Livermore**
Project Number : **01LV**

Sample : **IP-4** Matrix : Water Lab Number : 63855-03
Sample Date :07/23/2008

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**130**	1.5	ug/L	EPA 8260B	07/29/2008
Toluene	**45**	1.5	ug/L	EPA 8260B	07/29/2008
Ethylbenzene	**240**	1.5	ug/L	EPA 8260B	07/29/2008
Total Xylenes	**750**	1.5	ug/L	EPA 8260B	07/29/2008
Methyl-t-butyl ether (MTBE)	**940**	1.5	ug/L	EPA 8260B	07/29/2008
Diisopropyl ether (DIPE)	**< 1.5**	1.5	ug/L	EPA 8260B	07/29/2008
Ethyl-t-butyl ether (ETBE)	**< 1.5**	1.5	ug/L	EPA 8260B	07/29/2008
Tert-amyl methyl ether (TAME)	**6.9**	1.5	ug/L	EPA 8260B	07/29/2008
Tert-Butanol	**890**	7.0	ug/L	EPA 8260B	07/29/2008
Methanol	**< 150**	150	ug/L	EPA 8260B	07/29/2008
Ethanol	**< 15**	15	ug/L	EPA 8260B	07/29/2008
TPH as Gasoline	**7600**	150	ug/L	EPA 8260B	07/29/2008
1,2-Dichloroethane	**< 1.5**	1.5	ug/L	EPA 8260B	07/29/2008
1,2-Dibromoethane	**< 1.5**	1.5	ug/L	EPA 8260B	07/29/2008
1,2-Dichloroethane-d4 (Surr)	98.8		% Recovery	EPA 8260B	07/29/2008
Toluene - d8 (Surr)	97.5		% Recovery	EPA 8260B	07/29/2008

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Project Name : **Tesoro - Livermore**
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Sample : **IP-6** Matrix : Water Lab Number : 63855-04
Sample Date :07/23/2008

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**260**	0.50	ug/L	EPA 8260B	07/29/2008
Toluene	**78**	0.50	ug/L	EPA 8260B	07/29/2008
Ethylbenzene	**98**	0.50	ug/L	EPA 8260B	07/29/2008
Total Xylenes	**340**	0.50	ug/L	EPA 8260B	07/29/2008
Methyl-t-butyl ether (MTBE)	**180**	0.50	ug/L	EPA 8260B	07/29/2008
Diisopropyl ether (DIPE)	**< 0.50**	0.50	ug/L	EPA 8260B	07/29/2008
Ethyl-t-butyl ether (ETBE)	**< 0.50**	0.50	ug/L	EPA 8260B	07/29/2008
Tert-amyl methyl ether (TAME)	**1.6**	0.50	ug/L	EPA 8260B	07/29/2008
Tert-Butanol	**190**	5.0	ug/L	EPA 8260B	07/29/2008
Methanol	**< 80**	80	ug/L	EPA 8260B	07/29/2008
Ethanol	**< 9.0**	9.0	ug/L	EPA 8260B	07/29/2008
TPH as Gasoline	**4400**	50	ug/L	EPA 8260B	07/29/2008
1,2-Dichloroethane	**< 0.50**	0.50	ug/L	EPA 8260B	07/29/2008
1,2-Dibromoethane	**< 0.50**	0.50	ug/L	EPA 8260B	07/29/2008
1,2-Dichloroethane-d4 (Surr)	98.8		% Recovery	EPA 8260B	07/29/2008
Toluene - d8 (Surr)	104		% Recovery	EPA 8260B	07/29/2008

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Report Number : 63855
Date : 07/30/2008

Project Name : **Tesoro - Livermore**
Project Number : **01LV**

Sample : **IP-7** Matrix : Water Lab Number : 63855-05
Sample Date :07/23/2008

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**190**	0.90	ug/L	EPA 8260B	07/29/2008
Toluene	**12**	0.90	ug/L	EPA 8260B	07/29/2008
Ethylbenzene	**99**	0.90	ug/L	EPA 8260B	07/29/2008
Total Xylenes	**190**	0.90	ug/L	EPA 8260B	07/29/2008
Methyl-t-butyl ether (MTBE)	**49**	0.90	ug/L	EPA 8260B	07/29/2008
Diisopropyl ether (DIPE)	**< 0.90**	0.90	ug/L	EPA 8260B	07/29/2008
Ethyl-t-butyl ether (ETBE)	**< 0.90**	0.90	ug/L	EPA 8260B	07/29/2008
Tert-amyl methyl ether (TAME)	**1.1**	0.90	ug/L	EPA 8260B	07/29/2008
Tert-Butanol	**58**	5.0	ug/L	EPA 8260B	07/29/2008
Methanol	**< 90**	90	ug/L	EPA 8260B	07/29/2008
Ethanol	**< 9.0**	9.0	ug/L	EPA 8260B	07/29/2008
TPH as Gasoline	**4200**	90	ug/L	EPA 8260B	07/29/2008
1,2-Dichloroethane	**< 0.90**	0.90	ug/L	EPA 8260B	07/29/2008
1,2-Dibromoethane	**< 0.90**	0.90	ug/L	EPA 8260B	07/29/2008
1,2-Dichloroethane-d4 (Surr)	96.9		% Recovery	EPA 8260B	07/29/2008
Toluene - d8 (Surr)	99.2		% Recovery	EPA 8260B	07/29/2008

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Date : 07/30/2008

Project Name : **Tesoro - Livermore**
Project Number : **01LV**

Sample : **MW-1** Matrix : Water Lab Number : 63855-06
Sample Date :07/23/2008

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**0.52**	0.50	ug/L	EPA 8260B	07/25/2008
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	07/25/2008
Ethylbenzene	**3.9**	0.50	ug/L	EPA 8260B	07/25/2008
Total Xylenes	**1.8**	0.50	ug/L	EPA 8260B	07/25/2008
Methyl-t-butyl ether (MTBE)	**< 0.50**	0.50	ug/L	EPA 8260B	07/25/2008
Diisopropyl ether (DIPE)	**< 0.50**	0.50	ug/L	EPA 8260B	07/25/2008
Ethyl-t-butyl ether (ETBE)	**< 0.50**	0.50	ug/L	EPA 8260B	07/25/2008
Tert-amyl methyl ether (TAME)	**< 0.50**	0.50	ug/L	EPA 8260B	07/25/2008
Tert-Butanol	**< 5.0**	5.0	ug/L	EPA 8260B	07/25/2008
Methanol	**< 80**	80	ug/L	EPA 8260B	07/25/2008
Ethanol	**< 5.0**	5.0	ug/L	EPA 8260B	07/25/2008
TPH as Gasoline	**270**	50	ug/L	EPA 8260B	07/25/2008
1,2-Dichloroethane	**< 0.50**	0.50	ug/L	EPA 8260B	07/25/2008
1,2-Dibromoethane	**< 0.50**	0.50	ug/L	EPA 8260B	07/25/2008
1,2-Dichloroethane-d4 (Surr)	97.6		% Recovery	EPA 8260B	07/25/2008
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	07/25/2008

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Date : 07/30/2008

Project Name : **Tesoro - Livermore**

Project Number : **01LV**

Sample : **MW-4** Matrix : Water Lab Number : 63855-07

Sample Date :07/23/2008

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	07/26/2008
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	07/26/2008
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	07/26/2008
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	07/26/2008
Methyl-t-butyl ether (MTBE)	**< 0.50**	0.50	ug/L	EPA 8260B	07/26/2008
Diisopropyl ether (DIPE)	**< 0.50**	0.50	ug/L	EPA 8260B	07/26/2008
Ethyl-t-butyl ether (ETBE)	**< 0.50**	0.50	ug/L	EPA 8260B	07/26/2008
Tert-amyl methyl ether (TAME)	**< 0.50**	0.50	ug/L	EPA 8260B	07/26/2008
Tert-Butanol	**< 5.0**	5.0	ug/L	EPA 8260B	07/26/2008
Methanol	**< 50**	50	ug/L	EPA 8260B	07/26/2008
Ethanol	**< 5.0**	5.0	ug/L	EPA 8260B	07/26/2008
TPH as Gasoline	**< 50**	50	ug/L	EPA 8260B	07/26/2008
1,2-Dichloroethane	**< 0.50**	0.50	ug/L	EPA 8260B	07/26/2008
1,2-Dibromoethane	**< 0.50**	0.50	ug/L	EPA 8260B	07/26/2008
1,2-Dichloroethane-d4 (Surr)	102		% Recovery	EPA 8260B	07/26/2008
Toluene - d8 (Surr)	104		% Recovery	EPA 8260B	07/26/2008

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Date : 07/30/2008

Project Name : **Tesoro - Livermore**
Project Number : **01LV**

Sample : **MW-3** Matrix : Water Lab Number : 63855-08
Sample Date :07/23/2008

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	07/25/2008
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	07/25/2008
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	07/25/2008
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	07/25/2008
Methyl-t-butyl ether (MTBE)	**< 0.50**	0.50	ug/L	EPA 8260B	07/25/2008
Diisopropyl ether (DIPE)	**< 0.50**	0.50	ug/L	EPA 8260B	07/25/2008
Ethyl-t-butyl ether (ETBE)	**< 0.50**	0.50	ug/L	EPA 8260B	07/25/2008
Tert-amyl methyl ether (TAME)	**< 0.50**	0.50	ug/L	EPA 8260B	07/25/2008
Tert-Butanol	**< 5.0**	5.0	ug/L	EPA 8260B	07/25/2008
Methanol	**< 50**	50	ug/L	EPA 8260B	07/25/2008
Ethanol	**< 5.0**	5.0	ug/L	EPA 8260B	07/25/2008
TPH as Gasoline	**< 50**	50	ug/L	EPA 8260B	07/25/2008
1,2-Dichloroethane	**< 0.50**	0.50	ug/L	EPA 8260B	07/25/2008
1,2-Dibromoethane	**< 0.50**	0.50	ug/L	EPA 8260B	07/25/2008
1,2-Dichloroethane-d4 (Surr)	101		% Recovery	EPA 8260B	07/25/2008
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	07/25/2008

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Project Name : **Tesoro - Livermore**
Project Number : **01LV**

Sample : **MW-7** Matrix : Water Lab Number : 63855-09
Sample Date :07/23/2008

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**3.9**	0.50	ug/L	EPA 8260B	07/26/2008
Toluene	**1.4**	0.50	ug/L	EPA 8260B	07/26/2008
Ethylbenzene	**8.9**	0.50	ug/L	EPA 8260B	07/26/2008
Total Xylenes	**5.4**	0.50	ug/L	EPA 8260B	07/26/2008
Methyl-t-butyl ether (MTBE)	**< 0.50**	0.50	ug/L	EPA 8260B	07/26/2008
Diisopropyl ether (DIPE)	**< 0.50**	0.50	ug/L	EPA 8260B	07/26/2008
Ethyl-t-butyl ether (ETBE)	**< 0.50**	0.50	ug/L	EPA 8260B	07/26/2008
Tert-amyl methyl ether (TAME)	**< 0.50**	0.50	ug/L	EPA 8260B	07/26/2008
Tert-Butanol	**< 5.0**	5.0	ug/L	EPA 8260B	07/26/2008
Methanol	**< 50**	50	ug/L	EPA 8260B	07/26/2008
Ethanol	**< 5.0**	5.0	ug/L	EPA 8260B	07/26/2008
TPH as Gasoline	**2300**	50	ug/L	EPA 8260B	07/26/2008
1,2-Dichloroethane	**< 0.50**	0.50	ug/L	EPA 8260B	07/26/2008
1,2-Dibromoethane	**< 0.50**	0.50	ug/L	EPA 8260B	07/26/2008
1,2-Dichloroethane-d4 (Surr)	99.1		% Recovery	EPA 8260B	07/26/2008
Toluene - d8 (Surr)	103		% Recovery	EPA 8260B	07/26/2008

