# SITE CONCEPTUAL MODEL UPDATE
# FIRST QUARTER 2006

Tesoro Station No. 67106
Former Beacon Station No. 3720
1088 Marina Boulevard
San Leandro, California
RDM Project No. 00-67106

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## EXECUTIVE SUMMARY

This Site Conceptual Model (SCM) Update has been prepared by RDM Environmental, Inc. (RDM) and Haley & Aldrich, Inc. (Haley & Aldrich), on behalf of Tesoro Petroleum Companies, Inc. (Tesoro), for the former Tesoro Station No. 67106 located at 1088 Marina Boulevard, San Leandro, California. This report is submitted in fulfillment of the requirements for the California Regional Water Quality Control Board, San Francisco Bay Region (CRWQCBSFB), the Alameda County Health Care Agency – Department of Health and the City of San Leandro – Environmental Service Division. This report contains only updates to the Groundwater Monitoring and Remediation Systems Status Report dated November 10, 2005 (RDM). Standard background information previously submitted to the agency in hard copy is not included in this update report. This information can be found in hard copy by referring to the SCM report dated November 10, 2005, or electronically accessed on the Tesoro North Hollywood Sharepoint website (https://portal.haleyaldrich.com/sites/ext/San Leandro).

Currently, the groundwater flow is toward the southwest, which is generally consistent with recent monitoring events, and consistent with historical groundwater flow direction. Total Petroleum Hydrocarbons as gasoline (TPH-G) are currently detected in Wells MW-1, MW-2, MW-3, and MW-4 at concentrations greater than the environmental screening level (ESL) for groundwater that is not a current or potential drinking water resource; MW-9 meets the non-drinking water resource criteria but exceeds the ESL criteria for groundwater that is considered a current or potential drinking water resource. Total Xylenes are currently detected in Wells MW-2 and MW-4 at a concentration greater than the non-drinking water resource ESL. Benzene, Toluene and Ethylenzene concentrations in Wells MW-1, MW-2, MW-3 and MW-4 are below the non-drinking water ESL but are greater than the drinking water resource ESLs. All other on-site and off-site Wells are either non-detect (ND) or have concentrations below the drinking water resource ESLs for TPH-G, BTEX, MTBE or other fuel oxygenates.

Significant concentration reductions have been observed since beginning this monitoring program: the highest MTBE concentration detected this quarter (4.9 ug/L, January 13, 2006 in Well MW-4) is less than one one-hundredth of a percent of the historical maximum of 84,000 ug/L; the highest combined BTEX concentration detected this quarter (1128 ug/L, January 13, 2006 in Well MW-4) is approximately fifteen percent that of the historical maximum of 7,300 ug/L; and the highest TPH-G concentration detected this quarter (6,800 ug/L, January 13, 2006 in Well MW-2) is approximately one fifth that of the historical maximum of 35,000 ug/L. The remedial approach has slowed the migration of the gasoline plume and has substantially reduced contaminant concentrations in the aquifer.

Soil vapor extraction has reached the limit of its effectiveness as no measurable concentrations of VOCs or TPH-G were detected in the vapor stream during this quarter. We are proposing to temporarily suspend active remediation during the 2nd and 3rd Quarters of 2006 to allow an assessment of site rebound and equilibrium concentrations for a six month period. This assessment will be used to focus subsequent remedial action to the areas warranting further attention and facilitate a better understanding of which technology(ies) will be most appropriate to complete site restoration. Alameda County Health Care Services has agreed with the proposed scope of work as indicated in their letter dated April 11, 2006, and has also requested the completion of a detailed well survey for wells within a 2,000-foot radius of the site to identify potential down gradient receptors and to assess which groundwater contaminant screening criteria is most applicable to the site.

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## 1.0 INTRODUCTION

This Site Conceptual Model (SCM) Update Report has been prepared by RDM Environmental, Inc. (RDM) and Haley & Aldrich, Inc. (Haley & Aldrich), on behalf of Tesoro Petroleum Companies, Inc. (Tesoro) for the former Tesoro Station No. 67106 located at 1088 Marina Boulevard, San Leandro, California. This report contains only updates to the previously submitted documents. The most recently prepared project reports and standard project reference materials consistently contained in quarterly reports submitted to the CRWQCBSFB (e.g., site background, local groundwater use, site geology and hydrogeology, general field procedures, previous work, remedial system descriptions) are available in hard copy in any of the previous report submittals or electronically on the Tesoro North Hollywood Sharepoint website (https://portal.haleyaldrich.com/sites/ext/Tesoro/San Leandro), a project data portal and collaborative resource that is currently available to all members of the project team and interested stakeholders.

Total Petroleum Hydrocarbons as gasoline (TPH-G) and Total Xylenes remain the main constituents of concern in groundwater beneath this site. The plume is contained within the site boundary with TPH-G concentrations in Wells MW-1, MW-2, MW-3, and MW-4 at concentrations greater than the environmental screening level (ESL) for groundwater that is not a current or potential drinking water resource; MW-9 meets the non-drinking water resource criteria but exceeds the ESL criteria for groundwater that is considered a current or potential drinking water resource. Total Xylenes are currently detected in Wells MW-2 and MW-4 at a concentration greater than the non-drinking water resource ESL. Benzene, Toluene and Ethylenzene concentrations in Wells MW-1, MW-2, MW-3 and MW-4 are below the non-drinking water ESL but are greater than the drinking water resource ESLs. All other on-site and off-site Wells are either non-detect (ND) or have concentrations below the drinking water resource ESLs for TPH-G, BTEX, MTBE or other fuel oxygenates.

Soil vapor extraction (SVE) from Wells MW-2, MW-3, MW-8, MW-9, VW-1, ozone sparging in Wells MW-1, MW-4 and MW-5, coupled with air sparging in sparge points SP-1 through SP-6 have significantly reduced subsurface contaminant concentrations beneath the site and have prevented off-site migration.

Significant concentration reductions have been observed since beginning this monitoring program: the highest MTBE concentration detected this quarter (4.9 ug/L, January 13, 2006 in Well MW-4) is less than one one-hundredth of a percent of the historical maximum of 84,000 ug/L; the highest combined BTEX concentration detected this quarter (1128 ug/L, January 13, 2006 in Well MW-4) is approximately fifteen percent that of the historical maximum of 7,300 ug/L; and the highest TPH-G concentration detected this quarter (6,800 ug/L, January 13, 2006 in Well MW-2) is approximately one fifth that of the historical maximum of 35,000 ug/L. The remedial approach has slowed the migration of the gasoline plume and has substantially reduced contaminant concentrations in the aquifer.

## 2.0 SITE BACKGROUND

Site Description and Groundwater Use details are available in hard copy in any of the previous report submittals or electronically on the Tesoro North Hollywood Sharepoint website (https://portal.haleyaldrich.com/sites/ext/Tesoro/San Leandro).

## 3.0 ENVIRONMENTAL SETTING

Descriptions of the site geologic and hydrogeologic conditions are available in hard copy in any of the previous report submittals or electronically on the Tesoro North Hollywood Sharepoint website (https://portal.haleyaldrich.com/sites/ext/Tesoro/San Leandro). A site topographic map and site map are shown in Figures 1 and 2, respectively.

## 4.0 SITE ASSESSMENT ACTIVITIES

No supplemental site assessment activities were performed during the reporting period. A summary of previous work conducted at the site is available in hard copy in any of the previous report submittals or electronically on the Tesoro North Hollywood Sharepoint website (https://portal.haleyaldrich.com/sites/ext/Tesoro/San Leandro).

## 5.0 QUARTERLY GROUNDWATER MONITORING AND SAMPLING

### 5.1 GROUNDWATER MONITORING AND SAMPLING ACTIVITIES

On January 13, 2006, fluid levels in Monitoring Wells MW-1 through MW-9 were measured prior to well purging and sampling. No free product was observed in any of the groundwater monitoring wells and has not been observed in any project monitoring well since before March 1998. Groundwater monitoring data are presented in Table 1.

Data used to prepare the groundwater elevation contour maps were obtained from fluid level sensors deployed during the January 13, 2006 sampling event. Groundwater elevation data are summarized in Table 1. The groundwater elevation contour map, using data obtained during the January 13, 2006 sampling event, is shown in Figure 3 and indicates that groundwater direction is predominately to the southwest.

### 5.2 LABORATORY ANALYSIS

Groundwater samples collected during this sampling event were analyzed by a State-certified laboratory, for total petroleum hydrocarbons as gasoline (TPH-G) using the Department of Health Services Leaking Underground Fuel Tank (DHS LUFT) Method, and volatile organic compounds (VOCs), including benzene, toluene, ethylbenzene, total xylenes (BTEX), MTBE, and other fuel oxygenates using Environmental Protection Agency (EPA) Method 8260B.

Historical and quarterly results of laboratory analysis of groundwater samples (including First Quarter 2006) are presented in Table 1. Dissolved-phase Benzene, TPH-G, MTBE and total Xylenes iso-concentration maps are shown on Figures 4, 5, 6, and 7, respectively. Copies of the official laboratory reports and chain of custody records for the 1$^{st}$ Quarter 2006 quarterly groundwater sampling event are included in Appendix B. In addition, field data sheets from the quarterly monitoring and sampling event are included in Appendix A.

### 5.3 FINDINGS

On January 13, 2006, groundwater was measured at depths between 10.7 feet and 13.2 feet bgs. Based on previous groundwater elevation data, the groundwater elevation has increased 1.2 feet, on average, across the site. Groundwater flow beneath the site is to the southwest under a hydraulic gradient less than 0.05 foot per foot. Groundwater monitoring data are presented in Tables 1 and 2, and the groundwater elevation contour map is shown on Figure 3.

Results of laboratory analysis of groundwater samples collected on January 13, 2006, from Wells MW-1 through MW-9 are summarized in Table 1 and indicate the following:

- TPH-G was detected in groundwater samples collected from Wells MW-1, MW-2, MW-3, MW-4, MW-8, and MW-9 at concentrations of 6500, 6800, 1200, 4000, 52, and 280 ug/L, respectively. Results show no significant reduction in TPH-G concentrations from the Fourth Quarter 2005 analytical results.

- Benzene was detected in groundwater samples collected from Wells MW-2, MW-3, and MW-4 at concentrations of 17, 5.0, and 8.3 ug/L, respectively. Results are consistent with groundwater sample results from the Fourth Quarter 2005 and do not show a significant decrease in contaminant concentrations.

- Toluene was detected in groundwater samples collected from Wells MW-2, MW-3 and MW-4 at concentrations of 7.8, 1.1 and 100 ug/L, respectively. Results are consistent with groundwater sample results from the Fourth Quarter 2005 and do not show a significant decrease in contaminant concentrations.

- Ethylbenzene was detected in groundwater samples collected from Wells MW-1, MW-2, MW-3, MW-4, and MW-5 at concentrations of 34, 220, 4.9, 160, and 1.2 ug/L, respectively. Results are consistent with groundwater sample results from the Fourth Quarter 2005 and do not show a significant decrease in contaminant concentrations.

- Total Xylenes was detected in groundwater samples collected from Wells MW-1, MW-2, MW-3, MW-4, and MW-8 at concentrations of 17, 230, 1.2, 860, and 0.51 ug/L, respectively. Results are consistent with groundwater sample results from the Fourth Quarter 2005 and do not show a significant decrease in contaminant concentrations.

- MTBE was detected in groundwater samples collected from Wells MW-2, MW-3, MW-4, MW-5, MW-7 and MW-8 at concentrations of 3.5, 3.1, 4.9, 0.60, 0.61 and 0.58 ug/L, respectively. Results are consistent with groundwater sample results from the Fourth Quarter 2005 and do not show a significant decrease in contaminant concentrations, with the exception of Well MW-8 where the MTBE concentration was reduced from 15 ug/L to 0.58 (>96% reduction).

## 6.0 SITE CONCEPTUAL MODEL OVERVIEW AND UPDATE

Currently, the groundwater flow is toward the southwest, which is generally consistent with recent monitoring events, and consistent with the previous SCM for the site. Wells MW-1, MW-4 and MW-5 are currently connected to an ozone sparging system and have shown significant decreases in BTEX and MTBE concentrations over the last year, with a leveling off during the past two quarters; no significant decrease in TPH-G concentrations have been observed in the ozone sparge wells. An air sparging system is connected to sparge points SP-1 through SP-6, in an effort to stimulate aerobic biodegradation pathways. The current process flow diagram for all active remediation systems is shown on Figure 8.

In comparison to the Fourth Quarter 2005 sampling event, TPH-G, BTEX and MTBE concentrations for the First Quarter 2006 have not significantly decreased in monitoring Wells throughout the site, indicating the current remedial measures may have reached the limit of their effectiveness. There was an average increase in groundwater elevation of 1.2 feet compared to the Fourth Quarter of 2005.

Total Petroleum Hydrocarbons as gasoline (TPH-G) are currently detected in Wells MW-1, MW-2, MW-3, and MW-4 at concentrations greater than the environmental screening level (ESL) for groundwater that is not a current or potential drinking water resource; MW-9 meets the non-drinking water resource criteria but exceeds the ESL criteria for groundwater that is considered a current or potential drinking water resource. Total Xylenes are currently detected in Wells MW-2 and MW-4 at a concentration greater than the non-drinking water resource ESL. Benzene, Toluene and Ethylenzene concentrations in Wells MW-1, MW-2, MW-3 and MW-4 are below the non-drinking water ESL but are greater than the drinking water resource ESLs. All other on-site and off-site Wells are either non-detect (ND) or have concentrations below the drinking water resource ESLs for TPH-G, BTEX, MTBE or other fuel oxygenates. Despite the application of ozone injection and based on current data, TPH concentrations in the vicinity of MW-1 through MW-4 and MW-9, along with BTEX constituents in MW-1 through MW-4, will require further remediation. Ozone sparging will not effectively address the TPH concentrations since ozone is not able to readily oxidize straight or branched chain alkanes typical of gasoline.

## 7.0 QUARTERLY REMEDIAL PROGRESS OF SOIL VAPOR EXTRACTION SYSTEM

### 7.1 OPERATIONS UPDATE

The SVE system is continuing to operate with extraction from Wells MW-2, MW-3, MW-8, MW-9 and VW-1. The effluent vapor from the SVE blower is abated using two 600-lb carbon vessels connected in series. During the First Quarter 2006 no detectable concentrations of BTEX, MTBE, or TPH-G were identified in the SVE vapor stream (Table 2). It is estimated that less than 12 pounds of vapor equivalent gasoline were removed during the First Quarter 2005 (Table 3), calculated using the analytical method reporting limit for each constituent as the vapor stream concentration. The cumulative vapor equivalent gasoline removed (Table 3), as of January 13, 2006, is estimated at 3,082 pounds (505 gallons).

### 7.2 CONCLUSIONS AND RECOMMENDATIONS

Based on no detectable concentrations of BTEX, MTBE and TPH-G in the SVE vapor stream for all samples collected during the First Quarter 2006, it appears SVE has reached the limit of its effectiveness. We recommend that active SVE operations are temporarily suspended to allow an assessment of site rebound and equilibrium concentrations for a six month period.

## 8.0 QUARTERLY REMEDIAL PROGRESS OF GROUNDWATER TREATMENT SYSTEM

### 8.1 OPERATIONS UPDATE

Two 0.5 lb/hr ozone generators, connected in parallel, continuously sparge ozone in monitoring Wells MW-1, MW-4 and MW-5. Significant reductions in BTEX and MTBE concentrations have occurred over the past year, with a leveling off during the past two quarters. The application of ozone sparging has had little effect in decreasing TPH-G concentrations over the past two quarters. An air sparging system is connected to sparge points SP-1 through SP-6, in an effort to stimulate aerobic biodegradation pathways. The current process flow diagram for all active remediation systems is shown on Figure 7.

### 8.2 CONCLUSIONS AND RECOMMENDATIONS

Although groundwater monitoring data shown in Table 1 show significant reduction in contaminant concentrations throughout the site, it also shows a leveling off of treatment system performance. The results to date may not reflect actual aquifer conditions beyond the bore water of each ozone sparging well due to the small radius of influence resulting from the tight nature of the subsurface clay. Analytical

results may also be biased low because many of the on-site monitoring wells are either vapor extraction or ozone injection points (ozone injection at MW-1, MW-4, and MW-5; SVE at MW-2, MW-3, MW-8, and MW-9).

Based on current data, TPH-G and BTEX concentrations in the vicinity of MW-1 through MW-4 will require further remediation. Continued ozone sparging will not effectively address the TPH-G concentrations based on ozone's inability to readily oxidize straight or branched chain alkanes typical of gasoline, and that benefits observed are likely limited to the well-bore water and an artifact of oxygen addition from ozone decomposition.

We therefore recommend that site conditions be reassessed under un-amended, equilibrium state conditions (i.e., after sufficient shutdown of current remediation systems). The assessment of un-amended site conditions will provide the data and insight necessary to support a preferred path to closure.

## 9.0 PROPOSED WORK ACTIVITIES

RDM, Haley & Aldrich, and Tesoro propose the following work activities for the Second and Third Quarters of 2006:

- Shut-down of all active remediation (i.e., SVE, air sparging, and ozone injection), with immediate collection of TPH-G and VOC samples. Shutdown date is tentatively scheduled for the week of 15 May 2006.

- Maintain remediation shut-down for a minimum 6-month period. We anticipate, based on experience at sites with similar subsurface conditions, that six months is sufficient time for the subsurface to reach equilibrium conditions.

- During the third month of remediation shutdown, collect TPH-G, VOC and MNA (e.g., dissolved oxygen, redox potential, pH, conductivity, ferrous iron, total iron, alkalinity, carbon dioxide, total organic carbon, ) parameters from all wells using low flow sampling methods. This data will be reported in our next quarterly SCM update.

- At the end of the six month period sample each well for TPH-G, VOC, and MNA parameter analysis. We anticipate the analytical results will provide insight with respect to the following two concerns:
    - Whether subsurface conditions are appropriate for the current remedial approach.
    - The extent to which the current remedial approach has been effective.

- Regularly scheduled monitoring of water levels in key wells within the monitoring network to provide groundwater flow gradient and direction data.

- Continue quarterly groundwater compliance reporting under this new reporting format, including updates to the SCM as appropriate.

- Conduct a well survey to locate all wells (monitoring and water supply wells: active, inactive, standby, decommissioned, and abandoned) within a 2,000-foot radius of the site. Results will be used to identify potential down gradient receptors and to assess which groundwater contaminant screening criteria is most applicable to the site.

## 10.0 STATEMENT OF LIMITATIONS AND PROFESSIONAL CERTIFICATION

The conclusions presented herein are based solely upon the agreed upon scope of work outlined in this report. RDM makes no warranties or guarantees as to the accuracy or completeness of information provided or compiled by others. It is possible that information exists beyond the scope of this investigation. Additional information, which was not found or available to RDM at the time of writing this report, may result in modification of the conclusions presented. This report is not a legal opinion. The services performed by RDM have been conducted in a manner consistent with the level of care ordinarily exercised by members of our profession currently practicing under similar conditions. No other warranty, expressed or implied, is made.

This report was supervised or prepared by the licensed professional whose signature and license number appear below.

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## 11.0 REFERENCES

Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater; Volume 1: Summary Tier 1 Lookup Tables. California Regional Water Quality Control Board, San Francisco Bay Region, Interim Final – 2005.

Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater; Volume 2: Background Documentation for the Development of Tier I Environmental Screening Levels. California Regional Water Quality Control Board, San Francisco Bay Region, Interim Final – 2005.

**TABLE 1**

**GROUND WATER MONITORING DATA**

Tesoro Station No. 67106
Former Beacon Station No. 3720
1088 Marina Boulevard
San Leandro, California

| Monitoring Well | Date | Reference Elevation (ft) [a] | Depth to Ground Water (ft) | Ground Water Elevation (ft) | Benzene (µg/L) | Toluene (µg/L) | Ethyl-benzene (µg/L) | Total Xylenes (µg/L) | TPH as gasoline (µg/L) | MTBE (µg/L) | Oxygenates (µg/L) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-1 | 03/12/98 | 33.10 | 11.09 | 22.01 | <0.5 | <0.5 | 5.0 | 2.8 | 100 | <5.0 | NA | No sheen |
| | 05/28/98 | | 11.36 | 21.74 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <5.0 | NA | No sheen |
| | 08/31/98 | | 12.61 | 20.49 | <0.5 | <0.5 | 6.4 | 1.4 | 130 | <5.0 | NA | No sheen |
| | 11/19/98 | | 13.84 | 19.26 | 0.75 | <0.5 | <0.5 | 3.0 | 120 | <5.0 | NA | No sheen |
| | 03/15/99 | | 11.95 | 21.15 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <5.0 | NA | No sheen |
| | 06/07/99 | | 13.45 | 19.65 | 1.6 | 1.9 | 230 | 110 | 5,200 | <5.0 | NA | No sheen |
| | 09/07/99 | | 13.10 | 20.00 | 1.0 | <0.5 | 22 | 15 | 490 | <5.0 | NA | No sheen |
| | 12/13/99 | | 14.29 | 18.81 | <2.5 | <2.5 | 170 | 110 | 4,100 | <25 | NA | No sheen |
| | 03/08/00 | | 11.22 | 21.88 | <0.5 | <0.5 | 21 | 7.7 | 1,200 | 150 | NA | No sheen |
| | 06/12/00 | | 12.85 | 20.25 | 1.5 | 0.9 | 160 | 98 | 3,000 | 34 | NA | No sheen |
| | 11/15/00 | | 14.19 | 18.91 | <20 | <20 | 470 | 390 | 8,500 | 14,000 | NA | No sheen |
| | 02/27/01 | | 12.35 | 20.75 | 5.4 | 2.6 | 260 | 190 | 6,100 | 4,300 | NA | No sheen |
| | 05/22/01 | | 14.18 | 18.92 | 8.9 | 13 | 1,100 | 1,300 | 21,000 | 2,300 | NA | No sheen |
| | 09/05/01 | | 13.70 | 19.10 | <2.0 | 3.6 | 600 | 850 | 12,000 | 93 | NA | No sheen |
| | 11/07/01 | | 14.25 | 18.85 | <5.0 | <5.0 | 1,300 | 1,600 | 23,000 | 87 | NA | No sheen |
| | 02/11/02 | 35.47 | 13.05 | 22.42 | <0.5 | <0.5 | 140 | 150 | 4,500 | 18 | NA | No sheen |
| | 06/03/02 | | 13.31 | 22.16 | <2.5 | <2.5 | 520 | 460 | 12,000 | 12 | NA | No sheen |
| | 08/06/02 | | 13.75 | 21.72 | <0.5 | <0.5 | 710 | 580 | 22,000 | 15 | NA | No sheen |
| | 11/14/02 | | 14.10 | 21.37 | <5.0 | <5.0 | 300 | 250 | 16,000 | 8.1 | ND | No sheen |
| | 02/20/03 | | 12.80 | 22.67 | <1.5 | <1.5 | 130 | 89 | 7,300 | 9.3 | ND | No sheen |
| | 05/15/03 | | 12.90 | 22.57 | <2.5 | <2.5 | 270 | 120 | 14,000 | 4.7 | ND | No sheen |
| | 07/31/03 | | 13.50 | 21.97 | <5.0 | <5.0 | 380 | 230 | 18,000 | 5.2 | ND | No sheen |
| | 10/28/03 | | 14.42 | 21.05 | <5.0 | <5.0 | 340 | 210 | 17,000 | <5.0 | ND | No sheen |
| | 02/28/04 | | 12.72 | 22.75 | <2.0 | <2.0 | 140 | 48 | 10,000 | 4.8 | ND | No sheen |
| | 04/16/04 | | 13.52 | 21.95 | <0.5 | <0.5 | 29 | 11 | 2,800 | 2.1 | ND | No sheen |
| | 07/16/04 | | 14.04 | 21.43 | <0.5 | 0.57 | 130 | 74 | 5,500 | 1.4 | ND | No sheen |
| | 11/13/04 | | 13.99 | 21.43 | <0.70 | <0.70 | 56 | 25 | 4,000 | ND | ND | No sheen |
| | 02/04/05 | | 13.36 | 22.11 | 0.57 | <0.5 | 140 | 58 | 9,700 | 0.75 | ND | No sheen |
| | 04/08/05 | | 12.43 | 23.04 | <1.5 | <1.5 | 84 | 24 | 8,100 | <1.5 | ND | No sheen |
| | 08/10/05 | | 13.62 | 21.85 | <1.5 | <1.5 | 92 | 32 | 8,700 | <1.5 | ND | No sheen |
| | 11/05/05 | | 13.95 | 21.52 | <1.5 | <1.5 | 92 | 38 | 9,200 | <1.5 | ND | No sheen |
| | 01/13/06 | | 12.43 | 23.04 | <1.5 | <1.5 | 34 | 17 | 6,500 | <1.5 | ND | No sheen |

**TABLE 1**

**GROUND WATER MONITORING DATA**

Tesoro Station No. 67106
Former Beacon Station No. 3720
1088 Marina Boulevard
San Leandro, California

| Monitoring Well | Date | Reference Elevation (ft) [a] | Depth to Ground Water (ft) | Ground Water Elevation (ft) | Benzene (µg/L) | Toluene (µg/L) | Ethyl-benzene (µg/L) | Total Xylenes (µg/L) | TPH as gasoline (µg/L) | MTBE (µg/L) | Oxygenates (µg/L) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-2 | 03/12/98 | 32.80 | 10.92 | 21.88 | 32 | 1.0 | 12 | 6.5 | 440 | 20 | NA | No sheen |
| | 05/28/98 | | 10.41 | 22.39 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | 27 | NA | No sheen |
| | 08/31/98 | | 12.29 | 20.51 | 9.3 | 0.95 | 4.9 | 8.8 | 270 | 20 | NA | No sheen |
| | 11/19/98 | | 13.47 | 19.33 | 16 | 0.72 | <0.5 | 4.3 | 180 | 7.4 | NA | No sheen |
| | 03/15/99 | | 11.95 | 20.85 | 12 | 3.5 | 59 | 840 | 2,400 | 10 | NA | No sheen |
| | 06/07/99 | | 13.11 | 19.69 | 21 | 0.99 | 6.9 | 10 | 690 | 6.1 | NA | No sheen |
| | 09/07/99 | | 12.92 | 19.88 | 7.8 | 1.2 | 42 | 100 | 610 | <5.0 | NA | No sheen |
| | 12/13/99 | | 13.96 | 18.84 | 26 | 0.93 | 52 | 96 | 3,000 | <5.0 | NA | No sheen |
| | 03/08/00 | | 10.87 | 21.93 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <5.0 | NA | No sheen |
| | 06/12/00 | | 12.53 | 20.27 | 51 | 17 | 170 | 320 | 5,500 | 18 | NA | No sheen |
| | 11/15/00 | | 13.96 | 18.84 | 75 | 48 | 1,200 | 2,800 | 16,000 | 19,000 | NA | No sheen |
| | 02/27/01 | | 12.29 | 20.51 | 54 | 24 | 320 | 870 | 10,000 | 6,000 | NA | No sheen |
| | 05/22/01 | | 15.51 | 17.29 | 12 | 5.0 | 79 | 100 | 2,400 | 3,500 | NA | No sheen |
| | 09/05/01 | | 13.75 | 19.05 | 120 | 180 | 1,500 | 5,100 | 34,000 | 400 | NA | No sheen |
| | 11/07/01 | | 13.99 | 18.81 | 87 | 170 | 1,400 | 3,700 | 32,000 | 870 | NA | No sheen |
| | 02/11/02 | 35.11 | 12.98 | 22.13 | 170 | 250 | 1,600 | 4,700 | 34,000 | 390 | NA | No sheen |
| | 06/03/02 | | 13.24 | 21.87 | 130 | 260 | 1,700 | 5,100 | 29,000 | 110 | NA | No sheen |
| | 08/06/02 | | 13.73 | 21.38 | 110 | 240 | 1,700 | 4,700 | 34,000 | 84 | NA | No sheen |
| | 11/14/02 | | 13.55 | 21.56 | 51 | 150 | 1,300 | 3,600 | 35,000 | 39 | ND | No sheen |
| | 02/20/03 | | 11.80 | 23.31 | 67 | 130 | 1,100 | 2,800 | 23,000 | 71 | ND | No sheen |
| | 05/15/03 | | 12.27 | 22.84 | 57 | 110 | 840 | 2,300 | 19,000 | 43 | ND | No sheen |
| | 07/31/03 | | 13.46 | 21.65 | 78 | 210 | 2,000 | 5,000 | 31,000 | 36 | ND | No sheen |
| | 10/28/03 | | 14.09 | 21.02 | 59 | 120 | 2,000 | 3,600 | 32,000 | 19 | ND | No sheen |
| | 02/28/04 | | 12.27 | 22.84 | 21 | 26 | 520 | 980 | 10,000 | 35 | ND | No sheen |
| | 04/16/04 | | 13.22 | 21.89 | 30 | 30 | 540 | 890 | 11,000 | 30 | 23[c] | No sheen |
| | 07/16/04 | | 13.76 | 21.35 | 42 | 36 | 1,200 | 2,300 | 21,000 | 17 | ND | No sheen |
| | 11/13/04 | | 13.79 | 21.35 | 25 | 27 | 780 | 1,300 | 14,000 | 9.1 | ND | No sheen |
| | 02/04/05 | | 13.08 | 22.03 | 24 | 20 | 720 | 1,000 | 14,000 | 8.6 | ND | No sheen |
| | 04/08/05 | | 12.11 | 23.00 | 19 | 11 | 580 | 630 | 14,000 | 7.9 | ND | No sheen |
| | 08/10/05 | | 13.27 | 21.84 | 21 | 11 | 610 | 520 | 13,000 | 7.6 | ND | No sheen |
| | 11/05/05 | | 11.92 | 23.19 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <0.5 | ND | No sheen |
| | 01/13/06 | | 12.26 | 22.85 | 17 | 7.8 | 220 | 230 | 6,800 | 3.5 | ND | No sheen |

