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**Lehigh Hanson West Region**

**Second Quarter 2010  
Air Injection System and  
Groundwater Monitoring  
Report**

Hanson Aggregates Mission Valley Rock  
Facility, 7999 Athenour Way  
Sunol, Alameda County, California  
(SLIC Case #RO0000207 and  
GeoTracker ID T0600102092)

August 27, 2010

August 27, 2010

Mr. Jerry Wickham  
Alameda County Health Care Services  
Environmental Health Services  
1131 Harbor Bay Parkway, Suite 250  
Alameda, California 94502-6577

**Subject: Second Quarter 2010 Air Injection System and Groundwater Monitoring Report, Hanson Aggregates Mission Valley Rock Facility, 7999 Athenour Way, Sunol, Alameda County, California (SLIC Case #RO0000207 and GeoTracker ID T0600102092)**

Dear Mr. Wickham:

The attached Second Quarter 2010 Air Injection System and Groundwater Monitoring Report was prepared by ARCADIS U.S., Inc. (ARCADIS) on behalf of Lehigh Hanson West Region (“Hanson”) for the asphalt plant area of the Hanson Aggregates Former Mission Valley Rock Facility, located at 7999 Athenour Way, Sunol, California (“the Site”). This report summarizes the results from groundwater monitoring conducted during the second quarter of 2010 (April 1 through June 30, 2010; “the current quarter”) in the asphalt plant area of the Site. This report also provides a summary of air injection system (AIS) performance monitoring and routine operation and maintenance activities conducted during the current quarter.

In summary, the findings of this report indicate that the AIS has been effective at reducing total petroleum hydrocarbon (TPH) concentrations in the vicinity of the AIS. There are three wells that are screened in the deep zone where TPH as diesel (TPHd) and/or TPH as gasoline (TPHg) concentrations remain above 1,000 micrograms per liter ( $\mu\text{g}/\text{l}$ ; MW-7D, MW-9D, and OXY-1D); however, when considering the entire historical record for these locations, concentration trend analysis indicates relatively stable or slightly decreasing trends.

In the “First Quarter 2010 Air Injection System and Groundwater Monitoring Report,” dated May 17, 2010, Hanson recommended that the AIS be shut down to allow for an evaluation of potential rebound. In a letter dated July 7, 2010, Alameda County Environmental Health stated that it had no objection to shutting down the AIS coupled with the continuation of groundwater monitoring to assess the potential occurrence and magnitude of rebound in site groundwater of dissolved TPH and TPH-related compounds. In response to the July 7, 2010 letter, the AIS was shut down on July 15, 2010 and will remain down while the rebound of TPH and TPH-related compounds in site groundwater is assessed. The next routine groundwater monitoring event is scheduled to be conducted during the third quarter of 2010 and will consist of sampling the 26 wells site-wide.

**Second Quarter 2010 Air Injection System and Groundwater Monitoring Report, Hanson  
Aggregates Mission Valley Rock Facility, 7999 Athenour Way, Sunol, Alameda County, California  
(SLIC Case #RO0000207 and GeoTracker ID T0600102092)**

**August 27, 2010**

**Page 2**

I declare, under penalty of perjury, that the information and/or recommendations contained in the attached report are true and correct to the best of my knowledge.

If you have any questions or comments concerning this report, please call me at (925) 244-6584 or Ron Goloubow of ARCADIS at (510) 596-9550.

Sincerely,

A handwritten signature in blue ink that reads "Lee W. Cover". The signature is fluid and cursive, with a long horizontal flourish extending to the right.

Lee W. Cover  
Environmental Manager  
Lehigh Hanson West Region

Attachment



---

E. Max MacLeod, P.E.  
Project Engineer



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Ron Goloubow, P.G.  
Principal Geologist

**Second Quarter 2010  
Air Injection System and  
Groundwater Monitoring  
Report**

Hanson Aggregates Mission  
Valley Rock Facility,  
7999 Athenour Way, Sunol,  
Alameda County, California  
(SLIC Case #RO0000207 and  
GeoTracker ID T0600102092)

Prepared for:

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San Ramon, California 94583

Prepared by:

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Our Ref.:

EM009480.0011

Date:

August 27, 2010

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**Appendices**

- A Historical Groundwater Elevation and Analytical Data
- B Certified Laboratory Analytical Reports
- C Field Sheets
- D July 7, 2010 Letter from ACEH

**Certification**

ARCADIS U.S., Inc., has prepared this Air Injection System and Groundwater Monitoring Report on behalf of Lehigh Hanson West Region in a manner consistent with the level of care and skill ordinarily exercised by professional engineers and geologists.

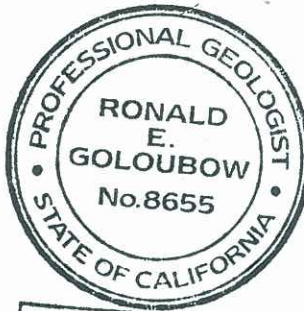
This report was prepared under the technical direction of the undersigned California Professional Engineer and California Professional Geologist.\*



August 27, 2010

Date

E. Max MacLeod, P.E.  
Project Engineer  
California Professional Engineer (C69846)



Expires Nov. 30, 2011

August 27, 2010

Date

Ron Goloubow, P.G.  
Principal Geologist  
California Professional Geologist (8655)

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## Executive Summary

This report presents the results of groundwater monitoring conducted in the asphalt plant area of the aggregate mining facility located at 7999 Athenour Way in Sunol, Alameda County, California (“the Site”) during the period from April 1, 2010 through June 30, 2010 (“the current quarter”). This report also presents a summary of the air injection system (AIS) operation and its effectiveness during the current quarter. The AIS and its associated monitoring and injection wells are located in the asphalt plant area of the Site. All AIS operation and maintenance and groundwater monitoring activities were conducted by ARCADIS U.S., Inc. (ARCADIS) on behalf of Lehigh Hanson West Region (“Hanson”).

Routine AIS operation and maintenance were conducted approximately monthly during the current quarter. Routine quarterly groundwater monitoring was conducted on June 9 and 10, 2010. The AIS has been in operation since April 6, 2009 and consists of compressed air injected into wells OXY-1D and OXY-1LF. The AIS was shut down prior to and during sampling and monitoring to allow the routine groundwater monitoring event to be conducted safely by dissipating the pressure buildup in the wells caused by air injection.

One unscheduled shutdown event occurred during the current quarter when the AIS temporarily ceased operating for approximately 14 days due to an unauthorized resetting of the solenoid timer. The timer was reset to run, and the AIS resumed full-time operation. A lock was placed on the door to the shed that houses the AIS to inhibit potential subsequent unauthorized attempts to alter the operating parameters of the AIS.

Analytical results from the current quarter confirm that total petroleum hydrocarbons (TPH) as diesel (TPHd) and as gasoline (TPHg) are the primary compounds of potential concern (COPCs) at the Site. Considering the Site’s historical data, concentrations of these compounds in the asphalt plant area are generally decreasing or stable with samples from six of the 10 groundwater monitoring wells below the laboratory reporting limits for all of the COPCs.

The existing AIS has been effective at significantly reducing TPH concentrations in groundwater beneath the asphalt plant area, especially in the vicinity of the MW-9 well cluster. For example, concentrations of all analyzed individual hydrocarbon constituents have decreased to below laboratory reporting limits in groundwater samples from MW-9S and MW-9LF. Based on results of quarterly monitoring,



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ARCADIS and Hanson recommended to Alameda County Environmental Health (ACEH), in the "First Quarter 2010 Air Injection System and Groundwater Monitoring Report, Hanson Aggregates Mission Valley Rock Facility," that the AIS be shut down and that groundwater be monitored for rebound according to the current routine monitoring program. ACEH concurred with this approach in its July 7, 2010 letter ("the July 7 letter") to Mr. Lee Cover of Hanson (ACEH 2010), and the AIS was shut down on July 15, 2010. In the July 7 letter, ACEH requested that the current monitoring and sampling plan be continued and requested periodic reporting on a specified schedule to document the results of the monitoring and sampling program. ARCADIS and Hanson plan to adhere to the sampling and reporting schedule requested by ACEH in the July 7 letter.

**1. Introduction**

ARCADIS U.S., Inc. (ARCADIS) has prepared this “Second Quarter 2010 Air Injection System and Groundwater Monitoring Report” on behalf of Lehigh Hanson West Region (“Hanson”) for the asphalt plant area of the aggregate mining facility located at 7999 Athenour Way in Sunol, Alameda County, California (“the Site”; Figure 1). This report presents a summary of air injection system (AIS) operation and maintenance (O&M) activities and groundwater monitoring results for the quarterly monitoring period from April 1 through June 30, 2010 (“the current quarter”).

During the current quarter, routine AIS O&M activities and groundwater monitoring were conducted in accordance with the July 23, 2009 Alameda County Environmental Health (ACEH) comment letter (ACEH 2009) and the August 17, 2009 report by LFR Inc. (LFR) titled “Air Injection System Installation, Start-up, and First Quarter Operations Report” (“the Start-up Report”; LFR 2009). As requested by ACEH, routine groundwater monitoring of select wells located in the vicinity of the AIS is conducted on a quarterly basis to monitor the performance of the AIS; routine groundwater monitoring of all site wells is conducted on a semiannual basis during the first and third quarters of the year. This monitoring report presents the results of the routine groundwater monitoring and sampling of the 10 selected wells located in the vicinity of the AIS for the current quarter (MW-1, MW-7S, MW-7D, MW-8, MW-9S, MW-9D, MW-9LF, OXY-1S, OXY-1D, and OXY-1LF).

Based on results of quarterly monitoring previously conducted at the Site, ARCADIS and Hanson recommended to ACEH in the “First Quarter 2010 Air Injection System and Groundwater Monitoring Report, Hanson Aggregates Mission Valley Rock Facility” (ARCADIS 2010) that the AIS be shut down and that groundwater be monitored for rebound according to the current routine monitoring program. ACEH concurred with this approach in its July 7, 2010 letter (“the July 7 letter”) to Mr. Lee Cover of Hanson (ACEH 2010), and the AIS was shut down on July 15, 2010. In the July 7 letter, ACEH requested that the current monitoring and sampling plan be continued and requested periodic reporting on a specified schedule to document the results of the monitoring and sampling program. ARCADIS and Hanson plan to adhere to the sampling and reporting schedule requested by ACEH in the July 7 letter.

**2. Air Injection System Operation**

The injection wells of the existing AIS were installed during January and February 2008 as part of a field pilot study to test the effectiveness of injecting air into the subsurface

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to enhance the natural biodegradation of petroleum hydrocarbons (LFR 2008a). Based on the results of the pilot study, the existing AIS was installed in March 2009 and has been operated full-time since April 6, 2009 (LFR 2009) with the exception of two unscheduled shutdowns. The AIS consists of an air compressor and associated piping to inject compressed air through a series of regulators, filters, valves, flow meters, hoses, and eventually through the screened intervals of injection wells OXY-1D and OXY-1LF (Figure 3). The AIS is used to deliver oxygen to groundwater as a means of accelerating the natural biodegradation of petroleum hydrocarbons that have affected groundwater beneath the Site. Injection wells OXY-1D and OXY-1LF are located in the vicinity of well cluster MW-9 where historically the highest concentrations of total petroleum hydrocarbons (TPH) have been detected in groundwater. A description of the AIS design, installation, and construction was provided in the Start-up Report (LFR 2009).

During the current quarter, routine O&M activities of the AIS were conducted by ARCADIS approximately once a month. Operating parameters are recorded on field sheets, and the system's flow rates were adjusted as necessary to comply with regulatory requirements of the Bay Area Air Quality Management District and to achieve remedial goals. Below is a summary of performance monitoring and results for the current quarter.