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Project Name : **Tesoro - Livermore**
Project Number : **01LV**

Sample : **IP-1** Matrix : Water Lab Number : 63855-10
Sample Date :07/23/2008

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**2100**	15	ug/L	EPA 8260B	07/29/2008
Toluene	**6800**	15	ug/L	EPA 8260B	07/29/2008
Ethylbenzene	**2700**	15	ug/L	EPA 8260B	07/29/2008
Total Xylenes	**11000**	15	ug/L	EPA 8260B	07/29/2008
Methyl-t-butyl ether (MTBE)	**16**	15	ug/L	EPA 8260B	07/29/2008
Diisopropyl ether (DIPE)	**< 15**	15	ug/L	EPA 8260B	07/29/2008
Ethyl-t-butyl ether (ETBE)	**< 15**	15	ug/L	EPA 8260B	07/29/2008
Tert-amyl methyl ether (TAME)	**< 15**	15	ug/L	EPA 8260B	07/29/2008
Tert-Butanol	**< 70**	70	ug/L	EPA 8260B	07/29/2008
Methanol	**< 1500**	1500	ug/L	EPA 8260B	07/29/2008
Ethanol	**< 150**	150	ug/L	EPA 8260B	07/29/2008
TPH as Gasoline	**62000**	1500	ug/L	EPA 8260B	07/29/2008
1,2-Dichloroethane	**< 15**	15	ug/L	EPA 8260B	07/29/2008
1,2-Dibromoethane	**< 15**	15	ug/L	EPA 8260B	07/29/2008
1,2-Dichloroethane-d4 (Surr)	101		% Recovery	EPA 8260B	07/29/2008
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	07/29/2008

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Date : 07/30/2008

Project Name : **Tesoro - Livermore**
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Sample : **IP-5** Matrix : Water Lab Number : 63855-11
Sample Date :07/23/2008

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**3.0**	0.50	ug/L	EPA 8260B	07/29/2008
Toluene	**17**	0.50	ug/L	EPA 8260B	07/29/2008
Ethylbenzene	**5.1**	0.50	ug/L	EPA 8260B	07/29/2008
Total Xylenes	**31**	0.50	ug/L	EPA 8260B	07/29/2008
Methyl-t-butyl ether (MTBE)	**4.4**	0.50	ug/L	EPA 8260B	07/29/2008
Diisopropyl ether (DIPE)	**< 0.50**	0.50	ug/L	EPA 8260B	07/29/2008
Ethyl-t-butyl ether (ETBE)	**< 0.50**	0.50	ug/L	EPA 8260B	07/29/2008
Tert-amyl methyl ether (TAME)	**< 0.50**	0.50	ug/L	EPA 8260B	07/29/2008
Tert-Butanol	**< 5.0**	5.0	ug/L	EPA 8260B	07/29/2008
Methanol	**< 50**	50	ug/L	EPA 8260B	07/29/2008
Ethanol	**< 5.0**	5.0	ug/L	EPA 8260B	07/29/2008
TPH as Gasoline	**2000**	50	ug/L	EPA 8260B	07/29/2008
(Note: Primarily compounds not found in typical Gasoline)					
1,2-Dichloroethane	**< 0.50**	0.50	ug/L	EPA 8260B	07/29/2008
1,2-Dibromoethane	**< 0.50**	0.50	ug/L	EPA 8260B	07/29/2008
1,2-Dichloroethane-d4 (Surr)	102		% Recovery	EPA 8260B	07/29/2008
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	07/29/2008

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Project Name : **Tesoro - Livermore**
Project Number : **01LV**

Sample : **DW-4** Matrix : Water Lab Number : 63855-12
Sample Date :07/23/2008

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**0.79**	0.50	ug/L	EPA 8260B	07/25/2008
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	07/25/2008
Ethylbenzene	**6.5**	0.50	ug/L	EPA 8260B	07/25/2008
Total Xylenes	**7.4**	0.50	ug/L	EPA 8260B	07/25/2008
Methyl-t-butyl ether (MTBE)	**< 0.50**	0.50	ug/L	EPA 8260B	07/25/2008
Diisopropyl ether (DIPE)	**< 0.50**	0.50	ug/L	EPA 8260B	07/25/2008
Ethyl-t-butyl ether (ETBE)	**< 0.50**	0.50	ug/L	EPA 8260B	07/25/2008
Tert-amyl methyl ether (TAME)	**< 0.50**	0.50	ug/L	EPA 8260B	07/25/2008
Tert-Butanol	**< 5.0**	5.0	ug/L	EPA 8260B	07/25/2008
Methanol	**< 50**	50	ug/L	EPA 8260B	07/25/2008
Ethanol	**< 5.0**	5.0	ug/L	EPA 8260B	07/25/2008
TPH as Gasoline	**91**	50	ug/L	EPA 8260B	07/25/2008
1,2-Dichloroethane	**< 0.50**	0.50	ug/L	EPA 8260B	07/25/2008
1,2-Dibromoethane	**< 0.50**	0.50	ug/L	EPA 8260B	07/25/2008
1,2-Dichloroethane-d4 (Surr)	107		% Recovery	EPA 8260B	07/25/2008
Toluene - d8 (Surr)	105		% Recovery	EPA 8260B	07/25/2008

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Project Name : **Tesoro - Livermore**
Project Number : **01LV**

Sample : **DW-3** Matrix : Water Lab Number : 63855-13
Sample Date :07/23/2008

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**8.1**	0.50	ug/L	EPA 8260B	07/24/2008
Toluene	**1.4**	0.50	ug/L	EPA 8260B	07/24/2008
Ethylbenzene	**94**	0.50	ug/L	EPA 8260B	07/24/2008
Total Xylenes	**100**	0.50	ug/L	EPA 8260B	07/24/2008
Methyl-t-butyl ether (MTBE)	**2.8**	0.50	ug/L	EPA 8260B	07/24/2008
Diisopropyl ether (DIPE)	**< 0.50**	0.50	ug/L	EPA 8260B	07/24/2008
Ethyl-t-butyl ether (ETBE)	**< 0.50**	0.50	ug/L	EPA 8260B	07/24/2008
Tert-amyl methyl ether (TAME)	**< 0.50**	0.50	ug/L	EPA 8260B	07/24/2008
Tert-Butanol	**< 5.0**	5.0	ug/L	EPA 8260B	07/24/2008
Methanol	**< 50**	50	ug/L	EPA 8260B	07/24/2008
Ethanol	**< 5.0**	5.0	ug/L	EPA 8260B	07/24/2008
TPH as Gasoline	**2800**	50	ug/L	EPA 8260B	07/24/2008
1,2-Dichloroethane	**< 0.50**	0.50	ug/L	EPA 8260B	07/24/2008
1,2-Dibromoethane	**< 0.50**	0.50	ug/L	EPA 8260B	07/24/2008
1,2-Dichloroethane-d4 (Surr)	96.2		% Recovery	EPA 8260B	07/24/2008
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	07/24/2008

KIFF Analytical LLC

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Project Name : **Tesoro - Livermore**
Project Number : **01LV**

Sample : **DW-2** Matrix : Water Lab Number : 63855-14
Sample Date :07/23/2008

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**980**	2.0	ug/L	EPA 8260B	07/30/2008
Toluene	**44**	2.0	ug/L	EPA 8260B	07/30/2008
Ethylbenzene	**180**	2.0	ug/L	EPA 8260B	07/30/2008
Total Xylenes	**55**	2.0	ug/L	EPA 8260B	07/30/2008
Methyl-t-butyl ether (MTBE)	**420**	2.0	ug/L	EPA 8260B	07/30/2008
Diisopropyl ether (DIPE)	**< 2.0**	2.0	ug/L	EPA 8260B	07/30/2008
Ethyl-t-butyl ether (ETBE)	**< 2.0**	2.0	ug/L	EPA 8260B	07/30/2008
Tert-amyl methyl ether (TAME)	**5.7**	2.0	ug/L	EPA 8260B	07/30/2008
Tert-Butanol	**720**	9.0	ug/L	EPA 8260B	07/30/2008
Methanol	**< 200**	200	ug/L	EPA 8260B	07/30/2008
Ethanol	**< 20**	20	ug/L	EPA 8260B	07/30/2008
TPH as Gasoline	**7600**	200	ug/L	EPA 8260B	07/30/2008
1,2-Dichloroethane	**< 2.0**	2.0	ug/L	EPA 8260B	07/30/2008
1,2-Dibromoethane	**< 2.0**	2.0	ug/L	EPA 8260B	07/30/2008
1,2-Dichloroethane-d4 (Surr)	99.5		% Recovery	EPA 8260B	07/30/2008
Toluene - d8 (Surr)	105		% Recovery	EPA 8260B	07/30/2008

KIFF Analytical LLC

Report Number : 63855
Date : 07/30/2008

Project Name : **Tesoro - Livermore**
Project Number : **01LV**

Sample : **MW-2** Matrix : Water Lab Number : 63855-15
Sample Date :07/23/2008

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**3800**	9.0	ug/L	EPA 8260B	07/25/2008
Toluene	**220**	5.0	ug/L	EPA 8260B	07/24/2008
Ethylbenzene	**1600**	5.0	ug/L	EPA 8260B	07/24/2008
Total Xylenes	**1000**	5.0	ug/L	EPA 8260B	07/24/2008
Methyl-t-butyl ether (MTBE)	**780**	5.0	ug/L	EPA 8260B	07/24/2008
Diisopropyl ether (DIPE)	**< 5.0**	5.0	ug/L	EPA 8260B	07/24/2008
Ethyl-t-butyl ether (ETBE)	**< 5.0**	5.0	ug/L	EPA 8260B	07/24/2008
Tert-amyl methyl ether (TAME)	**14**	5.0	ug/L	EPA 8260B	07/24/2008
Tert-Butanol	**470**	25	ug/L	EPA 8260B	07/24/2008
Methanol	**< 900**	900	ug/L	EPA 8260B	07/25/2008
Ethanol	**< 50**	50	ug/L	EPA 8260B	07/24/2008
TPH as Gasoline	**25000**	500	ug/L	EPA 8260B	07/24/2008
1,2-Dichloroethane	**< 5.0**	5.0	ug/L	EPA 8260B	07/24/2008
1,2-Dibromoethane	**< 5.0**	5.0	ug/L	EPA 8260B	07/24/2008
1,2-Dichloroethane-d4 (Surr)	98.1		% Recovery	EPA 8260B	07/24/2008
Toluene - d8 (Surr)	99.9		% Recovery	EPA 8260B	07/24/2008