**TABLE 1**

**GROUND WATER MONITORING DATA**

Tesoro Station No. 67106
Former Beacon Station No. 3720
1088 Marina Boulevard
San Leandro, California

| Monitoring Well | Date | Reference Elevation (ft) [a] | Depth to Ground Water (ft) | Ground Water Elevation (ft) | Benzene (µg/L) | Toluene (µg/L) | Ethyl-benzene (µg/L) | Total Xylenes (µg/L) | TPH as gasoline (µg/L) | MTBE (µg/L) | Oxygenates (µg/L) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-3 | 03/12/98 | 32.30 | 10.81 | 21.49 | 0.67 | <0.5 | 7.1 | 3.4 | 1,200 | 7.3 | NA | No sheen |
| | 05/28/98 | | 11.45 | 20.85 | <0.5 | 0.5 | <0.5 | <0.5 | 350 | <5.0 | NA | No sheen |
| | 08/31/98 | | 12.21 | 20.09 | <0.5 | 0.89 | 0.69 | <0.5 | 240 | <5.0 | NA | No sheen |
| | 11/19/98 | | 13.26 | 19.04 | 5.3 | 0.72 | 0.86 | 4.2 | 440 | <5.0 | NA | No sheen |
| | 03/15/99 | | 11.89 | 20.41 | 3.3 | 1.3 | 0.77 | <0.5 | 410 | <5.0 | NA | No sheen |
| | 06/07/99 | | 12.91 | 19.39 | <0.5 | 2.0 | <0.5 | 0.66 | 680 | <5.0 | NA | No sheen |
| | 09/07/99 | | 12.81 | 19.49 | <0.5 | 0.62 | <0.5 | 8.7 | 150 | 12 | NA | No sheen |
| | 12/13/99 | | 13.75 | 18.55 | <0.5 | 0.52 | <0.5 | 1.0 | 830 | <5.0 | NA | No sheen |
| | 03/08/00 | | 11.39 | 20.91 | 0.58 | <0.5 | 0.77 | <0.5 | 960 | <5.0 | NA | No sheen |
| | 06/12/00 | | 12.58 | 19.72 | 1.7 | <0.5 | 46 | 6.3 | 1,700 | <5.0 | NA | No sheen |
| | 11/15/00 | | 13.85 | 18.45 | <200 | <200 | <200 | <200 | <20,000 | 84,000 | NA | No sheen |
| | 02/27/01 | | 12.22 | 20.08 | 98 | <20 | 130 | 30 | 3,500 | 16,000 | NA | No sheen |
| | 05/22/01 | | 13.66 | 18.64 | 41 | <20 | 20 | <20 | <2,000 | 5,800 | NA | No sheen |
| | 09/05/01 | | 13.41 | 18.89 | 9.9 | 1.5 | 49 | 8.2 | 5,300 | 430 | NA | No sheen |
| | 11/07/01 | | 13.85 | 18.45 | 9.4 | 1.8 | 47 | 8.8 | 6,500 | 1,600 | NA | No sheen |
| | 02/11/02 | 34.84 | 12.86 | 21.98 | 8.9 | <2.0 | 14 | <2.0 | 2,400 | 530 | NA | No sheen |
| | 06/03/02 | | 13.10 | 21.74 | 13 | 0.77 | 19 | 0.94 | 2,100 | 110 | NA | No sheen |
| | 08/06/02 | | 13.52 | 21.32 | 25 | 2.5 | 12 | 1.1 | 2,800 | 120 | NA | No sheen |
| | 11/14/02 | | 13.49 | 21.35 | 29 | 0.89 | 3.7 | <0.5 | 2,200 | 420 | 1.1[b], 19[c] | No sheen |
| | 02/20/03 | | 12.92 | 21.92 | 2.5 | <0.5 | <0.5 | <0.5 | 2,400 | 340 | 13[c] | No sheen |
| | 05/15/03 | | 12.83 | 22.01 | 2.0 | <0.5 | 1.2 | <0.5 | 2,100 | 200 | 0.85[b], 15[c] | No sheen |
| | 07/31/03 | | 13.44 | 21.40 | 1.2 | <0.5 | <0.5 | <0.5 | 1,600 | 330 | 0.81[b], 15[c] | No sheen |
| | 10/28/03 | | 13.92 | 20.92 | 1.0 | <0.5 | <0.5 | <0.5 | 1,600 | 160 | 7.1[c] | No sheen |
| | 02/28/04 | | 12.50 | 22.34 | 1.2 | <0.5 | 0.74 | <0.5 | 1,400 | 58 | 74[c] | No sheen |
| | 04/16/04 | | 13.07 | 21.77 | 1.2 | <0.5 | <0.5 | <0.5 | 1,400 | 45 | 95[c] | No sheen |
| | 07/16/04 | | 13.62 | 21.22 | 6.1 | 1.1 | <0.5 | 0.83 | 1,900 | 43 | 21[c] | No sheen |
| | 11/13/04 | | 13.70 | 21.22 | 4.7 | 0.79 | <0.5 | <0.5 | 1,300 | 30 | 82[c] | No sheen |
| | 02/04/05 | | 12.94 | 21.90 | 0.79 | <0.5 | <0.5 | <0.5 | 1,300 | 10 | 12[c] | No sheen |
| | 04/08/05 | | 12.10 | 22.74 | <0.5 | <0.5 | <0.5 | <0.5 | 770 | 4.2 | ND | No sheen |
| | 08/10/05 | | 13.19 | 21.65 | 3.4 | 0.61 | 0.57 | <0.5 | 1,600 | 6.3 | 11[c] | No sheen |
| | 11/05/05 | | 13.46 | 21.38 | 7.1 | 1.0 | 2.7 | 0.75 | 2,200 | 3.6 | 13[c] | No sheen |
| | 01/13/06 | | 12.20 | 22.64 | 5.0 | 1.1 | 4.9 | 1.2 | 1,200 | 3.1 | 9.8[a] | No sheen |

**TABLE 1**

**GROUND WATER MONITORING DATA**

Tesoro Station No. 67106
Former Beacon Station No. 3720
1088 Marina Boulevard
San Leandro, California

| Monitoring Well | Date | Reference Elevation (ft) [a] | Depth to Ground Water (ft) | Ground Water Elevation (ft) | Benzene (µg/L) | Toluene (µg/L) | Ethyl-benzene (µg/L) | Total Xylenes (µg/L) | TPH as gasoline (µg/L) | MTBE (µg/L) | Oxygenates (µg/L) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-4 | 03/12/98 | 32.90 | 11.31 | 21.59 | 2,200 | 1,500 | 630 | 3,000 | 14,000 | 440 | NA | No sheen |
| | 05/28/98 | | 10.40 | 22.50 | <0.5 | 0.75 | 0.68 | 6.9 | 67 | 26 | NA | No sheen |
| | 08/31/98 | | 12.54 | 20.36 | 1.8 | 2.5 | 0.65 | 3.4 | <50 | <5.0 | NA | No sheen |
| | 11/19/98 | | 13.99 | 18.91 | <0.5 | <0.5 | <0.5 | 0.61 | <50 | 17 | NA | No sheen |
| | 03/15/99 | | 12.06 | 20.84 | 1.2 | 1.6 | 0.76 | 4.5 | 160 | 9.3 | NA | No sheen |
| | 06/07/99 | | 13.57 | 19.33 | 210 | 370 | 350 | 2,000 | 5,800 | <20 | NA | No sheen |
| | 09/07/99 | | 10.30 | 22.60 | 2.2 | 2.8 | 4.8 | 25 | 130 | 12 | NA | No sheen |
| | 12/13/99 | | 14.18 | 18.72 | 1.3 | 1.0 | 1.2 | 4.8 | <50 | 12 | NA | No sheen |
| | 03/08/00 | | 11.77 | 21.13 | 78 | 200 | 160 | 750 | 3,700 | 11 | NA | No sheen |
| | 06/12/00 | | 13.47 | 19.43 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | 24 | NA | No sheen |
| | 11/15/00 | | 14.33 | 18.57 | 12 | 38 | 28 | 130 | 710 | 1,300 | NA | No sheen |
| | 02/27/01 | | 14.25 | 18.65 | 67 | 300 | 310 | 1,400 | 6,500 | 1,000 | NA | No sheen |
| | 05/22/01 | | 13.99 | 18.91 | 2.1 | 5.6 | 4.8 | 20 | 130 | 350 | NA | No sheen |
| | 09/05/01 | | 15.75 | 17.15 | 110 | 670 | 250 | 1,300 | 6,200 | 600 | NA | No sheen |
| | 11/07/01 | | 16.10 | 16.80 | 40 | 270 | 180 | 940 | 4,100 | 110 | NA | No sheen |
| | 02/11/02 | 35.33 | 15.04 | 20.29 | 91 | 590 | 620 | 3,000 | 14,000 | 350 | NA | No sheen |
| | 06/03/02 | | 13.61 | 21.72 | 69 | 390 | 190 | 1,100 | 4,300 | 240 | NA | No sheen |
| | 08/06/02 | | 15.01 | 20.32 | 100 | 690 | 570 | 2,900 | 13,000 | 170 | NA | No sheen |
| | 11/14/02 | | 13.98 | 21.35 | 65 | 380 | 550 | 3,400 | 20,000 | 130 | ND | No sheen |
| | 02/20/03 | | 13.33 | 22.00 | 57 | 240 | 650 | 3,700 | 18,000 | 98 | ND | No sheen |
| | 05/15/03 | | 13.29 | 22.04 | 44 | 100 | 200 | 1,200 | 8,500 | 120 | 21[c] | No sheen |
| | 07/31/03 | | 13.76 | 21.57 | 42 | 59 | 250 | 1,400 | 11,000 | 87 | ND | No sheen |
| | 10/28/03 | | 14.48 | 20.85 | 80 | 40 | 130 | 650 | 8,100 | 130 | 20[c] | No sheen |
| | 02/28/04 | | 12.96 | 22.37 | 85 | 430 | 570 | 3,700 | 17,000 | 67 | ND | No sheen |
| | 04/16/04 | | 13.57 | 21.76 | 72 | 420 | 570 | 3,800 | 19,000 | 60 | ND | No sheen |
| | 07/16/04 | | 14.16 | 21.17 | 46 | 330 | 360 | 2,200 | 10,000 | 58 | 28[c] | No sheen |
| | 11/13/04 | | 14.34 | 21.17 | 50 | 240 | 360 | 2,200 | 9,400 | 22 | ND | No sheen |
| | 02/04/05 | | 13.56 | 21.77 | 14 | 160 | 170 | 1,100 | 4,800 | 7.9 | ND | No sheen |
| | 04/08/05 | | 12.65 | 22.68 | 15 | 160 | 200 | 1,200 | 5,800 | 6.6 | ND | No sheen |
| | 08/10/05 | | 13.73 | 21.60 | 7.0 | 110 | 100 | 570 | 3,000 | 5.2 | 9.9[c] | No sheen |
| | 11/05/05 | | 14.35 | 20.98 | 6.0 | 91 | 95 | 630 | 3,000 | 5.3 | 9.1[c] | No sheen |
| | 01/13/06 | | 12.76 | 22.57 | 8.3 | 100 | 160 | 860 | 4,000 | 4.9 | 6.7[a] | No sheen |

**TABLE 1**

**GROUND WATER MONITORING DATA**

Tesoro Station No. 67106
Former Beacon Station No. 3720
1088 Marina Boulevard
San Leandro, California

| Monitoring Well | Date | Reference Elevation (ft) [a] | Depth to Ground Water (ft) | Ground Water Elevation (ft) | Benzene (µg/L) | Toluene (µg/L) | Ethyl-benzene (µg/L) | Total Xylenes (µg/L) | TPH as gasoline (µg/L) | MTBE (µg/L) | Oxygenates (µg/L) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-5 | 03/12/98 | 32.70 | 11.11 | 21.59 | 2,600 | 160 | 470 | 2,200 | 12,000 | <250 | NA | No sheen |
| | 05/28/98 | | 10.92 | 21.78 | 480 | 99 | 160 | 730 | 4,700 | <250 | NA | No sheen |
| | 08/31/98 | | 12.79 | 19.91 | 200 | 14 | 55 | 220 | 1,400 | 180 | NA | No sheen |
| | 11/19/98 | | 13.39 | 19.31 | 1.4 | <0.5 | <0.5 | <0.5 | <50 | 39 | NA | No sheen |
| | 03/15/99 | | 11.71 | 20.99 | 320 | 17 | 290 | 780 | 3,400 | 33 | NA | No sheen |
| | 06/07/99 | | 13.26 | 19.44 | 220 | 8.9 | 240 | 290 | 3,200 | <25 | NA | No sheen |
| | 09/07/99 | | 9.70 | 23.00 | 8.5 | <0.5 | 8.5 | 12 | 140 | 38 | NA | No sheen |
| | 12/13/99 | | 14.06 | 18.64 | <0.5 | <0.5 | <0.5 | 13 | 140 | <5.0 | NA | No sheen |
| | 03/08/00 | | 11.80 | 20.90 | 0.66 | <0.5 | 2.5 | 30 | 280 | <5.0 | NA | No sheen |
| | 06/12/00 | | 12.99 | 19.71 | 22 | 1.2 | 79 | 170 | 2,700 | 6.4 | NA | No sheen |
| | 11/15/00 | | 14.23 | 18.47 | 36 | 1.6 | 180 | 180 | 4,500 | 10 | NA | No sheen |
| | 02/27/01 | | 12.66 | 20.04 | 33 | 1.6 | 160 | 220 | 2,800 | 110 | NA | No sheen |
| | 05/22/01 | | 13.58 | 19.12 | 49 | 2.2 | 180 | 230 | 3,200 | 240 | NA | No sheen |
| | 09/05/01 | | 14.05 | 18.65 | 28 | 1.0 | 100 | 100 | 2,400 | 560 | NA | No sheen |
| | 11/07/01 | | 14.32 | 18.38 | <2.0 | <2.0 | 2.1 | 20 | 390 | 590 | NA | No sheen |
| | 02/11/02 | 35.09 | 13.31 | 21.78 | 19 | <5.0 | 59 | 52 | 1,200 | 1,800 | NA | No sheen |
| | 06/03/02 | | 13.55 | 21.54 | 44 | <2.0 | 150 | 210 | 3,200 | 610 | NA | No sheen |
| | 08/06/02 | | 14.10 | 20.99 | 42 | <2.0 | 140 | 150 | 3,200 | 820 | NA | No sheen |
| | 11/14/02 | | 14.03 | 21.06 | 29 | 1.3 | 94 | 100 | 2,900 | 560 | 100[c] | No sheen |
| | 02/20/03 | | 13.35 | 21.74 | 22 | <1.0 | 81 | 77 | 2,900 | 270 | 170[c] | No sheen |
| | 05/15/03 | | 13.11 | 21.98 | 55 | 1.8 | 94 | 85 | 3,700 | 220 | 0.64[b], 170[c] | No sheen |
| | 07/31/03 | | 13.88 | 21.21 | 45 | 1.1 | 26 | 19 | 2,400 | 200 | 180[c] | No sheen |
| | 10/28/03 | | 14.41 | 20.68 | 6.8 | <0.5 | 4.4 | 1.1 | 570 | 77 | 8.0[c] | No sheen |
| | 02/28/04 | | 12.89 | 22.20 | 37 | 1.4 | 130 | 120 | 3,400 | 72 | 32[c] | No sheen |
| | 04/16/04 | | 13.41 | 21.68 | 26 | 0.73 | 45 | 53 | 2,400 | 81 | 130[c] | No sheen |
| | 07/16/04 | | 13.92 | 21.17 | 24 | 0.85 | 36 | 20 | 2,100 | 71 | 46[c] | No sheen |
| | 11/13/04 | | 14.35 | 21.17 | 19 | 0.55 | 37 | 17 | 1,600 | 38 | 59[c] | No sheen |
| | 02/04/05 | | 13.48 | 21.61 | 40 | 1.40 | 120 | 80 | 4,500 | 32 | 43[c] | No sheen |
| | 04/08/05 | | 12.42 | 22.67 | <0.5 | <0.5 | <0.5 | <0.5 | 67 | 7.9 | ND | No sheen |
| | 08/10/05 | | 13.36 | 21.73 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | 1.5 | ND | No sheen |
| | 11/05/05 | | 13.96 | 21.13 | <0.5 | <0.5 | 2.2 | 1.5 | 110 | <0.5 | ND | No sheen |
| | 01/13/06 | | 12.53 | 22.56 | <0.5 | <0.5 | 1.2 | <0.5 | 0.58 | <0.5 | ND | No sheen |

**TABLE 1**

**GROUND WATER MONITORING DATA**

Tesoro Station No. 67106
Former Beacon Station No. 3720
1088 Marina Boulevard
San Leandro, California

| Monitoring Well | Date | Reference Elevation (ft) [a] | Depth to Ground Water (ft) | Ground Water Elevation (ft) | Benzene (µg/L) | Toluene (µg/L) | Ethyl-benzene (µg/L) | Total Xylenes (µg/L) | TPH as gasoline (µg/L) | MTBE (µg/L) | Oxygenates (µg/L) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-6 | 03/12/98 | 30.40 | 10.49 | 19.91 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <5.0 | NA | No sheen |
| | 05/28/98 | | 10.58 | 19.82 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <5.0 | NA | No sheen |
| | 08/31/98 | | 10.85 | 19.55 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <5.0 | NA | No sheen |
| | 11/19/98 | | 10.88 | 19.52 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <5.0 | NA | No sheen |
| | 03/15/99 | | 10.83 | 19.57 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <5.0 | NA | No sheen |
| | 06/07/99 | | 11.01 | 19.39 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <5.0 | NA | No sheen |
| | 09/07/99 | | 11.89 | 18.51 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <5.0 | NA | No sheen |
| | 12/13/99 | | 12.09 | 18.31 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <5.0 | NA | No sheen |
| | 03/08/00 | | 10.02 | 20.38 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <5.0 | NA | No sheen |
| | 06/12/00 | | 11.07 | 19.33 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <5.0 | NA | No sheen |
| | 11/15/00 | | 12.34 | 18.06 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <0.5 | NA | No sheen |
| | 02/27/01 | | 10.75 | 19.65 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <0.5 | NA | No sheen |
| | 05/22/01 | | 11.55 | 18.85 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <0.5 | NA | No sheen |
| | 09/05/01 | | 12.10 | 18.30 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <0.5 | NA | No sheen |
| | 11/07/01 | | 12.31 | 18.09 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <0.5 | NA | No sheen |
| | 02/11/02 | 32.74 | 11.05 | 21.69 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <0.5 | NA | No sheen |
| | 06/03/02 | | 11.70 | 21.40 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <0.5 | NA | No sheen |
| | 08/06/02 | | 12.28 | 20.46 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <0.5 | NA | No sheen |
| | 11/14/02 | | 12.46 | 20.28 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <0.5 | ND | No sheen |
| | 02/20/03 | | 11.26 | 21.48 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <0.5 | ND | No sheen |
| | 05/15/03 | | 11.85 | 20.89 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <0.5 | ND | No sheen |
| | 07/31/03 | | 11.73 | 21.01 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <0.5 | ND | No sheen |
| | 10/28/03 | | 12.38 | 20.36 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <0.5 | ND | No sheen |
| | 02/28/04 | | 11.88 | 20.86 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <0.5 | ND | No sheen |
| | 04/16/04 | | 11.85 | 20.89 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <0.5 | ND | No sheen |
| | 07/16/04 | | 12.84 | 19.90 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <0.5 | ND | No sheen |
| | 11/13/04 | | 12.13 | 19.90 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <0.5 | ND | No sheen |
| | 02/04/05 | | 11.14 | 21.60 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <0.5 | ND | No sheen |
| | 04/08/05 | | 10.94 | 21.80 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <0.5 | ND | No sheen |
| | 08/10/05 | | 11.42 | 21.32 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <0.5 | ND | No sheen |
| | 11/05/05 | | 11.90 | 20.84 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <0.5 | ND | No sheen |
| | 01/13/06 | | 10.70 | 22.04 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <0.5 | ND | No sheen |

**TABLE 1**

**GROUND WATER MONITORING DATA**

Tesoro Station No. 67106
Former Beacon Station No. 3720
1088 Marina Boulevard
San Leandro, California

| Monitoring Well | Date | Reference Elevation (ft) [a] | Depth to Ground Water (ft) | Ground Water Elevation (ft) | Benzene (µg/L) | Toluene (µg/L) | Ethyl-benzene (µg/L) | Total Xylenes (µg/L) | TPH as gasoline (µg/L) | MTBE (µg/L) | Oxygenates (µg/L) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-7 | 03/12/98 | 31.20 | 10.14 | 21.06 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <5.0 | NA | No sheen |
| | 05/28/98 | | 10.93 | 20.27 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <5.0 | NA | No sheen |
| | 08/31/98 | | 12.01 | 19.19 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <5.0 | NA | No sheen |
| | 11/19/98 | | 12.54 | 18.66 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <5.0 | NA | No sheen |
| | 03/15/99 | | 10.94 | 20.26 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <5.0 | NA | No sheen |
| | 06/07/99 | | 12.05 | 19.15 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <5.0 | NA | No sheen |
| | 09/07/99 | | 12.67 | 18.53 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <5.0 | NA | No sheen |
| | 12/13/99 | | 12.73 | 18.47 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <5.0 | NA | No sheen |
| | 03/08/00 | | 10.90 | 20.30 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <5.0 | NA | No sheen |
| | 06/12/00 | | 12.61 | 18.59 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <5.0 | NA | No sheen |
| | 11/15/00 | | 13.06 | 18.14 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <0.5 | NA | No sheen |
| | 02/27/01 | | 11.85 | 19.35 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <0.5 | NA | No sheen |
| | 05/22/01 | | 12.31 | 18.89 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <0.5 | NA | No sheen |
| | 09/05/01 | | 12.85 | 18.35 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <0.5 | NA | No sheen |
| | 11/07/01 | | 12.75 | 18.45 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <0.5 | NA | No sheen |
| | 02/11/02 | 33.64 | NM | NC | NS | NS | NS | NS | NS | NS | NS | |
| | 06/03/02 | | 12.58 | 21.06 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | 0.95 | NA | No sheen |
| | 08/06/02 | | 12.93 | 20.71 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <0.5 | NA | No sheen |
| | 11/14/02 | | 13.04 | 20.60 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <0.5 | ND | No sheen |
| | 02/20/03 | | 12.75 | 20.89 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <0.5 | ND | No sheen |
| | 05/15/03 | | 12.45 | 21.19 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | 0.69 | ND | No sheen |
| | 07/31/03 | | 12.80 | 20.84 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | 0.65 | ND | No sheen |
| | 10/28/03 | | NM | NC | NS | NS | NS | NS | NS | NS | NS | No sheen |
| | 02/28/04 | | 12.21 | 21.43 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <0.5 | ND | No sheen |
| | 04/16/04 | | 12.26 | 21.38 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <0.5 | ND | No sheen |
| | 07/16/04 | | 12.85 | 20.79 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <0.5 | ND | No sheen |
| | 11/13/04 | | 13.01 | 20.79 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <0.5 | ND | No sheen |
| | 02/04/05 | | 12.57 | 21.07 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <0.5 | ND | No sheen |
| | 04/08/05 | | 11.82 | 21.82 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | 0.78 | ND | No sheen |
| | 08/10/05 | | 12.44 | 21.20 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | 0.61 | ND | No sheen |
| | 11/05/05 | | 12.91 | 20.73 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | 0.76 | ND | No sheen |
| | 01/13/06 | | 11.51 | 22.13 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | 0.61 | ND | No sheen |

**TABLE 1**

**GROUND WATER MONITORING DATA**

Tesoro Station No. 67106
Former Beacon Station No. 3720
1088 Marina Boulevard
San Leandro, California

| Monitoring Well | Date | Reference Elevation (ft) [a] | Depth to Ground Water (ft) | Ground Water Elevation (ft) | Benzene (µg/L) | Toluene (µg/L) | Ethyl-benzene (µg/L) | Total Xylenes (µg/L) | TPH as gasoline (µg/L) | MTBE (µg/L) | Oxygenates (µg/L) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-8 | 03/12/98 | 33.80 | 11.81 | 21.99 | 1.4 | <0.5 | <0.5 | <0.5 | 72 | <5.0 | NA | No sheen |
| | 05/28/98 | | 12.14 | 21.66 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <5.0 | NA | No sheen |
| | 08/31/98 | | 13.16 | 20.64 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <5.0 | NA | No sheen |
| | 11/19/98 | | 14.56 | 19.24 | 510 | 24 | 1,200 | 2,800 | 14,000 | <5.0 | NA | No sheen |
| | 03/15/99 | | 12.40 | 21.40 | 160 | 16 | 910 | 2,100 | 14,000 | <50 | NA | No sheen |
| | 06/07/99 | | 14.06 | 19.74 | 330 | 14 | 470 | 880 | 7,800 | <50 | NA | No sheen |
| | 09/07/99 | | 14.01 | 19.79 | 150 | 2.6 | 260 | 370 | 3,200 | <5.0 | NA | No sheen |
| | 12/13/99 | | 14.91 | 18.89 | 35 | <5.0 | 280 | 730 | 6,700 | <50 | NA | No sheen |
| | 03/08/00 | | 11.85 | 21.95 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <5.0 | NA | No sheen |
| | 06/12/00 | | 13.59 | 20.21 | 4.0 | <0.5 | 4.9 | 2.1 | 140 | <5.0 | NA | No sheen |
| | 11/15/00 | | 14.94 | 18.86 | 2.0 | <0.5 | 3.1 | 2.6 | 100 | 110 | NA | No sheen |
| | 02/27/01 | | NM | NC | NS | NS | NS | NS | NS | NS | NA | Tank Over Well |
| | 05/22/01 | | NM | NC | NS | NS | NS | NS | NS | NS | NA | Tank Over Well |
| | 09/05/01 | | 14.68 | 19.12 | 160 | <2.0 | 200 | 330 | 4,800 | 850 | NA | No sheen |
| | 11/07/01 | | 15.10 | 18.70 | 1.1 | <1.0 | 2.0 | 6.1 | <100 | 590 | NA | No sheen |
| | 02/11/02 | 36.08 | 14.06 | 22.02 | 7.9 | <5.0 | 16 | 22 | <500 | 1,700 | NA | No sheen |
| | 06/03/02 | | 14.25 | 21.83 | 20.0 | <2.0 | 19 | 35 | 550 | 650 | NA | No sheen |
| | 08/06/02 | | 14.55 | 21.53 | 220 | <2.0 | 170 | 280 | 4,800 | 1,000 | NA | No sheen |
| | 11/14/02 | | 14.73 | 21.35 | 250 | <2.5 | 160 | 220 | 4,800 | 1,200 | 47[c] | No sheen |
| | 02/20/03 | | 13.81 | 22.27 | 17 | <1.0 | 19 | 42 | 760 | 520 | 16[c] | No sheen |
| | 05/15/03 | | 13.68 | 22.40 | 14 | <0.5 | 16 | 23 | 690 | 370 | 0.79[b], 10[c] | No sheen |
| | 07/31/03 | | 14.54 | 21.54 | 29 | <1.0 | 15 | 18 | 700 | 380 | 36[c] | No sheen |
| | 10/28/03 | | 15.09 | 20.99 | 87 | <1.0 | 34 | 40 | 2,000 | 490 | 130[c] | No sheen |
| | 02/28/04 | | 13.45 | 22.63 | 21 | <0.5 | 15 | 49 | 1,100 | 200 | 110[c] | No sheen |
| | 04/16/04 | | 14.19 | 21.89 | 57 | <0.5 | 52 | 75 | 2,900 | 300 | 140[c] | No sheen |
| | 07/16/04 | | 14.76 | 21.32 | 32 | <0.5 | 34 | 51 | 2,000 | 92 | 67[c] | No sheen |
| | 11/13/04 | | 14.91 | 21.32 | 30 | 0.64 | 84 | 92 | 4,100 | 61 | 76[c] | No sheen |
| | 02/04/05 | | 14.09 | 21.99 | 27 | <0.5 | 65 | 92 | 2,700 | 56 | 38[c] | No sheen |
| | 04/08/05 | | 13.11 | 22.97 | 1.1 | <0.5 | <0.5 | <0.5 | 81 | 6.9 | ND | No sheen |
| | 08/10/05 | | 14.20 | 21.88 | 14 | <0.5 | 26 | 22 | 2,000 | 27 | 22[c] | No sheen |
| | 11/05/05 | | 14.79 | 21.29 | 9.7 | <0.5 | 54 | 67 | 2,300 | 15 | 21[c] | No sheen |
| | 01/13/06 | | 13.24 | 22.84 | <0.5 | <0.5 | <0.5 | 0.51 | 52 | 0.58 | ND | No sheen |