## **2.1 AIS Operation Parameters**

The AIS is configured to inject air into wells OXY-1D and OXY-1LF in a pulsing cycle by continuously injecting air for 45 minutes of each hour and then stopping the air injection for 15 minutes per hour. The timer has been programmed to open the two solenoid valves that provide air flow to wells OXY-1D and OXY-1LF for overlapping 30-minute intervals per hour for each well. The system initially was programmed to inject 5 standard cubic feet per minute (scfm) of air into each injection well for sequential 20-minute intervals followed by a 20-minute period with no air flow during each hour. On August 28, 2009, the injection sequence was re-programmed to increase the length of time that air is injected into each injection well in order to deliver more oxygen to the groundwater. During the current quarter, air was injected according to the following sequence, which was repeated hourly:

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**Air Injection Sequence**

Time Interval	OXY-1LF	OXY-1D
0 to 15 minutes	Off	Air injection at approximately 5 scfm
15 to 30 minutes	Air injection at approximately 5 scfm	Air injection at approximately 5 scfm
30 to 45 minutes	Air injection at approximately 5 scfm	Off
45 to 60 minutes	Off	Off

**2.2 Routine O&M Observations**

The AIS operated continuously during the current quarter with one unscheduled shutdown that was estimated to have lasted approximately 14 days. During the routine O&M visit conducted on May 13, 2010, the field technician found the system was not operating and the timer switch had been moved from the "Run" position to the "Set" position. On-site staff was questioned to determine if the system had been shut down in response to a perceived or actual operating problem (for example, an unexpected noise from the equipment, a squealing compressor belt, sparking, or other signs that the system required an immediate shutdown). None of the site personnel interviewed had witnessed any signs of a system problem or had seen unauthorized personnel accessing the system. It is likely that a person not authorized to operate the system had turned the switch, causing the shutdown. To prevent the reoccurrence of this type of tampering with the system's operating controls, a lock was placed on the door to the shed that houses the AIS. When the field technician switched the timer back to the "Run" position, the AIS resumed operation without incident. No other unscheduled shutdowns occurred during the current quarter.

During the routine O&M site visits, the field technician records system flow rates and pressure at various points, adjusts the flow of air into each injection well (if necessary), and provides periodic system equipment maintenance as needed. Since system start-up, upgrades to the equipment have been performed, including installation of check valves in the compressed air hoses and a new pressure switch for the compressor that can be set to operate over a wider range of pressures than the factory-supplied switch. Routine maintenance of the AIS conducted during the current quarter included:

- Restarting the AIS system and setting air flow rate;

- Adding oil and performing an oil change for the compressor;
- Cleaning or changing the compressor's air filter; and
- Field verification of the programmed sparging sequence.

### **3. Groundwater Monitoring**

The current quarter's routine groundwater monitoring event consisted of measuring depth to groundwater and purging and sampling 10 wells located in the vicinity of the asphalt plant on June 9 and 10, 2010. The 10 wells included seven groundwater monitoring wells (wells (MW-1, MW-7S/D, MW-8, and MW-9S/D/LF) and the three air injection wells (OXY1S/D/LF; Figure 3). The methodology and results of this groundwater monitoring event are described in this section. Groundwater monitoring results from the current quarter are summarized in Tables 1 and 2 and presented on Figure 3. Historical groundwater monitoring data are included in Appendix A. Certified analytical reports are included in Appendix B, and copies of field sheets are included in Appendix C.

Results from the routine groundwater monitoring event are briefly discussed below. A more detailed data evaluation will be presented in the next semiannual summary report following the site-wide groundwater sampling event scheduled to be conducted during third quarter of 2010.

#### **3.1 Methodology**

##### **3.1.1 Temporary AIS Shutdown**

Before the groundwater monitoring event was conducted, the AIS was temporarily shut down to stop the flow of compressed air into injection wells OXY-1D and OXY-1LF and to allow the injection wells and nearby monitoring wells to be accessed safely by allowing pressure buildup in these wells to dissipate. The system was shut down approximately one hour before depth-to-groundwater monitoring was measured on the morning of June 9, 2010 and was restarted after all groundwater sampling was completed on June 10, 2010.

### 3.1.2 Groundwater Elevation Monitoring

Depth to groundwater was measured in all 10 wells beginning approximately one hour after the system was shut down. The depth to groundwater was measured relative to the top of casing (TOC) using a Solinst water-level indicator, and the measurements were recorded on a field sheet. Groundwater elevations were calculated by subtracting the depth-to-groundwater measurement from the TOC elevation. Groundwater elevation data for the current quarter are presented in Table 1 and included in the historical data table presented in Appendix A.

### 3.1.3 Groundwater Well Purging and Sampling

The 10 monitoring and injection wells were purged and sampled using “low-flow” sampling protocols and dedicated flexible tubing. An electrical peristaltic pump was used to minimize the drawdown during purging. Water-quality parameters, including temperature, pH, electrical conductivity, dissolved oxygen (DO), and oxidation-reduction potential (ORP), were monitored during well purging using an in-line water-quality monitoring device, and were recorded on field sheets. Groundwater samples were collected after the measured water-quality parameters stabilized for three successive readings to approximately within the standard criteria for pH ( $\pm 0.1$  standard units), electrical conductivity ( $\pm 3\%$ ), DO ( $\pm 10\%$ ), and ORP ( $\pm 10$  millivolts). The final stabilized general water-quality readings were recorded immediately prior to sample collection. Additionally, prior to sample collection for laboratory analyses, all wells were field analyzed for ferrous iron concentrations. A summary of general water-quality parameters including ferrous iron concentrations measured during monitoring events conducted approximately since the pilot study was completed in early 2008 is included in Appendix A.

Groundwater samples for laboratory analyses were collected into clean, laboratory-provided sample containers using the low-flow pump. Containers were properly labeled and transported in ice-chilled coolers under standard chain-of-custody protocol to the analytical laboratory. Field duplicate samples were collected daily (from wells MW-8 and OXY-1S), and submitted to the laboratory for quality control purposes. Results for both primary and duplicate samples were identical.

### 3.1.4 Groundwater Sample Analyses

As noted above, all groundwater samples were analyzed in the field for the general water-quality field parameters and for ferrous iron. Groundwater samples for laboratory

analyses were collected and submitted to TestAmerica Laboratories, Inc., a California-certified analytical laboratory located in Pleasanton, California, and were analyzed for the following parameters:

- TPH as diesel (TPHd) by U.S. Environmental Protection Agency (EPA) Method 8015B
- TPH as gasoline (TPHg) by EPA Method 8260B
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX) by EPA Method 8260B
- Methyl tertiary-butyl ether (MTBE) by EPA Method 8260B

### 3.2 Groundwater Analytical Results

Groundwater analytical results are summarized in Tables 1 and 2, and are presented on Figure 3.

#### 3.2.1 Petroleum Hydrocarbons and Related Compounds

Consistent with previous monitoring events, the primary compounds detected in groundwater samples collected from asphalt plant area wells continue to be TPHd (highest concentration of 12,000 micrograms per liter [ $\mu\text{g/l}$ ] in well MW-7D), TPHg (highest concentration of 16,000  $\mu\text{g/l}$  in MW-7D), and, to a lesser extent, BTEX compounds (highest concentration of 44  $\mu\text{g/l}$  in MW-7D). Methyl tertiary-butyl ether (MTBE) was not detected in any sample collected from the 10 wells collected during the current quarter (MTBE historically has been detected primarily in samples collected from wells located in the southern portion of the Site). Analytical results for all monitored compounds in six of the 10 monitoring wells in the asphalt plant area (MW-1, MW-8, MW-9S, MW-9LF, OXY-1S, and OXY-1LF) were below their respective reporting limits. The highest concentrations of petroleum hydrocarbons were detected in samples collected from well MW-7D.

In general, concentrations of petroleum hydrocarbons and related compounds have decreased in wells located in the vicinity of the AIS since the beginning of AIS operation, in particular in well cluster MW-9 where historically the highest concentrations have been detected.

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The analytical results for TPH compounds detected in the sample collected from well MW-7D in June 2010 were higher than previous samples collected since the AIS began operation. MW-7D is located approximately 32 feet from the two air injection wells and is considered to be either on the boundary of the area influenced by the AIS or just beyond it. The higher air flow used during the pilot test led to indications (increased pressure, increased DO, changes to water temperature, and increased ORP) that MW-7D was within the area of influence of the sparging wells. Since implementation of the full-time sparging system, there has been some indication that the AIS has influenced well MW-7D (slightly increased DO in the well and contaminant concentrations that increased in reaction to increased air flow), but sustained reductions in the concentrations of TPHd and TPHg have not been observed.

Samples collected from well MW-9D have historically contained the highest concentrations of TPH and BTEX compounds detected in samples collected at the Site. Since the AIS began operation, the concentrations of these compounds have decreased significantly. The analytical results for samples collected from this well during the fourth quarter of 2009 increased relative to historical analytical results. However, the concentrations remain lower than those detected in samples collected from this well prior to AIS operation. This trend will be further evaluated during the next monitoring events.

### 3.2.2 Inorganic and Field Parameters

Selected field parameter and inorganic monitoring results in groundwater samples collected during the pilot test and since the AIS began operation are summarized in Table A-3 of Appendix A, based on field sheets included in Appendix C. In general, DO concentrations and ORP have increased in monitoring wells nearest the AIS injection wells, confirming the delivery of oxygen into the formation.

## 4. Conclusions and Recommendations

### 4.1 Conclusions

Routine AIS O&M was conducted approximately once a month during the current quarter, and routine quarterly groundwater sampling was conducted on June 9 and 10, 2010. Groundwater monitoring consisted of purging and sampling the 10 wells located in the vicinity of the AIS. This report presents the data from groundwater monitoring conducted during the current quarter. A more detailed data evaluation will be



presented in the semiannual monitoring report following the site-wide groundwater sampling event scheduled to be conducted during the third quarter of 2010.

The AIS has been in continuous operation since April 6, 2009 (with the exception of two unscheduled shutdowns) and consisted of compressed air injected into wells OXY-1D and OXY-1LF. During the current quarter, the AIS temporarily ceased operating for an estimated 14 days in late May to early June 2010 when unauthorized personnel turned off the system. The field technician switched the timer to "Run" again (from "Set") and the AIS resumed operation. No other significant O&M issues were encountered during the current quarter. In its July 7 letter, ACEH expressed that it had no objection to the shutdown of the AIS system coupled with continued monitoring of site groundwater, and the AIS was shut down on July 15, 2010. The AIS will remain down while the rebound of compounds of potential concern in groundwater is evaluated during the third quarter of 2010 through the second quarter of 2011.

Groundwater monitoring results confirmed that TPH and TPH-related compounds are present at lower concentrations than their historical averages in monitoring well MW-9D, located near the air injection wells and where historically the highest concentrations have been detected. Analytical results for TPH and TPH-related compounds in samples from both MW-9S and MW-9LF were below the reporting limits for all compounds that were analyzed. Concentrations detected in the groundwater sample collected from well MW-7D are higher than results from the previous sampling event, but are within their historical range. Inorganic parameters, including increasing DO and ORP and reducing ferrous iron concentrations, confirm that oxygen is being delivered into the formation, in particular in the MW-9 well cluster.

In conclusion, operation of the AIS during the second quarter of 2010 was effective at reducing TPH and TPH-related concentrations in groundwater. The AIS was shut down on July 15, 2010 and will remain down while the rebound of TPH and TPH-related compounds in site groundwater is assessed.

#### **4.2 Recommendations and Proposed Monitoring Schedule**

Based on the effectiveness of the AIS at reducing hydrocarbon concentrations, ARCADIS and Hanson recommend that the AIS be shut down and that groundwater be monitored as needed to assess for potential rebound effects. ACEH agreed with this approach in its July 7 letter to Mr. Cover of Hanson. In response, the AIS was shut down on July 15, 2010. The letter requested that the current monitoring and sampling plan be continued and requested periodic reporting to document the results of the

Hanson Aggregates Mission Valley Rock Facility, 7999 Athenour Way, Sunol, Alameda County, California

monitoring and sampling program. ARCADIS will perform the monitoring, sampling, and reporting on behalf of and in consultation with Hanson.

The following table provides a summary of the existing groundwater monitoring and reporting schedule. The effects of shutting down the AIS on groundwater quality will be evaluated following the completion of the fourth quarter groundwater monitoring event. At that time, a recommendation will be made regarding the future operation of the AIS and periodic groundwater monitoring and reporting requirements for the Site.