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Date : 07/30/2008

Project Name : **Tesoro - Livermore**
Project Number : **01LV**

Sample : **DW-1** Matrix : Water Lab Number : 63855-16
Sample Date :07/23/2008

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**43**	0.50	ug/L	EPA 8260B	07/25/2008
Toluene	**5.2**	0.50	ug/L	EPA 8260B	07/25/2008
Ethylbenzene	**18**	0.50	ug/L	EPA 8260B	07/25/2008
Total Xylenes	**40**	0.50	ug/L	EPA 8260B	07/25/2008
Methyl-t-butyl ether (MTBE)	**16**	0.50	ug/L	EPA 8260B	07/25/2008
Diisopropyl ether (DIPE)	**< 0.50**	0.50	ug/L	EPA 8260B	07/25/2008
Ethyl-t-butyl ether (ETBE)	**< 0.50**	0.50	ug/L	EPA 8260B	07/25/2008
Tert-amyl methyl ether (TAME)	**< 0.50**	0.50	ug/L	EPA 8260B	07/25/2008
Tert-Butanol	**21**	5.0	ug/L	EPA 8260B	07/25/2008
Methanol	**< 100**	100	ug/L	EPA 8260B	07/25/2008
Ethanol	**< 5.0**	5.0	ug/L	EPA 8260B	07/25/2008
TPH as Gasoline	**560**	50	ug/L	EPA 8260B	07/25/2008
1,2-Dichloroethane	**< 0.50**	0.50	ug/L	EPA 8260B	07/25/2008
1,2-Dibromoethane	**< 0.50**	0.50	ug/L	EPA 8260B	07/25/2008
1,2-Dichloroethane-d4 (Surr)	102		% Recovery	EPA 8260B	07/25/2008
Toluene - d8 (Surr)	95.1		% Recovery	EPA 8260B	07/25/2008

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Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Toluene	< 0.50	0.50	ug/L	EPA 8260B	07/24/2008
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	07/24/2008
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	07/24/2008
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	07/24/2008
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	07/24/2008
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	07/24/2008
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	07/24/2008
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	07/24/2008
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	07/24/2008
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	07/24/2008
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	07/24/2008
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	07/24/2008
1,2-Dichloroethane-d4 (Surr)	98.0		%	EPA 8260B	07/24/2008
Toluene - d8 (Surr)	99.0		%	EPA 8260B	07/24/2008
Benzene	< 0.50	0.50	ug/L	EPA 8260B	07/25/2008
Toluene	< 0.50	0.50	ug/L	EPA 8260B	07/25/2008
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	07/25/2008
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	07/25/2008
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	07/25/2008
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	07/25/2008
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	07/25/2008
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	07/25/2008
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	07/25/2008
Methanol	< 50	50	ug/L	EPA 8260B	07/25/2008
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	07/25/2008
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	07/25/2008
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	07/25/2008
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	07/25/2008
1,2-Dichloroethane-d4 (Surr)	98.4		%	EPA 8260B	07/25/2008
Toluene - d8 (Surr)	101		%	EPA 8260B	07/25/2008

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	07/28/2008
Toluene	< 0.50	0.50	ug/L	EPA 8260B	07/28/2008
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	07/28/2008
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	07/28/2008
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	07/28/2008
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	07/28/2008
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	07/28/2008
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	07/28/2008
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	07/28/2008
Methanol	< 50	50	ug/L	EPA 8260B	07/28/2008
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	07/28/2008
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	07/28/2008
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	07/28/2008
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	07/28/2008
1,2-Dichloroethane-d4 (Surr)	95.2		%	EPA 8260B	07/28/2008
Toluene - d8 (Surr)	102		%	EPA 8260B	07/28/2008
Benzene	< 0.50	0.50	ug/L	EPA 8260B	07/25/2008
Toluene	< 0.50	0.50	ug/L	EPA 8260B	07/25/2008
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	07/25/2008
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	07/25/2008
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	07/25/2008
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	07/25/2008
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	07/25/2008
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	07/25/2008
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	07/25/2008
Methanol	< 50	50	ug/L	EPA 8260B	07/25/2008
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	07/25/2008
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	07/25/2008
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	07/25/2008
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	07/25/2008
1,2-Dichloroethane-d4 (Surr)	102		%	EPA 8260B	07/25/2008
Toluene - d8 (Surr)	95.1		%	EPA 8260B	07/25/2008

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Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	07/24/2008
Toluene	< 0.50	0.50	ug/L	EPA 8260B	07/24/2008
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	07/24/2008
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	07/24/2008
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	07/24/2008
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	07/24/2008
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	07/24/2008
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	07/24/2008
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	07/24/2008
Methanol	< 50	50	ug/L	EPA 8260B	07/24/2008
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	07/24/2008
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	07/24/2008
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	07/24/2008
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	07/24/2008
1,2-Dichloroethane-d4 (Surr)	102		%	EPA 8260B	07/24/2008
Toluene - d8 (Surr)	103		%	EPA 8260B	07/24/2008

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	07/25/2008
Toluene	< 0.50	0.50	ug/L	EPA 8260B	07/25/2008
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	07/25/2008
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	07/25/2008
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	07/25/2008
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	07/25/2008
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	07/25/2008
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	07/25/2008
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	07/25/2008
Methanol	< 50	50	ug/L	EPA 8260B	07/25/2008
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	07/25/2008
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	07/25/2008
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	07/25/2008
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	07/25/2008
1,2-Dichloroethane-d4 (Surr)	101		%	EPA 8260B	07/25/2008
Toluene - d8 (Surr)	104		%	EPA 8260B	07/25/2008

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	07/25/2008
Toluene	< 0.50	0.50	ug/L	EPA 8260B	07/25/2008
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	07/25/2008
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	07/25/2008
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	07/25/2008
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	07/25/2008
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	07/25/2008
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	07/25/2008
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	07/25/2008
Methanol	< 50	50	ug/L	EPA 8260B	07/25/2008
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	07/25/2008
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	07/25/2008
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	07/25/2008
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	07/25/2008
1,2-Dichloroethane-d4 (Surr)	104		%	EPA 8260B	07/25/2008
Toluene - d8 (Surr)	100		%	EPA 8260B	07/25/2008

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	07/28/2008
Toluene	< 0.50	0.50	ug/L	EPA 8260B	07/28/2008
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	07/28/2008
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	07/28/2008
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	07/28/2008
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	07/28/2008
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	07/28/2008
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	07/28/2008
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	07/28/2008
Methanol	< 50	50	ug/L	EPA 8260B	07/28/2008
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	07/28/2008
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	07/28/2008
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	07/28/2008
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	07/28/2008
1,2-Dichloroethane-d4 (Surr)	105		%	EPA 8260B	07/28/2008
Toluene - d8 (Surr)	98.9		%	EPA 8260B	07/28/2008

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Date : 07/30/2008

QC Report : Method Blank Data

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Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	07/28/2008
Toluene	< 0.50	0.50	ug/L	EPA 8260B	07/28/2008
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	07/28/2008
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	07/28/2008
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	07/28/2008
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	07/28/2008
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	07/28/2008
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	07/28/2008
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	07/28/2008
Methanol	< 50	50	ug/L	EPA 8260B	07/28/2008
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	07/28/2008
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	07/28/2008
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	07/28/2008
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	07/28/2008
1,2-Dichloroethane-d4 (Surr)	104		%	EPA 8260B	07/28/2008
Toluene - d8 (Surr)	99.8		%	EPA 8260B	07/28/2008

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	07/30/2008
Toluene	< 0.50	0.50	ug/L	EPA 8260B	07/30/2008
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	07/30/2008
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	07/30/2008
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	07/30/2008
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	07/30/2008
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	07/30/2008
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	07/30/2008
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	07/30/2008
Methanol	< 50	50	ug/L	EPA 8260B	07/30/2008
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	07/30/2008
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	07/30/2008
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	07/30/2008
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	07/30/2008
1,2-Dichloroethane-d4 (Surr)	100		%	EPA 8260B	07/30/2008
Toluene - d8 (Surr)	103		%	EPA 8260B	07/30/2008

Benzene	< 0.50	0.50	ug/L	EPA 8260B	07/29/2008
Toluene	< 0.50	0.50	ug/L	EPA 8260B	07/29/2008
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	07/29/2008
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	07/29/2008
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	07/29/2008
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	07/29/2008
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	07/29/2008
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	07/29/2008
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	07/29/2008
Methanol	< 50	50	ug/L	EPA 8260B	07/29/2008
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	07/29/2008
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	07/29/2008
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	07/29/2008
1,2-Dichloroethane-d4 (Surr)	100		%	EPA 8260B	07/29/2008
Toluene - d8 (Surr)	103		%	EPA 8260B	07/29/2008

Report Number : 63855

QC Report : Matrix Spike/ Matrix Spike Duplicate

Date : 07/30/2008

Project Name : **Tesoro - Livermore**

Project Number : **01LV**

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
1,2-Dichloroethane	63812-03	<0.50	39.2	39.0	36.8	36.8	ug/L	EPA 8260B	7/24/08	93.8	94.2	0.443	70-130	25
Methyl-t-butyl ether	63812-03	<0.50	40.1	39.8	33.8	34.0	ug/L	EPA 8260B	7/24/08	84.2	85.3	1.29	70-130	25
Tert-Butanol	63812-03	<5.0	200	199	206	205	ug/L	EPA 8260B	7/24/08	103	103	0.0253	70-130	25
Toluene	63812-03	1.1	39.5	39.3	38.7	38.4	ug/L	EPA 8260B	7/24/08	95.2	94.8	0.345	70-130	25
1,2-Dichloroethane	63867-01	<0.50	38.7	38.6	48.7	47.9	ug/L	EPA 8260B	7/25/08	126	124	1.46	70-130	25
Benzene	63867-01	<0.50	39.6	39.5	43.1	43.0	ug/L	EPA 8260B	7/25/08	109	109	0.191	70-130	25
Methyl-t-butyl ether	63867-01	4.2	39.5	39.4	48.6	47.8	ug/L	EPA 8260B	7/25/08	112	111	1.68	70-130	25
Tert-Butanol	63867-01	<5.0	197	197	232	235	ug/L	EPA 8260B	7/25/08	118	119	1.09	70-130	25
Toluene	63867-01	<0.50	39.0	38.9	42.6	42.3	ug/L	EPA 8260B	7/25/08	109	108	0.598	70-130	25
1,2-Dichloroethane	63820-15	<0.50	38.5	38.6	45.4	45.0	ug/L	EPA 8260B	7/28/08	118	117	1.16	70-130	25
Benzene	63820-15	2.4	39.3	39.5	42.8	43.4	ug/L	EPA 8260B	7/28/08	102	104	1.22	70-130	25
Methyl-t-butyl ether	63820-15	78	39.3	39.4	116	115	ug/L	EPA 8260B	7/28/08	98.3	94.5	3.93	70-130	25
Tert-Butanol	63820-15	180	196	197	421	413	ug/L	EPA 8260B	7/28/08	123	118	3.85	70-130	25
Toluene	63820-15	0.68	38.8	38.9	41.9	42.4	ug/L	EPA 8260B	7/28/08	106	107	0.737	70-130	25
1,2-Dichloroethane	63841-05	<0.50	39.2	39.2	42.0	41.6	ug/L	EPA 8260B	7/25/08	107	106	1.14	70-130	25
Benzene	63841-05	<0.50	40.1	40.1	41.5	40.9	ug/L	EPA 8260B	7/25/08	103	102	1.34	70-130	25
Methyl-t-butyl ether	63841-05	<0.50	40.1	40.1	35.6	35.2	ug/L	EPA 8260B	7/25/08	89.0	88.0	1.10	70-130	25
Tert-Butanol	63841-05	<5.0	200	200	204	208	ug/L	EPA 8260B	7/25/08	102	104	1.72	70-130	25
Toluene	63841-05	<0.50	39.5	39.5	38.8	38.5	ug/L	EPA 8260B	7/25/08	98.1	97.4	0.663	70-130	25