**TABLE 1**

**GROUND WATER MONITORING DATA**

Tesoro Station No. 67106
Former Beacon Station No. 3720
1088 Marina Boulevard
San Leandro, California

| Monitoring Well | Date | Reference Elevation (ft) [a] | Depth to Ground Water (ft) | Ground Water Elevation (ft) | Benzene (µg/L) | Toluene (µg/L) | Ethyl-benzene (µg/L) | Total Xylenes (µg/L) | TPH as gasoline (µg/L) | MTBE (µg/L) | Oxygenates (µg/L) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-9 | 03/12/98 | 32.56 | 10.93 | 21.63 | 320 | 23 | 180 | 720 | 3,700 | 190 | NA | No sheen |
| | 05/28/98 | | 11.31 | 21.25 | 110 | 6.4 | 87 | 300 | 2,200 | 220 | NA | No sheen |
| | 08/31/98 | | 12.16 | 20.40 | 240 | 23 | 690 | 1,900 | 11,000 | <50 | NA | No sheen |
| | 11/19/98 | | 11.04 | 21.52 | 7.7 | <0.5 | 10 | 22 | 280 | 67 | NA | No sheen |
| | 03/15/99 | | 11.81 | 20.75 | <0.5 | <0.5 | <0.5 | 1.2 | <50 | <5.0 | NA | No sheen |
| | 06/07/99 | | 12.21 | 20.35 | 9.3 | 0.86 | 9.7 | 12 | 340 | <5.0 | NA | No sheen |
| | 09/07/99 | | 10.10 | 22.46 | 0.76 | <0.5 | 1.9 | 0.8 | 72 | 9.9 | NA | No sheen |
| | 12/13/99 | | 13.64 | 18.92 | <0.5 | <0.5 | <0.5 | <0.5 | 60 | <5.0 | NA | No sheen |
| | 03/08/00 | | 10.88 | 21.68 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <5.0 | NA | No sheen |
| | 06/12/00 | | 12.50 | 20.06 | 0.9 | <0.5 | 2.7 | 1.3 | 640 | 10 | NA | No sheen |
| | 11/15/00 | | 13.60 | 18.96 | <0.5 | <0.5 | 0.69 | <0.5 | 200 | 12 | NA | No sheen |
| | 02/27/01 | | 12.15 | 20.41 | 0.61 | <0.5 | 2.2 | 1.2 | 360 | 42 | NA | No sheen |
| | 05/22/01 | | 13.20 | 19.36 | 0.57 | <0.5 | 2.1 | 0.61 | 330 | 290 | NA | No sheen |
| | 09/05/01 | | 13.10 | 19.46 | <2.0 | <2.0 | <2.0 | <2.0 | <200 | 1,100 | NA | No sheen |
| | 11/07/01 | | 13.85 | 18.71 | 1.0 | <1.0 | <1.0 | <1.0 | 230 | 510 | NA | No sheen |
| | 02/11/02 | 34.63 | 12.98 | 21.65 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | 41 | NA | No sheen |
| | 06/03/02 | | 12.48 | 22.15 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | 55 | NA | No sheen |
| | 08/06/02 | | 13.16 | 21.47 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | 65 | NA | No sheen |
| | 11/14/02 | | 13.15 | 21.48 | <0.5 | <0..5 | <0.5 | <0.5 | <50 | 47 | ND | No sheen |
| | 02/20/03 | | 12.46 | 22.17 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | 28 | ND | No sheen |
| | 05/15/03 | | 12.26 | 22.37 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | 8.9 | ND | No sheen |
| | 07/31/03 | | 12.94 | 21.69 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | 0.85 | ND | No sheen |
| | 10/28/03 | | 13.83 | 20.80 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | 0.76 | ND | No sheen |
| | 02/28/04 | | 12.59 | 22.04 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <0.5 | ND | No sheen |
| | 04/16/04 | | 13.04 | 21.59 | <0.5 | <0.5 | <0.5 | <0.5 | 53 | <0.5 | ND | No sheen |
| | 07/16/04 | | 13.52 | 21.11 | <0.5 | <0.5 | <0.5 | <0.5 | 56 | <0.5 | ND | No sheen |
| | 11/13/04 | | 13.68 | 21.11 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <0.5 | ND | No sheen |
| | 02/04/05 | | 13.04 | 21.59 | <0.5 | <0.5 | <0.5 | <0.5 | 90 | <0.5 | ND | No sheen |
| | 04/08/05 | | 12.17 | 22.46 | <0.5 | <0.5 | <0.5 | <0.5 | 150 | <0.5 | ND | No sheen |
| | 08/10/05 | | 13.04 | 21.59 | <0.5 | <0.5 | 0.76 | <0.5 | 260 | <0.5 | ND | No sheen |
| | 11/05/05 | | 13.55 | 21.08 | <0.5 | <0.5 | <0.5 | <0.5 | 150 | <0.5 | ND | No sheen |
| | 01/13/06 | | 12.30 | 22.33 | <0.5 | <0.5 | 0.78 | <0.5 | 280 | <0.5 | ND | No sheen |

a =Referenced to mean sea level.
b =tert-amyl methyl ether
c = tert-butanol
TPH = Total petroleum hydrocarbons.
MTBE = Methyl tertiary butyl ether.
µg/L = Micrograms per liter.
Oxygenates = methyl-t-butyl ether, diisopropyl ether, ethyl-t-butyl ether, tert-amyl methyl ether, tert-butanol, 1,2-dichloroethane, 1,2-dibromoethane

**TABLE 2**

**SVE SYSTEM ANALYTICAL RESULTS**

Tesoro Station No. 67106
Former Beacon Station No. 3720
1088 Marina Boulevard
San Leandro, California

| Sample ID | Date | Benzene (ppmv) | Toluene (ppmv) | Ethyl-benzene (ppmv) | Total Xylenes (ppmv) | TPH as gasoline (ppmv) | MTBE (ppmv) |
|---|---|---|---|---|---|---|---|
| Influent | 06/05/97 | 3.2 | 0.72 | 1.2 | 2.5 | 220 | NA |
| Effluent | 06/05/97 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Influent | 07/03/97 | 0.30 | 0.67 | 0.23 | 1.8 | 86 | NA |
| Effluent | 07/03/97 | <0.05 | 0.054 | <0.05 | 0.13 | <5.0 | NA |
| Influent | 07/22/97 | 0.76 | 1.6 | 0.92 | 5.3 | 270 | NA |
| Effluent | 07/22/97 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Influent | 08/07/97 | 2.0 | 1.3 | 0.53 | 2.7 | 130 | NA |
| Effluent | 08/07/97 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Influent | 09/04/97 | 1.8 | 0.73 | 1.3 | 5.9 | 190 | NA |
| Effluent | 09/04/97 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Influent | 10/24/97 | 0.49 | 0.52 | 0.35 | 2.3 | 54 | NA |
| Effluent | 10/24/97 | <0.05 | <0.05 | <0.05 | 0.057 | <5.0 | NA |
| Effluent | 11/26/97 | 0.094 | 0.089 | <0.05 | 0.062 | 5.3 | NA |
| Influent | 12/10/97 | <0.05 | 0.44 | 0.076 | 0.37 | 5.8 | NA |
| Effluent | 12/10/97 | <0.05 | 0.062 | <0.05 | <0.05 | <5.0 | NA |
| Influent | 12/12/97 | 0.59 | 0.17 | 0.49 | 2.0 | 26 | NA |
| Effluent | 12/12/97 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Influent | 01/12/98 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Effluent | 01/12/98 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Influent | 04/23/98 | 0.18 | 0.32 | 0.072 | 0.47 | 18 | NA |
| Mid-Carbon | 04/23/98 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Effluent | 04/23/98 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Influent | 06/09/98 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Mid-Carbon | 06/09/98 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Effluent | 06/09/98 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Influent | 07/07/98 | 0.067 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Mid-Carbon | 07/07/98 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Effluent | 07/07/98 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Mid-Carbon | 07/21/98 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Influent | 08/11/98 | <0.05 | 0.06 | <0.05 | 0.071 | <5.0 | NA |
| Mid-Carbon | 08/11/98 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Effluent | 08/11/98 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |

**TABLE 2**

**SVE SYSTEM ANALYTICAL RESULTS**

Tesoro Station No. 67106
Former Beacon Station No. 3720
1088 Marina Boulevard
San Leandro, California

| Sample ID | Date | Benzene (ppmv) | Toluene (ppmv) | Ethyl-benzene (ppmv) | Total Xylenes (ppmv) | TPH as gasoline (ppmv) | MTBE (ppmv) |
|---|---|---|---|---|---|---|---|
| Influent | 09/10/98 | 0.16 | 0.46 | 0.062 | 0.20 | 16 | NA |
| Mid-Carbon | 09/10/98 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Effluent | 09/10/98 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Influent | 09/23/98 | 0.16 | 0.32 | <0.05 | 0.20 | 9.4 | NA |
| Mid-Carbon | 09/23/98 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Influent | 10/20/98 | 0.63 | 0.19 | 0.062 | 0.17 | 28 | NA |
| Mid-Carbon | 10/20/98 | 0.79 | 0.37 | <0.05 | 0.088 | 48 | NA |
| Effluent | 10/20/98 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Influent | 11/26//97 | 0.13 | 0.43 | 0.072 | 0.35 | 9.2 | NA |
| Influent | 12/08/99 | 0.73 | 2.2 | 0.15 | 0.71 | 43 | NA |
| Mid-Carbon | 12/08/99 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Effluent | 12/08/99 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Influent | 01/13/99 | 0.068 | 0.057 | <0.05 | 0.095 | 6.5 | NA |
| Mid-Carbon | 01/13/99 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Effluent | 01/13/99 | <0.05 | <0.05 | <0.05 | <0.05 | 5.4 | NA |
| Effluent | 01/28/99 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Influent | 02/10/99 | 1.1 | 1.2 | 0.071 | 0.28 | 56 | NA |
| Mid-Carbon | 02/10/99 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Effluent | 02/10/99 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Influent | 03/10/99 | 0.070 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Mid-Carbon | 03/10/99 | 0.069 | <0.05 | <0.05 | <0.05 | 28 | NA |
| Effluent | 03/10/99 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Influent | 04/07/99 | 0.22 | 0.078 | <0.05 | 0.060 | 17 | NA |
| Influent | 06/08/99 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Mid-Carbon | 06/08/99 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Effluent | 06/08/99 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Influent | 07/12/99 | 0.16 | 0.77 | <0.05 | 0.18 | 11 | NA |
| Mid-Carbon | 07/12/99 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Effluent | 07/12/99 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Influent | 08/09/99 | 0.092 | 1.0 | 0.20 | 0.94 | 12 | NA |
| Mid-Carbon | 08/09/99 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Effluent | 08/09/99 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |

**TABLE 2**

**SVE SYSTEM ANALYTICAL RESULTS**

Tesoro Station No. 67106
Former Beacon Station No. 3720
1088 Marina Boulevard
San Leandro, California

| Sample ID | Date | Benzene (ppmv) | Toluene (ppmv) | Ethyl-benzene (ppmv) | Total Xylenes (ppmv) | TPH as gasoline (ppmv) | MTBE (ppmv) |
|---|---|---|---|---|---|---|---|
| Influent | 09/07/99 | 0.069 | 0.41 | 0.07 | 0.38 | 16 | NA |
| Mid-Carbon | 09/07/99 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Effluent | 09/07/99 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Influent | 10/12/99 | 0.96 | 8.6 | 1.1 | 4.7 | 150 | NA |
| Mid-Carbon | 10/12/99 | <0.05 | <0.05 | <0.05 | 0.064 | <5.0 | NA |
| Effluent | 10/12/99 | <0.05 | <0.05 | <0.05 | 0.063 | <5.0 | NA |
| Influent | 11/17/99 | 0.22 | 1.9 | 0.32 | 1.7 | 21 | NA |
| Mid-Carbon | 11/17/99 | 0.067 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Effluent | 11/17/99 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Influent | 12/28/99 | 1.2 | 22 | 2.4 | 12 | 570 | NA |
| Mid-Carbon | 12/28/99 | 0.052 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Effluent | 12/28/99 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Influent | 01/12/00 | 0.45 | 1.7 | 0.18 | 1.0 | 110 | NA |
| Mid-Carbon | 01/12/00 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Effluent | 01/12/00 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Influent | 01/26/00 | 0.059 | 0.77 | 0.19 | 1.1 | 14 | NA |
| Mid-Carbon | 01/26/00 | 0.20 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Effluent | 01/26/00 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Influent | 02/06/00 | 0.095 | 1.4 | 0.18 | 0.87 | 22 | NA |
| Mid-Carbon | 02/06/00 | 0.20 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Effluent | 02/06/00 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Influent | 02/09/00 | 0.45 | 3.1 | 0.52 | 2.8 | 59 | NA |
| Mid-Carbon | 02/09/00 | 0.18 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Effluent | 02/09/00 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Influent | 03/16/00 | 0.10 | 3.5 | 0.54 | 4.1 | 46 | NA |
| Mid-Carbon | 03/16/00 | 0.83 | 0.31 | <0.05 | <0.05 | 22 | NA |
| Effluent | 03/16/00 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Influent | 04/04/00 | 0.17 | 1.9 | 0.29 | 2.0 | 23 | NA |
| Mid | 04/04/00 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Effluent | 04/04/00 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Influent | 05/12/00 | <0.05 | 0.059 | <0.05 | 0.091 | <5.0 | NA |
| Mid | 05/12/00 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Effluent | 05/12/00 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |

**TABLE 2**

**SVE SYSTEM ANALYTICAL RESULTS**

Tesoro Station No. 67106
Former Beacon Station No. 3720
1088 Marina Boulevard
San Leandro, California

| Sample ID | Date | Benzene (ppmv) | Toluene (ppmv) | Ethyl-benzene (ppmv) | Total Xylenes (ppmv) | TPH as gasoline (ppmv) | MTBE (ppmv) |
|---|---|---|---|---|---|---|---|
| Influent | 06/19/00 | <0.05 | 0.12 | <0.05 | <0.05 | <5.0 | NA |
| Mid | 06/19/00 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Effluent | 06/19/00 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Influent | 07/25/00 | 2.4 | 8.1 | 0.80 | 3.5 | 140 | NA |
| Mid | 07/25/00 | <0.050 | 0.07 | <0.050 | <0.050 | 12 | NA |
| Effluent | 07/25/00 | <0.05 | <0.05 | <0.05 | <0.05 | 5.4 | NA |
| Influent | 07/25/00 | 2.4 | 8.1 | 0.80 | 3.5 | 140 | NA |
| Mid | 07/25/00 | <0.050 | 0.07 | <0.050 | <0.050 | 12 | NA |
| Effluent | 07/25/00 | <0.05 | <0.05 | <0.05 | <0.05 | 5.4 | NA |
| Influent | 08/09/00 | 2.4 | 8.1 | 0.80 | 3.5 | 140 | NA |
| Mid | 08/09/00 | <0.050 | 0.07 | <0.050 | <0.050 | 12 | NA |
| Effluent | 08/09/00 | <0.05 | <0.05 | <0.05 | <0.05 | 5.4 | NA |
| Influent | 09/06/00 | 2.4 | 8.1 | 0.80 | 3.5 | 140 | NA |
| Mid | 09/06/00 | <0.050 | 0.07 | <0.050 | <0.050 | 12 | NA |
| Effluent | 09/06/00 | <0.05 | <0.05 | <0.05 | <0.05 | 5.4 | NA |
| Influent | 10/17/00 | <0.05 | 0.075 | <0.05 | 0.14 | <5.0 | NA |
| Mid | 10/17/00 | <0.050 | 0.07 | <0.050 | <0.050 | <5.0 | NA |
| Effluent | 10/17/00 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Influent | 11/29/00 | <0.05 | 0.24 | 0.08 | 0.29 | <5.0 | NA |
| Mid | 11/29/00 | <0.05 | 0.07 | <0.05 | 0.18 | <5.0 | NA |
| Effluent | 11/29/00 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Influent | 12/07/00 | <0.05 | 0.13 | <0.05 | 0.064 | <5.0 | NA |
| Mid | 12/07/00 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Effluent | 12/07/00 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Influent | 01/07/01 | 0.12 | 0.85 | 0.16 | 0.92 | 17 | NA |
| Mid | 01/07/01 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Effluent | 01/07/01 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Influent | 02/23/01 | 0.19 | 1.6 | 0.19 | 1.1 | 32 | NA |
| Mid | 02/23/01 | <0.05 | 0.07 | <0.05 | <0.05 | <5.0 | NA |
| Effluent | 02/23/01 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Influent | 03/01/01 | 0.97 | 1.2 | 0.13 | 0.64 | 18 | NA |
| Mid | 03/01/01 | <0.05 | 0.053 | <0.05 | <0.098 | <5.0 | NA |
| Effluent | 03/01/01 | <0.05 | 0.053 | <0.05 | 0.13 | <5.0 | NA |

**TABLE 2**

**SVE SYSTEM ANALYTICAL RESULTS**

Tesoro Station No. 67106
Former Beacon Station No. 3720
1088 Marina Boulevard
San Leandro, California

| Sample ID | Date | Benzene (ppmv) | Toluene (ppmv) | Ethyl-benzene (ppmv) | Total Xylenes (ppmv) | TPH as gasoline (ppmv) | MTBE (ppmv) |
|---|---|---|---|---|---|---|---|
| Influent | 10/17/2000 | <0.05 | 0.075 | <0.05 | 0.14 | <5.0 | NA |
| Mid-Carbon | 10/17/2000 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Effluent | 10/17/2000 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Influent | 11/29/2000 | <0.05 | 0.24 | 0.08 | 0.29 | <5.0 | NA |
| Mid-Carbon | 11/29/2000 | <0.05 | 0.07 | <0.05 | 0.18 | <5.0 | NA |
| Effluent | 11/29/2000 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Influent | 12/07/00 | <0.05 | 0.13 | <0.05 | 0.064 | <5.0 | NA |
| Mid-Carbon | 12/07/00 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Effluent | 12/07/00 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Influent | 01/07/01 | 0.12 | 0.85 | 0.16 | 0.92 | 17 | NA |
| Mid-Carbon | 01/07/01 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Effluent | 01/07/01 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Influent | 02/23/01 | 0.19 | 1.6 | 0.19 | 1.1 | 32 | NA |
| Mid-Carbon | 02/23/01 | <0.05 | 0.07 | <0.05 | <0.05 | <5.0 | NA |
| Effluent | 02/23/01 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Influent | 03/01/01 | 0.97 | 1.2 | 0.13 | 0.64 | 18 | NA |
| Mid-Carbon | 03/01/01 | <0.05 | 0.053 | <0.05 | 0.098 | <5.0 | NA |
| Effluent | 03/01/01 | <0.05 | 0.11 | <0.05 | 0.13 | <5.0 | NA |
| Influent | 04/18/01 | 0.1 | 0.63 | 0.12 | 0.56 | 18 | NA |
| Mid-Carbon | 04/18/01 | <0.05 | <0.05 | <0.05 | 0.078 | <5.0 | NA |
| Effluent | 04/18/01 | <0.05 | <0.05 | <0.05 | 0.11 | <5.0 | NA |
| Influent | 05/21/01 | 0.088 | 1.0 | 0.31 | 1.5 | 20 | NA |
| Mid-Carbon | 05/21/01 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Effluent | 05/21/01 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Influent | 06/05/01 | 0.15 | 1.5 | 0.36 | 1.6 | 24 | NA |
| Mid-Carbon | 06/05/01 | <0.05 | 0.053 | <0.05 | 0.098 | 9.1 | NA |
| Effluent | 06/05/01 | <0.05 | <0.05 | <0.05 | <0.05 | 5.6 | NA |
| Influent | 07/16/01 | <0.05 | 0.11 | <0.05 | 0.14 | <5.0 | NA |
| Mid-Carbon | 07/16/01 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Effluent | 07/16/01 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Influent | 08/24/01 | 0.15 | 1.1 | 0.16 | 0.71 | 19 | NA |
| Mid-Carbon | 08/24/01 | <0.05 | 0.055 | <0.05 | <0.05 | <5.0 | NA |
| Effluent | 08/24/01 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |

**TABLE 2**

**SVE SYSTEM ANALYTICAL RESULTS**

Tesoro Station No. 67106
Former Beacon Station No. 3720
1088 Marina Boulevard
San Leandro, California

| Sample ID | Date | Benzene (ppmv) | Toluene (ppmv) | Ethyl-benzene (ppmv) | Total Xylenes (ppmv) | TPH as gasoline (ppmv) | MTBE (ppmv) |
|---|---|---|---|---|---|---|---|
| Influent | 09/06/01 | 0.28 | 1.8 | 0.38 | 1.6 | 37 | NA |
| Mid-Carbon | 09/06/01 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Effluent | 09/06/01 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Influent | 11/23/01 | 0.11 | 0.17 | <0.05 | 0.10 | <5.0 | NA |
| Mid-Carbon | 11/23/01 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Effluent | 11/23/01 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Influent | 12/13/01 | O.076 | 0.16 | <0.05 | 0.063 | <5.0 | NA |
| Mid-Carbon | 12/13/01 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Effluent | 12/13/01 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Influent | 01/29/02 | <0.05 | 0.12 | <0.05 | 0.067 | <5.0 | NA |
| Mid-Carbon | 01/29/02 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Effluent | 01/29/02 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Influent | 03/20/02 | 0.054 | 0.12 | <0.05 | <0.05 | <5.0 | NA |
| Mid-Carbon | 03/20/02 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Effluent | 03/20/02 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Influent | 04/18/02 | <0.05 | 0.076 | <0.05 | 0.092 | <5.0 | 0.16 |
| Mid-Carbon | 04/18/02 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | 2.1 |
| Effluent | 04/18/02 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | 0.32 |
| Influent | 05/13/02 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Mid-Carbon | 05/13/02 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Effluent | 05/13/02 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Influent | 06/13/02 | <0.05 | 0.07 | <0.05 | <0.05 | <5.0 | NA |
| Mid-Carbon | 06/13/02 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Effluent | 06/13/02 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Influent | 07/22/02 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Mid-Carbon | 07/22/02 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Effluent | 07/22/02 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Influent | 08/21/02 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | 0.2 |
| Mid-Carbon | 08/21/02 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | 0.94 |
| Effluent | 08/21/02 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | 1.5 |
| Influent | 09/23/02 | <0.05 | 0.19 | <0.05 | 0.12 | <5.0 | 1.2 |
| Mid-Carbon | 09/23/02 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | 1.9 |
| Effluent | 09/23/02 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | 2.0 |

**TABLE 2**

**SVE SYSTEM ANALYTICAL RESULTS**

Tesoro Station No. 67106
Former Beacon Station No. 3720
1088 Marina Boulevard
San Leandro, California

| Sample ID | Date | Benzene (ppmv) | Toluene (ppmv) | Ethyl-benzene (ppmv) | Total Xylenes (ppmv) | TPH as gasoline (ppmv) | MTBE (ppmv) |
|---|---|---|---|---|---|---|---|
| Influent | 10/21/02 | <0.05 | 0.46 | 0.068 | 0.33 | 7.3 | 0.93 |
| Mid-Carbon | 10/21/02 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | <0.1 |
| Effluent | 10/21/02 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | <0.1 |
| Influent | 11/24/02 | 0.064 | 0.8 | 0.11 | 0.56 | 12 | 2.3 |
| Mid-Carbon | 11/24/02 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | <0.1 |
| Effluent | 11/24/02 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | <0.1 |
| Influent | 12/20/02 | 0.18 | 2.6 | 0.34 | 1.4 | 27 | 4.7 |
| Mid-Carbon | 12/20/02 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | 0.63 |
| Effluent | 12/20/02 | <0.05 | 0.13 | <0.05 | 0.052 | <5.0 | 0.24 |
| Influent | 01/29/03 | <0.05 | 0.11 | <0.05 | 0.071 | <5.0 | NA |
| Mid-Carbon | 01/29/03 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Effluent | 01/29/03 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | NA |
| Influent | 02/20/03 | <0.05 | 0.19 | <0.05 | 0.17 | <5.0 | 0.61 |
| Mid-Carbon | 02/20/03 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | <0.10 |
| Effluent | 02/20/03 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | <0.10 |
| Influent | 03/20/03 | <0.05 | 0.12 | <0.05 | 0.11 | <5.0 | 0.59 |
| Mid-Carbon | 03/20/03 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | <0.10 |
| Effluent | 03/20/03 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | <0.10 |
| Influent | 04/22/03 | <0.05 | 0.15 | 0.067 | 0.44 | 5.6 | 1.1 |
| Mid-Carbon | 04/22/03 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | 1.6 |
| Effluent | 04/22/03 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | 0.91 |
| Influent | 05/29/03 | <0.05 | 0.094 | <0.05 | 0.084 | <5.0 | 0.96 |
| Mid-Carbon | 05/29/03 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | 3.3 |
| Effluent | 05/29/03 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | 0.85 |
| Influent | 06/10/03 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | 2.2 |
| Mid-Carbon | 06/10/03 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | 0.55 |
| Effluent | 06/10/03 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | 0.50 |
| Influent | 07/21/03 | <0.05 | 0.077 | <0.05 | <0.05 | <5.0 | 3.2 |
| Mid-Carbon | 07/21/03 | 0.064 | <0.05 | <0.05 | <0.05 | <5.0 | 1.2 |
| Effluent | 07/21/03 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | 2.0 |
| Influent | 08/20/03 | 0.18 | 1.0 | 0.095 | 0.58 | 23 | 2.3 |
| Mid-Carbon | 08/20/03 | 0.058 | <0.05 | <0.05 | <0.05 | <5.0 | 1.9 |
| Effluent | 08/20/03 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | <0.05 |
| Influent | 11/26/03 | 0.86 | 9.5 | 1.2 | 5.4 | 210 | 4.9 |
| Mid-Carbon | 11/26/03 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | <0.10 |
| Effluent | 11/26/03 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | <0.10 |

**TABLE 2**

**SVE SYSTEM ANALYTICAL RESULTS**

Tesoro Station No. 67106
Former Beacon Station No. 3720
1088 Marina Boulevard
San Leandro, California

| Sample ID | Date | Benzene (ppmv) | Toluene (ppmv) | Ethyl-benzene (ppmv) | Total Xylenes (ppmv) | TPH as gasoline (ppmv) | MTBE (ppmv) |
|---|---|---|---|---|---|---|---|
| Influent | 12/29/03 | 0.21 | 4.1 | 0.68 | 4.1 | 69 | <0.05 |
| Mid-Carbon | 12/29/03 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | <0.05 |
| Effluent | 12/29/03 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | <0.05 |
| Influent | 01/28/04 | 0.13 | 1.7 | 0.31 | 1.4 | 29 | <0.10 |
| Mid-Carbon | 01/28/04 | <0.05 | 0.078 | <0.05 | 0.36 | <5.0 | <0.10 |
| Effluent | 01/28/04 | <0.05 | 0.092 | 0.061 | 0.49 | <5.0 | <0.10 |
| Influent | 02/29/04 | 0.12 | 0.91 | 0.29 | 2.0 | 24 | <0.10 |
| Mid-Carbon | 02/29/04 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | <0.10 |
| Effluent | 02/29/04 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | <0.10 |
| Influent | 03/15/04 | 0.13 | 0.72 | 0.15 | 0.88 | 15 | <0.05 |
| Mid-Carbon | 03/15/04 | <0.05 | <0.05 | <0.05 | 0.056 | <5.0 | <0.05 |
| Effluent | 03/15/04 | <0.05 | <0.05 | <0.05 | 0.38 | <5.0 | <0.05 |
| Influent | 05/26/04 | 0.13 | 0.88 | 0.24 | 1.3 | 19 | <0.05 |
| Mid-Carbon | 05/26/04 | <0.05 | <0.05 | <0.05 | 0.15 | <5.0 | <0.05 |
| Effluent | 05/26/04 | <0.05 | 0.07 | 0.066 | 0.51 | 7.2 | <0.05 |
| Influent | 06/30/04 | 0.15 | 0.83 | 0.30 | 1.7 | 33 | <0.05 |
| Mid-Carbon | 06/30/04 | <0.05 | <0.05 | <0.05 | <0.05 | 16 | <0.05 |
| Effluent | 06/30/04 | <0.05 | <0.05 | <0.05 | <0.05 | 5.2 | <0.05 |
| Influent | 08/30/04 | <0.05 | 0.05 | <0.05 | 0.14 | <5.0 | <0.05 |
| Mid-Carbon | 08/30/04 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | <0.05 |
| Effluent | 08/30/04 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | <0.05 |
| Influent | 09/19/04 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | <0.05 |
| Mid-Carbon | 09/19/04 | <0.05 | <0.05 | <0.05 | <0.05 | 6.2* | <0.05 |
| Effluent | 09/19/04 | <0.05 | <0.05 | <0.05 | <0.05 | 5.6* | <0.05 |
| Influent | 10/28/04 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | <0.05 |
| Mid-Carbon | 10/28/04 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | <0.05 |
| Effluent | 10/28/04 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | <0.05 |
| Influent | 11/23/04 | <0.05 | 0.056 | <0.05 | <0.05 | <5.0 | <0.05 |
| Mid-Carbon | 11/23/04 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | <0.05 |
| Effluent | 11/23/04 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | <0.05 |
| Influent | 12/26/04 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | <0.05 |
| Mid-Carbon | 12/26/04 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | <0.05 |
| Effluent | 12/26/04 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | <0.05 |
| Influent | 01/26/05 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | <0.05 |
| Mid-Carbon | 01/26/05 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | <0.05 |
| Effluent | 01/26/05 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | <0.05 |