**Groundwater Monitoring and Reporting Schedule for 2010**

Quarter	Water Level Monitoring	Groundwater Sampling Event	Reporting Schedule (report due date 45 days after end of the quarter)
3Q10 (July through September)	Site-wide	Site-wide: 26 monitoring wells and 3 injection wells	Monitoring Report (due November 15, 2010)
4Q10 (October through December)	Site-wide	Site-wide: 26 monitoring wells and 3 injection wells	Monitoring Report (due February 15, 2011)

Note: 3Q10 and 4Q10 refer to the third and fourth quarters of 2010, respectively,

**5. Limitations Statement**

The opinions and recommendations presented in this report are based upon the scope of services, information obtained through the performance of the services, and the schedule as agreed upon by ARCADIS and the party for whom this report was originally prepared. This report is an instrument of professional service and was prepared in accordance with the generally accepted standards and level of skill and care under similar conditions and circumstances established by the environmental consulting industry. No representation, warranty, or guarantee, express or implied, is intended or given. To the extent that ARCADIS relied upon any information prepared by other parties not under contract to ARCADIS, ARCADIS makes no representation as to the accuracy or completeness of such information. This report is expressly for the sole and exclusive use of the party for whom this report was originally prepared for a particular purpose. Only the party for whom this report was originally prepared and/or other specifically named parties have the right to make use of and rely upon this report. Reuse of this report or any portion thereof for other than its intended purpose, or if modified, or if used by third parties, shall be at the user’s sole risk.

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Results of any investigations or testing and any findings presented in this report apply solely to conditions existing at the time when ARCADIS' investigative work was performed. It must be recognized that any such investigative or testing activities are inherently limited and do not represent a conclusive or complete characterization. Conditions in other parts of the Site may vary from those at the locations where data were collected. ARCADIS' ability to interpret investigation results is related to the availability of the data and the extent of the investigation activities. As such, 100% confidence in environmental investigation conclusions cannot reasonably be achieved.

ARCADIS, therefore, does not provide any guarantees, certifications, or warranties regarding any conclusions regarding environmental contamination of any such property. Furthermore, nothing contained in this document shall relieve any other party of its responsibility to abide by contract documents and applicable laws, codes, regulations, or standards.

**6. References**

Alameda County Environmental Health (ACEH). 2005. Letter to Mr. W.M. Calvert, Mission Valley Rock Company from Jerry Wickham, re: Fuel Leak Case No. RO0000207, Mission Valley Rock and Asphalt, 7999 Athenour Way, Sunol, California. November 3.

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———. 2006b. Letter to Mr. Steven Zacks of Hanson Aggregates Mid-Pacific, Inc., and to Mr. W.M. Calvert of Mission Valley Rock Company from Jerry Wickham, re: Fuel Leak Case No. RO0000207, Mission Valley Rock and Asphalt, 7999 Athenour Way, Sunol, California. August 3.

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———. 2007b. Letter to Lee Cover of Hanson Aggregates West Region from Jerry Wickham, re: Fuel Leak Case No. RO0000207 and Geotracker Global ID T0600102092, Mission Valley Rock and Asphalt, 7999 Athenour Way, Sunol, CA 94586. August 30.

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**Table 1**  
**Groundwater Elevation Data - June 2010**  
**Lehigh Hanson Sunol Facility Asphalt Plant**  
**7999 Athenour Way, Sunol, California**

<b>Well</b>	<b>Top of Casing Elevation (feet MSL)</b>	<b>Date Measured</b>	<b>Depth to Water (feet TOC)</b>	<b>GW Elevation (feet MSL)</b>	<b>Product Observation or Thickness (feet)</b>
MW-1	258.68	6/9/10	1.67	257.01	ND
MW-7S	258.84	6/9/10	1.82	257.02	ND
MW-7D	258.8	6/9/10	3.03	255.77	ND
MW-8	258.84	6/9/10	1.12	257.72	ND
MW-9S	258.41	6/9/10	1.45	256.96	ND
MW-9D	258.86	6/9/10	3.95	254.91	ND
MW-9LF	258.94	6/9/10	3.49	255.45	ND

**Notes:**

feet MSL = feet relative to mean sea level

feet TOC = feet below top of casing

ND = not detected

**Table 2**  
**Analytical Results for Groundwater Monitoring Well Samples - June 2010**  
**Lehigh Hanson Sunol Facility Asphalt Plant**  
**7999 Athenour Way, Sunol, California**

Sample ID	Sample Date	Notes	TPHd (ug/l)	TPHg (ug/l)	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Xylenes (ug/l)	MTBE (ug/l)
MW-1	6/9/10		ND<54	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5
MW-7S	6/9/10		<b>140</b>	<b>900</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5
MW-7D	6/9/10		<b>12,000</b>	<b>16,000</b>	<b>44</b>	<b>32</b>	<b>780</b>	<b>480</b>	ND<5
MW-8	6/9/10		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5
MW-8	6/9/10	D	ND<53	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5
MW-9S	6/9/10		ND<51	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5
MW-9D	6/9/10		<b>1,300</b>	<b>5,200</b>	<b>0.58</b>	<b>2.5</b>	<b>82</b>	<b>120</b>	ND<0.5
MW-9LF	6/9/10		ND<51	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5
OXY-1S	6/10/10		ND<53	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5
OXY-1S	6/10/10	D	ND<51	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5
OXY-1D	6/10/10		<b>1,300</b>	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5
OXY-1LF	6/10/10		ND<51	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5
<i>ESLs</i>			<i>100</i>	<i>100</i>	<i>1</i>	<i>40</i>	<i>30</i>	<i>20</i>	<i>5</i>

**Notes:**

TPHd = total petroleum hydrocarbons as diesel

TPHg = total petroleum hydrocarbons as gasoline

MTBE = methyl tertiary-butyl ether

ug/l = micrograms per liter

ND = not detected above given laboratory reporting limit

D = duplicate sample

ESL = Environmental Screening Levels by San Francisco Bay Regional Water Quality Control Board, May 2008, for groundwater beneath Residential Land Use Areas where Groundwater is a Current or Potential Source of Drinking Water.

**Bold** values indicate detection above given laboratory reporting limit.

Boxed values indicate result exceeds the ESL.



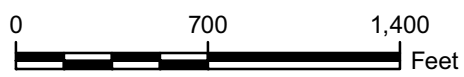


HANSON AGGREGATES, 7999 ATHENOUR WAY,  
SUNOL, CALIFORNIA

**SITE LOCATION MAP**

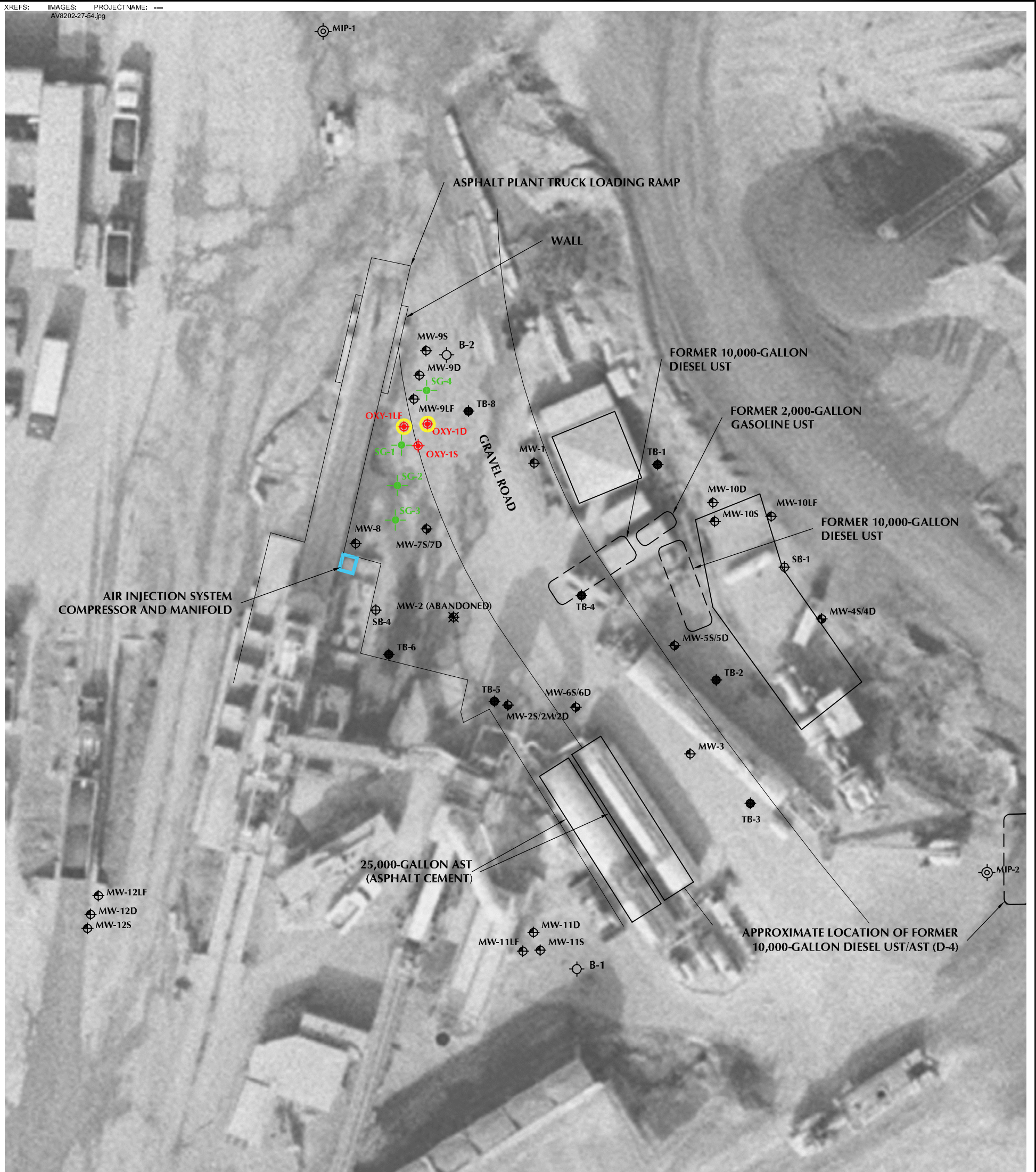


FIGURE  
**1**














GRAPHIC SCALE

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 AV820227-54.jpg



**EXPLANATION:**

-  MW-9S Groundwater monitoring well (single completion; well cluster)
-  MW-7S/7D Groundwater monitoring well (dual nested)
-  MW-2S/2M/2D Groundwater monitoring well (triple nested)
-  MW-2 Abandoned groundwater monitoring well
-  TB-6 Grab groundwater sample location
-  SB-4 Temporary soil boring location
-  B-2 Sonic boring / grab groundwater
-  MIP-3 MIP boring / grab groundwater
-  OXY-1S Air injection well (approximate location)
-  SG-1 Soil-gas monitoring probe (approximate location)
-  OXY-1S Used for air injection

AST = Aboveground storage tank  
 UST = Underground storage tank  
 MIP = Membrane Interface Probe