Report Number : 63855

QC Report : Matrix Spike/ Matrix Spike Duplicate

Date : 07/30/2008

Project Name : **Tesoro - Livermore**

Project Number : **01LV**

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
1,2-Dichloroethane	63858-02	20	39.2	39.2	63.1	63.0	ug/L	EPA 8260B	7/24/08	110	110	0.317	70-130	25
Benzene	63858-02	<0.50	40.1	40.1	38.9	38.8	ug/L	EPA 8260B	7/24/08	97.0	96.8	0.157	70-130	25
Methyl-t-butyl ether	63858-02	<0.50	40.1	40.1	40.7	38.6	ug/L	EPA 8260B	7/24/08	102	96.3	5.29	70-130	25
Tert-Butanol	63858-02	33	200	200	236	232	ug/L	EPA 8260B	7/24/08	101	99.4	1.93	70-130	25
Toluene	63858-02	<0.50	39.5	39.5	40.3	38.5	ug/L	EPA 8260B	7/24/08	102	97.3	4.53	70-130	25
1,2-Dichloroethane	63855-12	<0.50	39.2	39.2	45.6	44.0	ug/L	EPA 8260B	7/25/08	116	112	3.62	70-130	25
Benzene	63855-12	0.79	40.1	40.1	42.3	41.0	ug/L	EPA 8260B	7/25/08	104	100	3.19	70-130	25
Methyl-t-butyl ether	63855-12	<0.50	40.1	40.1	42.6	41.3	ug/L	EPA 8260B	7/25/08	106	103	3.30	70-130	25
Tert-Butanol	63855-12	<5.0	200	200	204	204	ug/L	EPA 8260B	7/25/08	102	102	0.311	70-130	25
Toluene	63855-12	<0.50	39.5	39.5	43.6	42.1	ug/L	EPA 8260B	7/25/08	110	106	3.50	70-130	25
1,2-Dichloroethane	63883-01	<0.50	39.2	39.2	40.4	42.4	ug/L	EPA 8260B	7/25/08	103	108	4.88	70-130	25
Benzene	63883-01	<0.50	40.1	40.1	39.4	39.2	ug/L	EPA 8260B	7/25/08	98.2	97.8	0.493	70-130	25
Methyl-t-butyl ether	63883-01	<0.50	40.1	40.1	39.0	37.4	ug/L	EPA 8260B	7/25/08	97.4	93.2	4.38	70-130	25
Tert-Butanol	63883-01	<5.0	200	200	190	198	ug/L	EPA 8260B	7/25/08	95.0	99.2	4.35	70-130	25
Toluene	63883-01	<0.50	39.5	39.5	41.1	39.3	ug/L	EPA 8260B	7/25/08	104	99.3	4.55	70-130	25
1,2-Dichloroethane	63861-01	<0.50	3.92	3.92	5.00	4.84	ug/L	EPA 8260B	7/28/08	127	123	3.25	70-130	25
Benzene	63861-01	<0.50	4.01	4.01	4.85	4.87	ug/L	EPA 8260B	7/28/08	121	121	0.316	70-130	25
Methyl-t-butyl ether	63861-01	<0.50	4.01	4.01	5.09	4.64	ug/L	EPA 8260B	7/28/08	127	116	9.27	70-130	25
Tert-Butanol	63861-01	<5.0	20.0	20.0	24.1	23.9	ug/L	EPA 8260B	7/28/08	120	119	0.925	70-130	25

Report Number : 63855

QC Report : Matrix Spike/ Matrix Spike Duplicate

Date : 07/30/2008

Project Name : **Tesoro - Livermore**

Project Number : **01LV**

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
Toluene	63861-01	<0.50	3.95	3.95	5.18	4.81	ug/L	EPA 8260B	7/28/08	131	122	7.51	70-130	25
1,2-Dichloroethane	63893-01	<0.50	39.2	39.2	40.8	39.9	ug/L	EPA 8260B	7/28/08	104	102	2.03	70-130	25
Benzene	63893-01	<0.50	40.1	40.1	39.5	37.8	ug/L	EPA 8260B	7/28/08	98.4	94.3	4.25	70-130	25
Methyl-t-butyl ether	63893-01	<0.50	40.1	40.1	40.2	40.2	ug/L	EPA 8260B	7/28/08	100	100	0.0559	70-130	25
Tert-Butanol	63893-01	<5.0	200	200	199	195	ug/L	EPA 8260B	7/28/08	99.7	97.4	2.33	70-130	25
Toluene	63893-01	<0.50	39.5	39.5	41.2	39.6	ug/L	EPA 8260B	7/28/08	104	100	4.15	70-130	25
1,2-Dichloroethane	63901-02	3.3	39.2	39.2	46.8	48.4	ug/L	EPA 8260B	7/29/08	111	115	3.74	70-130	25
Benzene	63901-02	<0.50	40.1	40.1	40.5	40.8	ug/L	EPA 8260B	7/29/08	101	102	0.591	70-130	25
Methyl-t-butyl ether	63901-02	<0.50	40.1	40.1	41.6	39.4	ug/L	EPA 8260B	7/29/08	104	98.2	5.44	70-130	25
Tert-Butanol	63901-02	<5.0	200	200	203	206	ug/L	EPA 8260B	7/29/08	101	103	1.31	70-130	25
Toluene	63901-02	<0.50	39.5	39.5	42.5	39.3	ug/L	EPA 8260B	7/29/08	107	99.5	7.68	70-130	25
1,2-Dichloroethane	63905-08	<0.50	39.2	39.2	46.1	45.1	ug/L	EPA 8260B	7/29/08	117	115	2.01	70-130	25
Benzene	63905-08	<0.50	40.1	40.1	43.2	42.0	ug/L	EPA 8260B	7/29/08	108	105	2.80	70-130	25
Methyl-t-butyl ether	63905-08	<0.50	40.1	40.1	42.2	41.5	ug/L	EPA 8260B	7/29/08	105	104	1.56	70-130	25
Tert-Butanol	63905-08	<5.0	200	200	211	211	ug/L	EPA 8260B	7/29/08	106	105	0.352	70-130	25
Toluene	63905-08	<0.50	39.5	39.5	42.2	41.4	ug/L	EPA 8260B	7/29/08	107	105	1.86	70-130	25

Report Number : 63855

QC Report : Laboratory Control Sample (LCS)

Date : 07/30/2008

Project Name : **Tesoro - Livermore**

Project Number : **01LV**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
1,2-Dichloroethane	39.2	ug/L	EPA 8260B	7/24/08	117	70-130
Methyl-t-butyl ether	40.1	ug/L	EPA 8260B	7/24/08	100	70-130
Tert-Butanol	200	ug/L	EPA 8260B	7/24/08	103	70-130
Toluene	39.5	ug/L	EPA 8260B	7/24/08	103	70-130
1,2-Dichloroethane	39.2	ug/L	EPA 8260B	7/25/08	126	70-130
Benzene	40.1	ug/L	EPA 8260B	7/25/08	114	70-130
Methyl-t-butyl ether	40.1	ug/L	EPA 8260B	7/25/08	93.5	70-130
Tert-Butanol	200	ug/L	EPA 8260B	7/25/08	122	70-130
Toluene	39.5	ug/L	EPA 8260B	7/25/08	114	70-130
1,2-Dichloroethane	39.2	ug/L	EPA 8260B	7/28/08	124	70-130
Benzene	40.1	ug/L	EPA 8260B	7/28/08	108	70-130
Methyl-t-butyl ether	40.1	ug/L	EPA 8260B	7/28/08	110	70-130
Tert-Butanol	200	ug/L	EPA 8260B	7/28/08	117	70-130
Toluene	39.5	ug/L	EPA 8260B	7/28/08	111	70-130
1,2-Dichloroethane	40.2	ug/L	EPA 8260B	7/25/08	105	70-130
Benzene	40.2	ug/L	EPA 8260B	7/25/08	104	70-130
Methyl-t-butyl ether	40.3	ug/L	EPA 8260B	7/25/08	91.5	70-130
Tert-Butanol	201	ug/L	EPA 8260B	7/25/08	101	70-130
Toluene	40.2	ug/L	EPA 8260B	7/25/08	98.3	70-130

Report Number : 63855

QC Report : Laboratory Control Sample (LCS)

Date : 07/30/2008

Project Name : **Tesoro - Livermore**

Project Number : **01LV**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
1,2-Dichloroethane	39.0	ug/L	EPA 8260B	7/24/08	111	70-130
Benzene	39.9	ug/L	EPA 8260B	7/24/08	99.3	70-130
Methyl-t-butyl ether	39.9	ug/L	EPA 8260B	7/24/08	102	70-130
Tert-Butanol	199	ug/L	EPA 8260B	7/24/08	95.9	70-130
Toluene	39.4	ug/L	EPA 8260B	7/24/08	106	70-130
1,2-Dichloroethane	39.4	ug/L	EPA 8260B	7/25/08	112	70-130
Benzene	40.3	ug/L	EPA 8260B	7/25/08	102	70-130
Methyl-t-butyl ether	40.3	ug/L	EPA 8260B	7/25/08	104	70-130
Tert-Butanol	201	ug/L	EPA 8260B	7/25/08	99.0	70-130
Toluene	39.7	ug/L	EPA 8260B	7/25/08	110	70-130
1,2-Dichloroethane	39.3	ug/L	EPA 8260B	7/25/08	103	70-130
Benzene	40.2	ug/L	EPA 8260B	7/25/08	101	70-130
Methyl-t-butyl ether	40.2	ug/L	EPA 8260B	7/25/08	98.5	70-130
Tert-Butanol	200	ug/L	EPA 8260B	7/25/08	96.2	70-130
Toluene	39.6	ug/L	EPA 8260B	7/25/08	106	70-130
1,2-Dichloroethane	39.0	ug/L	EPA 8260B	7/28/08	107	70-130
Benzene	39.9	ug/L	EPA 8260B	7/28/08	98.5	70-130
Methyl-t-butyl ether	39.9	ug/L	EPA 8260B	7/28/08	104	70-130

Report Number : 63855

QC Report : Laboratory Control Sample (LCS)

Date : 07/30/2008

Project Name : **Tesoro - Livermore**

Project Number : **01LV**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Tert-Butanol	199	ug/L	EPA 8260B	7/28/08	99.1	70-130
Toluene	39.4	ug/L	EPA 8260B	7/28/08	105	70-130
1,2-Dichloroethane	39.1	ug/L	EPA 8260B	7/28/08	99.9	70-130
Benzene	40.0	ug/L	EPA 8260B	7/28/08	97.7	70-130
Methyl-t-butyl ether	40.0	ug/L	EPA 8260B	7/28/08	98.5	70-130
Tert-Butanol	199	ug/L	EPA 8260B	7/28/08	96.6	70-130
Toluene	39.4	ug/L	EPA 8260B	7/28/08	103	70-130
1,2-Dichloroethane	39.2	ug/L	EPA 8260B	7/29/08	112	70-130
Benzene	40.1	ug/L	EPA 8260B	7/29/08	104	70-130
Methyl-t-butyl ether	40.1	ug/L	EPA 8260B	7/29/08	108	70-130
Tert-Butanol	200	ug/L	EPA 8260B	7/29/08	102	70-130
Toluene	39.5	ug/L	EPA 8260B	7/29/08	110	70-130
1,2-Dichloroethane	39.0	ug/L	EPA 8260B	7/29/08	110	70-130
Benzene	39.9	ug/L	EPA 8260B	7/29/08	104	70-130
Methyl-t-butyl ether	39.9	ug/L	EPA 8260B	7/29/08	107	70-130
Tert-Butanol	199	ug/L	EPA 8260B	7/29/08	103	70-130
Toluene	39.4	ug/L	EPA 8260B	7/29/08	108	70-130

Calscience Environmental Laboratories, Inc.