**TABLE 2**

**SVE SYSTEM ANALYTICAL RESULTS**

Tesoro Station No. 67106
Former Beacon Station No. 3720
1088 Marina Boulevard
San Leandro, California

| Sample ID | Date | Benzene (ppmv) | Toluene (ppmv) | Ethyl-benzene (ppmv) | Total Xylenes (ppmv) | TPH as gasoline (ppmv) | MTBE (ppmv) |
|---|---|---|---|---|---|---|---|
| Influent | 02/27/05 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | <0.05 |
| Mid-Carbon | 02/27/05 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | <0.05 |
| Effluent | 02/27/05 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | <0.05 |
| Influent | 03/24/05 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | <0.05 |
| Mid-Carbon | 03/24/05 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | <0.05 |
| Effluent | 03/24/05 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | <0.05 |
| Influent | 04/26/05 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | <0.05 |
| Mid-Carbon | 04/26/05 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | <0.05 |
| Effluent | 04/26/05 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | <0.05 |
| Influent | 05/30/05 | <0.05 | 0.08 | 0.086 | 0.68 | 14 | 0.06 |
| Mid-Carbon | 05/30/05 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | <0.05 |
| Effluent | 05/30/05 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | <0.05 |
| Influent | 06/28/05 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | <0.05 |
| Mid-Carbon | 06/28/05 | <0.05 | <0.05 | <0.05 | <0.05 | 32* | <0.05 |
| Effluent | 06/28/05 | <0.05 | <0.05 | <0.05 | <0.05 | 26* | <0.05 |
| Influent | 07/28/05 | <0.05 | <0.05 | <0.05 | <0.05 | 58* | <0.05 |
| Mid-Carbon | 07/28/05 | <0.05 | <0.05 | <0.05 | <0.05 | 36* | <0.05 |
| Effluent | 07/28/05 | <0.05 | <0.05 | <0.05 | <0.05 | 70* | <0.05 |
| Influent | 08/24/05 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | <0.05 |
| Mid-Carbon | 08/24/05 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | <0.05 |
| Effluent | 08/24/05 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | <0.05 |
| Influent | 09/29/05 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | <0.05 |
| Mid-Carbon | 09/29/05 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | <0.05 |
| Effluent | 09/29/05 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | <0.05 |
| Influent | 10/26/05 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | <0.05 |
| Mid-Carbon | 10/26/05 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | <0.05 |
| Effluent | 10/26/05 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | <0.05 |
| Influent | 11/27/05 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | <0.05 |
| Mid-Carbon | 11/27/05 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | <0.05 |
| Effluent | 11/27/05 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | <0.05 |
| Influent | 12/27/05 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | <0.05 |
| Mid-Carbon | 12/27/05 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | <0.05 |
| Effluent | 12/27/05 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | <0.05 |
| Influent | 01/29/06 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | <0.05 |
| Mid-Carbon | 01/29/06 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | <0.05 |
| Effluent | 01/29/06 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | <0.05 |
| Influent | 02/27/06 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | <0.05 |
| Mid-Carbon | 02/27/06 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | <0.05 |
| Effluent | 02/27/06 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | <0.05 |

**TABLE 2**

**SVE SYSTEM ANALYTICAL RESULTS**

Tesoro Station No. 67106
Former Beacon Station No. 3720
1088 Marina Boulevard
San Leandro, California

| Sample ID | Date | Benzene (ppmv) | Toluene (ppmv) | Ethyl-benzene (ppmv) | Total Xylenes (ppmv) | TPH as gasoline (ppmv) | MTBE (ppmv) |
|---|---|---|---|---|---|---|---|
| Influent | 03/27/06 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | <0.05 |
| Mid-Carbon | 03/27/06 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | <0.05 |
| Effluent | 03/27/06 | <0.05 | <0.05 | <0.05 | <0.05 | <5.0 | <0.05 |

TPH = Total petroleum hydrocarbons.
MTBE = methyl -t-butyl ether
mg/L = Micrograms per liter.
ppmv = parts per million by volume.
* = It was determined the tedlar bag manufacturer had produced and shipped contaminated bags.

**TABLE 3**
**SVE SYSTEM THROUGHPUT CALCULATIONS**

Tesoro Station No. 67106
Former Beacon Station No. 3720
1088 Marina Boulevard
San Leandro, California

| Date | Influent Flow Rate ($ft^3$/min) | Effluent Flow Rate ($ft^3$/min) | TPH Influent (ppmv) | TPH Effluent (ppmv) | Benzene Influent (ppmv) | Benzene Effluent (ppmv) | TPH Removal (%) | Benzene Removal (%) | TPH Extraction Rate (lbs/day) | TPH Mass Emission (lbs/day) | Benzene Extraction Rate (lbs/day) | Benzene Emission Rate (lbs/day) | FID or LAB | **Cumulative TPH Extraction (lbs)** | Cumulative TPH Extraction (gallons) | Total Hours | Change in hours of operation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 08/18/98 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | **1,715** | --- | --- | --- |
| 09/10/98 | 98 | 98 | 16 | <5.0 | 0.16 | <0.05 | NC | NC | 0.50 | < 0.16 | 0.005 | < 0.002 | LAB | **1,721** | 282 | 2,587 | 552 |
| 09/23/98 | 98 | 98 | 9.4 | <5.0 | 0.16 | <0.05 | NC | NC | 0.29 | < 0.16 | 0.005 | < 0.002 | LAB | **1,726** | 283 | 2,907 | 320 |
| 10/20/98 | 59 | 59 | 28 | <5.0 | 0.63 | <0.05 | NC | NC | 0.53 | < 0.09 | 0.012 | < 0.001 | LAB | **1,727** | 283 | 2,962 | 55 |
| 12/08/98 | 49 | 49 | 43 | <5.0 | 0.73 | <0.05 | NC | NC | 0.67 | < 0.08 | 0.011 | < 0.001 | LAB | **1,727** | 283 | 3,803 | 0* |
| 01/13/99 | 49 | 49 | 6.5 | 5.4 | 0.068 | <0.05 | 16.9 | NC | 0.10 | 0.08 | 0.001 | < 0.001 | LAB | **1,738** | 285 | 4,495 | 692 |
| 02/10/99 | 44 | 44 | 56 | <5.0 | 1.1 | <0.05 | NC | NC | 0.79 | < 0.07 | 0.016 | < 0.001 | LAB | **1,738** | 285 | 4,496 | 1 |
| 03/10/99 | 15 | 15 | <5.0 | <5.0 | 0.07 | <0.05 | NC | NC | < 0.02 | < 0.02 | 0.001 | < 0.001 | LAB | **1,750** | 287 | 5,172 | 676 |
| 06/08/99 | 35 | 35 | <5.0 | <5.0 | <0.05 | <0.05 | NC | NC | < 0.06 | < 0.06 | < 0.001 | < 0.001 | LAB | **1,750** | 287 | 5,173 | 1 |
| 07/12/99 | 39 | 39 | 11 | <5.0 | 0.16 | <0.05 | NC | NC | 0.14 | < 0.06 | 0.002 | < 0.001 | LAB | **1,753** | 287 | 5,982 | 809 |
| 08/04/99 | 39 | 39 | 12 | <5.0 | 0.092 | <0.05 | NC | NC | 0.15 | < 0.06 | 0.001 | < 0.001 | LAB | **1,756** | 288 | 6,534 | 552 |
| 09/07/99 | 39 | 39 | 16 | <5.0 | 0.069 | <0.05 | NC | NC | 0.20 | < 0.06 | 0.001 | < 0.001 | LAB | **1,762** | 289 | 7,351 | 817 |
| 10/12/99 | 54 | 54 | 150 | <5.0 | 0.96 | <0.05 | NC | NC | 2.59 | < 0.09 | 0.015 | < 0.001 | LAB | **1,772** | 290 | 7,998 | 167** |
| 11/17/99 | 49 | 49 | 21 | <5.0 | 0.22 | <0.05 | NC | NC | 0.33 | < 0.08 | 0.003 | < 0.001 | LAB | **1,825** | 299 | 8,866 | 868 |
| 12/28/00 | 49 | 49 | 570 | <5.0 | 1.2 | <0.05 | NC | NC | 8.96 | < 0.08 | 0.017 | < 0.001 | LAB | **1,825** | 299 | 8,867 | 1 |
| 01/12/00 | 79 | 79 | 110 | <5.0 | 0.45 | <0.05 | NC | NC | 2.77 | < 0.13 | 0.010 | < 0.001 | LAB | **1,907** | 313 | 9,202 | 335 |
| 01/26/00 | 79 | 79 | 14 | <5.0 | 0.059 | <0.05 | NC | NC | 0.35 | < 0.13 | 0.001 | < 0.001 | LAB | **1,929** | 316 | 9,540 | 338 |
| 02/09/00 | 79 | 79 | 59 | <5.0 | 0.45 | <0.05 | NC | NC | 1.48 | < 0.13 | 0.010 | < 0.001 | LAB | **1,933** | 317 | 9,662 | 122 |
| 03/16/00 | 79 | 79 | 46 | <5.0 | 0.1 | <0.05 | NC | NC | 1.16 | < 0.13 | 0.002 | < 0.001 | LAB | **1,981** | 325 | 10,525 | 863 |
| 04/04/00 | 41 | 41 | 23 | <5.0 | 0.17 | <0.05 | NC | NC | 0.30 | < 0.07 | 0.002 | < 0.001 | LAB | **1,981** | 325 | 10,526 | 2 |
| 05/12/00 | 41 | 41 | <5.0 | <5.0 | <0.05 | <0.05 | NC | NC | < 0.07 | < 0.07 | < 0.001 | < 0.001 | LAB | **1,986** | 326 | 11,164 | 638 |
| 06/19/00 | 41 | 41 | <5.0 | <5.0 | <0.05 | <0.05 | NC | NC | < 0.07 | < 0.07 | < 0.001 | < 0.001 | LAB | **1,988** | 326 | 12,071 | 907 |
| 07/11/00 | 41 | 41 | <5.0 | <5.0 | <0.05 | <0.05 | NC | NC | < 0.07 | < 0.07 | < 0.001 | < 0.001 | LAB | **1,990** | 326 | 12,601 | 530 |
| 07/25/00 | 41 | 41 | 140 | < 5.4 | 2.4 | <0.05 | 96.1 | NC | 1.85 | 0.07 | 0.029 | < 0.001 | LAB | **2,003** | 328 | 12,937 | 336 |
| 08/09/00 | 41 | 41 | 2200 | <5.0 | 25 | <0.05 | NC | NC | 29.05 | < 0.07 | 0.299 | < 0.001 | LAB | **2,004** | 329 | 12,938 | 1 |
| 09/06/00 | 41 | 41 | 6.8 | <5.0 | <0.05 | <0.05 | NC | NC | 0.09 | < 0.07 | < 0.001 | < 0.001 | LAB | **2,409** | 395 | 13,606 | 668 |

**TABLE 3**
**SVE SYSTEM THROUGHPUT CALCULATIONS**

Tesoro Station No. 67106
Former Beacon Station No. 3720
1088 Marina Boulevard
San Leandro, California

| Date | Influent Flow Rate ($ft^3$/min) | Effluent Flow Rate ($ft^3$/min) | TPH Influent (ppmv) | TPH Effluent (ppmv) | Benzene Influent (ppmv) | Benzene Effluent (ppmv) | TPH Removal (%) | Benzene Removal (%) | TPH Extraction Rate (lbs/day) | TPH Mass Emission (lbs/day) | Benzene Extraction Rate (lbs/day) | Benzene Emission Rate (lbs/day) | FID or LAB | **Cumulative TPH Extraction (lbs)** | Cumulative TPH Extraction (gallons) | Total Hours | Change in hours of operation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10/17/00 | 40 | 40 | <5.0 | <5.0 | <0.05 | <0.05 | NC | NC | < 0.06 | < 0.06 | < 0.001 | < 0.001 | LAB | **2,411** | 395 | 14,054 | 448 |
| 11/29/00 | 40 | 40 | <5.0 | <5.0 | <0.05 | <0.05 | NC | NC | < 0.06 | < 0.06 | < 0.001 | < 0.001 | LAB | **2,414** | 396 | 15,062 | 1,008 |
| 12/07/00 | 40 | 40 | <5.0 | <5.0 | <0.05 | <0.05 | NC | NC | < 0.06 | < 0.06 | < 0.001 | < 0.001 | LAB | **2,414** | 396 | 15,328 | 266 |
| 01/19/01 | 87 | 87 | 17.0 | <5.0 | 0.12 | <0.05 | NC | NC | 0.47 | < 0.14 | 0.003 | < 0.001 | LAB | **2,425** | 397 | 16,259 | 931 |
| 02/23/01 | 67 | 67 | 32.0 | <5.0 | 0.19 | <0.05 | NC | NC | 0.69 | < 0.11 | 0.004 | < 0.001 | LAB | **2,445** | 401 | 17,096 | 837 |
| 03/01/01 | 60 | 60 | 18.0 | <5.0 | 0.097 | <0.05 | NC | NC | 0.35 | < 0.10 | 0.002 | < 0.001 | LAB | **2,448** | 401 | 17,247 | 151 |
| 04/18/01 | 62 | 62 | 18.0 | <5.0 | 0.1 | <0.05 | NC | NC | 0.36 | < 0.10 | 0.002 | < 0.001 | LAB | **2,465** | 404 | 18,396 | 1,149 |
| 05/21/01 | 65 | 65 | 20.0 | <5.0 | 0.088 | <0.05 | NC | NC | 0.42 | < 0.10 | 0.002 | < 0.001 | LAB | **2,477** | 406 | 19,160 | 764 |
| 06/05/01 | 78 | 78 | 24.0 | <5.0 | 0.15 | <0.05 | NC | NC | 0.60 | < 0.12 | 0.003 | < 0.001 | LAB | **2,485** | 407 | 19,514 | 354 |
| 07/16/01 | 40 | 40 | <5.0 | <5.0 | <0.05 | <0.05 | NC | NC | < 0.06 | < 0.06 | < 0.001 | < 0.001 | LAB | **2,494** | 409 | 20,157 | 643 |
| 08/24/01 | 45 | 45 | 19.0 | <5.0 | 0.15 | <0.05 | NC | NC | 0.27 | < 0.07 | 0.002 | < 0.001 | LAB | **2,500** | 410 | 21,098 | 941 |
| 09/06/01 | 50 | 50 | 37.0 | <5.0 | 0.28 | <0.05 | NC | NC | 0.59 | < 0.08 | 0.004 | < 0.001 | LAB | **2,506** | 411 | 21,406 | 308 |
| 11/23/01 | 60 | 60 | <5.0 | <5.0 | 0.11 | <0.05 | NC | NC | < 0.10 | < 0.10 | 0.002 | < 0.001 | LAB | **2,518** | 413 | 22,246 | 840 |
| 12/13/01 | 65 | 65 | <5.0 | <5.0 | 0.076 | <0.05 | NC | NC | < 0.10 | < 0.10 | 0.001 | < 0.001 | LAB | **2,520** | 413 | 22,728 | 482 |
| 01/29/02 | 62 | 62 | <5.0 | <5.0 | <0.05 | <0.05 | NC | NC | < 0.10 | < 0.10 | < 0.001 | < 0.001 | LAB | **2,525** | 414 | 23,850 | 1,122 |
| 03/20/02 | 65 | 65 | <5.0 | <5.0 | 0.054 | <0.05 | NC | NC | < 0.10 | < 0.10 | 0.001 | < 0.001 | LAB | **2,530** | 415 | 25,054 | 1,204 |
| 04/18/02 | 65 | 65 | <5.0 | <5.0 | <0.05 | <0.05 | NC | NC | < 0.10 | < 0.10 | < 0.001 | < 0.001 | LAB | **2,533** | 415 | 25,743 | 689 |
| 05/13/02 | 64 | 65 | <5.0 | <5.0 | <0.05 | <0.05 | NC | NC | < 0.10 | < 0.10 | < 0.001 | < 0.001 | LAB | **2,535** | 416 | 26,358 | 615 |
| 06/13/02 | 65 | 65 | <5.0 | <5.0 | <0.05 | <0.05 | NC | NC | < 0.10 | < 0.10 | < 0.001 | < 0.001 | LAB | **2,538** | 416 | 27,071 | 713 |
| 07/22/02 | 68 | 68 | <5.0 | <5.0 | <0.05 | <0.05 | NC | NC | < 0.11 | < 0.11 | < 0.001 | < 0.001 | LAB | **2,543** | 417 | 28,027 | 956 |
| 08/21/02 | 68 | 68 | <5.0 | <5.0 | <0.05 | <0.05 | NC | NC | < 0.11 | < 0.11 | < 0.001 | < 0.001 | LAB | **2,546** | 417 | 28,750 | 722 |
| 09/23/02 | 65 | 65 | <5.0 | <5.0 | <0.05 | <0.05 | NC | NC | < 0.10 | < 0.10 | < 0.001 | < 0.001 | LAB | **2,549** | 418 | 29,536 | 787 |
| 10/21/02 | 69 | 69 | 7.3 | <5.0 | <0.05 | <0.05 | NC | NC | 0.16 | < 0.11 | < 0.001 | < 0.001 | LAB | **2,553** | 419 | 30,212 | 676 |
| 11/24/02 | 70 | 70 | 12.0 | <5.0 | 0.064 | <0.05 | NC | NC | 0.27 | < 0.11 | 0.001 | < 0.001 | LAB | **2,560** | 420 | 31,024 | 812 |
| 12/20/02 | 62 | 62 | 27.0 | <5.0 | 0.18 | <0.05 | NC | NC | 0.54 | < 0.10 | 0.003 | < 0.001 | LAB | **2,571** | 421 | 31,654 | 630 |
| 01/29/03 | 65 | 65 | <5.0 | <5.0 | <0.05 | <0.05 | NC | NC | < 0.10 | < 0.10 | < 0.001 | < 0.001 | LAB | **2,584** | 424 | 32,613 | 959 |
| 02/20/03 | 68 | 68 | <5.0 | <5.0 | <0.05 | <0.05 | NC | NC | < 0.11 | < 0.11 | < 0.001 | < 0.001 | LAB | **2,586** | 424 | 33,138 | 525 |
| 03/20/03 | 62 | 62 | <5.0 | <5.0 | <0.05 | <0.05 | NC | NC | < 0.10 | < 0.10 | < 0.001 | < 0.001 | LAB | **2,587** | 424 | 33,426 | 288 |
| 04/22/03 | 65 | 65 | 5.6 | <5.0 | <0.05 | <0.05 | NC | NC | 0.12 | < 0.10 | < 0.001 | < 0.001 | LAB | **2,593** | 425 | 34,600 | 1,175 |

**TABLE 3**
**SVE SYSTEM THROUGHPUT CALCULATIONS**

Tesoro Station No. 67106
Former Beacon Station No. 3720
1088 Marina Boulevard
San Leandro, California

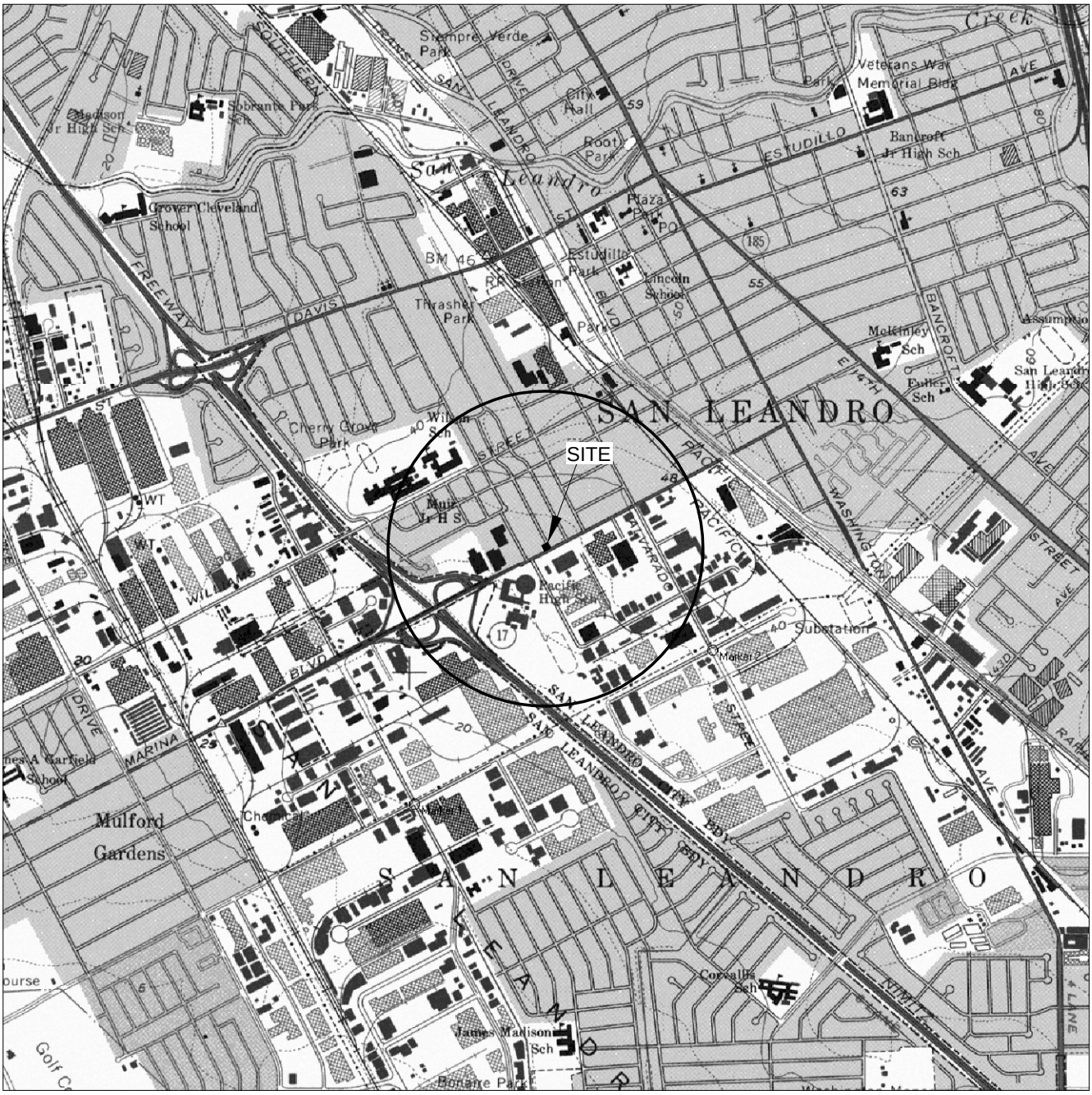
| Date | Influent Flow Rate ($ft^3$/min) | Effluent Flow Rate ($ft^3$/min) | TPH Influent (ppmv) | TPH Effluent (ppmv) | Benzene Influent (ppmv) | Benzene Effluent (ppmv) | TPH Removal (%) | Benzene Removal (%) | TPH Extraction Rate (lbs/day) | TPH Mass Emission (lbs/day) | Benzene Extraction Rate (lbs/day) | Benzene Emission Rate (lbs/day) | FID or LAB | **Cumulative TPH Extraction (lbs)** | Cumulative TPH Extraction (gallons) | Total Hours | Change in hours of operation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 05/29/03 | 65 | 65 | <5.0 | <5.0 | <0.05 | <0.05 | NC | NC | < 0.10 | < 0.10 | < 0.001 | < 0.001 | LAB | **2,597** | 426 | 35,480 | 880 |
| 06/10/03 | 64 | 64 | <5.0 | <5.0 | <0.05 | <0.05 | NC | NC | < 0.10 | < 0.10 | < 0.001 | < 0.001 | LAB | **2,598** | 426 | 35,776 | 296 |
| 07/21/03 | 62 | 62 | <5.0 | <5.0 | <0.05 | <0.05 | NC | NC | < 0.10 | < 0.10 | < 0.001 | < 0.001 | LAB | **2,602** | 427 | 36,760 | 984 |
| 08/20/03 | 61 | 61 | 23.0 | <5.0 | 0.18 | <0.05 | NC | NC | 0.45 | < 0.10 | 0.003 | < 0.001 | LAB | **2,610** | 428 | 37,485 | 726 |
| 11/26/03 | 82 | 82 | 210.0 | <5.0 | 0.86 | <0.05 | NC | NC | 5.51 | < 0.13 | 0.020 | < 0.001 | LAB | **2,664** | 437 | 37,916 | 431 |
| 12/29/03 | 118 | 118 | 69.0 | <5.0 | 0.21 | <0.05 | NC | NC | 2.61 | < 0.19 | 0.007 | < 0.002 | LAB | **2,802** | 459 | 38,732 | 816 |
| 01/28/04 | 120 | 120 | 29.0 | <5.0 | 0.13 | <0.05 | NC | NC | 1.11 | < 0.19 | 0.005 | < 0.002 | LAB | **2,858** | 469 | 39,452 | 720 |
| 02/29/04 | 119 | 119 | 24.0 | <5.0 | 0.12 | <0.05 | NC | NC | 0.91 | < 0.19 | 0.004 | < 0.002 | LAB | **2,890** | 474 | 40,220 | 768 |
| 03/15/04 | 121 | 121 | 15.0 | <5.0 | 0.13 | <0.05 | NC | NC | 0.58 | < 0.19 | 0.005 | < 0.002 | LAB | **2,902** | 476 | 40,580 | 360 |
| 05/26/04 | 75 | 75 | 19.0 | <5.0 | 0.13 | <0.05 | NC | NC | 0.46 | < 0.12 | 0.003 | < 0.001 | LAB | **2,925** | 479 | 41,660 | 1,080 |
| 06/30/04 | 85 | 85 | 33.0 | <5.0 | 0.15 | <0.05 | NC | NC | 0.90 | < 0.14 | 0.004 | < 0.001 | LAB | **2,949** | 483 | 42,500 | 840 |
| 08/30/04 | 68 | 68 | <5.0 | <5.0 | <0.05 | <0.05 | NC | NC | 0.11 | < 0.11 | 0.001 | < 0.001 | LAB | **2,971** | 487 | 43,580 | 1,080 |
| 09/19/04 | 72 | 72 | <5.0 | <5.0 | <0.05 | <0.05 | NC | NC | 0.12 | < 0.12 | 0.001 | < 0.001 | LAB | **2,973** | 487 | 44,060 | 480 |
| 10/28/04 | 71 | 71 | <5.0 | <5.0 | <0.05 | <0.05 | NC | NC | 0.11 | < 0.11 | 0.001 | < 0.001 | LAB | **2,978** | 488 | 44,996 | 936 |
| 11/23/04 | 80 | 80 | <5.0 | <5.0 | <0.05 | <0.05 | NC | NC | 0.13 | < 0.13 | 0.001 | < 0.001 | LAB | **2,981** | 489 | 45,620 | 624 |
| 12/26/04 | 68 | 68 | <5.0 | <5.0 | <0.05 | <0.05 | NC | NC | 0.11 | < 0.11 | 0.001 | < 0.001 | LAB | **2,985** | 489 | 46,412 | 792 |
| 01/26/05 | 78 | 78 | <5.0 | <5.0 | <0.05 | <0.05 | NC | NC | 0.12 | < 0.12 | 0.001 | < 0.001 | LAB | **2,989** | 490 | 47,154 | 742 |
| 02/27/05 | 69 | 69 | <5.0 | <5.0 | <0.05 | <0.05 | NC | NC | 0.11 | < 0.11 | 0.001 | < 0.001 | LAB | **2,992** | 491 | 47,922 | 768 |
| 03/24/05 | 75 | 75 | <5.0 | <5.0 | <0.05 | <0.05 | NC | NC | 0.12 | < 0.12 | 0.001 | < 0.001 | LAB | **2,995** | 491 | 48,525 | 603 |
| 04/26/05 | 80 | 80 | <5.0 | <5.0 | <0.05 | <0.05 | NC | NC | 0.13 | < 0.13 | 0.001 | < 0.001 | LAB | **3,000** | 492 | 49,341 | 816 |
| 05/30/05 | 75 | 75 | 14.0 | <5.0 | <0.05 | <0.05 | NC | NC | 0.34 | < 0.12 | 0.001 | < 0.001 | LAB | **3,008** | 493 | 50,181 | 840 |
| 06/28/05 | 65 | 65 | <5.0 | <5.0 | <0.05 | <0.05 | NC | NC | 0.10 | < 0.10 | 0.001 | < 0.001 | LAB | **3,014** | 494 | 50,901 | 720 |
| 07/28/05 | 70 | 70 | 58.0 | <5.0 | <0.05 | <0.05 | NC | NC | 1.30 | < 0.11 | 0.001 | < 0.001 | LAB | **3,035** | 498 | 51,623 | 722 |
| 08/24/05 | 68 | 68 | <5.0 | <5.0 | <0.05 | <0.05 | NC | NC | 0.11 | < 0.11 | 0.001 | < 0.001 | LAB | **3,055** | 501 | 52,276 | 653 |
| 09/29/05 | 65 | 65 | <5.0 | <5.0 | <0.05 | <0.05 | NC | NC | 0.10 | < 0.10 | 0.001 | < 0.001 | LAB | **3,058** | 501 | 53,140 | 864 |
| 10/26/05 | 88 | 88 | <5.0 | <5.0 | <0.05 | <0.05 | NC | NC | 0.14 | < 0.14 | 0.001 | < 0.001 | LAB | **3,062** | 502 | 53,819 | 679 |
| 11/27/05 | 72 | 72 | <5.0 | <5.0 | <0.05 | <0.05 | NC | NC | 0.12 | < 0.12 | 0.001 | < 0.001 | LAB | **3,066** | 503 | 54,590 | 771 |
| 12/27/05 | 82 | 82 | <5.0 | <5.0 | <0.05 | <0.05 | NC | NC | 0.13 | < 0.13 | 0.001 | < 0.001 | LAB | **3,070** | 503 | 55,308 | 718 |