0 30 FEET  
 APPROXIMATE SCALE

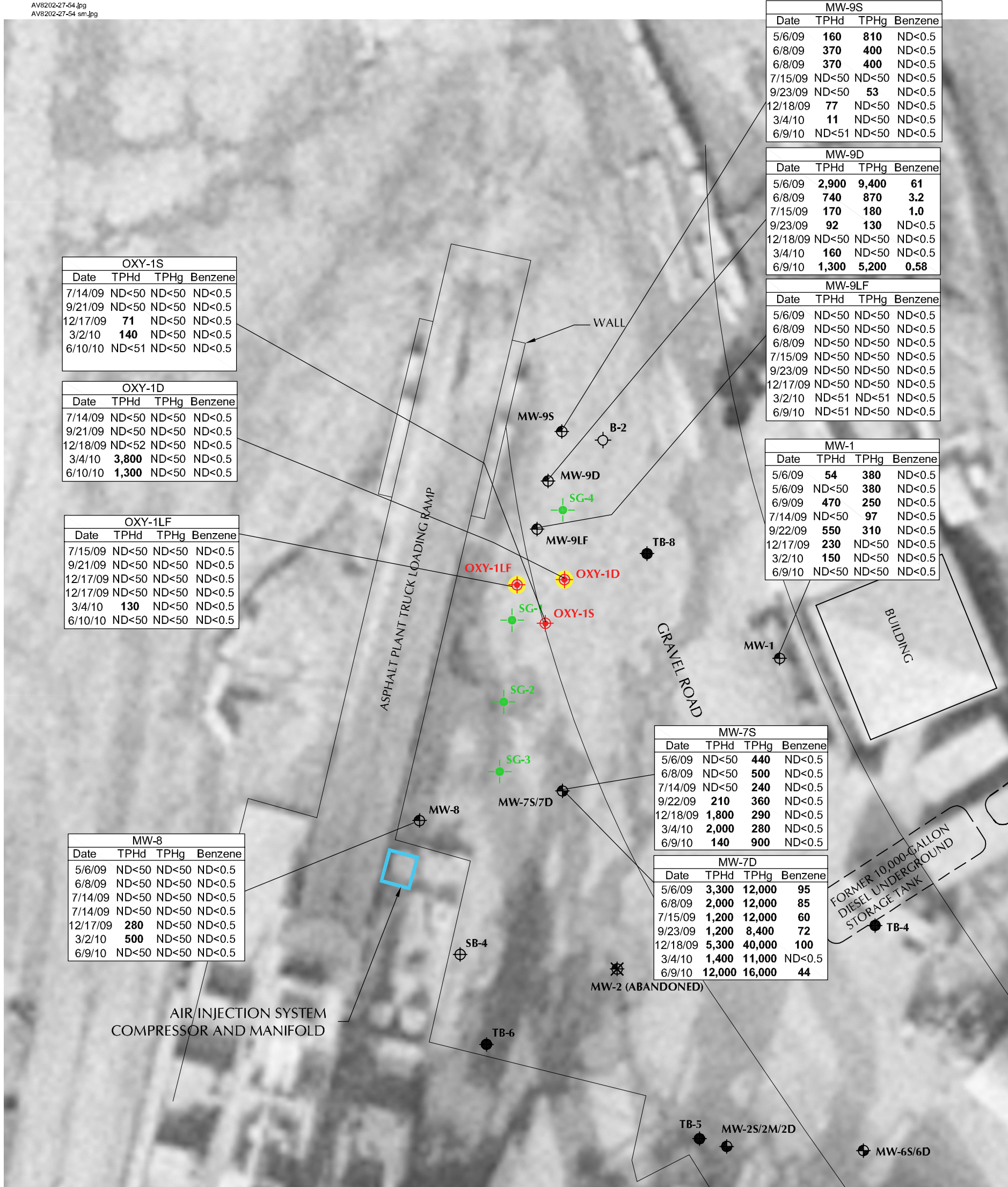
HANSON AGGREGATES, SUNOL, CALIFORNIA

**SITE PLAN**



FIGURE  
**2**

XREFS: IMAGES: PROJECTNAME: --  
 AV8202-27-54.jpg  
 AV8202-27-54-sm.jpg



OXY-1S			
Date	TPHd	TPHg	Benzene
7/14/09	ND<50	ND<50	ND<0.5
9/21/09	ND<50	ND<50	ND<0.5
12/17/09	71	ND<50	ND<0.5
3/2/10	140	ND<50	ND<0.5
6/10/10	ND<51	ND<50	ND<0.5

OXY-1D			
Date	TPHd	TPHg	Benzene
7/14/09	ND<50	ND<50	ND<0.5
9/21/09	ND<50	ND<50	ND<0.5
12/18/09	ND<52	ND<50	ND<0.5
3/4/10	3,800	ND<50	ND<0.5
6/10/10	1,300	ND<50	ND<0.5

OXY-1LF			
Date	TPHd	TPHg	Benzene
7/15/09	ND<50	ND<50	ND<0.5
9/21/09	ND<50	ND<50	ND<0.5
12/17/09	ND<50	ND<50	ND<0.5
3/4/10	130	ND<50	ND<0.5
6/10/10	ND<50	ND<50	ND<0.5

MW-8			
Date	TPHd	TPHg	Benzene
5/6/09	ND<50	ND<50	ND<0.5
6/8/09	ND<50	ND<50	ND<0.5
7/14/09	ND<50	ND<50	ND<0.5
7/14/09	ND<50	ND<50	ND<0.5
12/17/09	280	ND<50	ND<0.5
3/2/10	500	ND<50	ND<0.5
6/9/10	ND<50	ND<50	ND<0.5

MW-9S			
Date	TPHd	TPHg	Benzene
5/6/09	160	810	ND<0.5
6/8/09	370	400	ND<0.5
6/8/09	370	400	ND<0.5
7/15/09	ND<50	ND<50	ND<0.5
9/23/09	ND<50	53	ND<0.5
12/18/09	77	ND<50	ND<0.5
3/4/10	11	ND<50	ND<0.5
6/9/10	ND<51	ND<50	ND<0.5

MW-9D			
Date	TPHd	TPHg	Benzene
5/6/09	2,900	9,400	61
6/8/09	740	870	3.2
7/15/09	170	180	1.0
9/23/09	92	130	ND<0.5
12/18/09	ND<50	ND<50	ND<0.5
3/4/10	160	ND<50	ND<0.5
6/9/10	1,300	5,200	0.58

MW-9LF			
Date	TPHd	TPHg	Benzene
5/6/09	ND<50	ND<50	ND<0.5
6/8/09	ND<50	ND<50	ND<0.5
6/8/09	ND<50	ND<50	ND<0.5
7/15/09	ND<50	ND<50	ND<0.5
9/23/09	ND<50	ND<50	ND<0.5
12/17/09	ND<50	ND<50	ND<0.5
3/2/10	ND<51	ND<51	ND<0.5
6/9/10	ND<51	ND<50	ND<0.5

MW-1			
Date	TPHd	TPHg	Benzene
5/6/09	54	380	ND<0.5
5/6/09	ND<50	380	ND<0.5
6/9/09	470	250	ND<0.5
7/14/09	ND<50	97	ND<0.5
9/22/09	550	310	ND<0.5
12/17/09	230	ND<50	ND<0.5
3/2/10	150	ND<50	ND<0.5
6/9/10	ND<50	ND<50	ND<0.5

MW-7S			
Date	TPHd	TPHg	Benzene
5/6/09	ND<50	440	ND<0.5
6/8/09	ND<50	500	ND<0.5
7/14/09	ND<50	240	ND<0.5
9/22/09	210	360	ND<0.5
12/18/09	1,800	290	ND<0.5
3/4/10	2,000	280	ND<0.5
6/9/10	140	900	ND<0.5

MW-7D			
Date	TPHd	TPHg	Benzene
5/6/09	3,300	12,000	95
6/8/09	2,000	12,000	85
7/15/09	1,200	12,000	60
9/23/09	1,200	8,400	72
12/18/09	5,300	40,000	100
3/4/10	1,400	11,000	ND<0.5
6/9/10	12,000	16,000	44

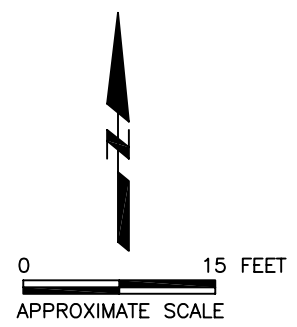
**EXPLANATION:**

- MW-9S Groundwater monitoring well (single completion; well cluster)
- MW-7S/7D Groundwater monitoring well (dual nested)
- MW-2S/SM/2D Groundwater monitoring well (triple nested)
- MW-2 Abandoned groundwater monitoring well
- TB-6 Grab groundwater sample location
- SB-4 Temporary soil boring location
- B-2 Sonic boring / grab groundwater
- OXY-1D Air injection well
- SG-1 Soil-gas monitoring probe
- OXY-1D Used for air injection

MW-1			
Date	TPHd	TPHg	Benzene
5/6/09	54	380	ND<0.5
5/6/09	ND<50	380	ND<0.5
6/9/09	470	250	ND<0.5
7/14/09	ND<50	97	ND<0.5
9/22/09	550	310	ND<0.5
12/17/09	230	ND<50	ND<0.5
3/2/10	150	ND<50	ND<0.5
6/9/10	ND<50	ND<50	ND<0.5

Location ID  
 Compound  
 Concentrations in µg/L

**470** Bold Values Represent Laboratory Detections  
 TPHd Total Petroleum Hydrocarbons as Diesel  
 TPHg Total Petroleum Hydrocarbons as Gasoline  
 µg/L Micrograms per Liter  
 ND Not Detected Above the Given Laboratory Reporting Limit



HANSON AGGREGATES, SUNOL, CALIFORNIA

**TPHd/g AND BENZENE IN GROUNDWATER IN VICINITY OF AIR INJECTION SYSTEM SINCE START-UP**

FIGURE **3**

ARCADIS

**Appendix A**

Historical Groundwater Elevation and  
Analytical Data

**Table A-1  
Historical Groundwater Elevation Data  
Lehigh Hanson Sunol Facility Asphalt Plant  
7999 Athenour Way, Sunol, California**

<b>Well</b>	<b>Top of Casing Elevation (feet MSL)</b>	<b>Date Measured</b>	<b>Depth to Water (feet TOC)</b>	<b>GW Elevation (feet MSL)</b>	<b>Product Observation or Thickness (feet)</b>
MW-1	256.51	6/23/98	1.32	255.19	ND
MW-1		1/5/99	2.28	254.23	ND
MW-1		3/29/99	1.88	254.63	ND
MW-1		6/10/99	3.35	253.16	ND
MW-1		9/17/99	3.66	252.85	ND
MW-1		12/27/99	2.94	253.57	ND
MW-1		3/22/00	2.72	253.79	Odor
MW-1		6/30/00	4.01	252.50	Slight Odor
MW-1		9/14/00	5.11	251.40	Slight Odor
MW-1		12/20/00	4.95	251.56	ND
MW-1		3/22/01	2.28	254.23	ND
MW-1		6/27/01	3.60	252.91	ND
MW-1		9/21/01	6.50	250.01	ND
MW-1		12/27/01	1.29	255.22	ND
MW-1		3/29/02	2.91	253.60	ND
MW-1		6/13/02	3.95	252.56	ND
MW-1		9/27/02	5.18	251.33	ND
MW-1		12/3/02	3.90	252.61	ND
MW-1		3/31/03	1.40	255.11	ND
MW-1		6/27/03	2.65	253.86	ND
MW-1		9/19/03	4.67	251.84	ND
MW-1		12/22/03	4.60	251.91	ND
MW-1	258.68	1/17/05	3.41	255.27	ND
MW-1		5/4/05	1.20	257.48	ND
MW-1		8/12/05	4.52	254.16	ND
MW-1		12/12/05	6.44	252.24	ND
MW-1		3/2/06	0.71	257.97	ND
MW-1		6/12/06	2.47	256.21	ND
MW-1		9/5/06	6.13	252.55	ND
MW-1		12/4/06	5.42	253.26	ND
MW-1		2/26/07	2.46	256.22	ND
MW-1		6/11/07	4.10	254.58	ND
MW-1		9/11/07	5.48	253.20	ND
MW-1		12/10/07	5.35	253.33	ND
MW-1		3/10/08	1.90	256.78	ND
MW-1		6/9/08	3.26	255.42	ND
MW-1		9/8/08	4.49	254.19	ND
MW-1		12/8/08	5.90	252.78	ND
MW-1		3/9/09	2.47	256.21	ND
MW-1		5/6/09	3.39	255.29	ND
MW-1		5/6/09	3.39	255.29	ND
MW-1		6/9/09	3.50	255.18	ND

**Table A-1**  
**Historical Groundwater Elevation Data**  
**Lehigh Hanson Sunol Facility Asphalt Plant**  
**7999 Athenour Way, Sunol, California**