July 31, 2008

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

Subject: **Calscience Work Order No.: 08-07-2193**
Client Reference: Tesoro-Livermore

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 7/25/2008 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

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

Sincerely,

Amanda Porter

Calscience Environmental
Laboratories, Inc.
Amanda Porter
Project Manager

Calscience Environmental Laboratories, Inc.

Analytical Report

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

Date Received: 07/25/08
Work Order No: 08-07-2193
Preparation: N/A
Method: RSK-175M

Project: Tesoro-Livermore

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IP-2	**08-07-2193-1-A**	**07/23/08 14:48**	**Aqueous**	**GC 14**	**N/A**	**07/28/08 00:00**	**080728L01**

Parameter	Result	RL	DF	Qual	Units
Methane	59.9	1.00	1		ug/L

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IP-3	**08-07-2193-2-A**	**07/23/08 12:24**	**Aqueous**	**GC 14**	**N/A**	**07/28/08 00:00**	**080728L01**

Parameter	Result	RL	DF	Qual	Units
Methane	6.07	1.00	1		ug/L

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IP-4	**08-07-2193-3-A**	**07/23/08 13:07**	**Aqueous**	**GC 14**	**N/A**	**07/28/08 00:00**	**080728L01**

Parameter	Result	RL	DF	Qual	Units
Methane	63.3	1.00	1		ug/L

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IP-6	**08-07-2193-4-A**	**07/23/08 10:39**	**Aqueous**	**GC 14**	**N/A**	**07/28/08 00:00**	**080728L01**

Parameter	Result	RL	DF	Qual	Units
Methane	88.4	1.00	1		ug/L

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IP-7	**08-07-2193-5-A**	**07/23/08 13:35**	**Aqueous**	**GC 14**	**N/A**	**07/28/08 00:00**	**080728L01**

Parameter	Result	RL	DF	Qual	Units
Methane	56.4	1.00	1		ug/L

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IP-1	**08-07-2193-6-B**	**07/23/08 13:00**	**Aqueous**	**GC 14**	**N/A**	**07/28/08 00:00**	**080728L01**

Parameter	Result	RL	DF	Qual	Units
Methane	1610	10.0	10		ug/L

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

Calscience Environmental Laboratories, Inc.

Analytical Report

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

Date Received: 07/25/08
Work Order No: 08-07-2193
Preparation: N/A
Method: RSK-175M

Project: Tesoro-Livermore

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
IP-5	**08-07-2193-7-A**	**07/23/08 13:25**	**Aqueous**	**GC 14**	**N/A**	**07/28/08 00:00**	**080728L01**

Parameter	Result	RL	DF	Qual	Units
Methane	8.44	1.00	1		ug/L

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-663-245**	**N/A**	**Aqueous**	**GC 14**	**N/A**	**07/28/08 00:00**	**080728L01**

Parameter	Result	RL	DF	Qual	Units
Methane	ND	1.00	1		ug/L

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

Calscience Environmental Laboratories, Inc.

Analytical Report

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

Date Received: 07/25/08
Work Order No: 08-07-2193

Project: Tesoro-Livermore

Client Sample Number	Lab Sample Number	Date Collected	Matrix
IP-2	**08-07-2193-1**	**07/23/08**	**Aqueous**

Parameter	Result	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Chemical Oxygen Demand	29	20	1		mg/L	07/28/08	07/28/08	EPA 410.4
Phosphorus, Total	0.45	0.10	1		mg/L	07/29/08	07/29/08	SM 4500 P B/E

Client Sample Number	Lab Sample Number	Date Collected	Matrix
IP-3	**08-07-2193-2**	**07/23/08**	**Aqueous**

Parameter	Result	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Chemical Oxygen Demand	ND	5.0	1		mg/L	07/28/08	07/28/08	EPA 410.4
Phosphorus, Total	0.25	0.10	1		mg/L	07/29/08	07/29/08	SM 4500 P B/E

Client Sample Number	Lab Sample Number	Date Collected	Matrix
IP-4	**08-07-2193-3**	**07/23/08**	**Aqueous**

Parameter	Result	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Chemical Oxygen Demand	49	20	1		mg/L	07/28/08	07/28/08	EPA 410.4
Phosphorus, Total	0.22	0.10	1		mg/L	07/29/08	07/29/08	SM 4500 P B/E

Client Sample Number	Lab Sample Number	Date Collected	Matrix
IP-6	**08-07-2193-4**	**07/23/08**	**Aqueous**

Parameter	Result	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Chemical Oxygen Demand	21	20	1		mg/L	07/28/08	07/28/08	EPA 410.4
Phosphorus, Total	0.51	0.10	1		mg/L	07/29/08	07/29/08	SM 4500 P B/E

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

Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

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

Date Received: 07/25/08
Work Order No: 08-07-2193

Project: Tesoro-Livermore

Client Sample Number	Lab Sample Number	Date Collected	Matrix
IP-7	**08-07-2193-5**	**07/23/08**	**Aqueous**

Parameter	Result	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Chemical Oxygen Demand	11	5.0	1		mg/L	07/28/08	07/28/08	EPA 410.4
Phosphorus, Total	0.42	0.10	1		mg/L	07/29/08	07/29/08	SM 4500 P B/E

IP-1	**08-07-2193-6**	**07/23/08**	**Aqueous**

Parameter	Result	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Chemical Oxygen Demand	200	20	1		mg/L	07/28/08	07/28/08	EPA 410.4
Phosphorus, Total	0.23	0.10	1		mg/L	07/29/08	07/29/08	SM 4500 P B/E

IP-5	**08-07-2193-7**	**07/23/08**	**Aqueous**

Parameter	Result	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Chemical Oxygen Demand	ND	5.0	1		mg/L	07/28/08	07/28/08	EPA 410.4
Phosphorus, Total	0.28	0.10	1		mg/L	07/29/08	07/29/08	SM 4500 P B/E

Method Blank		**N/A**	**Aqueous**

Parameter	Result	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Chemical Oxygen Demand	ND	20	1		mg/L	07/28/08	07/28/08	EPA 410.4
Chemical Oxygen Demand	ND	5.0	1		mg/L	07/28/08	07/28/08	EPA 410.4
Phosphorus, Total	ND	0.10	1		mg/L	07/29/08	07/29/08	SM 4500 P B/E

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

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

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

Date Received: N/A
Work Order No: 08-07-2193

Project: Tesoro-Livermore

Matrix: Aqueous

Parameter	Method	Quality Control Sample ID	Date Analyzed	Date Extracted	MS% REC	MSD % REC	%REC CL	RPD	RPD CL	Qualifiers
Phosphorus, Total	SM 4500 P B/E	08-07-2360-1	07/29/08	7/29/08	92	91	70-130	1	0-25	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Duplicate

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

Date Received: N/A
Work Order No: 08-07-2193

Project: Tesoro-Livermore

Matrix: Aqueous

Parameter	Method	QC Sample ID	Date Analyzed	Sample Conc	DUP Conc	RPD	RPD CL	Qualifiers
Chemical Oxygen Demand	EPA 410.4	IP-1	07/28/08	200	200	1	0-25	
Chemical Oxygen Demand	EPA 410.4	08-07-2145-1	07/28/08	31	31	0	0-25	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

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

Date Received: N/A
Work Order No: 08-07-2193
Preparation: N/A
Method: RSK-175M

Project: Tesoro-Livermore

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-663-245	**Aqueous**	**GC 14**	**N/A**	**07/28/08**	**080728L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Methane	93	94	79-109	1	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Laboratory Control Sample

ACCREDITED IN ACCORDANCE WITH nelac

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

Date Received: N/A
Work Order No: 08-07-2193

Project: Tesoro-Livermore

Matrix : Aqueous

Parameter	Method	Quality Control Sample ID	Date Analyzed	Date Extracted	Conc Added	Conc Recovered	LCS %Rec	%Rec CL	Qualifiers
Phosphorus, Total	SM 4500 P B/E	099-05-098-1,935	07/29/08	07/29/08	0.400	0.394	98	80-120	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 08-07-2193

Qualifier	Definition
*	See applicable analysis comment.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported with no further corrective action required.
A	Result is the average of all dilutions, as defined by the method.
B	Analyte was present in the associated method blank.
C	Analyte presence was not confirmed on primary column.
E	Concentration exceeds the calibration range.
H	Sample received and/or analyzed past the recommended holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	A Marginal Exceedance (ME) is defined as a LCS percent recovery beyond the normal 3 standard deviation Control Limits but still within the marginal exceedance limits (set at 4 standard deviations from the mean)
N	Nontarget Analyte.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
U	Undetected at the laboratory method detection limit.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

KIFF Analytical LLC

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

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

2193

COC No. **63855** Page 1 of 1

Chain-of-Custody Record and Analysis Request

Project Contact (Hardcopy or PDF to): Angelique Showman

EDF Report? YES

Company/Address: Kiff Analytical

Phone No.: 530-297-4800 FAX No.: 530-297-4808

Project Number: 080723-WW1 P.O. No.: 63855

Project Name: Tesoro - Livermore

Project Address:

Recommended but not mandatory to complete this section:

Sampling Company Log Code: BTSS

Global ID: T0600101410

Deliverables to (Email Address): inbox@kiffanalytical.com

Sample Designation	Sampling Date	Sampling Time	Container / Preservative: 125 ml Amber HCl	Container / Preservative: 250ml Glass H2SO4	Matrix: Water	Analysis Request: Chemical Oxygen Demand	Analysis Request: Hydrocarbons in Water by RSK 175 (1)	Analysis Request: Total Phosphorus	TAT: Standard	For Lab Use Only
IP-2	07/23/08	14:48	2	2	X	X	X	X	X	1
IP-3	07/23/08	12:24	2	2	X	X	X	X	X	2
IP-4	07/23/08	13:07	2	2	X	X	X	X	X	3
IP-6	07/23/08	10:39	2	2	X	X	X	X	X	4
IP-7	07/23/08	13:35	2	2	X	X	X	X	X	5
IP-1	07/23/08	13:00	2	2	X	X	X	X	X	6
IP-5	07/23/08	13:25	2	2	X	X	X	X	X	7

Relinquished by	Date	Time	Received by
[illegible] Kiff Analytical	07/24/08	1900	
Relinquished by:	Date	Time	Received by:
Relinquished by: COB102206494417	Date 7.25.08	Time 0800	Received by Laboratory:

Remarks: Please refer to attached Test Detail.