**TABLE 3**
**SVE SYSTEM THROUGHPUT CALCULATIONS**

Tesoro Station No. 67106
Former Beacon Station No. 3720
1088 Marina Boulevard
San Leandro, California

| Date | Influent Flow Rate ($ft^3$/min) | Effluent Flow Rate ($ft^3$/min) | TPH Influent (ppmv) | TPH Effluent (ppmv) | Benzene Influent (ppmv) | Benzene Effluent (ppmv) | TPH Removal (%) | Benzene Removal (%) | TPH Extraction Rate (lbs/day) | TPH Mass Emission (lbs/day) | Benzene Extraction Rate (lbs/day) | Benzene Emission Rate (lbs/day) | FID or LAB | **Cumulative TPH Extraction (lbs)** | Cumulative TPH Extraction (gallons) | Total Hours | Change in hours of operation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 01/29/06 | 75 | 75 | <5.0 | <5.0 | <0.05 | <0.05 | NC | NC | 0.12 | < 0.12 | 0.001 | < 0.001 | LAB | **3,074** | 504 | 56,097 | 789 |
| 02/27/06 | 65 | 65 | <5.0 | <5.0 | <0.05 | <0.05 | NC | NC | 0.10 | < 0.10 | 0.001 | < 0.001 | LAB | **3,077** | 504 | 56,794 | 697 |
| 03/27/06 | 68 | 68 | <5.0 | <5.0 | <0.05 | <0.05 | NC | NC | 0.11 | < 0.11 | 0.001 | < 0.001 | LAB | **3,080** | 505 | 57,468 | 674 |

* The system was running on ambient air, thus change in hours are zero.
** The system was running on ambient air from 9/22/99 to 10/12/99, the change in hours only represents time the system was extracting soil vapor.
NC = Not Calculated




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

QUADRANGLE LOCATION


SCALE 1:24,000

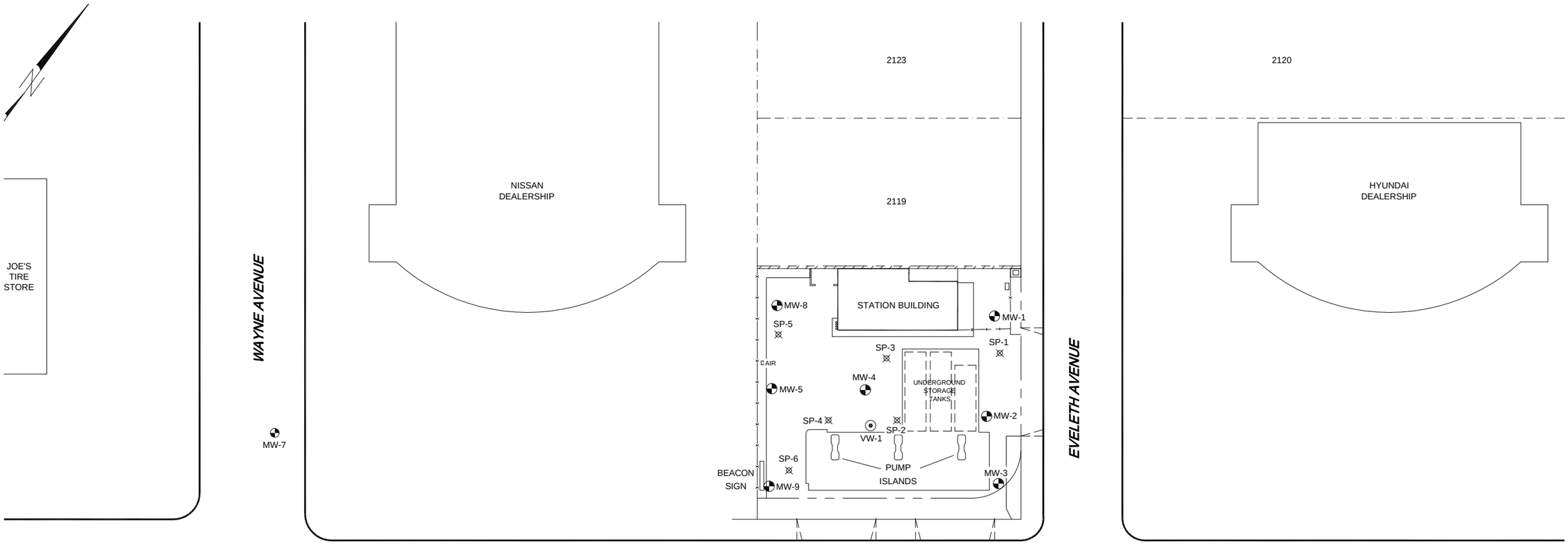
FIGURE 1

SITE LOCATION MAP

TESORO STATION NO. 67106
(FORMER BEACON STATION NO. 3720)
1088 MARINA BOULEVARD
SAN LEANDRO, CA.

| | |
|---|---|
| PROJECT NO. 00-3720 | DRAWN BY M.L. 12/18/01 |
| FILE NO. 00-3720-1A | PREPARED BY RDM |
| REVISION NO. 1 | REVIEWED BY |

R D M Environmental




LEGEND:

| | |
|---|---|
| —— — · —— | PROPERTY LINE |
| ——x——x—— | FENCE |
| MW-1 | MONITORING WELL LOCATION |
| VW-1 | VAPOR EXTRACTION WELL LOCATION |
| SP-1 | AIR SPARGING WELL LOCATION |

NOTES:

1. BASE MAP ADAPTED FROM FUGRO FIGURE DATED 10/24/95
   SITE DIMENSIONS AND FACILTY LOCATIONS NOT VERIFIED.
2. MONITORING WELLS MW-6 AND MW-7 ARE OFF-SITE.

0 40 FT

APPROX. SCALE

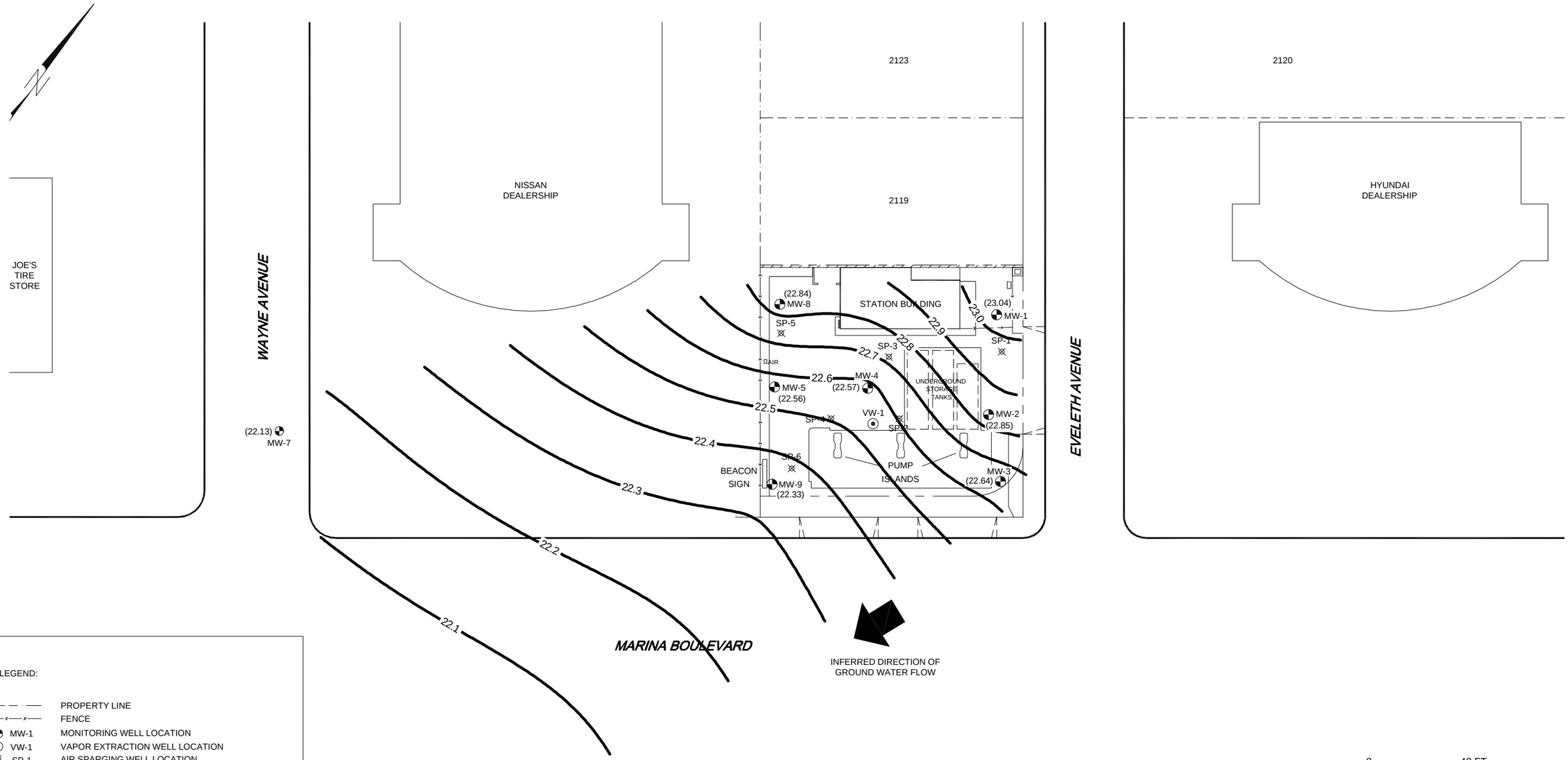
FIGURE 2

SITE MAP

TESORO STATION NO. 67106
(FORMER BEACON STATION NO. 3720)
1088 MARINA BOULEVARD
SAN LEANDRO, CA.

| | |
|---|---|
| PROJECT NO. 00-3720 | DRAWN BY M.L. 5/19/04 |
| FILE NO. 00-3720-11 | PREPARED BY RDM |
| REVISION NO. 1 | REVIEWED BY |

RDM Environmental




LEGEND:

| | |
|---|---|
| —— — · —— | PROPERTY LINE |
| ——x——x—— | FENCE |
| MW-1 | MONITORING WELL LOCATION |
| VW-1 | VAPOR EXTRACTION WELL LOCATION |
| SP-1 | AIR SPARGING WELL LOCATION |
| (23.04) | GROUND WATER ELEVATION IN FEET RELATIVE TO MEAN SEA LEVEL |
| 21.5 | WATER ELEVATION CONTOUR IN FEET RELATIVE TO MEAN SEA LEVEL |

NOTES:

1. BASE MAP ADAPTED FROM FUGRO FIGURE DATED 10/24/95
   SITE DIMENSIONS AND FACILTY LOCATIONS NOT VERIFIED.
2. MONITORING WELLS MW-6 AND MW-7 ARE OFF-SITE.

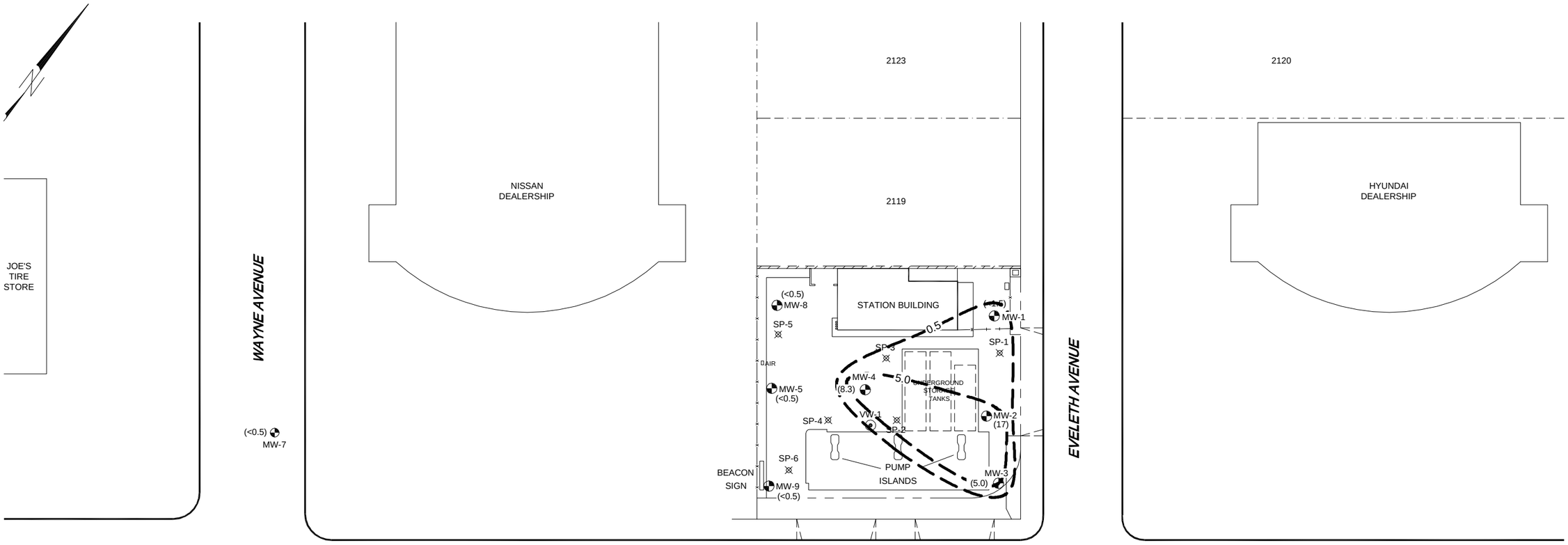
0 40 FT

APPROX. SCALE

FIGURE 3
GROUND WATER ELEVATION CONTOUR MAP
1/13/06
TESORO STATION NO. 67106
(FORMER BEACON STATION NO. 3720)
1088 MARINA BOULEVARD
SAN LEANDRO, CA.

| | |
|---|---|
| PROJECT NO. 00-3720 | DRAWN BY M.L. 4/6/06 |
| FILE NO. 00-3720-11 | PREPARED BY RDM |
| REVISION NO. 1 | REVIEWED BY |

RDM Environmental




LEGEND:

| | |
|---|---|
| —— — · —— | PROPERTY LINE |
| ——x——x—— | FENCE |
| MW-1 | MONITORING WELL LOCATION |
| VW-1 | VAPOR EXTRACTION WELL LOCATION |
| SP-1 | AIR SPARGING WELL LOCATION |
| (17) | BENZENE CONCENTRATION IN MICROGRAMS PER LITER (ug/L) |
| 5.0 | BENZENE ISOCONCENTRATION CONTOUR |

NOTES:

1. BASE MAP ADAPTED FROM FUGRO FIGURE DATED 10/24/95 SITE DIMENSIONS AND FACILTY LOCATIONS NOT VERIFIED.
2. MONITORING WELLS MW-6 AND MW-7 ARE OFF-SITE.

0 40 FT

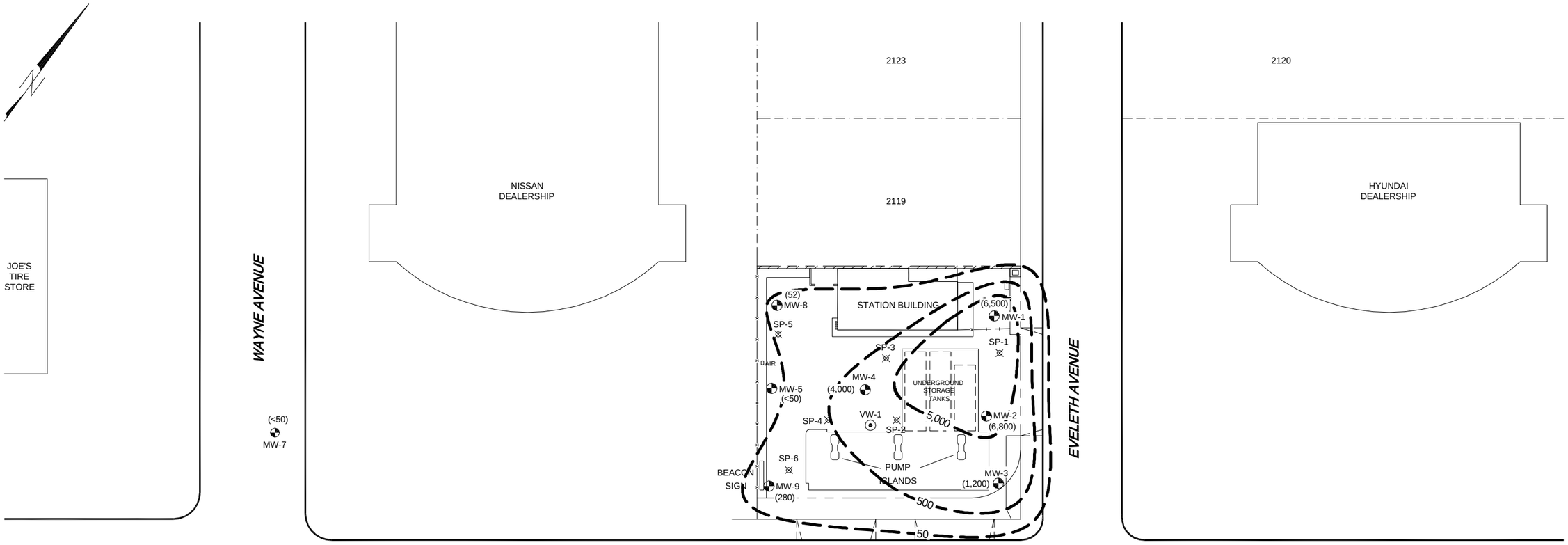
APPROX. SCALE

FIGURE 4
BENZENE ISO-CONCENTRATION MAP
1/13/06

TESORO STATION NO. 67106
(FORMER BEACON STATION NO. 3720)
1088 MARINA BOULEVARD
SAN LEANDRO, CA.

| | |
|---|---|
| PROJECT NO. 00-3720 | DRAWN BY M.L. 4/6/06 |
| FILE NO. 00-3720-11 | PREPARED BY RDM |
| REVISION NO. 1 | REVIEWED BY |

RDM Environmental




LEGEND:

| | |
|---|---|
| —— — · —— | PROPERTY LINE |
| ——x——x—— | FENCE |
| MW-1 | MONITORING WELL LOCATION |
| VW-1 | VAPOR EXTRACTION WELL LOCATION |
| SP-1 | AIR SPARGING WELL LOCATION |
| (6,800) | TPHg CONCENTRATION IN MICROGRAMS PER LITER (ug/L) |
| 500 | TPHg ISOCONCENTRATION CONTOUR |

NOTES:

1. BASE MAP ADAPTED FROM FUGRO FIGURE DATED 10/24/95 SITE DIMENSIONS AND FACILTY LOCATIONS NOT VERIFIED.
2. MONITORING WELLS MW-6 AND MW-7 ARE OFF-SITE.

0 40 FT

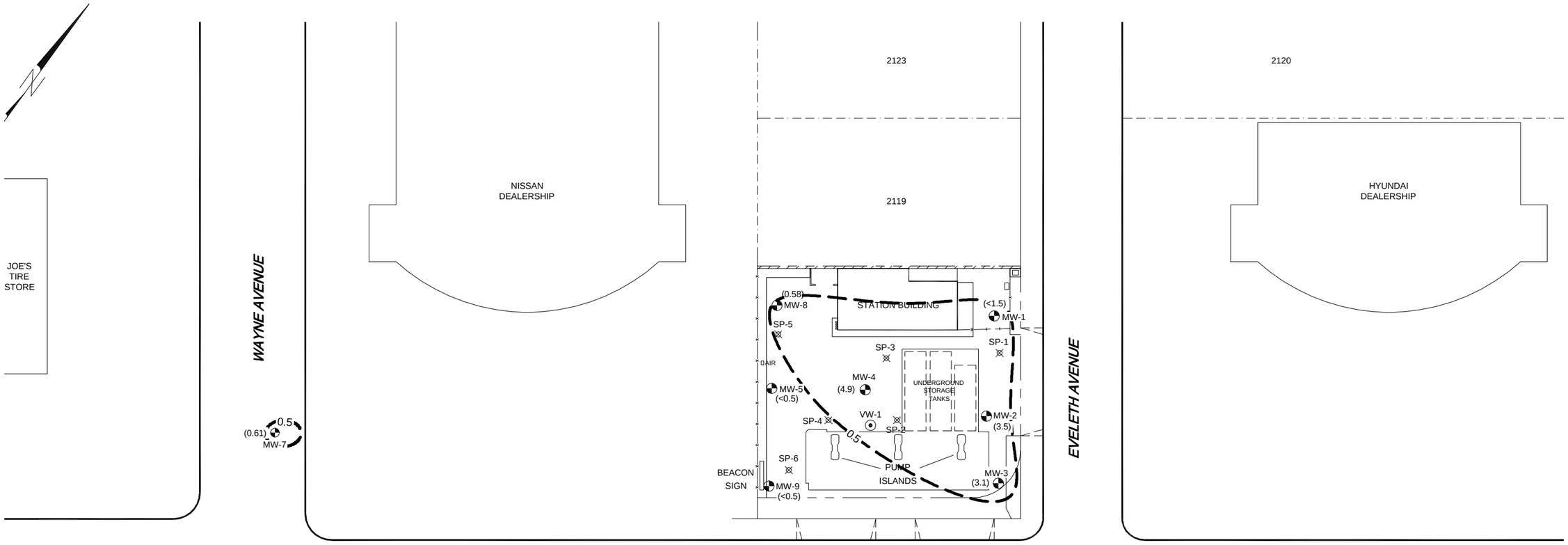
APPROX. SCALE

FIGURE 5
TPHg ISOCONCENTRATION MAP
1/13/06

TESORO STATION NO. 67106
(FORMER BEACON STATION NO. 3720)
1088 MARINA BOULEVARD
SAN LEANDRO, CA.

| | |
|---|---|
| PROJECT NO. 00-3720 | DRAWN BY M.L. 4/6/06 |
| FILE NO. 00-3720-11 | PREPARED BY RDM |
| REVISION NO. 1 | REVIEWED BY |

RDM Environmental




LEGEND:

- PROPERTY LINE
- FENCE
- MW-1 MONITORING WELL LOCATION
- VW-1 VAPOR EXTRACTION WELL LOCATION
- SP-1 AIR SPARGING WELL LOCATION
- (4.9) MTBE CONCENTRATION IN MICROGRAMS PER LITER (ug/L)
- 0.5 MTBE ISOCONCENTRATION CONTOUR

NOTES:

1. BASE MAP ADAPTED FROM FUGRO FIGURE DATED 10/24/95 SITE DIMENSIONS AND FACILTY LOCATIONS NOT VERIFIED.
2. MONITORING WELLS MW-6 AND MW-7 ARE OFF-SITE.

0 40 FT

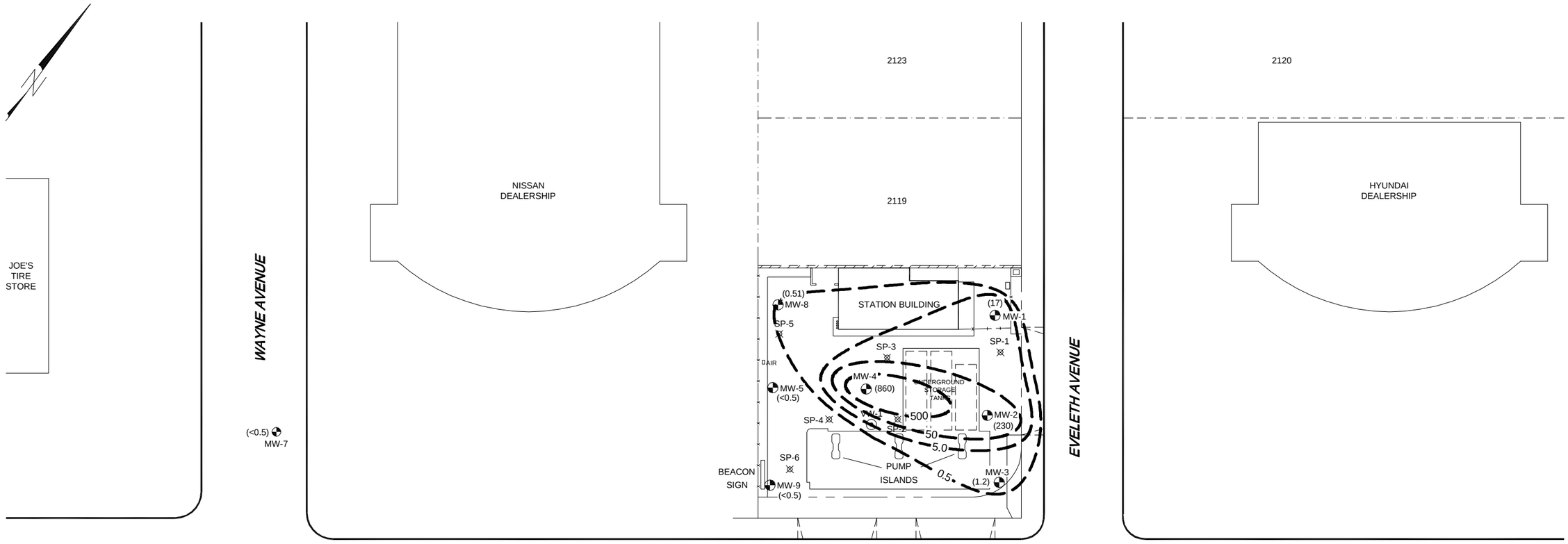
APPROX. SCALE

FIGURE 6
MTBE ISOCONCENTRATION MAP
1/13/06

TESORO STATION NO. 67106
(FORMER BEACON STATION NO. 3720)
1088 MARINA BOULEVARD
SAN LEANDRO, CA.

| | |
|---|---|
| PROJECT NO. 00-3720 | DRAWN BY M.L. 4/6/06 |
| FILE NO. 00-3720-11 | PREPARED BY RDM |
| REVISION NO. 1 | REVIEWED BY |

RDM Environmental




LEGEND:

| | |
|---|---|
| —— — · —— | PROPERTY LINE |
| ——x——x—— | FENCE |
| MW-1 | MONITORING WELL LOCATION |
| VW-1 | VAPOR EXTRACTION WELL LOCATION |
| SP-1 | AIR SPARGING WELL LOCATION |
| (860) | XYLENES CONCENTRATION IN MICROGRAMS PER LITER (ug/L) |
| 5.0 | XYLENES ISOCONCENTRATION CONTOUR |

NOTES:

1. BASE MAP ADAPTED FROM FUGRO FIGURE DATED 10/24/95 SITE DIMENSIONS AND FACILTY LOCATIONS NOT VERIFIED.
2. MONITORING WELLS MW-6 AND MW-7 ARE OFF-SITE.