Well	Top of Casing Elevation (feet MSL)	Date Measured	Depth to Water (feet TOC)	GW Elevation (feet MSL)	Product Observation or Thickness (feet)
MW-1		7/14/09	4.74	253.94	ND
MW-1		9/21/09	4.15	254.53	ND
MW-1		12/17/09	4.34	254.34	ND
MW-1		3/2/10	1.83	256.85	ND
MW-1		6/9/10	1.67	257.01	ND
MW-2	256.7	6/23/98	1.72	254.98	0.005
MW-2		1/5/99	2.69	254.01	4.00
MW-2		3/29/99	2.50	254.20	ND
MW-2		6/10/99	4.00	252.70	Sheen
MW-2		9/17/99	4.54	252.16	0.50
MW-2		12/27/99	3.85	252.85	0.13
MW-2		3/22/00	3.20	253.50	0.03
MW-2		6/30/00	4.62	252.08	0.02
MW-2		9/14/00	5.95	250.75	>0.01
MW-2		12/20/00	5.65	251.05	0.07
MW-2		3/22/01	3.21	253.49	0.10
MW-2		6/27/01	3.31	253.39	0.06
MW-2		9/21/01	7.08	249.62	0.34
MW-2		12/27/01	2.18	254.52	0.26
MW-2		3/29/02	3.40	253.30	0.90
MW-2		6/13/02	4.35	252.35	0.08
MW-2		9/27/02	5.54	251.16	ND
MW-2		12/3/02	4.30	252.40	ND
MW-2		3/31/03	1.78	254.92	ND
MW-2		6/27/03	3.10	253.60	ND
MW-2		9/19/03	5.02	251.68	ND
MW-2		1/5/05	Well abandoned		
MW-2S	258.84	1/17/05	4.25	254.59	ND
MW-2S		5/4/05	1.98	256.86	ND
MW-2S		8/12/05	5.46	253.38	ND
MW-2S		12/12/05	7.38	251.46	ND
MW-2S		3/2/06	2.24	256.60	ND
MW-2S		6/12/06	3.08	255.76	ND
MW-2S		9/5/06	7.01	251.83	ND
MW-2S		12/4/06	6.40	252.44	ND
MW-2S		2/26/07	3.52	255.32	ND
MW-2S		6/11/07	4.93	253.91	ND
MW-2S		9/11/07	6.45	252.39	ND
MW-2S		12/10/07	6.55	252.29	ND
MW-2S		3/10/08	2.82	256.02	ND

**Table A-1  
Historical Groundwater Elevation Data  
Lehigh Hanson Sunol Facility Asphalt Plant  
7999 Athenour Way, Sunol, California**

<b>Well</b>	<b>Top of Casing Elevation (feet MSL)</b>	<b>Date Measured</b>	<b>Depth to Water (feet TOC)</b>	<b>GW Elevation (feet MSL)</b>	<b>Product Observation or Thickness (feet)</b>
MW-2S		6/9/08	4.03	254.81	ND
MW-2S		9/8/08	5.42	253.42	ND
MW-2S		12/8/08	6.95	251.89	ND
MW-2S		3/9/09	3.40	255.44	ND
MW-2S		6/10/09	4.30	254.54	ND
MW-2S		9/21/09	4.90	253.94	ND
MW-2S		3/2/10	2.13	256.71	ND
MW-2M	258.99	1/17/05	4.68	254.31	ND
MW-2M		5/4/05	2.32	256.67	ND
MW-2M		8/12/05	5.77	253.22	ND
MW-2M		12/12/05	7.78	251.21	ND
MW-2M		3/2/06	2.10	256.89	ND
MW-2M		6/12/06	3.39	255.60	ND
MW-2M		9/5/06	7.36	251.63	ND
MW-2M		12/4/06	6.89	252.10	ND
MW-2M		2/26/07	3.79	255.20	ND
MW-2M		6/11/07	5.30	253.69	ND
MW-2M		9/11/07	6.88	252.11	ND
MW-2M		12/10/07	7.04	251.95	ND
MW-2M		3/10/08	3.15	255.84	ND
MW-2M		6/9/08	4.39	254.60	ND
MW-2M		9/8/08	5.85	253.14	ND
MW-2M		12/8/08	7.35	251.64	ND
MW-2M		3/9/09	3.68	255.31	ND
MW-2M		6/10/09	4.67	254.32	ND
MW-2M		9/21/09	5.22	253.77	ND
MW-2M		3/2/10	2.40	256.59	ND
MW-2D	258.91	1/17/05	4.75	254.16	ND
MW-2D		5/4/05	2.38	256.53	ND
MW-2D		8/12/05	5.90	253.01	ND
MW-2D		12/12/05	7.85	251.06	ND
MW-2D		3/2/06	2.16	256.75	ND
MW-2D		6/12/06	3.48	255.43	ND
MW-2D		9/5/06	7.44	251.47	ND
MW-2D		12/4/06	6.94	251.97	ND
MW-2D		2/26/07	3.89	255.02	ND
MW-2D		6/11/07	5.45	253.46	ND
MW-2D		9/11/07	7.00	251.91	ND
MW-2D		12/10/07	7.23	251.68	ND
MW-2D		3/10/08	3.22	255.69	ND

**Table A-1  
Historical Groundwater Elevation Data  
Lehigh Hanson Sunol Facility Asphalt Plant  
7999 Athenour Way, Sunol, California**

Well	Top of Casing Elevation (feet MSL)	Date Measured	Depth to Water (feet TOC)	GW Elevation (feet MSL)	Product Observation or Thickness (feet)
MW-2D		6/9/08	4.46	254.45	ND
MW-2D		9/8/08	5.94	252.97	ND
MW-2D		12/8/08	7.60	251.31	ND
MW-2D		3/9/09	3.80	255.11	ND
MW-2D		6/10/09	4.85	254.06	ND
MW-2D		9/21/09	5.42	253.49	ND
MW-2D		3/2/10	2.60	256.31	ND
MW-3	256.72	6/23/98	2.66	254.06	ND
MW-3		1/5/99	4.47	252.25	Slight Odor
MW-3		3/29/99	3.96	252.76	Sheen
MW-3		6/10/99	5.54	251.18	ND
MW-3		9/17/99	6.18	250.54	Sheen
MW-3		12/27/99	5.52	251.20	Odor
MW-3		3/22/00	4.61	252.11	Odor
MW-3		6/30/00	6.35	250.37	Very Slight Odor
MW-3		9/14/00	7.30	249.42	Very Slight Odor
MW-3		12/20/00	7.29	249.43	ND
MW-3		3/22/01	4.73	251.99	ND
MW-3		6/27/01	-	-	-
MW-3		9/21/01	7.89	248.83	ND
MW-3		12/27/01	3.77	252.95	ND
MW-3		3/29/02	5.12	251.60	ND
MW-3		6/13/02	6.52	250.20	ND
MW-3		9/27/02	7.28	249.44	ND
MW-3		12/3/02	6.40	250.32	ND
MW-3		3/31/03	4.01	252.71	ND
MW-3		6/27/03	5.13	251.59	ND
MW-3		9/19/03	5.13	251.59	ND
MW-3		12/22/03	7.20	249.52	ND
MW-3	259.08	1/17/05	5.81	253.27	ND
MW-3		5/4/05	3.50	255.58	ND
MW-3		8/12/05	6.01	253.07	ND
MW-3		12/12/05	8.45	250.63	ND
MW-3		3/2/06	3.42	255.66	ND
MW-3		6/12/06	4.15	254.93	ND
MW-3		9/5/06	7.97	251.11	ND
MW-3		12/4/06	7.30	251.78	ND
MW-3		2/26/07	4.62	254.46	ND
MW-3		6/11/07	6.11	252.97	ND
MW-3		9/11/07	7.47	251.61	ND
MW-3		12/10/07	7.95	251.13	ND



**Table A-1  
Historical Groundwater Elevation Data  
Lehigh Hanson Sunol Facility Asphalt Plant  
7999 Athenour Way, Sunol, California**

<b>Well</b>	<b>Top of Casing Elevation (feet MSL)</b>	<b>Date Measured</b>	<b>Depth to Water (feet TOC)</b>	<b>GW Elevation (feet MSL)</b>	<b>Product Observation or Thickness (feet)</b>
MW-3		3/10/08	3.89	255.19	ND
MW-3		6/9/08	-	-	-
MW-3		9/8/08	6.33	252.75	ND
MW-3		12/8/08	8.00	251.08	ND
MW-3		3/9/09	4.42	254.66	ND
MW-3		6/9/09	5.55	253.53	ND
MW-3		9/21/09	5.98	253.10	ND
MW-3		3/2/10	3.24	255.84	ND
MW-4S	259.14	1/17/05	4.62	254.52	ND
MW-4S		5/4/05	3.73	255.41	ND
MW-4S		8/12/05	3.45	255.69	ND
MW-4S		12/12/05	5.48	253.66	ND
MW-4S		3/2/06	3.10	256.04	ND
MW-4S		6/12/06	4.10	255.04	ND
MW-4S		9/5/06	3.90	255.24	ND
MW-4S		12/4/06	4.05	255.09	ND
MW-4S		2/26/07	3.40	255.74	ND
MW-4S		6/11/07	4.75	254.39	ND
MW-4S		9/11/07	4.77	254.37	ND
MW-4S		12/10/07	5.35	253.79	ND
MW-4S		3/10/08	3.20	255.94	ND
MW-4S		6/9/08	4.11	255.03	ND
MW-4S		9/8/08	4.60	254.54	ND
MW-4S		12/8/08	5.25	253.89	ND
MW-4S		3/9/09	4.10	255.04	ND
MW-4S		6/9/09	4.80	254.34	ND
MW-4S		9/21/09	4.98	254.16	ND
MW-4S		3/2/10	3.14	256.00	Slight Gasoline Odor
MW-4D	259.22	1/17/05	5.96	253.26	ND
MW-4D		5/4/05	3.93	255.29	ND
MW-4D		8/12/05	5.60	253.62	ND
MW-4D		12/12/05	8.50	250.72	ND
MW-4D		3/2/06	3.63	255.59	ND
MW-4D		6/12/06	4.51	254.71	ND
MW-4D		9/5/06	8.18	251.04	ND
MW-4D		12/4/06	7.95	251.27	ND
MW-4D		2/26/07	4.49	254.73	ND
MW-4D		6/11/07	6.25	252.97	ND
MW-4D		9/11/07	7.54	251.68	ND
MW-4D		12/10/07	8.16	251.06	ND

**Table A-1  
Historical Groundwater Elevation Data  
Lehigh Hanson Sunol Facility Asphalt Plant  
7999 Athenour Way, Sunol, California**

Well	Top of Casing Elevation (feet MSL)	Date Measured	Depth to Water (feet TOC)	GW Elevation (feet MSL)	Product Observation or Thickness (feet)
MW-4D		3/10/08	4.05	255.17	ND
MW-4D		6/9/08	5.09	254.13	ND
MW-4D		9/8/08	6.30	252.92	ND
MW-4D		12/8/08	8.16	251.06	ND
MW-4D		3/9/09	4.60	254.62	ND
MW-4D		6/9/09	5.60	253.62	ND
MW-4D		9/21/09	6.15	253.07	ND
MW-4D		3/3/2010 <sup>(1)</sup>	3.41	255.81	Gasoline Odor
MW-5S	259.43	1/17/05	4.57	254.86	ND
MW-5S		5/4/05	2.50	256.93	ND
MW-5S		8/12/05	5.30	254.13	ND
MW-5S		12/12/05	7.68	251.75	ND
MW-5S		3/2/06	1.42	258.01	ND
MW-5S		6/12/06	3.73	255.70	ND
MW-5S		9/5/06	7.02	252.41	ND
MW-5S		12/4/06	6.31	253.12	ND
MW-5S		2/26/07	3.06	256.37	ND
MW-5S		6/11/07	5.10	254.33	ND
MW-5S		9/11/07	6.49	252.94	ND
MW-5S		12/10/07	6.84	252.59	ND
MW-5S		3/10/08	3.34	256.09	ND
MW-5S		6/9/08	4.44	254.99	ND
MW-5S		9/8/08	5.44	253.99	ND
MW-5S		12/8/08	7.03	252.40	ND
MW-5S		3/9/09	3.50	255.93	ND
MW-5S		6/9/09	4.83	254.60	ND
MW-5S		9/21/09	5.27	254.16	ND
MW-5S		3/2/10	2.50	256.93	ND
MW-5D	259.40	1/17/05	5.15	254.25	ND
MW-5D		5/4/05	2.75	256.65	ND
MW-5D		8/12/05	5.60	253.80	ND
MW-5D		12/12/05	7.92	251.48	ND
MW-5D		3/2/06	1.98	257.42	ND
MW-5D		6/12/06	3.64	255.76	ND
MW-5D		9/5/06	7.30	252.10	ND
MW-5D		12/4/06	6.69	252.71	ND
MW-5D		2/26/07	3.56	255.84	ND
MW-5D		6/11/07	5.39	254.01	ND
MW-5D		9/11/07	6.76	252.64	ND
MW-5D		12/10/07	7.19	252.21	ND

**Table A-1  
Historical Groundwater Elevation Data  
Lehigh Hanson Sunol Facility Asphalt Plant  
7999 Athenour Way, Sunol, California**