Bill to: Accounts Payable

Test Detail for Kiff Work Order: 63855

Hydrocarbons in Water by RSK 175 (1)
Methane

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 08 - 07 - 2193

Cooler 1 of 1

SAMPLE RECEIPT FORM

CLIENT: KIFF ANALYTICAL **DATE:** 7-25-08

TEMPERATURE – SAMPLES RECEIVED BY:

CALSCIENCE COURIER:

_____ Chilled, cooler with temperature blank provided.
_____ Chilled, cooler without temperature blank.
_____ Chilled and placed in cooler with wet ice.
_____ Ambient and placed in cooler with wet ice.
_____ Ambient temperature (For Air & Filter only).

___.___ °C Temperature blank.

LABORATORY (Other than Calscience Courier):

4.0 °C Temperature blank.
___.___ °C IR thermometer.
_____ Ambient temperature (For Air & Filter only).

Initial: WB

CUSTODY SEAL INTACT:

Sample(s): _____ Cooler: ✓ No (Not Intact) : _____ Not Present: _____

Initial: WB

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody document(s) received with samples	✓		
Sampler's name indicated on COC		✓	
Sample container label(s) consistent with custody papers	✓		
Sample container(s) intact and good condition	✓		
Correct containers and volume for analyses requested	✓		
Proper preservation noted on sample label(s)	✓		
VOA vial(s) free of headspace.			✓
Tedlar bag(s) free of condensation			✓

Initial: WB

COMMENTS:

CALIFORNIA LABORATORY SERVICES

3249 Fitzgerald Road Rancho Cordova, CA 95742

July 31, 2008

CLS Work Order #: CRG0957
COC #: 63855

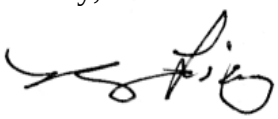
Angelique Showman
KIFF Analytical
2795 Second St. Suite 300
Davis, CA 95616

Project Name: Tesoro Livermore

Enclosed are the results of analyses for samples received by the laboratory on 07/24/08 09:03. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that the results are in compliance both technically and for completeness.

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

Sincerely,



James Liang, Ph.D.
Laboratory Director

CA DOHS ELAP Accreditation/Registration number 1233

CALIFORNIA LABORATORY SERVICES

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

Project: Tesoro Livermore
Project Number: 080723-WW1
Project Manager: Angelique Showman

CLS Work Order #: CRG0957
COC #: 63855

REVISED CRG0957 REVISED

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

CLS
3249 Fitzgerald Road
Rancho Cordova, CA 95742
916-638-7301 COC No. 63855 Page 1 of 1

Project Contact (Hardcopy or PDF to): Angelique Showman
Company/Address: Kiff Analytical
Phone No.: 530-297-4800 FAX No.: 530-297-4808
Project Number: 080723-WW1 P.O. No.: 63855
Project Name: Tesoro - Livermore
Project Address:

EDF Report? YES

Recommended but not mandatory to complete this section:
Sampling Company Log Code: BTSS
Global ID: T0600101410
Deliverables to (Email Address): inbox@kiffanalytical.com

Chain-of-Custody Record and Analysis Request

Sample Designation	Sampling Date	Sampling Time	Container / Preservative: 250ml Poly None	Matrix: Water	Analysis Request: Alkalinity SM 2320 (1)	Anions by EPA 300.0 (1)	Carbon Dioxide	Iron, Ferrous	TAT: Standard	For Lab Use Only
IP-2	07/23/08	14:48	3	X	X	X	X	X	X	
IP-3	07/23/08	12:24	3	X	X	X	X	X	X	
IP-4	07/23/08	13:07	3	X	X	X	X	X	X	
IP-6	07/23/08	10:39	3	X	X	X	X	X	X	
IP-7	07/23/08	13:35	3	X	X	X	X	X	X	
IP-1	07/23/08	13:00	3	X	X	X	X	X	X	
IP-5	07/23/08	13:25	3	X	X	X	X	X	X	

Relinquished by: Date Time Received by:
Relinquished by: Date Time Received by:
Relinquished by: Date Time Received by Laboratory: Will Cullana 7/24/08 0903 5°

Remarks: Please refer to attached Test Detail.
Bill to: Accounts Payable

KIFF Analytical	Project: Tesoro Livermore	
2795 Second St. Suite 300	Project Number: 080723-WW1	**CLS Work Order #: CRG0957**
Davis, CA 95616	Project Manager: Angelique Showman	COC #: 63855

Test Detail for Kiff Work Order: 63855

Alkalinity SM 2320 (1)
Alkalinity, Total (as CaCO3)

Anions by EPA 300.0 (1)
Nitrate as N
Sulfate

Page 1 of 1

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

Project: Tesoro Livermore
Project Number: 080723-WW1
Project Manager: Angelique Showman

CLS Work Order #: CRG0957
COC #: 63855

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
IP-2 (CRG0957-01) Water Sampled: 07/23/08 14:48 Received: 07/24/08 09:03									
Total Alkalinity	**350**	5.0	mg/L	1	CR06161	07/25/08	07/25/08	SM2310B	
Bicarbonate as CaCO3	**350**	5.0	"	"	"	"	"	"	
Carbonate as CaCO3	ND	5.0	"	"	"	"	"	"	
Hydroxide as CaCO3	ND	5.0	"	"	"	"	"	"	
Carbon Dioxide as CO2	**25**	5.0	"	"	CR06159	07/25/08	07/25/08	SM 4500C	
Ferrous Iron	ND	0.10	"	"	CR06103	07/24/08	07/24/08	SM3500-Fe D	
Nitrate as N	ND	0.50	"	"	CR06097	07/24/08	07/24/08	EPA 300.0	
Sulfate as SO4	**44**	2.5	"	5	CR06138	07/25/08	07/25/08	"	
IP-3 (CRG0957-02) Water Sampled: 07/23/08 12:24 Received: 07/24/08 09:03									
Total Alkalinity	**390**	5.0	mg/L	1	CR06161	07/25/08	07/25/08	SM2310B	
Bicarbonate as CaCO3	**210**	5.0	"	"	"	"	"	"	
Carbonate as CaCO3	**170**	5.0	"	"	"	"	"	"	
Hydroxide as CaCO3	ND	5.0	"	"	"	"	"	"	
Carbon Dioxide as CO2	ND	5.0	"	"	CR06159	07/25/08	07/25/08	SM 4500C	
Ferrous Iron	ND	0.10	"	"	CR06103	07/24/08	07/24/08	SM3500-Fe D	
Nitrate as N	ND	0.50	"	"	CR06097	07/24/08	07/24/08	EPA 300.0	
Sulfate as SO4	**58**	2.5	"	5	CR06138	07/25/08	07/25/08	"	
IP-4 (CRG0957-03) Water Sampled: 07/23/08 13:07 Received: 07/24/08 09:03									
Total Alkalinity	**270**	5.0	mg/L	1	CR06161	07/25/08	07/25/08	SM2310B	
Bicarbonate as CaCO3	**270**	5.0	"	"	"	"	"	"	
Carbonate as CaCO3	ND	5.0	"	"	"	"	"	"	
Hydroxide as CaCO3	ND	5.0	"	"	"	"	"	"	
Carbon Dioxide as CO2	**18**	5.0	"	"	CR06159	07/25/08	07/25/08	SM 4500C	
Ferrous Iron	ND	0.10	"	"	CR06103	07/24/08	07/24/08	SM3500-Fe D	
Nitrate as N	ND	0.50	"	"	CR06097	07/24/08	07/24/08	EPA 300.0	
Sulfate as SO4	**42**	0.50	"	"	"	"	"	"	

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

Project: Tesoro Livermore
Project Number: 080723-WW1
Project Manager: Angelique Showman

CLS Work Order #: CRG0957
COC #: 63855

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
IP-6 (CRG0957-04) Water	**Sampled: 07/23/08 10:39**	**Received: 07/24/08 09:03**							
Total Alkalinity	**310**	5.0	mg/L	1	CR06161	07/25/08	07/25/08	SM2310B	
Bicarbonate as CaCO3	**310**	5.0	"	"	"	"	"	"	
Carbonate as CaCO3	ND	5.0	"	"	"	"	"	"	
Hydroxide as CaCO3	ND	5.0	"	"	"	"	"	"	
Carbon Dioxide as CO2	ND	5.0	"	"	CR06159	07/25/08	07/25/08	SM 4500C	
Ferrous Iron	ND	0.10	"	"	CR06103	07/24/08	07/24/08	SM3500-Fe D	
Nitrate as N	**1.3**	0.50	"	"	CR06097	07/24/08	07/24/08	EPA 300.0	
Sulfate as SO4	**63**	2.5	"	5	CR06138	07/25/08	07/25/08	"	
IP-7 (CRG0957-05) Water	**Sampled: 07/23/08 13:35**	**Received: 07/24/08 09:03**							
Total Alkalinity	**380**	5.0	mg/L	1	CR06161	07/25/08	07/25/08	SM2310B	
Bicarbonate as CaCO3	**380**	5.0	"	"	"	"	"	"	
Carbonate as CaCO3	ND	5.0	"	"	"	"	"	"	
Hydroxide as CaCO3	ND	5.0	"	"	"	"	"	"	
Carbon Dioxide as CO2	**25**	5.0	"	"	CR06159	07/25/08	07/25/08	SM 4500C	
Ferrous Iron	ND	0.10	"	"	CR06103	07/24/08	07/24/08	SM3500-Fe D	
Nitrate as N	**2.1**	0.50	"	"	CR06097	07/24/08	07/24/08	EPA 300.0	
Sulfate as SO4	**53**	2.5	"	5	CR06138	07/25/08	07/25/08	"	
IP-1 (CRG0957-06) Water	**Sampled: 07/23/08 13:00**	**Received: 07/24/08 09:03**							
Total Alkalinity	**320**	5.0	mg/L	1	CR06161	07/25/08	07/25/08	SM2310B	
Bicarbonate as CaCO3	**320**	5.0	"	"	"	"	"	"	
Carbonate as CaCO3	ND	5.0	"	"	"	"	"	"	
Hydroxide as CaCO3	ND	5.0	"	"	"	"	"	"	
Carbon Dioxide as CO2	**22**	5.0	"	"	CR06159	07/25/08	07/25/08	SM 4500C	
Ferrous Iron	ND	0.10	"	"	CR06103	07/24/08	07/24/08	SM3500-Fe D	
Nitrate as N	ND	0.50	"	"	CR06097	07/24/08	07/24/08	EPA 300.0	
Sulfate as SO4	**40**	2.5	"	5	CR06138	07/25/08	07/25/08	"	

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

Project: Tesoro Livermore
Project Number: 080723-WW1
Project Manager: Angelique Showman