0 40 FT

APPROX. SCALE

FIGURE 7
XYLENES ISOCONCENTRATION MAP
1/13/06

TESORO STATION NO. 67106
(FORMER BEACON STATION NO. 3720)
1088 MARINA BOULEVARD
SAN LEANDRO, CA.

| | |
|---|---|
| PROJECT NO. 00-3720 | DRAWN BY M.L. 4/6/06 |
| FILE NO. 00-3720-11 | PREPARED BY RDM |
| REVISION NO. 1 | REVIEWED BY |

RDM Environmental

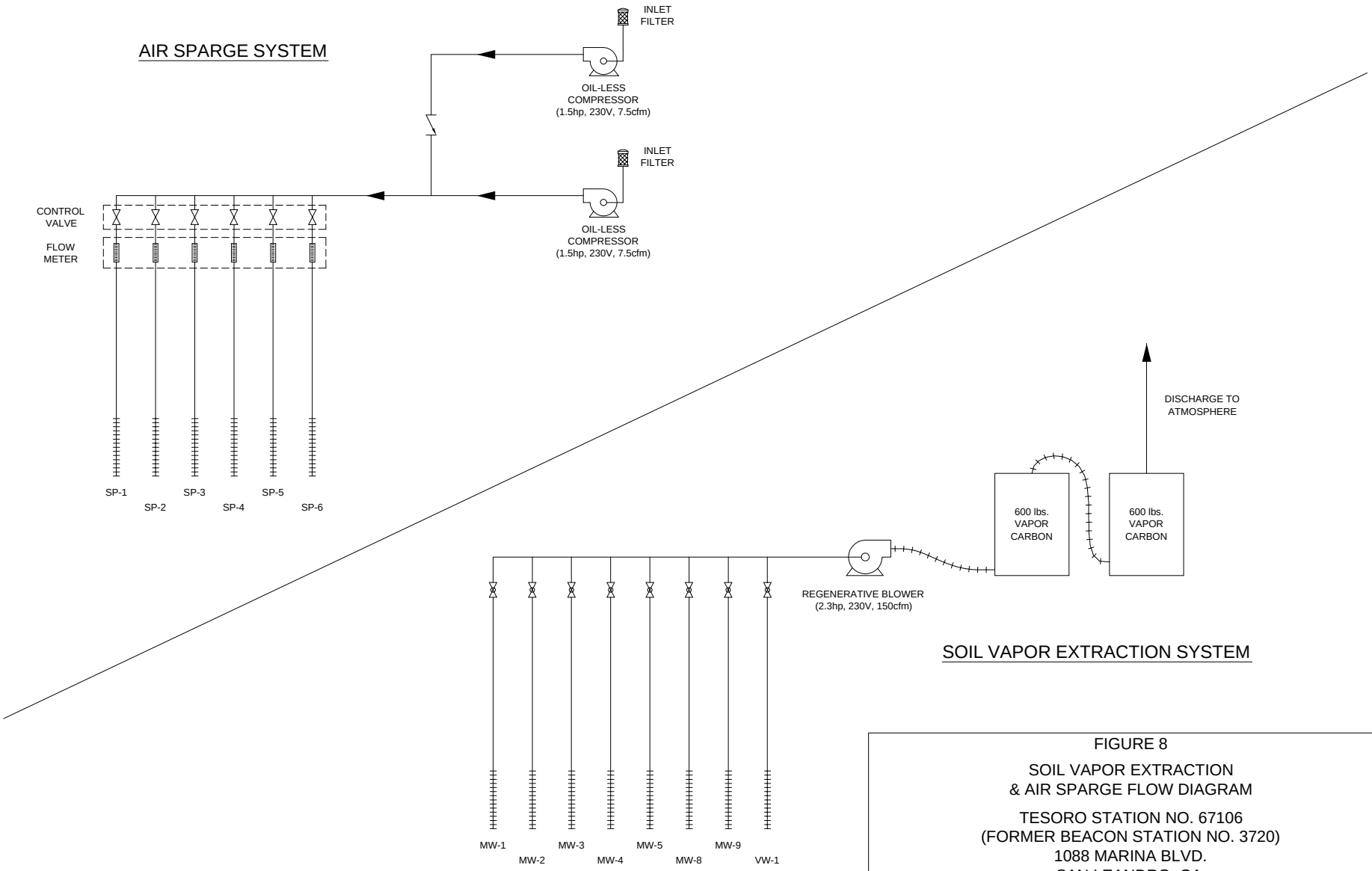



FIGURE 8

SOIL VAPOR EXTRACTION
& AIR SPARGE FLOW DIAGRAM

TESORO STATION NO. 67106
(FORMER BEACON STATION NO. 3720)
1088 MARINA BLVD.
SAN LEANDRO, CA.

| | |
|---|---|
| PROJECT NO. 00-3720 | DRAWN BY M.L. 2/18/04 |
| FILE NO. 00-3720-10 | PREPARED BY RDM |
| REVISION NO. 1 | REVIEWED BY |

R D M Environmental

# Appendix A

Ground Water Sampling Data Sheets –
Quarterly Ground Water Samples

# RDM ENVIRONMENTAL

GROUND WATER LEVEL DATA

Project Address: Tesoro Station 67106
1088 Marina Blvd., San Leandro, CA

Date: 1/13/2006

Technicians : SG/DH

Project Number: 02-67106

| Well Number | Sample Order | Time | Depth to Water | Total Depth | Depth to Product | Product Thickness | Comments |
|---|---|---|---|---|---|---|---|
| MW-1 | 9 | 0958 | 12.43 | 17.74 | | | 2" 2.55 |
| MW-2 | 8 | 0955 | 12.26 | 22.31 | | | 2" 4.82 |
| MW-3 | 5 | 0948 | 12.20 | 28.4 | | | 2" 7.78 |
| MW-4 | 7 | 0954 | 12.76 | 27.45 | | | 2" 7.05 |
| MW-5 | 4 | 0946 | 12.53 | 28.8 | | | 2" 7.81 |
| MW-6 | 1 | 0937 | 10.70 | 14.86 | | | 2" , 2.00 |
| MW-7 | 2 | 0940 | 11.51 | 25.45 | | | 2" , 6.69 |
| MW-8 | 6 | 0950 | 13,24 | 28.05 | | | 2" |
| MW-9 | 3 | 0943 | 12.30 | 24.6 | | | 4" , 23.99 |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

RDM ENVIRONMENTAL

SAMPLE INFORMATION SHEET

Client: Tesoro
Site: Tesoro Station 67106
1088 Marina Blvd., San Leandro, CA
Signature:

Sample Data: 1/13/2006
Project Number: 02-67106
**Well Designation:** MW-1

## Well Box Condition/Traffic

| | | | |
|---|---|---|---|
| Traffic Control | (Yes) No | Time: | 1428 hours |
| Standing water | Yes (No) | above or below casing | |
| Top of well level | (Yes) No | Remark: | |
| Well cap & locked | Yes (No) | Remark: | o/s cap. |
| Height of Riser | 6" | | |
| Well Box (8") 12" 24" | | Type of well box | CNI |

## Purging/Sampling Equipment

### Purging -

| | | | |
|---|---|---|---|
| 2" Disposable Bailer | X | Submersible Pump | |
| 2" PVC Bailer | | Dedicated Bailer | |
| 4" PVC Bailers | | Centrifugal Pump | |

### Sampling -

| | | | | | |
|---|---|---|---|---|---|
| Disposable Bailer | X | Teflon Bailer | | Disposable Tubing | |

## Well Purging

| | | | | |
|---|---|---|---|---|
| Well Diameter: 2" | X | 4" | 6" | 8" |
| Purge Vol. Multiplier | 0.16 | 0.65 | 1.47 | 2.61 |

| | | | | | |
|---|---|---|---|---|---|
| Initial Measurement | | Recharge Measurement | | Calculated Purge | 2.55 |
| Time: | 0958 | Time: | | Actual Purge | 3.0 |
| Depth of Well | 17.74 | Depth to Water | | | |
| Depth to Water | 12.43 | | | | |

## Sample

Start Purge: 1430 Sample Time: 1442

| Time | Temperature | E.C. | pH | ORP | Turbidity | | | Volume |
|---|---|---|---|---|---|---|---|---|
| 1434 | 66.8 | 274 | 6.60 | | | | | 1 |
| 1437 | 67.0 | 282 | 6.51 | | | | | 2 |
| 1439 | 67.0 | 287 | 6.48 | | | | | 3 |
| | | | | | | | | |
| | | | | | | | | |

Sample Appearance: CLEAR Lock: N/A

## Equipment Replacement

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Lock | N/A | Well Cap | ok | Bolts | -2 | Box | ok |

Remarks:

RDM ENVIRONMENTAL

SAMPLE INFORMATION SHEET

| | | | |
|---|---|---|---|
| Client: | Tesoro | Sample Data: | 1/13/2006 |
| Site: | Tesoro Station 67106 | Project Number: | 02-67106 |
| | 1088 Marina Blvd., San Leandro, CA | **Well Designation:** | MW-2 |
| Signature: | | | |

## Well Box Condition/Traffic

| | | | |
|---|---|---|---|
| Traffic Control | (Yes) No | Time: | 1405 hours |
| Standing water | Yes (No) | above or below casing | |
| Top of well level | (Yes) No | Remark: | |
| Well cap & locked | (Yes) No | Remark: | |
| Height of Riser | 3" | | |
| Well Box (8") 12" 24" | Type of well box | Pomeco | |

## Purging/Sampling Equipment

### Purging -

| | | | |
|---|---|---|---|
| 2" Disposable Bailer | X | Submersible Pump | |
| 2" PVC Bailer | | Dedicated Bailer | |
| 4" PVC Bailers | | Centrifugal Pump | |

### Sampling -

| | | | | | |
|---|---|---|---|---|---|
| Disposable Bailer | X | Teflon Bailer | | Disposable Tubing | |

## Well Purging

| | | | | |
|---|---|---|---|---|
| Well Diameter: 2" | X | 4" | 6" | 8" |
| Purge Vol. Multiplier | 0.16 | 0.65 | 1.47 | 2.61 |

| | | | | | |
|---|---|---|---|---|---|
| Initial Measurement | | Recharge Measurement | | Calculated Purge | 4.82 |
| Time: | 0955 | Time: | | Actual Purge | 5.0 |
| Depth of Well | 22.31 | Depth to Water | | | |
| Depth to Water | 12.26 | | | | |

## Sample

Start Purge 1404 Sample Time 1425

| Time | Temperature | E.C. | pH | ORP | Turbidity | | | Volume |
|---|---|---|---|---|---|---|---|---|
| 1414 | 66.5 | 313 | 6.86 | | | | | 1 |
| 1419 | 66.1 | 295 | 6.77 | | | | | 2 |
| 1422 | 66.4 | 293 | 6.73 | | | | | 3 |
| | | | | | | | | |
| | | | | | | | | |

Sample Appearance CLOUDY Lock ok

## Equipment Replacement

Lock ok Well Cap ok Bolts -1 Box ok

Remarks:

RDM ENVIRONMENTAL

SAMPLE INFORMATION SHEET

Client: Tesoro
Sample Data: 1/13/2006
Site: Tesoro Station 67106
Project Number: 02-67106
1088 Marina Blvd., San Leandro, CA
**Well Designation:** MW-3
Signature:

## Well Box Condition/Traffic

Traffic Control: (Yes) No
Time: 0948 hours
Standing water: Yes (No)
above or below casing
Top of well level: Yes (No)
Remark:
Well cap & locked: (Yes) No
Remark:
Height of Riser: 2"
Well Box 8" (12") 24"
Type of well box: CNI

## Purging/Sampling Equipment

### Purging -

| | | | |
|---|---|---|---|
| 2" Disposable Bailer | | Submersible Pump | |
| 2" PVC Bailer | | Dedicated Bailer | |
| 4" PVC Bailers | | Centrifugal Pump | X |

### Sampling -

| | | | | | |
|---|---|---|---|---|---|
| Disposable Bailer | X | Teflon Bailer | | Disposable Tubing | |

## Well Purging

| | 2" | 4" | 6" | 8" |
|---|---|---|---|---|
| Well Diameter: | X | | | |
| Purge Vol. Multiplier | 0.16 | 0.65 | 1.47 | 2.61 |

| | | | | | |
|---|---|---|---|---|---|
| Initial Measurement | | Recharge Measurement | | Calculated Purge | 7.78 |
| Time: | 0948 | Time: | | Actual Purge | 8.0 |
| Depth of Well | 28.4 | Depth to Water | | | |
| Depth to Water | 12.20 | | | | |

## Sample

Start Purge: 1202
Sample Time: 1219

| Time | Temperature | E.C. | pH | ORP | Turbidity | | | Volume |
|---|---|---|---|---|---|---|---|---|
| 1206 | 71.9 | 308 | 6.65 | | | | | 1 |
| 1210 | 72.0 | 307 | 6.55 | | | | | 2 |
| 1215 | 72.0 | 308 | 6.53 | | | | | 3 |
| | | | | | | | | |
| | | | | | | | | |

Sample Appearance: CLEAR
Lock: OK

## Equipment Replacement

Lock: OK
Well Cap: OK
Bolts: OK
Box: OK

Remarks:

RDM ENVIRONMENTAL

SAMPLE INFORMATION SHEET

| | | | |
|---|---|---|---|
| Client: | Tesoro | Sample Data: | 1/13/2006 |
| Site: | Tesoro Station 67106 | Project Number: | 02-67106 |
| | 1088 Marina Blvd., San Leandro, CA | **Well Designation:** | MW-4 |
| Signature: | | | |

## Well Box Condition/Traffic

| | | | |
|---|---|---|---|
| Traffic Control | (Yes) No | Time: | 0954 hours |
| Standing water | Yes (No) | above or below casing | |
| Top of well level | (Yes) No | Remark: | |
| Well cap & locked | Yes (No) | Remark: | OZONE SPARGE POINT |
| Height of Riser | 3" | | |
| Well Box | 8" 12" (24") | Type of well box | NOT MARKED |

## Purging/Sampling Equipment

### Purging -

| | | | |
|---|---|---|---|
| 2" Disposable Bailer | | Submersible Pump | |
| 2" PVC Bailer | | Dedicated Bailer | |
| 4" PVC Bailers | | Centrifugal Pump | X |

### Sampling -

| | | | | | |
|---|---|---|---|---|---|
| Disposable Bailer | X | Teflon Bailer | | Disposable Tubing | |

## Well Purging

| | | | | |
|---|---|---|---|---|
| Well Diameter: 2" | X | 4" | 6" | 8" |
| Purge Vol. Multiplier | 0.16 | 0.65 | 1.47 | 2.61 |

| | | | | | |
|---|---|---|---|---|---|
| Initial Measurement | | Recharge Measurement | | Calculated Purge | 7.05 |
| Time: | 0954 | Time: | | Actual Purge | 7.0 |
| Depth of Well | 22.45 | Depth to Water | | | |
| Depth to Water | 12.76 | | | | |

## Sample

Start Purge 1310 Sample Time 1358

| Time | Temperature | E.C. | pH | ORP | Turbidity | | | Volume |
|---|---|---|---|---|---|---|---|---|
| 1329 | 71.2 | 480 | 7.18 | | | | | 2.5 gal |
| 1344 | 73.2 | 536 | 6.98 | | | | | 4.5 gal |
| 1349 | 72.6 | 496 | 6.85 | | | | | 6.0 gal |
| 1354 | 74.0 | 490 | 6.77 | | | | | 7.0 gal |
| | | | | | | | | |

Sample Appearance CLOUDY Lock N/A

## Equipment Replacement

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Lock | N/A | Well Cap | 04 | Bolts | -1 | Box | ONE BOLT SHEARED OFF IN THREADS |

Remarks: OZONE SPARGE BLOCK IS MISSING
DEWATERED AFTER 2.25 gallons Allowed 15 minute recharge
DEWATERED AFTER 4.0 gallons Allowed 10 minute recharge

RDM ENVIRONMENTAL

SAMPLE INFORMATION SHEET

Client: Tesoro
Site: Tesoro Station 67106
1088 Marina Blvd., San Leandro, CA
Signature:

Sample Data: 1/13/2006
Project Number: 02-67106
**Well Designation:** MW-5

## Well Box Condition/Traffic

| | | | |
|---|---|---|---|
| Traffic Control | (Yes) No | Time: | 0946 hours |
| Standing water | Yes (No) | above or below casing | |
| Top of well level | (Yes) No | Remark: | |
| Well cap & locked | Yes (No) | Remark: | OZONE SPARGE POINT |
| Height of Riser | 2" | | |
| Well Box 8" 12" (24") | | Type of well box | Not Marked |

## Purging/Sampling Equipment

### Purging -

| | | | |
|---|---|---|---|
| 2" Disposable Bailer | | Submersible Pump | |
| 2" PVC Bailer | | Dedicated Bailer | |
| 4" PVC Bailers | | Centrifugal Pump | X |

### Sampling -

| | | | | | |
|---|---|---|---|---|---|
| Disposable Bailer | X | Teflon Bailer | | Disposable Tubing | |

## Well Purging

| | | | | |
|---|---|---|---|---|
| Well Diameter: 2" | X | 4" | 6" | 8" |
| Purge Vol. Multiplier | 0.16 | 0.65 | 1.47 | 2.61 |

| | | | | | |
|---|---|---|---|---|---|
| Initial Measurement | | Recharge Measurement | | Calculated Purge | 7.81 |
| Time: | 0946 | Time: | | Actual Purge | 8.0 |
| Depth of Well | 28.8 | Depth to Water | | | |
| Depth to Water | 12.53 | | | | |

## Sample

Start Purge: 1139 Sample Time: 1150

| Time | Temperature | E.C. | pH | ORP | Turbidity | | | Volume |
|---|---|---|---|---|---|---|---|---|
| 1142 | 68.3 | 482 | 6.88 | | | | | 1 |
| 1144 | 68.2 | 486 | 6.77 | | | | | 2 |
| 1146 | 68.2 | 489 | 6.69 | | | | | 3 |
| | | | | | | | | |
| | | | | | | | | |

Sample Appearance: CLEAR Lock: N/A

## Equipment Replacement

Lock: N/A Well Cap: OK Bolts: -4 Box: OK

Remarks: OZONE SPARGE BLOCK MISSING

RDM ENVIRONMENTAL

SAMPLE INFORMATION SHEET

| | | | |
|---|---|---|---|
| Client: | Tesoro | Sample Data: | 1/13/2006 |
| Site: | Tesoro Station 67106 | Project Number: | 02-67106 |
| | 1088 Marina Blvd., San Leandro, CA | **Well Designation:** | MW-6 |
| Signature: | | | |

## Well Box Condition/Traffic

| | | | |
|---|---|---|---|
| Traffic Control | (Yes) No | Time: | 1011 hours |
| Standing water | (Yes) No | | (above) or below casing |
| Top of well level | Yes (No) | Remark: | |
| Well cap & locked | (Yes) No | Remark: | |
| Height of Riser | 7" | | |
| Well Box | 8" (12") 24" | Type of well box | POMELO |

## Purging/Sampling Equipment

### Purging -

| | | | |
|---|---|---|---|
| 2" Disposable Bailer | X | Submersible Pump | |
| 2" PVC Bailer | | Dedicated Bailer | |
| 4" PVC Bailers | | Centrifugal Pump | |

### Sampling -

| | | | | | |
|---|---|---|---|---|---|
| Disposable Bailer | X | Teflon Bailer | | Disposable Tubing | |

## Well Purging

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Well Diameter: | 2" | X | 4" | | 6" | | 8" | |
| Purge Vol. Multiplier | | 0.16 | | 0.65 | | 1.47 | | 2.61 |

| | | | | | |
|---|---|---|---|---|---|
| Initial Measurement | | Recharge Measurement | | Calculated Purge | 2.00 |
| Time: | 0937 | Time: | | Actual Purge | 2.25 |
| Depth of Well | 14.86 | Depth to Water | | | |
| Depth to Water | 10.70 | | | | |

## Sample

| | | | |
|---|---|---|---|
| Start Purge | 1011 | Sample Time | 1023 |

| Time | Temperature | E.C. | pH | ORP | Turbidity | | | Volume |
|---|---|---|---|---|---|---|---|---|
| 1016 | 65.9 | 998 | 7.05 | | | | | 1 |
| 1017 | 65.8 | 948 | 6.70 | | | | | 2 |
| 1019 | 66.0 | 929 | 6.65 | | | | | 3 |
| | | | | | | | | |
| | | | | | | | | |

| | | | |
|---|---|---|---|
| Sample Appearance | CLEAR | Lock | OK |

## Equipment Replacement

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Lock | OK | Well Cap | OK | Bolts | -3 | Box | OK |

Remarks:

RDM ENVIRONMENTAL

SAMPLE INFORMATION SHEET

| | | | |
|---|---|---|---|
| Client: | Tesoro | Sample Data: | 1/13/2006 |
| Site: | Tesoro Station 67106 | Project Number: | 02-67106 |
| | 1088 Marina Blvd., San Leandro, CA | **Well Designation:** | MW-7 |
| Signature: | | | |

## Well Box Condition/Traffic

| | | | |
|---|---|---|---|
| Traffic Control | (Yes) No | Time: | 0940 hours |
| Standing water | Yes (No) | above or below casing | |
| Top of well level | (Yes) No | Remark: | |
| Well cap & locked | (Yes) No | Remark: | |
| Height of Riser | 8" | | |
| Well Box | 8" (12") 24" | Type of well box | POLELO |

## Purging/Sampling Equipment

### Purging -

| | | | |
|---|---|---|---|
| 2" Disposable Bailer | | Submersible Pump | |
| 2" PVC Bailer | | Dedicated Bailer | |
| 4" PVC Bailers | | Centrifugal Pump | X |

### Sampling -

| | | | | | |
|---|---|---|---|---|---|
| Disposable Bailer | X | Teflon Bailer | | Disposable Tubing | |

## Well Purging

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Well Diameter: | 2" | X | 4" | | 6" | | 8" | |
| Purge Vol. Multiplier | | 0.16 | | 0.65 | | 1.47 | | 2.61 |

| | | | | | |
|---|---|---|---|---|---|
| Initial Measurement | | Recharge Measurement | | Calculated Purge | 6.69 |
| Time: | 0940 | Time: | | Actual Purge | 7.0 |
| Depth of Well | 25.45 | Depth to Water | | | |
| Depth to Water | 11.51 | | | | |

## Sample

| | | | |
|---|---|---|---|
| Start Purge | 1036 | Sample Time | 1047 |

| Time | Temperature | E.C. | pH | ORP | Turbidity | | | Volume |
|---|---|---|---|---|---|---|---|---|
| 1038 | 67.7 | 402 | 6.61 | | | | | 1 |
| 1041 | 68.3 | 409 | 6.56 | | | | | 2 |
| 1043 | 68.5 | 409 | 6.56 | | | | | 3 |
| | | | | | | | | |
| | | | | | | | | |

| | | | |
|---|---|---|---|
| Sample Appearance | CLEAR | Lock | 04 |

## Equipment Replacement

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Lock | 04 | Well Cap | 04 | Bolts | -3 | Box | 2 Threads sheared<br>1 bolt sheared in thread |

Remarks:

RDM ENVIRONMENTAL

SAMPLE INFORMATION SHEET

| | | | |
|---|---|---|---|
| Client: | Tesoro | Sample Data: | 1/13/2006 |
| Site: | Tesoro Station 67106 | Project Number: | 02-67106 |
| | 1088 Marina Blvd., San Leandro, CA | **Well Designation:** | MW-8 |
| Signature: | | | |

## Well Box Condition/Traffic

| | | | |
|---|---|---|---|
| Traffic Control | Yes (No) | Time: | 0950 hours |
| Standing water | Yes (No) | above or below casing | |
| Top of well level | Yes (No) | Remark: | |
| Well cap & locked | (Yes) No | Remark: | |
| Height of Riser | 7" | | |
| Well Box | 8" (12") 24" | Type of well box | CNI |

## Purging/Sampling Equipment

### Purging -

| | | | |
|---|---|---|---|
| 2" Disposable Bailer | | Submersible Pump | |
| 2" PVC Bailer | | Dedicated Bailer | |
| 4" PVC Bailers | | Centrifugal Pump | X |

### Sampling -

| | | | | | |
|---|---|---|---|---|---|
| Disposable Bailer | X | Teflon Bailer | | Disposable Tubing | |

### Well Purging

| | | | | |
|---|---|---|---|---|
| Well Diameter: 2" | X | 4" | 6" | 8" |
| Purge Vol. Multiplier | 0.16 | 0.65 | 1.47 | 2.61 |

| | | | | | |
|---|---|---|---|---|---|
| Initial Measurement | | Recharge Measurement | | Calculated Purge | 7.11 |
| Time: | 0950 | Time: | | Actual Purge | 8.0 |
| Depth of Well | 28.05 | Depth to Water | | | |
| Depth to Water | 13.24 | | | | |

### Sample

Start Purge 1231 Sample Time 1245

| Time | Temperature | E.C. | pH | ORP | Turbidity | | | Volume |
|---|---|---|---|---|---|---|---|---|
| 1235 | 67.6 | 719 | 6.62 | | | | | 1 |
| 1237 | 67.7 | 719 | 6.56 | | | | | 2 |
| 1241 | 67.8 | 718 | 6.54 | | | | | 3 |
| | | | | | | | | |
| | | | | | | | | |

Sample Appearance CLEAR Lock OK

### Equipment Replacement

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Lock | OK | Well Cap | OK | Bolts | OK | Box | OK |

Remarks:

RDM ENVIRONMENTAL

SAMPLE INFORMATION SHEET

| | | | |
|---|---|---|---|
| Client: | Tesoro | Sample Data: | 1/13/2006 |
| Site: | Tesoro Station 67106 | Project Number: | 02-67106 |
| | 1088 Marina Blvd., San Leandro, CA | **Well Designation:** | MW-9 |
| Signature: | | | |

## Well Box Condition/Traffic

| | | | |
|---|---|---|---|
| Traffic Control | Yes (Yes) No | Time: | 0943 hours |
| Standing water | Yes (No) | above or below casing | |
| Top of well level | Yes (No) | Remark: | |
| Well cap & locked | Yes (No) | Remark: | Air Space Point |
| Height of Riser | 5" | | |
| Well Box | 8" 12" (24") | Type of well box | NOT MARKED |

## Purging/Sampling Equipment

### Purging -

| | | | |
|---|---|---|---|
| 2" Disposable Bailer | | Submersible Pump | |
| 2" PVC Bailer | | Dedicated Bailer | |
| 4" PVC Bailers | | Centrifugal Pump | X |

### Sampling -

| | | | | | |
|---|---|---|---|---|---|
| Disposable Bailer | X | Teflon Bailer | | Disposable Tubing | |

## Well Purging

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Well Diameter: | 2" | | 4" | X | 6" | | 8" | |
| Purge Vol. Multiplier | | 0.16 | | 0.65 | | 1.47 | | 2.61 |

| | | | | | |
|---|---|---|---|---|---|
| Initial Measurement | | Recharge Measurement | | Calculated Purge | 23.99 |
| Time: | 0943 | Time: | | Actual Purge | 33.0 |
| Depth of Well | 24.6 | Depth to Water | | | |
| Depth to Water | 12.30 | | | | |

## Sample

Start Purge 1106 Sample Time 1129

| Time | Temperature | E.C. | pH | ORP | Turbidity | | | Volume |
|---|---|---|---|---|---|---|---|---|
| 1114 | 68.2 | 471 | 6.74 | | | | | 1 |
| 1117 | 68.3 | 436 | 6.63 | | | | | 2 |
| 1121 | 68.2 | 416 | 6.61 | | | | | 3 |
| 1125 | 68.2 | 408 | 6.61 | | | | | 4 |
| | | | | | | | | |

Sample Appearance: CLOUDY Lock: N/A

## Equipment Replacement

Lock: N/A Well Cap: 04 Bolts: -3 Box: 1 Bolt sheared in threads

Remarks:

# Appendix B

Official Laboratory Analytical Results –
Quarterly Ground Water Samples

KIFF Analytical LLC

Report Number : 47950
Date : 1/25/2006

Richard Munsch
RDM Environmental
6280 Brookshire Drive
Rocklin, CA 95677

Subject : 9 Water Samples
Project Name : Tesoro St 67106
Project Number : 67106

Dear Mr. Munsch,

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 : 47950

Date : 1/25/2006

Project Name : **Tesoro St 67106**

Project Number : **67106**

Sample : **MW-1** Matrix : Water Lab Number : 47950-01

Sample Date :1/13/2006

| Parameter | Measured Value | Method Reporting Limit | Units | Analysis Method | Date Analyzed |
|---|---|---|---|---|---|
| **Benzene** | **< 1.5** | 1.5 | ug/L | EPA 8260B | 1/19/2006 |
| **Toluene** | **< 1.5** | 1.5 | ug/L | EPA 8260B | 1/19/2006 |
| **Ethylbenzene** | **34** | 1.5 | ug/L | EPA 8260B | 1/19/2006 |
| **Total Xylenes** | **17** | 1.5 | ug/L | EPA 8260B | 1/19/2006 |
| **Methyl-t-butyl ether (MTBE)** | **< 1.5** | 1.5 | ug/L | EPA 8260B | 1/19/2006 |
| **Diisopropyl ether (DIPE)** | **< 1.5** | 1.5 | ug/L | EPA 8260B | 1/19/2006 |
| **Ethyl-t-butyl ether (ETBE)** | **< 1.5** | 1.5 | ug/L | EPA 8260B | 1/19/2006 |
| **Tert-amyl methyl ether (TAME)** | **< 1.5** | 1.5 | ug/L | EPA 8260B | 1/19/2006 |
| **Tert-Butanol** | **< 7.0** | 7.0 | ug/L | EPA 8260B | 1/19/2006 |
| **TPH as Gasoline** | **6500** | 150 | ug/L | EPA 8260B | 1/19/2006 |
| Toluene - d8 (Surr) | 98.2 | | % Recovery | EPA 8260B | 1/19/2006 |
| 4-Bromofluorobenzene (Surr) | 97.2 | | % Recovery | EPA 8260B | 1/19/2006 |

Approved By: Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800

KIFF Analytical LLC

Report Number : 47950

Date : 1/25/2006

Project Name : **Tesoro St 67106**

Project Number : **67106**

Sample : **MW-2** Matrix : Water Lab Number : 47950-02

Sample Date :1/13/2006

| Parameter | Measured Value | Method Reporting Limit | Units | Analysis Method | Date Analyzed |
|---|---|---|---|---|---|
| **Benzene** | **17** | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| **Toluene** | **7.8** | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| **Ethylbenzene** | **220** | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| **Total Xylenes** | **230** | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| **Methyl-t-butyl ether (MTBE)** | **3.5** | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| **Diisopropyl ether (DIPE)** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| **Ethyl-t-butyl ether (ETBE)** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| **Tert-amyl methyl ether (TAME)** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| **Tert-Butanol** | **< 5.0** | 5.0 | ug/L | EPA 8260B | 1/19/2006 |
| **TPH as Gasoline** | **6800** | 150 | ug/L | EPA 8260B | 1/19/2006 |
| Toluene - d8 (Surr) | 97.7 | | % Recovery | EPA 8260B | 1/19/2006 |
| 4-Bromofluorobenzene (Surr) | 98.8 | | % Recovery | EPA 8260B | 1/19/2006 |

Approved By: Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800

KIFF Analytical LLC

Report Number : 47950

Date : 1/25/2006

Project Name : **Tesoro St 67106**

Project Number : **67106**

Sample : **MW-3** Matrix : Water Lab Number : 47950-03

Sample Date :1/13/2006

| Parameter | Measured Value | Method Reporting Limit | Units | Analysis Method | Date Analyzed |
|---|---|---|---|---|---|
| **Benzene** | **5.0** | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| **Toluene** | **1.1** | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| **Ethylbenzene** | **4.9** | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| **Total Xylenes** | **1.2** | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| **Methyl-t-butyl ether (MTBE)** | **3.1** | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| **Diisopropyl ether (DIPE)** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| **Ethyl-t-butyl ether (ETBE)** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| **Tert-amyl methyl ether (TAME)** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| **Tert-Butanol** | **9.8** | 5.0 | ug/L | EPA 8260B | 1/19/2006 |
| **TPH as Gasoline** | **1200** | 50 | ug/L | EPA 8260B | 1/19/2006 |
| Toluene - d8 (Surr) | 97.7 | | % Recovery | EPA 8260B | 1/19/2006 |
| 4-Bromofluorobenzene (Surr) | 95.0 | | % Recovery | EPA 8260B | 1/19/2006 |

Approved By: Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800

KIFF Analytical LLC

Report Number : 47950

Date : 1/25/2006

Project Name : **Tesoro St 67106**

Project Number : **67106**

Sample : **MW-4** Matrix : Water Lab Number : 47950-04

Sample Date :1/13/2006

| Parameter | Measured Value | Method Reporting Limit | Units | Analysis Method | Date Analyzed |
|---|---|---|---|---|---|
| **Benzene** | **8.3** | 0.90 | ug/L | EPA 8260B | 1/19/2006 |
| **Toluene** | **100** | 0.90 | ug/L | EPA 8260B | 1/19/2006 |
| **Ethylbenzene** | **160** | 0.90 | ug/L | EPA 8260B | 1/19/2006 |
| **Total Xylenes** | **860** | 0.90 | ug/L | EPA 8260B | 1/19/2006 |
| **Methyl-t-butyl ether (MTBE)** | **4.9** | 0.90 | ug/L | EPA 8260B | 1/19/2006 |
| **Diisopropyl ether (DIPE)** | **< 0.90** | 0.90 | ug/L | EPA 8260B | 1/19/2006 |
| **Ethyl-t-butyl ether (ETBE)** | **< 0.90** | 0.90 | ug/L | EPA 8260B | 1/19/2006 |
| **Tert-amyl methyl ether (TAME)** | **< 0.90** | 0.90 | ug/L | EPA 8260B | 1/19/2006 |
| **Tert-Butanol** | **6.7** | 5.0 | ug/L | EPA 8260B | 1/19/2006 |
| **TPH as Gasoline** | **4000** | 90 | ug/L | EPA 8260B | 1/19/2006 |
| Toluene - d8 (Surr) | 99.0 | | % Recovery | EPA 8260B | 1/19/2006 |
| 4-Bromofluorobenzene (Surr) | 99.7 | | % Recovery | EPA 8260B | 1/19/2006 |

Approved By: Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800

KIFF Analytical LLC

Report Number : 47950

Date : 1/25/2006

Project Name : **Tesoro St 67106**

Project Number : **67106**

Sample : **MW-5** Matrix : Water Lab Number : 47950-05

Sample Date :1/13/2006

| Parameter | Measured Value | Method Reporting Limit | Units | Analysis Method | Date Analyzed |
|---|---|---|---|---|---|
| **Benzene** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 1/25/2006 |
| **Toluene** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 1/25/2006 |
| **Ethylbenzene** | **1.2** | 0.50 | ug/L | EPA 8260B | 1/25/2006 |
| **Total Xylenes** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 1/25/2006 |
| **Methyl-t-butyl ether (MTBE)** | **0.58** | 0.50 | ug/L | EPA 8260B | 1/25/2006 |
| **Diisopropyl ether (DIPE)** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 1/25/2006 |
| **Ethyl-t-butyl ether (ETBE)** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 1/25/2006 |
| **Tert-amyl methyl ether (TAME)** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 1/25/2006 |
| **Tert-Butanol** | **< 5.0** | 5.0 | ug/L | EPA 8260B | 1/25/2006 |
| **TPH as Gasoline** | **< 50** | 50 | ug/L | EPA 8260B | 1/25/2006 |
| Toluene - d8 (Surr) | 98.1 | | % Recovery | EPA 8260B | 1/25/2006 |
| 4-Bromofluorobenzene (Surr) | 110 | | % Recovery | EPA 8260B | 1/25/2006 |

Approved By: Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800

KIFF Analytical LLC

Report Number : 47950

Date : 1/25/2006

Project Name : **Tesoro St 67106**

Project Number : **67106**

Sample : **MW-6** Matrix : Water Lab Number : 47950-06

Sample Date :1/13/2006

| Parameter | Measured Value | Method Reporting Limit | Units | Analysis Method | Date Analyzed |
|---|---|---|---|---|---|
| **Benzene** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| **Toluene** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| **Ethylbenzene** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| **Total Xylenes** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| **Methyl-t-butyl ether (MTBE)** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| **Diisopropyl ether (DIPE)** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| **Ethyl-t-butyl ether (ETBE)** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| **Tert-amyl methyl ether (TAME)** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| **Tert-Butanol** | **< 5.0** | 5.0 | ug/L | EPA 8260B | 1/19/2006 |
| **TPH as Gasoline** | **< 50** | 50 | ug/L | EPA 8260B | 1/19/2006 |
| Toluene - d8 (Surr) | 98.4 | | % Recovery | EPA 8260B | 1/19/2006 |
| 4-Bromofluorobenzene (Surr) | 105 | | % Recovery | EPA 8260B | 1/19/2006 |

Approved By: Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800

KIFF Analytical LLC

Report Number : 47950

Date : 1/25/2006

Project Name : **Tesoro St 67106**

Project Number : **67106**

Sample : **MW-7** Matrix : Water Lab Number : 47950-07

Sample Date :1/13/2006

| Parameter | Measured Value | Method Reporting Limit | Units | Analysis Method | Date Analyzed |
|---|---|---|---|---|---|
| **Benzene** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| **Toluene** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| **Ethylbenzene** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| **Total Xylenes** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| **Methyl-t-butyl ether (MTBE)** | **0.61** | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| **Diisopropyl ether (DIPE)** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| **Ethyl-t-butyl ether (ETBE)** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| **Tert-amyl methyl ether (TAME)** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| **Tert-Butanol** | **< 5.0** | 5.0 | ug/L | EPA 8260B | 1/19/2006 |
| **TPH as Gasoline** | **< 50** | 50 | ug/L | EPA 8260B | 1/19/2006 |
| Toluene - d8 (Surr) | 100 | | % Recovery | EPA 8260B | 1/19/2006 |
| 4-Bromofluorobenzene (Surr) | 97.4 | | % Recovery | EPA 8260B | 1/19/2006 |

Approved By: Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800

KIFF Analytical LLC

Report Number : 47950

Date : 1/25/2006

Project Name : **Tesoro St 67106**

Project Number : **67106**

Sample : **MW-8** Matrix : Water Lab Number : 47950-08

Sample Date :1/13/2006

| Parameter | Measured Value | Method Reporting Limit | Units | Analysis Method | Date Analyzed |
|---|---|---|---|---|---|
| **Benzene** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| **Toluene** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| **Ethylbenzene** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| **Total Xylenes** | **0.51** | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| **Methyl-t-butyl ether (MTBE)** | **0.58** | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| **Diisopropyl ether (DIPE)** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| **Ethyl-t-butyl ether (ETBE)** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| **Tert-amyl methyl ether (TAME)** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| **Tert-Butanol** | **< 5.0** | 5.0 | ug/L | EPA 8260B | 1/19/2006 |
| **TPH as Gasoline** | **52** | 50 | ug/L | EPA 8260B | 1/19/2006 |
| Toluene - d8 (Surr) | 99.2 | | % Recovery | EPA 8260B | 1/19/2006 |
| 4-Bromofluorobenzene (Surr) | 98.8 | | % Recovery | EPA 8260B | 1/19/2006 |

Approved By: Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800

KIFF Analytical LLC

Report Number : 47950

Date : 1/25/2006

Project Name : **Tesoro St 67106**

Project Number : **67106**

Sample : **MW-9** Matrix : Water Lab Number : 47950-09

Sample Date :1/13/2006

| Parameter | Measured Value | Method Reporting Limit | Units | Analysis Method | Date Analyzed |
|---|---|---|---|---|---|
| **Benzene** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| **Toluene** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| **Ethylbenzene** | **0.78** | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| **Total Xylenes** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| **Methyl-t-butyl ether (MTBE)** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| **Diisopropyl ether (DIPE)** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| **Ethyl-t-butyl ether (ETBE)** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| **Tert-amyl methyl ether (TAME)** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| **Tert-Butanol** | **< 5.0** | 5.0 | ug/L | EPA 8260B | 1/19/2006 |
| **TPH as Gasoline** | **280** | 50 | ug/L | EPA 8260B | 1/19/2006 |
| Toluene - d8 (Surr) | 100 | | % Recovery | EPA 8260B | 1/19/2006 |
| 4-Bromofluorobenzene (Surr) | 98.1 | | % Recovery | EPA 8260B | 1/19/2006 |

Approved By: Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800

Report Number : 47950

Date : 1/25/2006

**QC Report : Method Blank Data**

Project Name : **Tesoro St 67106**

Project Number : **67106**

| Parameter | Measured Value | Method Reporting Limit | Units | Analysis Method | Date Analyzed |
|---|---|---|---|---|---|
| Benzene | < 0.50 | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| Toluene | < 0.50 | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| Ethylbenzene | < 0.50 | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| Total Xylenes | < 0.50 | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| Methyl-t-butyl ether (MTBE) | < 0.50 | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| Diisopropyl ether (DIPE) | < 0.50 | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| Ethyl-t-butyl ether (ETBE) | < 0.50 | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| Tert-amyl methyl ether (TAME) | < 0.50 | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| Tert-Butanol | < 5.0 | 5.0 | ug/L | EPA 8260B | 1/19/2006 |
| TPH as Gasoline | < 50 | 50 | ug/L | EPA 8260B | 1/19/2006 |
| Toluene - d8 (Surr) | 99.2 | | % | EPA 8260B | 1/19/2006 |
| 4-Bromofluorobenzene (Surr) | 95.0 | | % | EPA 8260B | 1/19/2006 |

| Parameter | Measured Value | Method Reporting Limit | Units | Analysis Method | Date Analyzed |
|---|---|---|---|---|---|
| Benzene | < 0.50 | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| Toluene | < 0.50 | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| Ethylbenzene | < 0.50 | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| Total Xylenes | < 0.50 | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| Methyl-t-butyl ether (MTBE) | < 0.50 | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| Diisopropyl ether (DIPE) | < 0.50 | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| Ethyl-t-butyl ether (ETBE) | < 0.50 | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| Tert-amyl methyl ether (TAME) | < 0.50 | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| Tert-Butanol | < 5.0 | 5.0 | ug/L | EPA 8260B | 1/19/2006 |
| TPH as Gasoline | < 50 | 50 | ug/L | EPA 8260B | 1/19/2006 |
| Toluene - d8 (Surr) | 99.7 | | % | EPA 8260B | 1/19/2006 |
| 4-Bromofluorobenzene (Surr) | 106 | | % | EPA 8260B | 1/19/2006 |

| Parameter | Measured Value | Method Reporting Limit | Units | Analysis Method | Date Analyzed |
|---|---|---|---|---|---|
| Benzene | < 0.50 | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| Toluene | < 0.50 | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| Ethylbenzene | < 0.50 | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| Total Xylenes | < 0.50 | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| Methyl-t-butyl ether (MTBE) | < 0.50 | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| Diisopropyl ether (DIPE) | < 0.50 | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| Ethyl-t-butyl ether (ETBE) | < 0.50 | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| Tert-amyl methyl ether (TAME) | < 0.50 | 0.50 | ug/L | EPA 8260B | 1/19/2006 |
| Tert-Butanol | < 5.0 | 5.0 | ug/L | EPA 8260B | 1/19/2006 |
| TPH as Gasoline | < 50 | 50 | ug/L | EPA 8260B | 1/19/2006 |
| Toluene - d8 (Surr) | 98.5 | | % | EPA 8260B | 1/19/2006 |
| 4-Bromofluorobenzene (Surr) | 99.0 | | % | EPA 8260B | 1/19/2006 |

| Parameter | Measured Value | Method Reporting Limit | Units | Analysis Method | Date Analyzed |
|---|---|---|---|---|---|
| Benzene | < 0.50 | 0.50 | ug/L | EPA 8260B | 1/25/2006 |
| Toluene | < 0.50 | 0.50 | ug/L | EPA 8260B | 1/25/2006 |
| Ethylbenzene | < 0.50 | 0.50 | ug/L | EPA 8260B | 1/25/2006 |
| Total Xylenes | < 0.50 | 0.50 | ug/L | EPA 8260B | 1/25/2006 |
| Methyl-t-butyl ether (MTBE) | < 0.50 | 0.50 | ug/L | EPA 8260B | 1/25/2006 |
| Diisopropyl ether (DIPE) | < 0.50 | 0.50 | ug/L | EPA 8260B | 1/25/2006 |
| Ethyl-t-butyl ether (ETBE) | < 0.50 | 0.50 | ug/L | EPA 8260B | 1/25/2006 |
| Tert-amyl methyl ether (TAME) | < 0.50 | 0.50 | ug/L | EPA 8260B | 1/25/2006 |
| Tert-Butanol | < 5.0 | 5.0 | ug/L | EPA 8260B | 1/25/2006 |
| TPH as Gasoline | < 50 | 50 | ug/L | EPA 8260B | 1/25/2006 |
| Toluene - d8 (Surr) | 98.6 | | % | EPA 8260B | 1/25/2006 |
| 4-Bromofluorobenzene (Surr) | 110 | | % | EPA 8260B | 1/25/2006 |

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Report Number : 47950

**QC Report : Matrix Spike/ Matrix Spike Duplicate**

Date : 1/25/2006

Project Name : **Tesoro St 67106**

Project Number : **67106**

| Parameter | Spiked Sample | Sample Value | Spike Level | Spike Dup. Level | Spiked Sample Value | Duplicate Spiked Sample Value | Units | Analysis Method | Date Analyzed | Spiked Sample Percent Recov. | Duplicate Spiked Sample Percent Recov. | Relative Percent Diff. | Spiked Sample Percent Recov. Limit | Relative Percent Diff. Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 47950-09 | <0.50 | 39.7 | 39.9 | 45.3 | 45.7 | ug/L | EPA 8260B | 1/19/06 | 114 | 114 | 0.218 | 70-130 | 25 |
| Toluene | 47950-09 | <0.50 | 39.7 | 39.9 | 42.6 | 43.4 | ug/L | EPA 8260B | 1/19/06 | 107 | 109 | 1.20 | 70-130 | 25 |
| Tert-Butanol | 47950-09 | <5.0 | 198 | 200 | 202 | 214 | ug/L | EPA 8260B | 1/19/06 | 102 | 108 | 5.35 | 70-130 | 25 |
| Methyl-t-Butyl Ether | 47950-09 | <0.50 | 39.7 | 39.9 | 38.5 | 38.7 | ug/L | EPA 8260B | 1/19/06 | 97.0 | 97.0 | 0.0623 | 70-130 | 25 |
| Benzene | 47949-06 | <0.50 | 40.0 | 40.0 | 43.2 | 42.1 | ug/L | EPA 8260B | 1/19/06 | 108 | 105 | 2.62 | 70-130 | 25 |
| Toluene | 47949-06 | 4.0 | 40.0 | 40.0 | 43.8 | 42.7 | ug/L | EPA 8260B | 1/19/06 | 99.5 | 96.8 | 2.70 | 70-130 | 25 |
| Tert-Butanol | 47949-06 | <5.0 | 200 | 200 | 213 | 239 | ug/L | EPA 8260B | 1/19/06 | 107 | 119 | 11.3 | 70-130 | 25 |
| Methyl-t-Butyl Ether | 47949-06 | <0.50 | 40.0 | 40.0 | 42.6 | 41.7 | ug/L | EPA 8260B | 1/19/06 | 106 | 104 | 2.14 | 70-130 | 25 |
| Benzene | 47950-06 | <0.50 | 40.0 | 40.0 | 43.1 | 41.7 | ug/L | EPA 8260B | 1/19/06 | 108 | 104 | 3.40 | 70-130 | 25 |
| Toluene | 47950-06 | <0.50 | 40.0 | 40.0 | 41.6 | 40.4 | ug/L | EPA 8260B | 1/19/06 | 104 | 101 | 2.86 | 70-130 | 25 |
| Tert-Butanol | 47950-06 | <5.0 | 200 | 200 | 212 | 212 | ug/L | EPA 8260B | 1/19/06 | 106 | 106 | 0.0127 | 70-130 | 25 |
| Methyl-t-Butyl Ether | 47950-06 | <0.50 | 40.0 | 40.0 | 38.5 | 38.2 | ug/L | EPA 8260B | 1/19/06 | 96.3 | 95.4 | 0.917 | 70-130 | 25 |
| Benzene | 48048-04 | <0.50 | 40.0 | 40.0 | 41.1 | 40.5 | ug/L | EPA 8260B | 1/25/06 | 103 | 101 | 1.36 | 70-130 | 25 |
| Toluene | 48048-04 | <0.50 | 40.0 | 40.0 | 40.1 | 38.9 | ug/L | EPA 8260B | 1/25/06 | 100 | 97.3 | 3.04 | 70-130 | 25 |
| Tert-Butanol | 48048-04 | <5.0 | 200 | 200 | 211 | 215 | ug/L | EPA 8260B | 1/25/06 | 105 | 107 | 1.96 | 70-130 | 25 |
| Methyl-t-Butyl Ether | 48048-04 | <0.50 | 40.0 | 40.0 | 36.2 | 36.8 | ug/L | EPA 8260B | 1/25/06 | 90.4 | 91.9 | 1.65 | 70-130 | 25 |

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Report Number : 47950

**QC Report : Laboratory Control Sample (LCS)**

Date : 1/25/2006

Project Name : **Tesoro St 67106**

Project Number : **67106**

| Parameter | Spike Level | Units | Analysis Method | Date Analyzed | LCS Percent Recov. | LCS Percent Recov. Limit |
|---|---|---|---|---|---|---|
| Benzene | 40.0 | ug/L | EPA 8260B | 1/19/06 | 114 | 70-130 |
| Toluene | 40.0 | ug/L | EPA 8260B | 1/19/06 | 108 | 70-130 |
| Tert-Butanol | 200 | ug/L | EPA 8260B | 1/19/06 | 104 | 70-130 |
| Methyl-t-Butyl Ether | 40.0 | ug/L | EPA 8260B | 1/19/06 | 97.6 | 70-130 |
| Benzene | 40.0 | ug/L | EPA 8260B | 1/19/06 | 110 | 70-130 |
| Toluene | 40.0 | ug/L | EPA 8260B | 1/19/06 | 99.4 | 70-130 |
| Tert-Butanol | 200 | ug/L | EPA 8260B | 1/19/06 | 104 | 70-130 |
| Methyl-t-Butyl Ether | 40.0 | ug/L | EPA 8260B | 1/19/06 | 107 | 70-130 |
| Benzene | 40.0 | ug/L | EPA 8260B | 1/19/06 | 102 | 70-130 |
| Toluene | 40.0 | ug/L | EPA 8260B | 1/19/06 | 102 | 70-130 |
| Tert-Butanol | 200 | ug/L | EPA 8260B | 1/19/06 | 104 | 70-130 |
| Methyl-t-Butyl Ether | 40.0 | ug/L | EPA 8260B | 1/19/06 | 91.7 | 70-130 |
| Benzene | 40.0 | ug/L | EPA 8260B | 1/25/06 | 99.7 | 70-130 |
| Toluene | 40.0 | ug/L | EPA 8260B | 1/25/06 | 101 | 70-130 |
| Tert-Butanol | 200 | ug/L | EPA 8260B | 1/25/06 | 104 | 70-130 |
| Methyl-t-Butyl Ether | 40.0 | ug/L | EPA 8260B | 1/25/06 | 86.9 | 70-130 |

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

KIFF Analytical LLC

# Analysis Summary

Report Number : 47950

Date : 1/25/2006

Attention : Richard Munsch
RDM Environmental
6280 Brookshire Drive
Rocklin, CA 95677

Project Name :Tesoro St 67106
Project Number : 67106

| | | | MW-1 | | MW-2 | | MW-3 | | MW-4 | | MW-5 | | MW-6 | | MW-7 | | MW-8 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | MW-1 | | MW-2 | | MW-3 | | MW-4 | | MW-5 | | MW-6 | | MW-7 | | MW-8 | |
| | | Sample Date | 1/13/2006 | | 1/13/2006 | | 1/13/2006 | | 1/13/2006 | | 1/13/2006 | | 1/13/2006 | | 1/13/2006 | | 1/13/2006 | |
| Analyte | Method | Units | MRL | Results | MRL | Results | MRL | Results | MRL | Results | MRL | Results | MRL | Results | MRL | Results | MRL | Results |
| Benzene | EPA 8260B | ug/L | 1.5 | ND | 0.50 | **17** | 0.50 | **5.0** | 0.90 | **8.3** | 0.50 | ND | 0.50 | ND | 0.50 | ND | 0.50 | ND |
| Toluene | EPA 8260B | ug/L | 1.5 | ND | 0.50 | **7.8** | 0.50 | **1.1** | 0.90 | **100** | 0.50 | ND | 0.50 | ND | 0.50 | ND | 0.50 | ND |
| Ethylbenzene | EPA 8260B | ug/L | 1.5 | **34** | 0.50 | **220** | 0.50 | **4.9** | 0.90 | **160** | 0.50 | **1.2** | 0.50 | ND | 0.50 | ND | 0.50 | ND |
| Total Xylenes | EPA 8260B | ug/L | 1.5 | **17** | 0.50 | **230** | 0.50 | **1.2** | 0.90 | **860** | 0.50 | ND | 0.50 | ND | 0.50 | ND | 0.50 | **0.51** |
| Methyl-t-butyl ether (MTBE) | EPA 8260B | ug/L | 1.5 | ND | 0.50 | **3.5** | 0.50 | **3.1** | 0.90 | **4.9** | 0.50 | **0.58** | 0.50 | ND | 0.50 | **0.61** | 0.50 | **0.58** |
| Diisopropyl ether (DIPE) | EPA 8260B | ug/L | 1.5 | ND | 0.50 | ND | 0.50 | ND | 0.90 | ND | 0.50 | ND | 0.50 | ND | 0.50 | ND | 0.50 | ND |
| Ethyl-t-butyl ether (ETBE) | EPA 8260B | ug/L | 1.5 | ND | 0.50 | ND | 0.50 | ND | 0.90 | ND | 0.50 | ND | 0.50 | ND | 0.50 | ND | 0.50 | ND |
| Tert-amyl methyl ether (TAME) | EPA 8260B | ug/L | 1.5 | ND | 0.50 | ND | 0.50 | ND | 0.90 | ND | 0.50 | ND | 0.50 | ND | 0.50 | ND | 0.50 | ND |
| Tert-Butanol | EPA 8260B | ug/L | 7.0 | ND | 5.0 | ND | 5.0 | **9.8** | 5.0 | **6.7** | 5.0 | ND | 5.0 | ND | 5.0 | ND | 5.0 | ND |
| TPH as Gasoline | EPA 8260B | ug/L | 150 | **6500** | 150 | **6800** | 50 | **1200** | 90 | **4000** | 50 | ND | 50 | ND | 50 | ND | 50 | **52** |
| Toluene - d8 (Surr) | EPA 8260B | % | | 98.2 | | 97.7 | | 97.7 | | 99.0 | | 98.1 | | 98.4 | | 100 | | 99.2 |
| 4-Bromofluorobenzene (Surr) | EPA 8260B | % | | 97.2 | | 98.8 | | 95.0 | | 99.7 | | 110 | | 105 | | 97.4 | | 98.8 |

MRL = Method Reporting Limit
ND = Not Detected

Approved By,

Joel Kiff

KIFF Analytical LLC

# Analysis Summary

Report Number : 47950

Date : 1/25/2006

Attention : Richard Munsch
RDM Environmental
6280 Brookshire Drive
Rocklin, CA 95677

Project Name :Tesoro St 67106
Project Number : 67106

| | | | Sample Name | MW-9 |
|---|---|---|---|---|
| | | | Sample Date | 1/13/2006 |
| Analyte | Method | Units | MRL | Results |
| Benzene | EPA 8260B | ug/L | 0.50 | ND |
| Toluene | EPA 8260B | ug/L | 0.50 | ND |
| Ethylbenzene | EPA 8260B | ug/L | 0.50 | **0.78** |
| Total Xylenes | EPA 8260B | ug/L | 0.50 | ND |
| Methyl-t-butyl ether (MTBE) | EPA 8260B | ug/L | 0.50 | ND |
| Diisopropyl ether (DIPE) | EPA 8260B | ug/L | 0.50 | ND |
| Ethyl-t-butyl ether (ETBE) | EPA 8260B | ug/L | 0.50 | ND |
| Tert-amyl methyl ether (TAME) | EPA 8260B | ug/L | 0.50 | ND |
| Tert-Butanol | EPA 8260B | ug/L | 5.0 | ND |
| TPH as Gasoline | EPA 8260B | ug/L | 50 | **280** |
| Toluene - d8 (Surr) | EPA 8260B | % | | 100 |
| 4-Bromofluorobenzene (Surr) | EPA 8260B | % | | 98.1 |