<b>Well</b>	<b>Top of Casing Elevation (feet MSL)</b>	<b>Date Measured</b>	<b>Depth to Water (feet TOC)</b>	<b>GW Elevation (feet MSL)</b>	<b>Product Observation or Thickness (feet)</b>
MW-5D		3/10/08	3.50	255.90	ND
MW-5D		6/9/08	4.59	254.81	ND
MW-5D		9/8/08	5.69	253.71	ND
MW-5D		12/8/08	7.30	252.10	ND
MW-5D		3/9/09	3.80	255.60	ND
MW-5D		6/9/09	4.95	254.45	ND
MW-5D		9/21/09	5.40	254.00	ND
MW-5D		3/2/10	2.79	256.61	ND
MW-6S	258.75	1/17/05	4.30	254.45	ND
MW-6S		5/4/05	1.96	256.79	ND
MW-6S		8/12/05	5.17	253.58	ND
MW-6S		12/12/05	7.48	251.27	ND
MW-6S		3/2/06	1.95	256.80	ND
MW-6S		6/12/06	3.10	255.65	ND
MW-6S		9/5/06	6.94	251.81	ND
MW-6S		12/4/06	6.30	252.45	ND
MW-6S		2/26/07	3.44	255.31	ND
MW-6S		6/11/07	4.80	253.95	ND
MW-6S		9/11/07	6.32	252.43	ND
MW-6S		12/10/07	6.52	252.23	ND
MW-6S		3/10/08	2.89	255.86	ND
MW-6S		6/9/08	4.00	254.75	ND
MW-6S		9/8/08	5.40	253.35	ND
MW-6S		12/8/08	6.95	251.80	ND
MW-6S		3/9/09	3.30	255.45	ND
MW-6S		6/10/09	4.40	254.35	ND
MW-6S		9/21/09	4.96	253.79	ND
MW-6S		3/2/10	2.10	256.65	ND
MW-6D	259.27	1/17/05	5.17	254.10	ND
MW-6D		5/4/05	2.80	256.47	ND
MW-6D		8/12/05	6.30	252.97	ND
MW-6D		12/12/05	8.32	250.95	ND
MW-6D		3/2/06	2.70	256.57	ND
MW-6D		6/12/06	4.05	255.22	ND
MW-6D		9/5/06	7.90	251.37	ND
MW-6D		12/4/06	7.37	251.90	ND
MW-6D		2/26/07	4.35	254.92	ND
MW-6D		6/11/07	5.93	253.34	ND
MW-6D		9/11/07	7.46	251.81	Odor
MW-6D		12/10/07	7.80	251.47	ND

**Table A-1  
Historical Groundwater Elevation Data  
Lehigh Hanson Sunol Facility Asphalt Plant  
7999 Athenour Way, Sunol, California**

Well	Top of Casing Elevation (feet MSL)	Date Measured	Depth to Water (feet TOC)	GW Elevation (feet MSL)	Product Observation or Thickness (feet)
MW-6D		3/10/08	3.75	255.52	ND
MW-6D		6/9/08	4.95	254.32	ND
MW-6D		9/8/08	6.44	252.83	ND
MW-6D		12/8/08	8.00	251.27	ND
MW-6D		3/9/09	4.30	254.97	ND
MW-6D		6/10/09	5.30	253.97	ND
MW-6D		9/21/09	6.01	253.26	ND
MW-6D		3/2/10	3.13	256.14	Gasoline Odor
MW-7S	258.82	1/17/05	3.42	255.40	ND
MW-7S		5/4/05	1.44	257.38	ND
MW-7S		8/12/05	4.80	254.02	ND
MW-7S		12/12/05	6.64	252.18	ND
MW-7S		3/2/06	0.95	257.87	ND
MW-7S	258.84	6/12/06	2.55	256.29	ND
MW-7S		9/5/06	6.30	252.54	ND
MW-7S		12/4/06	5.60	253.24	ND
MW-7S		2/26/07	2.61	256.23	ND
MW-7S		6/11/07	4.32	254.52	ND
MW-7S		9/11/07	5.76	253.08	ND
MW-7S		12/10/07	5.62	253.22	ND
MW-7S		3/10/08	2.15	256.69	ND
MW-7S		6/9/08	3.51	255.33	ND
MW-7S		9/8/08	4.80	254.04	ND
MW-7S		12/8/08	6.20	252.64	ND
MW-7S		3/9/09	2.75	256.09	ND
MW-7S		5/6/09	3.32	255.52	ND
MW-7S		6/8/09	2.90	255.94	ND
MW-7S		7/14/09	4.83	254.01	ND
MW-7S		9/21/09	4.67	254.17	ND
MW-7S		12/17/09	5.32	253.52	ND
MW-7S		3/2/10	1.95	256.89	Gasoline Odor
MW-7S		6/9/10	1.82	257.02	ND
MW-7D	258.07	1/17/05	5.50	252.57	ND
MW-7D		5/4/05	1.45	256.62	ND
MW-7D		8/12/05	4.70	253.37	ND
MW-7D		12/12/05	7.40	250.67	ND
MW-7D		3/2/06	5.10	252.97	Gasoline odor
MW-7D	258.80	6/12/06	3.66	255.14	Gasoline odor
MW-7D		9/5/06	7.19	251.61	ND
MW-7D		12/4/06	6.64	252.16	ND

**Table A-1  
Historical Groundwater Elevation Data  
Lehigh Hanson Sunol Facility Asphalt Plant  
7999 Athenour Way, Sunol, California**

Well	Top of Casing Elevation (feet MSL)	Date Measured	Depth to Water (feet TOC)	GW Elevation (feet MSL)	Product Observation or Thickness (feet)
MW-7D		2/26/07	3.65	255.15	ND
MW-7D		6/11/07	4.95	253.85	ND
MW-7D		9/11/07	6.59	252.21	Odor
MW-7D		12/10/07	6.38	252.42	ND
MW-7D		3/10/08	2.21	256.59	ND
MW-7D		6/9/08	3.70	255.10	ND
MW-7D		9/8/08	5.18	253.62	ND
MW-7D		12/8/08	6.70	252.10	Odor
MW-7D		3/9/09	2.95	255.85	Odor
MW-7D		5/6/09	4.53	254.27	ND
MW-7D		6/8/09	4.15	254.65	ND
MW-7D		7/15/09	5.75	253.05	ND
MW-7D		9/21/09	6.41	252.39	ND
MW-7D		12/17/09	4.80	254.00	ND
MW-7D		3/4/2010 <sup>(2)</sup>	1.23	257.57	Strong Gasoline Odor
MW-7D		6/9/10	3.03	255.77	ND
MW-8	258.84	1/17/05	3.45	255.39	ND
MW-8		5/4/05	1.25	257.59	ND
MW-8		8/12/05	4.92	253.92	ND
MW-8		12/12/05	6.67	252.17	ND
MW-8		3/2/06	0.78	258.06	ND
MW-8		6/12/06	2.44	256.40	ND
MW-8		9/5/06	6.45	252.39	ND
MW-8		12/4/06	5.80	253.04	ND
MW-8		2/26/07	2.68	256.16	ND
MW-8		6/11/07	4.32	254.52	ND
MW-8		9/11/07	5.80	253.04	ND
MW-8		12/10/07	5.54	253.30	ND
MW-8		3/10/08	1.89	256.95	ND
MW-8		6/9/08	3.35	255.49	ND
MW-8		9/8/08	4.75	254.09	ND
MW-8		12/8/08	6.28	252.56	ND
MW-8		3/9/09	2.50	256.34	ND
MW-8		5/6/09	2.58	256.26	ND
MW-8		6/8/09	3.35	255.49	ND
MW-8		7/14/09	4.40	254.44	ND
MW-8		7/14/09	4.40	254.44	ND
MW-8		9/21/09	3.98	254.86	ND
MW-8		12/17/09	4.32	254.52	ND
MW-8		3/2/10	1.19	257.65	ND
MW-8		6/9/10	1.12	257.72	ND

**Table A-1  
Historical Groundwater Elevation Data  
Lehigh Hanson Sunol Facility Asphalt Plant  
7999 Athenour Way, Sunol, California**

<b>Well</b>	<b>Top of Casing Elevation (feet MSL)</b>	<b>Date Measured</b>	<b>Depth to Water (feet TOC)</b>	<b>GW Elevation (feet MSL)</b>	<b>Product Observation or Thickness (feet)</b>
MW-9S	258.41	6/12/06	2.14	256.27	ND
MW-9S		9/5/06	5.92	252.49	ND
MW-9S		12/4/06	5.21	253.20	ND
MW-9S		2/26/07	3.28	255.13	ND
MW-9S		6/11/07	3.70	254.71	ND
MW-9S		9/11/07	5.26	253.15	ND
MW-9S		12/10/07	5.06	253.35	ND
MW-9S		3/10/08	1.55	256.86	ND
MW-9S		6/9/08	3.00	255.41	ND
MW-9S		9/8/08	4.29	254.12	ND
MW-9S		12/8/08	5.65	252.76	Odor
MW-9S		3/9/09	2.25	256.16	Odor
MW-9S		5/6/09	2.48	255.93	ND
MW-9S		6/8/09	4.10	254.31	ND
MW-9S		6/8/09	4.10	254.31	ND
MW-9S		7/15/09	4.35	254.06	ND
MW-9S		9/21/09	4.52	253.89	ND
MW-9S		12/17/09	4.60	253.81	ND
MW-9S		3/4/2010 <sup>(2)</sup>	0.50	257.91	ND
MW-9S		6/9/10	1.45	256.96	ND
MW-9D	258.86	6/12/06	3.16	255.70	ND
MW-9D		9/5/06	7.12	251.74	ND
MW-9D		12/4/06	6.58	252.28	ND
MW-9D		2/26/07	3.52	255.34	Sheen
MW-9D		6/11/07	5.19	253.67	Sheen
MW-9D		9/11/07	6.67	252.19	Odor
MW-9D		12/10/07	6.71	252.15	ND
MW-9D		3/10/08	2.75	256.11	ND
MW-9D		6/9/08	4.17	254.69	ND
MW-9D		9/8/08	5.60	253.26	ND
MW-9D		12/8/08	7.10	251.76	Odor
MW-9D		3/9/09	3.46	255.40	Odor
MW-9D		5/6/09	3.88	254.98	ND
MW-9D		6/8/09	3.00	255.86	ND
MW-9D		7/15/09	6.14	252.72	ND
MW-9D		9/21/09	6.40	252.46	ND
MW-9D		12/17/09	6.90	251.96	ND
MW-9D		3/2/10	2.83	256.03	ND
MW-9D		6/9/10	3.95	254.91	ND
MW-9LF	258.94	6/12/06	3.46	255.48	ND

**Table A-1  
Historical Groundwater Elevation Data  
Lehigh Hanson Sunol Facility Asphalt Plant  
7999 Athenour Way, Sunol, California**

<b>Well</b>	<b>Top of Casing Elevation (feet MSL)</b>	<b>Date Measured</b>	<b>Depth to Water (feet TOC)</b>	<b>GW Elevation (feet MSL)</b>	<b>Product Observation or Thickness (feet)</b>
MW-9LF		9/5/06	7.37	251.57	ND
MW-9LF		12/4/06	6.85	252.09	ND
MW-9LF		2/26/07	3.79	255.15	ND
MW-9LF		6/11/07	8.94	250.00	ND
MW-9LF		9/11/07	7.00	251.94	ND
MW-9LF		12/10/07	7.04	251.90	ND
MW-9LF		3/10/08	3.00	255.94	ND
MW-9LF		6/9/08	4.38	254.56	ND
MW-9LF		9/8/08	5.83	253.11	ND
MW-9LF		12/8/08	7.36	251.58	ND
MW-9LF		3/9/09	3.60	255.34	ND
MW-9LF		5/6/09	3.71	255.23	ND
MW-9LF		6/8/09	4.97	253.97	ND
MW-9LF		6/8/09	4.85	254.09	ND
MW-9LF		7/15/09	5.83	253.11	ND
MW-9LF		9/21/09	6.05	252.89	ND
MW-9LF		12/17/09	6.46	252.48	ND
MW-9LF		3/2/10	2.74	256.20	ND
MW-9LF		6/9/10	3.49	255.45	ND
MW-10S	260.67	6/12/06	5.00	255.67	ND
MW-10S		9/5/06	5.62	255.05	ND
MW-10S		12/4/06	5.04	255.63	ND
MW-10S		2/26/07	3.88	256.79	ND
MW-10S		6/11/07	4.84	255.83	ND
MW-10S		9/11/07	4.94	255.73	ND
MW-10S		12/10/07	4.90	255.77	ND
MW-10S		3/10/08	4.10	256.57	ND
MW-10S		6/9/08	4.80	255.87	ND
MW-10S		9/8/08	4.89	255.78	ND
MW-10S		12/8/08	5.21	255.46	ND
MW-10S		3/9/09	4.97	255.70	ND
MW-10S		6/9/09	5.50	255.17	ND
MW-10S		9/21/09	5.52	255.15	ND
MW-10S		3/2/10	4.21	256.46	ND
MW-10D	260.64	6/12/06	5.42	255.22	ND
MW-10D		9/5/06	8.92	251.72	ND
MW-10D		12/4/06	8.18	252.46	ND
MW-10D		2/26/07	5.40	255.24	ND
MW-10D		6/11/07	7.13	253.51	ND
MW-10D		9/11/07	8.50	252.14	ND