CLS Work Order #: CRG0957
COC #: 63855

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
IP-5 (CRG0957-07) Water	**Sampled: 07/23/08 13:25**	**Received: 07/24/08 09:03**							
Total Alkalinity	**340**	5.0	mg/L	1	CR06161	07/25/08	07/25/08	SM2310B	
Bicarbonate as CaCO3	**340**	5.0	"	"	"	"	"	"	
Carbonate as CaCO3	ND	5.0	"	"	"	"	"	"	
Hydroxide as CaCO3	ND	5.0	"	"	"	"	"	"	
Carbon Dioxide as CO2	**19**	5.0	"	"	CR06159	07/25/08	07/25/08	SM 4500C	
Ferrous Iron	ND	0.10	"	"	CR06103	07/24/08	07/24/08	SM3500-Fe D	
Nitrate as N	ND	0.50	"	"	CR06097	07/24/08	07/24/08	EPA 300.0	
Sulfate as SO4	**52**	2.5	"	5	CR06138	07/25/08	07/26/08	"	

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

Project: Tesoro Livermore
Project Number: 080723-WW1
Project Manager: Angelique Showman

CLS Work Order #: CRG0957
COC #: 63855

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CR06097 - General Prep										
Blank (CR06097-BLK1)				Prepared & Analyzed: 07/24/08						
Sulfate as SO4	ND	0.50	mg/L							
Nitrate as N	ND	0.50	"							
LCS (CR06097-BS1)				Prepared & Analyzed: 07/24/08						
Sulfate as SO4	5.00	0.50	mg/L	5.00		100	80-120			
Nitrate as N	0.453	0.50	"	0.451		100	80-120			
LCS Dup (CR06097-BSD1)				Prepared & Analyzed: 07/24/08						
Sulfate as SO4	5.04	0.50	mg/L	5.00		101	80-120	0.777	20	
Nitrate as N	0.457	0.50	"	0.451		101	80-120	0.744	20	
Matrix Spike (CR06097-MS1)		**Source: CRG0917-04**		Prepared & Analyzed: 07/24/08						
Sulfate as SO4	11.9	0.50	mg/L	5.00	6.74	104	75-125			
Nitrate as N	0.533	0.50	"	0.451	0.0623	104	80-120			
Matrix Spike Dup (CR06097-MSD1)		**Source: CRG0917-04**		Prepared & Analyzed: 07/24/08						
Sulfate as SO4	12.0	0.50	mg/L	5.00	6.74	106	75-125	0.676	25	
Nitrate as N	0.534	0.50	"	0.451	0.0623	105	80-120	0.0846	20	
Batch CR06103 - General Preparation										
Blank (CR06103-BLK1)				Prepared & Analyzed: 07/24/08						
Ferrous Iron	ND	0.10	mg/L							
LCS (CR06103-BS1)				Prepared & Analyzed: 07/24/08						
Ferrous Iron	0.245	0.10	mg/L	0.250		98.0	80-120			

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

Project: Tesoro Livermore
Project Number: 080723-WW1
Project Manager: Angelique Showman

CLS Work Order #: CRG0957
COC #: 63855

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CR06103 - General Preparation										
LCS Dup (CR06103-BSD1)				Prepared & Analyzed: 07/24/08						
Ferrous Iron	0.245	0.10	mg/L	0.250		98.0	80-120	0.00	25	
Matrix Spike (CR06103-MS1)		**Source: CRG0957-04**		Prepared & Analyzed: 07/24/08						
Ferrous Iron	0.217	0.10	mg/L	0.250	0.0280	75.6	75-125			
Matrix Spike Dup (CR06103-MSD1)		**Source: CRG0957-04**		Prepared & Analyzed: 07/24/08						
Ferrous Iron	0.231	0.10	mg/L	0.250	0.0280	81.2	75-125	6.25	30	
Batch CR06138 - General Prep										
Blank (CR06138-BLK1)				Prepared & Analyzed: 07/25/08						
Sulfate as SO4	ND	0.50	mg/L							
LCS (CR06138-BS1)				Prepared & Analyzed: 07/25/08						
Sulfate as SO4	5.02	0.50	mg/L	5.00		100	80-120			
LCS Dup (CR06138-BSD1)				Prepared & Analyzed: 07/25/08						
Sulfate as SO4	5.00	0.50	mg/L	5.00		100	80-120	0.359	20	
Matrix Spike (CR06138-MS1)		**Source: CRG1007-01**		Prepared & Analyzed: 07/25/08						
Sulfate as SO4	47.2	0.50	mg/L	5.00	44.4	56.8	75-125			QM-4X
Matrix Spike Dup (CR06138-MSD1)		**Source: CRG1007-01**		Prepared & Analyzed: 07/25/08						
Sulfate as SO4	47.2	0.50	mg/L	5.00	44.4	56.5	75-125	0.0275	25	QM-4X
Batch CR06159 - General Preparation										
Blank (CR06159-BLK1)				Prepared & Analyzed: 07/25/08						
Carbon Dioxide as CO2	ND	5.0	mg/L							

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

Project: Tesoro Livermore
Project Number: 080723-WW1
Project Manager: Angelique Showman

CLS Work Order #: CRG0957
COC #: 63855

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CR06161 - General Preparation										
Blank (CR06161-BLK1)				Prepared & Analyzed: 07/25/08						
Total Alkalinity	ND	5.0	mg/L							
Bicarbonate as CaCO3	ND	5.0	"							
Carbonate as CaCO3	ND	5.0	"							
Hydroxide as CaCO3	ND	5.0	"							
Duplicate (CR06161-DUP1)		**Source: CRG0957-01**		Prepared & Analyzed: 07/25/08						
Total Alkalinity	370	5.0	mg/L		354			4.20	20	
Bicarbonate as CaCO3	370	5.0	"		354			4.20	20	
Carbonate as CaCO3	ND	5.0	"		ND				20	
Hydroxide as CaCO3	ND	5.0	"		ND				20	

KIFF Analytical	Project: Tesoro Livermore	
2795 Second St. Suite 300	Project Number: 080723-WW1	**CLS Work Order #: CRG0957**
Davis, CA 95616	Project Manager: Angelique Showman	COC #: 63855

Notes and Definitions

QM-4X	The spike recovery was outside of QC acceptance limits for the MS and/or MSD due to analyte concentration at 4 times or greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

BLAINE
TECH SERVICES, INC.

1680 ROGERS AVENUE
SAN JOSE, CALIFORNIA 95112-1105
FAX (408) 573-7771
PHONE (408) 573-0555

CONDUCT ANALYSIS TO DETECT

LAB KIFF 63855 | DHS #

ALL ANALYSES MUST MEET SPECIFICATIONS AND DETECTION LIMITS SET BY CALIFORNIA DHS AND
☐ EPA ☐ RWQCB REGION
☐ LIA
☐ OTHER

1/3

CHAIN OF CUSTODY BTS # 080723-WW1

CLIENT Arctos Environmental, Inc.

SITE Tesoro - Livermore
1619 1st Street
Livermore, CA

SPECIAL INSTRUCTIONS

Invoice and Report to : Arctos Environmental, Inc.
Attn: Mike Purchase
1332 Peralta Ave. Berkeley, CA 94702
Ph. 510-525-2180
mpurchase@arctosenv.com

SAMPLE I.D.	DATE	TIME	MATRIX S= SOIL W=H_2O	CONTAINERS TOTAL	VOA/HCL	C = COMPOSITE ALL CONTAINERS	TPH-G + BTEX + MTBE (8260)	(7) Oxygenates (8260)	Lead Scavengers	Ferrous Iron (24 hr. Hold time)	Nitrate, Sulfate, Phosphorous	COD (410.4)	Total Alkalinity (SM2320B)	Carbon Dioxide (SM4500-CO2D) & Methane	ADD'L INFORMATION	STATUS	CONDITION	LAB SAMPLE #
IP-2	07/23/08	1448	W	10			X	X	X	X	X	X	X	X				01
IP-3		1224		10			X	X	X	X	X	X	X	X				02
IP-4		1307		10			X	X	X	X	X	X	X	X				03
IP-6		1039		10			X	X	X	X	X	X	X	X				04
IP-7		1335		10			X	X	X	X	X	X	X	X				05

SAMPLE RECEIPT
Temp °C 1.8 Therm. ID# IR-1
Initial SS Date 072308
Time 1828 Coolant present: Yes / No

SAMPLING COMPLETED DATE 07/23/08 TIME

SAMPLING PERFORMED BY WILLIAM WONG

RESULTS NEEDED NO LATER THAN Standard TAT

RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME
WW	07/23/08	1540	WW	07/23/08	

SHIPPED VIA | DATE SENT | TIME SENT | COOLER # | Kiff Analytical 072308 1540

BLAINE
TECH SERVICES, INC.

1680 ROGERS AVENUE
SAN JOSE, CALIFORNIA 95112-1105
FAX (408) 573-7771
PHONE (408) 573-0555

LAB: KIFF 63855 | DHS #

ALL ANALYSES MUST MEET SPECIFICATIONS AND DETECTION LIMITS SET BY CALIFORNIA DHS AND
☐ EPA ☐ RWQCB REGION
☐ LIA
☐ OTHER

CHAIN OF CUSTODY BTS #

CLIENT: Arctos Environmental, Inc.

SITE: Tesoro - Livermore
1619 1st Street
Livermore, CA

SPECIAL INSTRUCTIONS

Invoice and Report to : Arctos Environmental, Inc.
Attn: Mike Purchase
1332 Peralta Ave. Berkeley, CA 94702
Ph. 510-525-2180
mpurchase@arctosenv.com

CONDUCT ANALYSIS TO DETECT

SAMPLE I.D.	DATE	TIME	MATRIX (S= SOIL W=H_2O)	CONTAINERS TOTAL	CONTAINERS VOA/HCL	C = COMPOSITE ALL CONTAINERS	TPH-G + BTEX + MTBE (8260)	(7) Oxygenates (8260)	Lead Scavengers	Ferrous Iron (24 hr. Hold time)	Nitrate, Sulfate, Phosphorous	COD (410.4)	Total Alkalinity (SM2320B)	Carbon Dioxide (SM4500-CO2D) & Methane	ADD'L INFORMATION	STATUS	CONDITION	LAB SAMPLE #
MW-1	7/23	1210	W	3	HCL VoA		X	X	X									06 01
MW-4	↓	1035	↓	3	HCL VoA		X	X	X									07 02
MW-3		1005		3	HCL VoA		X	X	X									08 03
MW-7		1100		3	HCL VoA		X	X	X									09 04
IP-1		1300		10	HCL VOA [illegible] HCL Amber		X	X	X	X	X	X	X	X				10 05
IP-5		1325		10	" "		X	X	X	X	X	X	X	X				11 06

SAMPLING COMPLETED: DATE 7/23 TIME 1325
SAMPLING PERFORMED BY: Will Lampe

RESULTS NEEDED NO LATER THAN: Standard TAT

RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME
[signature]	7/23/08				
			[signature] Kiff Analytical	072308	~~1325~~ 1523

SHIPPED VIA	DATE SENT	TIME SENT	COOLER #

BLAINE
TECH SERVICES, INC.