MRL = Method Reporting Limit
ND = Not Detected

Approved By,

Joel Kiff

# KIFF Analytical LLC

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

SRG # / Lab No. 47950

Page 1 of 1

## Chain-of-Custody Record and Analysis Request

| | |
|---|---|
| Project Contact (Hardcopy or PDF To): Richard Munsch | California EDF Report? ☐ Yes ☐ No |
| Company / Address: 6280 Brookshire Dr Rocklin CA 95677 | Sampling Company Log Code: |
| Phone #: 916 415 1134 / Fax #: 916 415 1154 | Global ID: T0600101409 |
| Project #: 67106 / P.O. #: | EDF Deliverable To (Email Address): |
| Project Name: Tesoro St 67106 | Sampler Signature: |
| Project Address: 1084 Marina Blvd San Leandro, CA | |

| Sample Designation | Sampling: Date | Sampling: Time | Container: 40 ml VOA | Container: Sleeve | Container: Poly | Container: Glass | Container: Tedlar | Preservative: HCl | Preservative: $HNO_3$ | Preservative: None | Matrix: Water | Matrix: Soil | Matrix: Air | MTBE (EPA 8260B) per EPA 8021 level @ 5.0 ppb | MTBE (EPA 8260B) @ 0.5 ppb | BTEX (EPA 8260B) | TPH Gas (EPA 8260B) | 5 Oxygenates (EPA 8260B) | 7 Oxygenates (EPA 8260B) | Lead Scav.(1,2 DCA & 1,2 EDB-EPA 8260B) | Volatile Halocarbons (EPA 8260B) | Volatile Organics Full List (EPA 8260B) | Volatile Organics (EPA 524.2 Drinking Water) | TPH as Diesel (EPA 8015M) | TPH as Motor Oil (EPA 8015M) | Total Lead (EPA 6010) | W.E.T. Lead (STLC) | | | | | For Lab Use Only |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-1 | 1/13/06 | 1442 | 3 | | | | | X | | | X | | | | | X | X | X | | | | | | | | | | | | | | 01 |
| MW-2 | 1/13/06 | 1425 | 3 | | | | | X | | | X | | | | | X | X | X | | | | | | | | | | | | | | 02 |
| MW-3 | 1/13/06 | 1219 | 3 | | | | | X | | | X | | | | | X | X | X | | | | | | | | | | | | | | 03 |
| MW-4 | 1/13/06 | 1358 | 3 | | | | | X | | | X | | | | | X | X | X | | | | | | | | | | | | | | 04 |
| MW-5 | 1/13/06 | 1150 | 3 | | | | | X | | | X | | | | | X | X | X | | | | | | | | | | | | | | 05 |
| MW-6 | 1/13/06 | 1023 | 3 | | | | | X | | | X | | | | | X | X | X | | | | | | | | | | | | | | 06 |
| MW-7 | 1/13/06 | 1047 | 3 | | | | | X | | | X | | | | | X | X | X | | | | | | | | | | | | | | 07 |
| MW-8 | 1/13/06 | 1245 | 3 | | | | | X | | | X | | | | | X | X | X | | | | | | | | | | | | | | 08 |
| MW-9 | 1/13/06 | 1129 | 3 | | | | | X | | | X | | | | | X | X | X | | | | | | | | | | | | | | 09 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

TAT: ☐ 12 hr ☐ 24 hr ☐ 48 hr ☐ 72 hr ☒ 1 wk

| | | | |
|---|---|---|---|
| Relinquished by: Douglas Hoff | Date | Time | Received by: |
| Relinquished by: | Date | Time | Received by: |
| Relinquished by: | Date: 011806 | Time: 1100 | Received by Laboratory: Michelle Spencer Kiff Analytical |

Remarks: STAT

email copy to RDM env

Bill to: Tesoro Petroleum / Rob Donovan

For Lab Use Only: Sample Receipt

| Temp °C | Initials | Date | Time | Therm. ID # | Coolant Present |
|---|---|---|---|---|---|
| .4 | MAS | 011806 | 1345 | IR-1 | (Yes) No |

Distribution: White - Lab; Pink - Originator
Rev: 051805

# Appendix C

Official Laboratory Analytical Results –
Soil Vapor Extraction Analytical Data

KIFF Analytical LLC

Report Number : 48650
Date : 3/7/2006

Richard Munsch
RDM Environmental
6280 Brookshire Drive
Rocklin, CA 95677

Subject : 3 Vapor Samples
Project Name : 67106
Project Number : 67106

Dear Mr. Munsch,

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 : 48650

Date : 3/7/2006

Project Name : **67106**

Project Number : **67106**

Sample : **SVE-INF** Matrix : Air Lab Number : 48650-01

Sample Date :2/27/2006

| Parameter | Measured Value | Method Reporting Limit | Units | Analysis Method | Date Analyzed |
|---|---|---|---|---|---|
| **Benzene** | **< 0.050** | 0.050 | ppmv | EPA 8260B | 3/1/2006 |
| **Toluene** | **< 0.050** | 0.050 | ppmv | EPA 8260B | 3/1/2006 |
| **Ethylbenzene** | **< 0.050** | 0.050 | ppmv | EPA 8260B | 3/1/2006 |
| **Total Xylenes** | **< 0.050** | 0.050 | ppmv | EPA 8260B | 3/1/2006 |
| **Methyl-t-butyl ether (MTBE)** | **< 0.050** | 0.050 | ppmv | EPA 8260B | 3/1/2006 |
| **Diisopropyl ether (DIPE)** | **< 0.050** | 0.050 | ppmv | EPA 8260B | 3/1/2006 |
| **Ethyl-t-butyl ether (ETBE)** | **< 0.050** | 0.050 | ppmv | EPA 8260B | 3/1/2006 |
| **Tert-amyl methyl ether (TAME)** | **< 0.050** | 0.050 | ppmv | EPA 8260B | 3/1/2006 |
| **Tert-Butanol** | **< 0.50** | 0.50 | ppmv | EPA 8260B | 3/1/2006 |
| **TPH as Gasoline** | **< 5.0** | 5.0 | ppmv | EPA 8260B | 3/1/2006 |
| 4-Bromofluorobenzene (Surr) | 101 | | % Recovery | EPA 8260B | 3/1/2006 |
| Toluene - d8 (Surr) | 102 | | % Recovery | EPA 8260B | 3/1/2006 |

Approved By: Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800

KIFF Analytical LLC

Report Number : 48650

Date : 3/7/2006

Project Name : **67106**

Project Number : **67106**

Sample : **SVE-MID** Matrix : Air Lab Number : 48650-02

Sample Date :2/27/2006

| Parameter | Measured Value | Method Reporting Limit | Units | Analysis Method | Date Analyzed |
|---|---|---|---|---|---|
| **Benzene** | **< 0.050** | 0.050 | ppmv | EPA 8260B | 2/28/2006 |
| **Toluene** | **< 0.050** | 0.050 | ppmv | EPA 8260B | 2/28/2006 |
| **Ethylbenzene** | **< 0.050** | 0.050 | ppmv | EPA 8260B | 2/28/2006 |
| **Total Xylenes** | **< 0.050** | 0.050 | ppmv | EPA 8260B | 2/28/2006 |
| **Methyl-t-butyl ether (MTBE)** | **< 0.050** | 0.050 | ppmv | EPA 8260B | 2/28/2006 |
| **Diisopropyl ether (DIPE)** | **< 0.050** | 0.050 | ppmv | EPA 8260B | 2/28/2006 |
| **Ethyl-t-butyl ether (ETBE)** | **< 0.050** | 0.050 | ppmv | EPA 8260B | 2/28/2006 |
| **Tert-amyl methyl ether (TAME)** | **< 0.050** | 0.050 | ppmv | EPA 8260B | 2/28/2006 |
| **Tert-Butanol** | **< 0.50** | 0.50 | ppmv | EPA 8260B | 2/28/2006 |
| **TPH as Gasoline** | **< 5.0** | 5.0 | ppmv | EPA 8260B | 2/28/2006 |
| 4-Bromofluorobenzene (Surr) | 101 | | % Recovery | EPA 8260B | 2/28/2006 |
| Toluene - d8 (Surr) | 101 | | % Recovery | EPA 8260B | 2/28/2006 |

Approved By: Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800

KIFF Analytical LLC

Report Number : 48650

Date : 3/7/2006

Project Name : **67106**

Project Number : **67106**

Sample : **SVE-EFF** Matrix : Air Lab Number : 48650-03

Sample Date :2/27/2006

| Parameter | Measured Value | Method Reporting Limit | Units | Analysis Method | Date Analyzed |
|---|---|---|---|---|---|
| **Benzene** | **< 0.050** | 0.050 | ppmv | EPA 8260B | 3/1/2006 |
| **Toluene** | **< 0.050** | 0.050 | ppmv | EPA 8260B | 3/1/2006 |
| **Ethylbenzene** | **< 0.050** | 0.050 | ppmv | EPA 8260B | 3/1/2006 |
| **Total Xylenes** | **< 0.050** | 0.050 | ppmv | EPA 8260B | 3/1/2006 |
| **Methyl-t-butyl ether (MTBE)** | **< 0.050** | 0.050 | ppmv | EPA 8260B | 3/1/2006 |
| **Diisopropyl ether (DIPE)** | **< 0.050** | 0.050 | ppmv | EPA 8260B | 3/1/2006 |
| **Ethyl-t-butyl ether (ETBE)** | **< 0.050** | 0.050 | ppmv | EPA 8260B | 3/1/2006 |
| **Tert-amyl methyl ether (TAME)** | **< 0.050** | 0.050 | ppmv | EPA 8260B | 3/1/2006 |
| **Tert-Butanol** | **< 0.50** | 0.50 | ppmv | EPA 8260B | 3/1/2006 |
| **TPH as Gasoline** | **< 5.0** | 5.0 | ppmv | EPA 8260B | 3/1/2006 |
| 4-Bromofluorobenzene (Surr) | 102 | | % Recovery | EPA 8260B | 3/1/2006 |
| Toluene - d8 (Surr) | 101 | | % Recovery | EPA 8260B | 3/1/2006 |

Approved By: Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800

Report Number : 48650

Date : 3/7/2006

**QC Report : Method Blank Data**

Project Name : **67106**

Project Number : **67106**

| Parameter | Measured Value | Method Reporting Limit | Units | Analysis Method | Date Analyzed |
|---|---|---|---|---|---|
| Benzene | < 0.050 | 0.050 | ppmv | EPA 8260B | 2/28/2006 |
| Toluene | < 0.050 | 0.050 | ppmv | EPA 8260B | 2/28/2006 |
| Ethylbenzene | < 0.050 | 0.050 | ppmv | EPA 8260B | 2/28/2006 |
| Total Xylenes | < 0.050 | 0.050 | ppmv | EPA 8260B | 2/28/2006 |
| Methyl-t-butyl ether (MTBE) | < 0.050 | 0.050 | ppmv | EPA 8260B | 2/28/2006 |
| Diisopropyl ether (DIPE) | < 0.050 | 0.050 | ppmv | EPA 8260B | 2/28/2006 |
| Ethyl-t-butyl ether (ETBE) | < 0.050 | 0.050 | ppmv | EPA 8260B | 2/28/2006 |
| Tert-amyl methyl ether (TAME) | < 0.050 | 0.050 | ppmv | EPA 8260B | 2/28/2006 |
| Tert-Butanol | < 0.50 | 0.50 | ppmv | EPA 8260B | 2/28/2006 |
| TPH as Gasoline | < 5.0 | 5.0 | ppmv | EPA 8260B | 2/28/2006 |
| 4-Bromofluorobenzene (Surr) | 102 | | % | EPA 8260B | 2/28/2006 |
| Toluene - d8 (Surr) | 100 | | % | EPA 8260B | 2/28/2006 |

| Parameter | Measured Value | Method Reporting Limit | Units | Analysis Method | Date Analyzed |
|---|---|---|---|---|---|

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

KIFF Analytical LLC

# Analysis Summary

Report Number : 48650

Date : 3/7/2006

Attention : Richard Munsch
RDM Environmental
6280 Brookshire Drive
Rocklin, CA 95677

Project Name :67106
Project Number : 67106

| | | | Sample Name | SVE-INF | SVE-MID | | SVE-EFF | |
|---|---|---|---|---|---|---|---|---|
| | | | Sample Date | 2/27/2006 | 2/27/2006 | | 2/27/2006 | |
| Analyte | Method | Units | MRL | Results | MRL | Results | MRL | Results |
| Benzene | EPA 8260B | ppmv | 0.050 | ND | 0.050 | ND | 0.050 | ND |
| Toluene | EPA 8260B | ppmv | 0.050 | ND | 0.050 | ND | 0.050 | ND |
| Ethylbenzene | EPA 8260B | ppmv | 0.050 | ND | 0.050 | ND | 0.050 | ND |
| Total Xylenes | EPA 8260B | ppmv | 0.050 | ND | 0.050 | ND | 0.050 | ND |
| Methyl-t-butyl ether (MTBE) | EPA 8260B | ppmv | 0.050 | ND | 0.050 | ND | 0.050 | ND |
| Diisopropyl ether (DIPE) | EPA 8260B | ppmv | 0.050 | ND | 0.050 | ND | 0.050 | ND |
| Ethyl-t-butyl ether (ETBE) | EPA 8260B | ppmv | 0.050 | ND | 0.050 | ND | 0.050 | ND |
| Tert-amyl methyl ether (TAME) | EPA 8260B | ppmv | 0.050 | ND | 0.050 | ND | 0.050 | ND |
| Tert-Butanol | EPA 8260B | ppmv | 0.50 | ND | 0.50 | ND | 0.50 | ND |
| TPH as Gasoline | EPA 8260B | ppmv | 5.0 | ND | 5.0 | ND | 5.0 | ND |
| Toluene - d8 (Surr) | EPA 8260B | % | | 102 | | 101 | | 101 |
| 4-Bromofluorobenzene (Surr) | EPA 8260B | % | | 101 | | 101 | | 102 |

MRL = Method Reporting Limit
ND = Not Detected

Approved By,

Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800
ELAP # 2236

**KIFF Analytical LLC**

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

SRG # / Lab No. 48650

Page 1 of 1

# Chain-of-Custody Record and Analysis Request

| | |
|---|---|
| Project Contact (Hardcopy or PDF To): Richard Munsch | California EDF Report? ☐ Yes ☐ No |
| Company / Address: 6280 Brookshire RDM Env. Rocklin | Sampling Company Log Code: |
| Phone #: 916 415 1134 / Fax #: 916 415 1154 | Global ID: |
| Project #: 67106 / P.O. #: — | EDF Deliverable To (Email Address): |
| Project Name: 67106 | Sampler Signature: |
| Project Address: 3880 Marina San Leandro | |

| Sample Designation | Date | Time | Sampling | Container: 40 ml VOA | Container: Sleeve | Container: Poly | Container: Glass | Container: Tedlar | Preservative: HCl | Preservative: $HNO_3$ | Preservative: None | Matrix: Water | Matrix: Soil | Matrix: Air | MTBE (EPA 8260B) per EPA 8021 level @ 5.0 ppb | MTBE (EPA 8260B) @ 0.5 ppb | BTEX (EPA 8260B) | TPH Gas (EPA 8260B) | 5 Oxygenates (EPA 8260B) | 7 Oxygenates (EPA 8260B) | Lead Scav.(1,2 DCA & 1,2 EDB-EPA 8260B) | Volatile Halocarbons (EPA 8260B) | Volatile Organics Full List (EPA 8260B) | Volatile Organics (EPA 524.2 Drinking Water) | TPH as Diesel (EPA 8015M) | TPH as Motor Oil (EPA 8015M) | Total Lead (EPA 6010) | W.E.T. Lead (STLC) | TAT | For Lab Use Only |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SVE-NF | 2/27/06 | 1454 | | | | | | 1 | | | ✓ | | | X | | | X | X | X | | | | | | | | | | | 01 |
| SVE-MID | 2/27/06 | 1452 | | | | | | 1 | | | ✓ | | | X | | | X | X | X | | | | | | | | | | | 02 |
| SVE-EF | 2/27/06 | 1430 | | | | | | 1 | | | ✓ | | | X | | | X | X | X | | | | | | | | | | | 03 |

| Relinquished by: | Date | Time | Received by: |
|---|---|---|---|
| Douglas Hoff. | | | |
| Relinquished by: | Date | Time | Received by: |
| | | | |
| Relinquished by: | Date | Time | Received by Laboratory: |
| | 022806 | 1345 | Thomas Aiken Kiff Analytical LLC |

Remarks: STAT
Email Copy to RDM
Bill to: Rob Donovan / Tesoro

For Lab Use Only: Sample Receipt

| Temp °C | Initials | Date | Time | Therm. ID # | Coolant Present |
|---|---|---|---|---|---|
| | | | | | Yes / No |

Distribution: White - Lab; Pink - Originator
Rev: 051805

KIFF Analytical LLC

Report Number : 49188
Date : 4/3/2006

Richard Munsch
RDM Environmental
6280 Brookshire Drive
Rocklin, CA 95677

Subject : 3 Vapor Samples
Project Name : Tesoro Station 67106
Project Number : 67106
P.O. Number : 67106

Dear Mr. Munsch,

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 : 49188

Date : 4/3/2006

Project Name : **Tesoro Station 67106**

Project Number : **67106**

Sample : **SVE-Inf** Matrix : Air Lab Number : 49188-01

Sample Date :3/27/2006

| Parameter | Measured Value | Method Reporting Limit | Units | Analysis Method | Date Analyzed |
|---|---|---|---|---|---|
| **Benzene** | **< 0.050** | 0.050 | ppmv | EPA 8260B | 3/28/2006 |
| **Toluene** | **< 0.050** | 0.050 | ppmv | EPA 8260B | 3/28/2006 |
| **Ethylbenzene** | **< 0.050** | 0.050 | ppmv | EPA 8260B | 3/28/2006 |
| **Total Xylenes** | **< 0.050** | 0.050 | ppmv | EPA 8260B | 3/28/2006 |
| **Methyl-t-butyl ether (MTBE)** | **< 0.050** | 0.050 | ppmv | EPA 8260B | 3/28/2006 |
| **Diisopropyl ether (DIPE)** | **< 0.050** | 0.050 | ppmv | EPA 8260B | 3/28/2006 |
| **Ethyl-t-butyl ether (ETBE)** | **< 0.050** | 0.050 | ppmv | EPA 8260B | 3/28/2006 |
| **Tert-amyl methyl ether (TAME)** | **< 0.050** | 0.050 | ppmv | EPA 8260B | 3/28/2006 |
| **Tert-Butanol** | **< 0.50** | 0.50 | ppmv | EPA 8260B | 3/28/2006 |
| **TPH as Gasoline** | **< 5.0** | 5.0 | ppmv | EPA 8260B | 3/28/2006 |
| 4-Bromofluorobenzene (Surr) | 97.3 | | % Recovery | EPA 8260B | 3/28/2006 |
| Toluene - d8 (Surr) | 104 | | % Recovery | EPA 8260B | 3/28/2006 |

Approved By: Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800

KIFF Analytical LLC

Report Number : 49188

Date : 4/3/2006

Project Name : **Tesoro Station 67106**

Project Number : **67106**

Sample : **SVE-MID** Matrix : Air Lab Number : 49188-02

Sample Date :3/27/2006

| Parameter | Measured Value | Method Reporting Limit | Units | Analysis Method | Date Analyzed |
|---|---|---|---|---|---|
| **Benzene** | **< 0.050** | 0.050 | ppmv | EPA 8260B | 3/29/2006 |
| **Toluene** | **< 0.050** | 0.050 | ppmv | EPA 8260B | 3/29/2006 |
| **Ethylbenzene** | **< 0.050** | 0.050 | ppmv | EPA 8260B | 3/29/2006 |
| **Total Xylenes** | **< 0.050** | 0.050 | ppmv | EPA 8260B | 3/29/2006 |
| **Methyl-t-butyl ether (MTBE)** | **< 0.050** | 0.050 | ppmv | EPA 8260B | 3/29/2006 |
| **Diisopropyl ether (DIPE)** | **< 0.050** | 0.050 | ppmv | EPA 8260B | 3/29/2006 |
| **Ethyl-t-butyl ether (ETBE)** | **< 0.050** | 0.050 | ppmv | EPA 8260B | 3/29/2006 |
| **Tert-amyl methyl ether (TAME)** | **< 0.050** | 0.050 | ppmv | EPA 8260B | 3/29/2006 |
| **Tert-Butanol** | **< 0.50** | 0.50 | ppmv | EPA 8260B | 3/29/2006 |
| **TPH as Gasoline** | **< 5.0** | 5.0 | ppmv | EPA 8260B | 3/29/2006 |
| 4-Bromofluorobenzene (Surr) | 101 | | % Recovery | EPA 8260B | 3/29/2006 |
| Toluene - d8 (Surr) | 104 | | % Recovery | EPA 8260B | 3/29/2006 |

Approved By: Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800

KIFF Analytical LLC

Report Number : 49188

Date : 4/3/2006

Project Name : **Tesoro Station 67106**

Project Number : **67106**

Sample : **SVE-Eff** Matrix : Air Lab Number : 49188-03

Sample Date :3/27/2006

| Parameter | Measured Value | Method Reporting Limit | Units | Analysis Method | Date Analyzed |
|---|---|---|---|---|---|
| **Benzene** | **< 0.050** | 0.050 | ppmv | EPA 8260B | 3/28/2006 |
| **Toluene** | **< 0.050** | 0.050 | ppmv | EPA 8260B | 3/28/2006 |
| **Ethylbenzene** | **< 0.050** | 0.050 | ppmv | EPA 8260B | 3/28/2006 |
| **Total Xylenes** | **< 0.050** | 0.050 | ppmv | EPA 8260B | 3/28/2006 |
| **Methyl-t-butyl ether (MTBE)** | **< 0.050** | 0.050 | ppmv | EPA 8260B | 3/28/2006 |
| **Diisopropyl ether (DIPE)** | **< 0.050** | 0.050 | ppmv | EPA 8260B | 3/28/2006 |
| **Ethyl-t-butyl ether (ETBE)** | **< 0.050** | 0.050 | ppmv | EPA 8260B | 3/28/2006 |
| **Tert-amyl methyl ether (TAME)** | **< 0.050** | 0.050 | ppmv | EPA 8260B | 3/28/2006 |
| **Tert-Butanol** | **< 0.50** | 0.50 | ppmv | EPA 8260B | 3/28/2006 |
| **TPH as Gasoline** | **< 5.0** | 5.0 | ppmv | EPA 8260B | 3/28/2006 |
| 4-Bromofluorobenzene (Surr) | 93.4 | | % Recovery | EPA 8260B | 3/28/2006 |
| Toluene - d8 (Surr) | 101 | | % Recovery | EPA 8260B | 3/28/2006 |

Approved By: Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800

Report Number : 49188

Date : 4/3/2006

**QC Report : Method Blank Data**

Project Name : **Tesoro Station 67106**

Project Number : **67106**

| Parameter | Measured Value | Method Reporting Limit | Units | Analysis Method | Date Analyzed |
|---|---|---|---|---|---|
| Benzene | < 0.050 | 0.050 | ppmv | EPA 8260B | 3/27/2006 |
| Toluene | < 0.050 | 0.050 | ppmv | EPA 8260B | 3/27/2006 |
| Ethylbenzene | < 0.050 | 0.050 | ppmv | EPA 8260B | 3/27/2006 |
| Total Xylenes | < 0.050 | 0.050 | ppmv | EPA 8260B | 3/27/2006 |
| Methyl-t-butyl ether (MTBE) | < 0.050 | 0.050 | ppmv | EPA 8260B | 3/27/2006 |
| Diisopropyl ether (DIPE) | < 0.050 | 0.050 | ppmv | EPA 8260B | 3/27/2006 |
| Ethyl-t-butyl ether (ETBE) | < 0.050 | 0.050 | ppmv | EPA 8260B | 3/27/2006 |
| Tert-amyl methyl ether (TAME) | < 0.050 | 0.050 | ppmv | EPA 8260B | 3/27/2006 |
| Tert-Butanol | < 0.50 | 0.50 | ppmv | EPA 8260B | 3/27/2006 |
| TPH as Gasoline | < 5.0 | 5.0 | ppmv | EPA 8260B | 3/27/2006 |
| 4-Bromofluorobenzene (Surr) | 97.9 | | % | EPA 8260B | 3/27/2006 |
| Toluene - d8 (Surr) | 105 | | % | EPA 8260B | 3/27/2006 |

| Parameter | Measured Value | Method Reporting Limit | Units | Analysis Method | Date Analyzed |
|---|---|---|---|---|---|

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

KIFF Analytical LLC

# Analysis Summary

Report Number : 49188

Date : 4/3/2006

Attention : Richard Munsch
RDM Environmental
6280 Brookshire Drive
Rocklin, CA 95677

Project Name :Tesoro Station 67106
Project Number : 67106

| | | | Sample Name | SVE-Inf | | SVE-MID | | SVE-Eff | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Date | 3/27/2006 | | 3/27/2006 | | 3/27/2006 | |
| Analyte | Method | Units | | MRL | Results | MRL | Results | MRL | Results |
| Benzene | EPA 8260B | ppmv | | 0.050 | ND | 0.050 | ND | 0.050 | ND |
| Toluene | EPA 8260B | ppmv | | 0.050 | ND | 0.050 | ND | 0.050 | ND |
| Ethylbenzene | EPA 8260B | ppmv | | 0.050 | ND | 0.050 | ND | 0.050 | ND |
| Total Xylenes | EPA 8260B | ppmv | | 0.050 | ND | 0.050 | ND | 0.050 | ND |
| Methyl-t-butyl ether (MTBE) | EPA 8260B | ppmv | | 0.050 | ND | 0.050 | ND | 0.050 | ND |
| Diisopropyl ether (DIPE) | EPA 8260B | ppmv | | 0.050 | ND | 0.050 | ND | 0.050 | ND |
| Ethyl-t-butyl ether (ETBE) | EPA 8260B | ppmv | | 0.050 | ND | 0.050 | ND | 0.050 | ND |
| Tert-amyl methyl ether (TAME) | EPA 8260B | ppmv | | 0.050 | ND | 0.050 | ND | 0.050 | ND |
| Tert-Butanol | EPA 8260B | ppmv | | 0.50 | ND | 0.50 | ND | 0.50 | ND |
| TPH as Gasoline | EPA 8260B | ppmv | | 5.0 | ND | 5.0 | ND | 5.0 | ND |
| Toluene - d8 (Surr) | EPA 8260B | % | | | 104 | | 104 | | 101 |
| 4-Bromofluorobenzene (Surr) | EPA 8260B | % | | | 97.3 | | 101 | | 93.4 |

MRL = Method Reporting Limit
ND = Not Detected

Approved By,

Joel Kiff

**KIFF Analytical LLC**

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

SRG # / Lab No. 49188

Page 1 of 1

# Chain-of-Custody Record and Analysis Request

Project Contact (Hardcopy or PDF To): Richard Mancuso
Company / Address: RPM Environmental
Phone #: (916) 415-1134 Fax #: (916) 415-1154
Project #: 67106 P.O. #: 67106
Project Name: Tesoro Station 67106
Project Address: San Leandro

California EDF Report? ☐ Yes ☐ No
Sampling Company Log Code:
Global ID:
EDF Deliverable To (Email Address):
Sampler Signature:

| Sample Designation | Sampling: Date | Sampling: Time | Container: 40 ml VOA | Container: Sleeve | Container: Poly | Container: Glass | Container: Tedlar | Preservative: HCl | Preservative: $HNO_3$ | Preservative: None | Matrix: Water | Matrix: Soil | Matrix: Air | MTBE (EPA 8260B) per EPA 8021 level @ 5.0 ppb | MTBE (EPA 8260B) @ 0.5 ppb | BTEX (EPA 8260B) | TPH Gas (EPA 8260B) | 5 Oxygenates (EPA 8260B) | 7 Oxygenates (EPA 8260B) | Lead Scav.(1,2 DCA & 1,2 EDB-EPA 8260B) | Volatile Halocarbons (EPA 8260B) | Volatile Organics Full List (EPA 8260B) | Volatile Organics (EPA 524.2 Drinking Water) | TPH as Diesel (EPA 8015M) | TPH as Motor Oil (EPA 8015M) | Total Lead (EPA 6010) | W.E.T. Lead (STLC) | | | | | For Lab Use Only |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SVE-Inf | 3/27/06 | 3:59 | | | | | X | | | X | | | X | | | X | X | X | | | | | | | | | | | | | | 01 |
| SVE-Mid | 3/27/06 | 3:57 | | | | | X | | | X | | | X | | | X | X | X | | | | | | | | | | | | | | 02 |
| SVE-Eff | 3/27/06 | 3:58 | | | | | X | | | X | | | X | | | X | X | X | | | | | | | | | | | | | | 03 |

TAT: ☐ 12 hr ☐ 24 hr ☐ 48 hr ☐ 72 hr ☒ 1 wk

Relinquished by: [signature] Date: Time: Received by:

Relinquished by: Date: Time: Received by:

Relinquished by: Date: 032806 Time: 1020 Received by Laboratory: Roz McGee Kiff Analytical

Remarks: STAT

Bill to: Tesoro Petroleum / Rob Donovan

For Lab Use Only: Sample Receipt

| Temp °C | Initials | Date | Time | Therm. ID # | Coolant Present |
|---|---|---|---|---|---|
| | | | | | Yes / No |

Distribution: White - Lab; Pink - Originator
Rev: 051805