**Table A-1  
Historical Groundwater Elevation Data  
Lehigh Hanson Sunol Facility Asphalt Plant  
7999 Athenour Way, Sunol, California**

Well	Top of Casing Elevation (feet MSL)	Date Measured	Depth to Water (feet TOC)	GW Elevation (feet MSL)	Product Observation or Thickness (feet)
MW-10D		12/10/07	8.81	251.83	ND
MW-10D		3/10/08	4.99	255.65	ND
MW-10D		6/9/08	6.17	254.47	ND
MW-10D		9/8/08	7.45	253.19	ND
MW-10D		12/8/08	8.88	251.76	Odor
MW-10D		3/9/09	5.45	255.19	Odor
MW-10D		6/10/09	6.70	253.94	ND
MW-10D		9/21/09	7.09	253.55	ND
MW-10D		3/2/10	4.35	256.29	Gasoline Odor
MW-10LF	260.58	6/12/06	5.99	254.59	ND
MW-10LF		9/5/06	9.65	250.93	ND
MW-10LF		12/4/06	9.02	251.56	ND
MW-10LF		2/26/07	6.23	254.35	ND
MW-10LF		6/11/07	7.86	252.72	ND
MW-10LF		9/11/07	9.24	251.34	ND
MW-10LF		12/10/07	9.73	250.85	ND
MW-10LF		3/10/08	5.65	254.93	ND
MW-10LF		6/9/08	6.71	253.87	ND
MW-10LF		9/8/08	8.08	252.50	ND
MW-10LF		12/8/08	9.75	250.83	Odor
MW-10LF		3/9/09	6.20	254.38	Odor
MW-10LF		6/10/09	7.15	253.43	ND
MW-10LF		9/21/09	7.77	252.81	ND
MW-10LF		3/2/10	4.94	255.64	Gasoline Odor
MW-11S	258.96	6/12/06	3.69	255.27	ND
MW-11S		9/5/06	7.69	251.27	ND
MW-11S		12/4/06	7.28	251.68	ND
MW-11S		2/26/07	4.20	254.76	ND
MW-11S		6/11/07	5.72	253.24	ND
MW-11S		9/11/07	7.10	251.86	ND
MW-11S		12/10/07	7.27	251.69	ND
MW-11S		3/10/08	3.31	255.65	ND
MW-11S		6/9/08	4.50	254.46	ND
MW-11S		9/8/08	5.80	253.16	ND
MW-11S		12/8/08	7.50	251.46	ND
MW-11S		3/9/09	3.76	255.20	ND
MW-11S		6/9/09	4.75	254.21	ND
MW-11S		9/21/09	5.29	253.67	ND
MW-11S		3/2/10	2.54	256.42	ND
MW-11D	258.98	6/12/06	3.70	255.28	ND



**Table A-1  
Historical Groundwater Elevation Data  
Lehigh Hanson Sunol Facility Asphalt Plant  
7999 Athenour Way, Sunol, California**

<b>Well</b>	<b>Top of Casing Elevation (feet MSL)</b>	<b>Date Measured</b>	<b>Depth to Water (feet TOC)</b>	<b>GW Elevation (feet MSL)</b>	<b>Product Observation or Thickness (feet)</b>
MW-11D		9/5/06	8.50	250.48	ND
MW-11D		12/4/06	7.65	251.33	ND
MW-11D		2/26/07	4.48	254.50	Sheen
MW-11D		6/11/07	6.14	252.84	Sheen
MW-11D		9/11/07	8.08	250.90	Sheen
MW-11D		12/10/07	7.75	251.23	ND
MW-11D		3/10/08	3.56	255.42	ND
MW-11D		6/9/08	4.84	254.14	ND
MW-11D		9/8/08	6.35	252.63	ND
MW-11D		12/8/08	8.35	250.63	ND
MW-11D		3/9/09	4.26	254.72	ND
MW-11D		6/10/09	4.92	254.06	ND
MW-11D		9/21/09	5.59	253.39	ND
MW-11D		3/2/10	2.88	256.10	ND
MW-11LF	259.01	6/12/06	3.90	255.11	ND
MW-11LF		9/5/06	7.84	251.17	ND
MW-11LF		12/4/06	7.75	251.26	ND
MW-11LF		2/26/07	4.69	254.32	ND
MW-11LF		6/11/07	6.15	252.86	ND
MW-11LF		9/11/07	7.70	251.31	ND
MW-11LF		12/10/07	7.92	251.09	ND
MW-11LF		3/10/08	3.65	255.36	ND
MW-11LF		6/9/08	4.89	254.12	ND
MW-11LF		9/8/08	6.49	252.52	ND
MW-11LF		12/8/08	8.30	250.71	ND
MW-11LF		3/9/09	4.25	254.76	ND
MW-11LF		6/9/09	5.13	253.88	ND
MW-11LF		9/21/09	5.84	253.17	ND
MW-11LF		3/2/10	2.82	256.19	ND
MW-12S	262.69	6/12/06	5.77	256.92	ND
MW-12S		9/5/06	10.51	252.18	ND
MW-12S		12/4/06	10.00	252.69	ND
MW-12S		2/26/07	6.45	256.24	ND
MW-12S		6/11/07	7.95	254.74	ND
MW-12S		9/11/07	9.54	253.15	ND
MW-12S		12/10/07	8.95	253.74	ND
MW-12S		3/10/08	4.90	257.79	ND
MW-12S		6/9/08	6.62	256.07	ND
MW-12S		9/8/08	8.27	254.42	ND
MW-12S		12/8/08	10.09	252.60	ND

**Table A-1**  
**Historical Groundwater Elevation Data**  
**Lehigh Hanson Sunol Facility Asphalt Plant**  
**7999 Athenour Way, Sunol, California**

Well	Top of Casing Elevation (feet MSL)	Date Measured	Depth to Water (feet TOC)	GW Elevation (feet MSL)	Product Observation or Thickness (feet)
MW-12S		3/9/09	5.84	256.85	ND
MW-12S		6/9/09	7.00	255.69	ND
MW-12S		9/21/09	7.35	255.34	ND
MW-12S		3/2/10	4.20	258.49	ND
MW-12D	262.70	6/12/06	5.69	257.01	ND
MW-12D		9/5/06	10.40	252.30	ND
MW-12D		12/4/06	9.94	252.76	ND
MW-12D		2/26/07	6.47	256.23	ND
MW-12D		6/11/07	7.96	254.74	ND
MW-12D		9/11/07	9.45	253.25	ND
MW-12D		12/10/07	8.74	253.96	ND
MW-12D		3/10/08	4.65	258.05	ND
MW-12D		6/9/08	6.42	256.28	ND
MW-12D		9/8/08	8.15	254.55	ND
MW-12D		12/8/08	10.00	252.70	ND
MW-12D		3/9/09	5.62	257.08	ND
MW-12D		6/9/09	6.80	255.90	ND
MW-12D		9/21/09	7.02	255.68	ND
MW-12D		3/2/10	3.75	258.95	ND
MW-12LF	262.90	6/12/06	5.92	256.98	ND
MW-12LF		9/5/06	10.69	252.21	ND
MW-12LF		12/4/06	10.25	252.65	ND
MW-12LF		2/26/07	6.65	256.25	ND
MW-12LF		6/11/07	8.10	254.80	ND
MW-12LF		9/11/07	9.71	253.19	ND
MW-12LF		12/10/07	9.02	253.88	ND
MW-12LF		3/10/08	4.85	258.05	ND
MW-12LF		6/9/08	6.65	256.25	ND
MW-12LF		9/8/08	8.32	254.58	ND
MW-12LF		12/8/08	10.25	252.65	ND
MW-12LF		3/9/09	5.82	257.08	ND
MW-12LF		6/9/09	7.05	255.85	ND
MW-12LF		9/21/09	7.22	255.68	ND
MW-12LF		3/2/10	3.89	259.01	ND

**Notes:**

feet MSL = feet relative to mean sea level  
feet TOC = feet below top of casing

GW = groundwater  
ND = not detected

(1) = Measured one day later than most wells included in this monitoring and sampling event

(2) = Measured two days later than the majority of wells included in this monitoring and sampling event

**Table A-2**  
**Historical Analytical Results of TPH and TPH-Related Compounds**  
**Lehigh Hanson Sunol Facility Asphalt Plant**  
**7999 Athenour Way, Sunol, California**

Well	Sample Date	Notes	TPHd (ug/l)	TPHg (ug/l)	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Xylenes (ug/l)	MTBE (ug/l)	TAME (ug/l)	TBA (ug/l)
MW-1	6/23/98		0.1	3,100	19	2.3	91	48	110	ND<2.0	ND<10
MW-1	10/1/98		0.1	2,300	3.1	4.2	5.0	15	ND<0.5	ND<2.0	ND<10
MW-1	1/5/99		350	ND<50	12	7.5	20	6.2	ND<5.0	ND<2.0	ND<10
MW-1	3/29/99		190	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.0	ND<10
MW-1	6/10/99		210	1,800	1.2	0.9	1.5	4.6	ND<0.5	ND<2.0	ND<10
MW-1	9/17/99		62	180	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.0	ND<10
MW-1	12/27/99		290	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.0	ND<10
MW-1	3/22/00		86	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.0	ND<10
MW-1	6/30/00		70	450	2.1	ND<0.5	2.1	1.4	7.6	ND<2.0	ND<10
MW-1	9/14/00		ND<50	850	5.4	ND<0.5	9.4	2.6	9.8	ND<2.0	ND<10
MW-1	12/20/00		ND<1,000	370	5.3	ND<1.0	2.7	ND<3.0	55	ND<2.0	ND<10
MW-1	3/22/01		ND<1,000	700	ND<1.0	ND<1.0	1.4	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-1	6/27/01		ND<1,000	170	ND<1.0	ND<1.0	1.2	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-1	9/21/01		ND<1,000	730	1.4	ND<1.0	7.6	1.2	ND<1.0	ND<2.0	ND<10
MW-1	12/27/01		1,000	500	15	ND<1.0	27	5.5	ND<1.0	ND<2.0	ND<10
MW-1	3/29/02		12,000	29,000	50	ND<25	960	290	ND<25	ND<2.0	ND<10
MW-1	6/13/02		ND<1,000	1,400	3.5	ND<1.0	42	7.9	ND<1.0	ND<2.0	ND<10
MW-1	9/27/02		1,400	760	ND<1.0	ND<1.0	4.3	1.1	ND<1.0	ND<2.0	ND<10
MW-1	12/3/02		ND<1,000	1,600	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-1	3/31/03		ND<1,000	620	1.2	ND<1.0	12	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-1	6/27/03		ND<1,000	0.61	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-1	9/19/03		ND<1,000	1.2	ND<1.0	ND<1.0	6.4	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-1	12/22/03		ND<1,000	0.49	ND<1.0	ND<1.0	3	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-1	1/17/05		ND<50	63	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<2.0	ND<10
MW-1	5/4/05		ND<50	1,200	ND<0.5	ND<0.5	8.5	1.2	ND<1.0	ND<2.0	ND<10
MW-1	8/12/05		ND<50	410	ND<0.5	ND<0.5	2.4	ND<0.5	ND<1.0	ND<2.0	ND<10
MW-1	12/13/05		ND<50	750	3.8	ND<0.5	4.2	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-1	3/3/06		ND<50	310	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-1	6/13/06		ND<50	96	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-1	9/6/06		ND<50	920	ND<0.5	ND<0.5	5.3	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-1	12/5/06		ND<50	1,200	1.4	ND<0.5	1.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-1	2/27/07		ND<500	430	1.1	ND<0.5	7.9	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-1	6/12/07		ND<500	370	0.9	ND<0.5	17	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-1	9/11/07		ND<500	270	0.8	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-1	12/11/07		ND<500	890	6.6	0.54	0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-1	1/22/08		440	460	4.6	0.52	1.3	ND<0.5	ND<0.5	-	-
MW-1	2/18/08		1,000	2,000	6.3	1.2	43	37.2	ND<0.5	-	-