1680 ROGERS AVENUE
SAN JOSE, CALIFORNIA 95112-1105
FAX (408) 573-7771
PHONE (408) 573-0555

CHAIN OF CUSTODY BTS # 080723-WW1

CLIENT: Arctos Environmental, Inc.

SITE: Tesoro - Livermore
1619 1st Street
Livermore, CA

LAB: KIFF 63855 DHS #

ALL ANALYSES MUST MEET SPECIFICATIONS AND DETECTION LIMITS SET BY CALIFORNIA DHS AND
☐ EPA ☐ RWQCB REGION
☐ LIA
☐ OTHER

CONDUCT ANALYSIS TO DETECT

SPECIAL INSTRUCTIONS

Invoice and Report to : Arctos Environmental, Inc.
Attn: Mike Purchase
1332 Peralta Ave. Berkeley, CA 94702
Ph. 510-525-2180
mpurchase@arctosenv.com

SAMPLE I.D.	DATE	TIME	MATRIX S= SOIL W=H_2O	CONTAINERS TOTAL	CONTAINERS VOA/HCL	C = COMPOSITE ALL CONTAINERS	TPH-G + BTEX + MTBE (8260)	(7) Oxygenates (8260)	Lead Scavengers	Ferrous Iron (24 hr. Hold time)	Nitrate, Sulfate, Phosphorous	COD (410.4)	Total Alkalinity (SM2320B)	Carbon Dioxide (SM4500-CO2D) & Methane	ADD'L INFORMATION	STATUS	CONDITION	LAB SAMPLE #
DW-4	7/07/08	1020	W	3	40mL HCL VOA		X	X	X									01 12
DW-3		1055	W	3	40mL HCL VOA		X	X	X									02 13
DW-2		1125	W	3	40mL HCL VOA		X	X	X									03 14
MW-2		1245	W	3	40mL HCL VOA		X	X	X									04 15
DW-1	↓	1440	W	3	40 mL HCL VOA		X	X	X									05 16

SAMPLING COMPLETED DATE 7/23/08 TIME

SAMPLING PERFORMED BY B. Dashler

RESULTS NEEDED NO LATER THAN Standard TAT

RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME
[signature]	7/23/08	1523			
			[signature] for Kiff Analytical	072308	1523

SHIPPED VIA	DATE SENT	TIME SENT	COOLER #	

ATTACHMENT F

WASTE MANIFESTS

Manifest

TPST Soil Recyclers of CA
Non-Hazardous Soils

↓ Manifest # ↓

Date of Shipment:	Responsible for Payment:	Transporter Truck #:	Facility #:	Given by TPST:	Load #
7/15/09		111-733	A07	31254	1104

Generator and/or Consultant

Generator's Name and Billing Address:	Generator's Phone #:	Generator's US EPA ID No.
TESORO ENVIRONMENTAL RESOURCES COMPANY 3450 S. 334TH, SUITE 201 AUBURN, WA 98001	Person to Contact:	
	FAX#:	Customer Account Number with TPST:

Consultant's Name and Billing Address:	Consultant's Phone #:	
	Person to Contact:	
	FAX#:	Customer Account Number with TPST:

Generation Site (Transport from): *(name & address)*	Site Phone #:	BTEX Levels
TESORO 67076 (FORMER) 1010 FIRST ST. LIVERMORE, CA 94550	Person to Contact:	TPH Levels
	FAX#:	AVG. Levels

Designated Facility (Transport to): *(name & address)*	Facility Phone #:	Facility Permit Numbers
TPST SOIL RECYCLERS OF CALIFORNIA 12328 HIBISCUS AVENUE ADELANTO, CA 92301	(800) 862-8001	
	Person to Contact: DELLENA JEFFREY	
	FAX#: (760) 246-8004	

Transporter Name and Mailing Address:	Transporter's Phone #:	Transporter's US EPA ID No.:
BELSHIRE 25971 TOWNE CENTRE DRIVE FOOTHILL RANCH, CA 92610 BESI: 163106	(949) 460-5200	CAR000183913
	Person to Contact: LARRY MOOTHART	Transporter's DOT No.: 460647
	FAX#: (949) 460-5210	Customer Account Number with TPST:

Description of Soil	Moisture Content	Contaminated by:	Approx. Qty:	Description of Delivery	Gross Weight	Tare Weight	Net Weight
Sand ❑ Organic ❑ Clay ❑ Other ❑	0 - 10% ❑ 10 - 20% ❑ 20% - over ❑	Gas ❑ Diesel ❑ Other ❑	9 DMS		104005020		53380
Sand ❑ Organic ❑ Clay ❑ Other ❑	0 - 10% ❑ 10 - 20% ❑ 20% - over ❑	Gas ❑ Diesel ❑ Other ❑					2.69

List any exception to items listed above: Scale Ticket# 60146

Generator's and/or consultant's certification: I/We certify that the soil referenced herein is taken entirely from those soils described in the Soil Data Sheet completed and certified by me/us for the Generation Site shown above and nothing has been added or done to such soil that would alter it in any way. 22 OCT

Print or Type Name: Generator ❑ Consultant ❑	Signature and date:	Month	Day	Year
Larry Moothart of BESI on behalf of generator		10	30	08

Transporter

Transporter's certification: I/We acknowledge receipt of the soil described above and certify that such soil is being delivered in exactly the same condition as when received. I/We further certify that this soil is being directly transported from the Generation Site to the Designated Facility without off-loading, adding to, subtracting from or in any way delaying delivery to such site.

Print or Type Name:	Signature and date:	Month	Day	Year
Bruce K Hosey		7	15	09

Recycling Facility

Discrepancies:

Recycling Facility certifies the receipt of the soil covered by this manifest except as noted above:

Print or Type Name:	Signature and date:
D. JEFFREY/J. PROVANSAL	7/15/09

Please print or type.

GENERATOR/CONSULTANTS COPY

NO. 673316

6

NON-HAZARDOUS WASTE DATA FORM

TO BE COMPLETED BY GENERATOR

GENERATING SITE: TESORO 67076 (FORMER), 1619 FIRST ST., LIVERMORE, CA 94550

EPA I.D. NO.:

NAME: TESORO ENVIRONMENTAL RESOURCES COMPANY

ADDRESS: 3450 S. 334TH, SUITE 201, AUBURN, WA 98001

PROFILE NO.:

CITY, STATE, ZIP:

PHONE NO. ( )

CONTAINERS: No. 6 VOLUME 330 GAL WEIGHT

TYPE: ☐ TANK TRUCK ☐ DUMP TRUCK ☐ DRUMS ☐ CARTONS ☐ OTHER

WASTE DESCRIPTION: NON-HAZARDOUS WATER

GENERATING PROCESS: WELL PURGING / DECON WATER

	COMPONENTS OF WASTE	PPM	%		COMPONENTS OF WASTE	PPM	%
1.	WATER		99-100%	5.			
2.	TPH		<1%	6.			
3.				7.			
4.				8.	BESI:153196		

PROPERTIES: pH 7-10 ☐ SOLID ☒ LIQUID ☐ SLUDGE ☐ SLURRY ☐ OTHER

HANDLING INSTRUCTIONS: 24-HOUR EMERGENCY PHONE: 949-699-3796

THE GENERATOR CERTIFIES THAT THE WASTE AS DESCRIBED IS 100% NON-HAZARDOUS.

Larry Moothart of BESI on behalf of generator [signature] 6/30/08

TYPED OR PRINTED FULL NAME & SIGNATURE — DATE

TRANSPORTER

NAME: BELSHIRE — Nieto & Sons trucking

EPA I.D. NO.:

ADDRESS: 25971 TOWNE CENTRE DRIVE — 1281 Brea Canyon

SERVICE ORDER NO.

CITY, STATE, ZIP: FOOTHILL RANCH, CA 92610 — Brea - Calif 92821

PICK UP DATE

PHONE NO.: (949) 460-5200

TRUCK, UNIT, I.D. NO.: 213-325

Richard Duran [signature] 7-3-08

TYPED OR PRINTED FULL NAME & SIGNATURE — DATE

TSD FACILITY

NAME: DEMENNO KERDOON

EPA I.D. NO.:

DISPOSAL METHOD: ☐ LANDFILL ☐ OTHER

ADDRESS: 2000 N. ALAMEDA ST.

CITY, STATE, ZIP: COMPTON, CA 90222

PHONE NO.: 310-537-7100

[signature] 7-3-08

TYPED OR PRINTED FULL NAME & SIGNATURE — DATE

GEN	OLD/NEW	L A	TONS
TRANS		S B	
C/O		RT/CD	HWDF NONE

DISCREPANCY

NO. 673716

NON-HAZARDOUS WASTE DATA FORM

23

TO BE COMPLETED BY GENERATOR

GENERATING SITE:

NAME: TESORO ENVIRONMENTAL RESOURCES COMPANY — TESORO 67076 (FORMER)

ADDRESS: 3450 S. 334TH, SUITE 201, AUBURN, WA 98001 — 1619 FIRST ST.

CITY, STATE, ZIP: LIVERMORE, CA 94550

EPA I.D. NO.

PROFILE NO.

PHONE NO. ( )

CONTAINERS: No. 4 VOLUME 220 WEIGHT

TYPE: ☐ TANK TRUCK ☐ DUMP TRUCK ☐ DRUMS ☐ CARTONS ☐ OTHER

WASTE DESCRIPTION: NON-HAZARDOUS WATER — GENERATING PROCESS: WELL PURGING / DECON WATER

COMPONENTS OF WASTE	PPM	%	COMPONENTS OF WASTE	PPM	%
1. WATER		98-100%	5.		
2. TPH		<1%	6.		
3.			7.		
4.			8. BESI:157506		

PROPERTIES: pH 7-10 ☐ SOLID ☒ LIQUID ☐ SLUDGE ☐ SLURRY ☐ OTHER

HANDLING INSTRUCTIONS: 24-HOUR EMERGENCY PHONE: 949-689-3708

THE GENERATOR CERTIFIES THAT THE WASTE AS DESCRIBED IS 100% NON-HAZARDOUS.

Larry Meathen of BESI on behalf of generator — TYPED OR PRINTED FULL NAME & SIGNATURE — 9/4/08 DATE

TRANSPORTER

NAME: BELSHIRE Nieto & Sons

EPA I.D. NO.

ADDRESS: 25971 TOWNE CENTRE DRIVE 1284 BREA CA 92821 — SERVICE ORDER NO.

CITY, STATE, ZIP: FOOTHILL RANCH, CA 92610 BREA CA 92821 — PICK UP DATE 9/4/08

PHONE NO. (949) 460-6200 714-990-6855

TRUCK, UNIT, I.D. NO. 217-372 — Richard Duarte — 9-9-08

TYPED OR PRINTED FULL NAME & SIGNATURE — DATE

TSD FACILITY

NAME: DEMENNO KERDOON

EPA I.D. NO.

DISPOSAL METHOD

ADDRESS: 2000 N. ALAMEDA ST. ☐ LANDFILL ☐ OTHER

CITY, STATE, ZIP: COMPTON, CA 90222

PHONE NO. 310-537-7100

Denis Alexander — TYPED OR PRINTED FULL NAME & SIGNATURE — 09-10-08 DATE

GEN	OLD/NEW	L A	TONS	
TRANS		S B		
C/Q		RT/CD	HWDF NONE	DISCREPANCY