**Table A-2**  
**Historical Analytical Results of TPH and TPH-Related Compounds**  
**Lehigh Hanson Sunol Facility Asphalt Plant**  
**7999 Athenour Way, Sunol, California**

Well	Sample Date	Notes	TPHd (ug/l)	TPHg (ug/l)	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Xylenes (ug/l)	MTBE (ug/l)	TAME (ug/l)	TBA (ug/l)
MW-1	3/11/08		ND<50	<b>660</b>	ND<0.5	ND<0.5	<b>4</b>	<b>4.9</b>	ND<1.0	ND<2.0	ND<10
MW-1	6/10/08		ND<50	<b>220</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-1	9/10/08		<b>210</b>	<b>130</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-1	12/9/08		ND<50	<b>160</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-1	3/9/09		ND<50	<b>100</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-1	5/6/09		<b>54</b>	<b>380</b>	ND<0.5	ND<0.5	<b>2.4</b>	<b>1.7</b>	ND<0.5	-	-
MW-1	5/6/09		ND<50	<b>380</b>	ND<0.5	ND<0.5	<b>2.4</b>	<b>1.8</b>	ND<0.5	-	-
MW-1	6/9/09		<b>470</b>	<b>250</b>	ND<0.5	ND<0.5	<b>2.0</b>	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-1	7/14/09		ND<50	<b>97</b>	<b>0.51</b>	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
MW-1	9/22/09		<b>550</b>	<b>310</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-1	12/17/09		<b>230</b>	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
MW-1	3/2/10		<b>150</b>	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
MW-1	6/9/10		ND<54	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
MW-2	6/23/98		<b>12,000</b>	<b>2,500</b>	<b>0.68</b>	ND<0.50	<b>1.2</b>	<b>0.57</b>	<b>14</b>	ND<2.0	ND<10
MW-2	10/1/98		<b>4,300</b>	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.0	ND<10
MW-2	1/5/99		<b>38,000</b>	ND<5,000	ND<50	ND<50	<b>51</b>	<b>190</b>	ND<500	ND<2.0	ND<10
MW-2	3/29/99		<b>580</b>	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.0	ND<10
MW-2	6/10/99		<b>4,500</b>	<b>24,000</b>	<b>38</b>	<b>27</b>	<b>41</b>	<b>98</b>	ND<0.5	ND<2.0	ND<10
MW-2	9/17/99		<b>24,000</b>	<b>1,400</b>	ND<0.5	ND<0.5	ND<0.5	ND<0.5	<b>27</b>	ND<2.0	ND<10
MW-2	12/27/99		<b>2,300</b>	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.0	ND<10
MW-2	3/22/00		<b>620</b>	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.0	ND<10
MW-2	6/30/00		<b>1,700</b>	<b>270</b>	ND<0.5	ND<0.5	ND<0.5	ND<0.5	<b>17</b>	ND<2.0	ND<10
MW-2	9/14/00		<b>5,800</b>	<b>130</b>	ND<0.5	ND<0.5	ND<0.5	<b>0.94</b>	<b>12</b>	ND<2.0	ND<10
MW-2	12/20/00		<b>19,000</b>	<b>1,700</b>	ND<50	ND<50	ND<50	ND<150	ND<250	ND<2.0	ND<10
MW-2	3/22/01		<b>610,000</b>	<b>3,300</b>	ND<1.0	ND<1.0	ND<1.0	ND<1.0	<b>9</b>	ND<2.0	ND<10
MW-2	6/27/01		<b>8,800</b>	<b>1,800</b>	ND<1.0	ND<1.0	ND<1.0	ND<1.0	<b>6.7</b>	ND<2.0	ND<10
MW-2	9/21/01		<b>530,000</b>	<b>7,000</b>	ND<50	ND<50	ND<50	ND<50	ND<50	ND<2.0	ND<10
MW-2	12/27/01		<b>27,000</b>	<b>310</b>	ND<1.0	ND<1.0	ND<1.0	ND<1.0	<b>62</b>	ND<2.0	ND<10
MW-2	3/29/02		<b>65,000</b>	<b>130</b>	ND<1.0	ND<1.0	ND<1.0	ND<1.0	<b>30</b>	ND<2.0	ND<10
MW-2	6/13/02		<b>130,000</b>	<b>460</b>	ND<1.0	ND<1.0	ND<1.0	ND<1.0	<b>24</b>	ND<2.0	ND<10
MW-2	9/27/02		<b>480,000</b>	<b>290</b>	ND<1.0	ND<1.0	ND<1.0	ND<1.0	<b>16</b>	ND<2.0	ND<10
MW-2	12/3/02		<b>61,000</b>	<b>1,800</b>	ND<1.0	ND<1.0	ND<1.0	ND<1.0	<b>10</b>	ND<2.0	ND<10
MW-2	3/31/03		<b>5,000</b>	ND<100	ND<1.0	ND<1.0	ND<1.0	ND<1.0	<b>14</b>	ND<2.0	ND<10
MW-2	6/27/03		<b>8.1</b>	<b>360</b>	ND<1.0	ND<1.0	ND<1.0	ND<1.0	<b>20</b>	ND<2.0	ND<10
MW-2	9/19/03		<b>85</b>	<b>12</b>	ND<1.0	ND<1.0	ND<1.0	ND<1.0	<b>15</b>	ND<2.0	ND<10

**Table A-2**  
**Historical Analytical Results of TPH and TPH-Related Compounds**  
**Lehigh Hanson Sunol Facility Asphalt Plant**  
**7999 Athenour Way, Sunol, California**

Well	Sample Date	Notes	TPHd (ug/l)	TPHg (ug/l)	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Xylenes (ug/l)	MTBE (ug/l)	TAME (ug/l)	TBA (ug/l)
MW-2	1/17/05	1	-	-	-	-	-	-	-	-	-
MW-2S	1/17/05		<b>1,100</b>	<b>730</b>	ND<0.5	ND<0.5	<b>1.0</b>	<b>3.5</b>	<b>50</b>	ND<2.0	ND<10
MW-2S	5/4/05		<b>8,200</b>	<b>190</b>	ND<0.5	ND<0.5	ND<0.5	ND<0.5	<b>44</b>	ND<2.0	ND<10
MW-2S	8/12/05		<b>6,100</b>	<b>120</b>	ND<0.5	ND<0.5	ND<0.5	ND<0.5	<b>77</b>	ND<2.0	ND<10
MW-2S	12/12/05		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	<b>26</b>	ND<2.0	ND<10
MW-2S	3/3/06		<b>5,900</b>	<b>160</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	<b>21</b>	ND<2.0	ND<10
MW-2S	6/13/06		<b>8,700</b>	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	<b>22</b>	ND<2.0	ND<10
MW-2S	9/6/06		<b>11,000</b>	<b>190</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	<b>29</b>	ND<2.0	ND<10
MW-2S	12/5/06		<b>18,000</b>	ND<50	ND<0.5	ND<50	ND<0.5	ND<1.0	<b>38</b>	ND<2.0	ND<10
MW-2S	2/28/07		<b>6,600</b>	<b>140</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	<b>33</b>	ND<2.0	ND<10
MW-2S	6/12/07		<b>3,700</b>	<b>90</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	<b>19</b>	ND<2.0	<b>12</b>
MW-2S	9/11/07		<b>17,000</b>	ND<50	ND<2.5	ND<2.5	ND<2.5	ND<5.0	<b>46</b>	ND<10	ND<50
MW-2S	12/11/07		<b>16,000</b>	ND<50	ND<2.5	ND<2.5	ND<2.5	ND<5.0	<b>16</b>	ND<10	ND<50
MW-2S	3/11/08		<b>8,900</b>	<b>50</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	<b>17</b>	ND<2.0	ND<10
MW-2S	6/10/08		<b>1,100</b>	<b>72</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	<b>25</b>	ND<2.0	ND<10
MW-2S	9/9/08		<b>10,000</b>	<b>62</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	<b>41</b>	ND<2.0	ND<10
MW-2S	12/9/08		<b>13,000</b>	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	<b>37</b>	ND<2.0	ND<10
MW-2S	3/9/09		<b>9,800</b>	<b>59</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	<b>31</b>	ND<2.0	ND<10
MW-2S	6/10/09		<b>9,900</b>	<b>140</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	<b>30</b>	ND<2.0	ND<10
MW-2S	9/22/09		<b>10,000</b>	<b>54</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	<b>40</b>	ND<2.0	ND<10
MW-2S	3/3/10		<b>12,000</b>	<b>100</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	<b>19</b>	-	-
MW-2S	3/3/10	D	<b>10,000</b>	<b>100</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	<b>20</b>	-	-
MW-2M	1/17/05		<b>4,100</b>	<b>3,300</b>	<b>6.5</b>	<b>1.7</b>	<b>89</b>	<b>82.2</b>	<b>38</b>	ND<2.0	ND<10
MW-2M	5/4/05		ND<50	<b>610</b>	ND<0.5	ND<0.5	<b>16</b>	<b>10.6</b>	<b>32</b>	ND<2.0	ND<10
MW-2M	8/12/05		ND<50	<b>460</b>	ND<0.5	ND<0.5	<b>2.5</b>	<b>1.2</b>	<b>56</b>	ND<2.0	ND<10
MW-2M	12/12/05		ND<50	<b>410</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	<b>28</b>	ND<2.0	ND<10
MW-2M	3/3/06		ND<50	<b>290</b>	ND<0.5	ND<0.5	<b>0.5</b>	ND<1.0	<b>17</b>	ND<2.0	ND<10
MW-2M	6/13/06		ND<50	<b>130</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-2M	9/6/06		<b>1,900</b>	<b>330</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	<b>22</b>	ND<2.0	ND<10
MW-2M	12/5/06		<b>6,100</b>	<b>340</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	<b>37</b>	ND<2.0	ND<10
MW-2M	2/27/07		ND<500	<b>310</b>	ND<0.5	ND<0.5	<b>0.65</b>	ND<1.0	<b>25</b>	ND<2.0	ND<10
MW-2M	6/12/07		<b>350</b>	<b>290</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	<b>14</b>	ND<2.0	ND<10
MW-2M	9/11/07		<b>4,900</b>	<b>220</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	<b>14</b>	ND<2.0	ND<10
MW-2M	12/11/07		ND<500	<b>370</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	<b>9.4</b>	ND<2.0	ND<10

**Table A-2**  
**Historical Analytical Results of TPH and TPH-Related Compounds**  
**Lehigh Hanson Sunol Facility Asphalt Plant**  
**7999 Athenour Way, Sunol, California**

Well	Sample Date	Notes	TPHd (ug/l)	TPHg (ug/l)	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Xylenes (ug/l)	MTBE (ug/l)	TAME (ug/l)	TBA (ug/l)
MW-2M	3/11/08		4,000	230	ND<0.5	ND<0.5	ND<0.5	ND<1.0	7.4	ND<2.0	ND<10
MW-2M	6/10/08		2,800	330	ND<0.5	ND<0.5	ND<0.5	1	10	ND<2.0	ND<10
MW-2M	9/9/08		3,900	240	ND<0.5	ND<0.5	ND<0.5	ND<1.0	13	ND<2.0	12
MW-2M	12/9/08		3,500	130	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-2M	3/9/09		1,900	240	ND<0.5	ND<0.5	1.6	ND<1.0	15	ND<2.0	ND<10
MW-2M	6/10/09		2,800	210	ND<0.5	ND<0.5	ND<0.5	ND<1.0	11	ND<2.0	ND<10
MW-2M	9/22/09		1,700	230	ND<0.5	ND<0.5	ND<0.5	ND<1.0	18	ND<2.0	ND<10
MW-2M	3/3/10		3,700	220	ND<0.5	ND<0.5	ND<0.5	ND<1.0	18	-	-
MW-2D	1/17/05		1,800	1,000	6.5	ND<0.5	80	71	62	ND<2.0	ND<10
MW-2D	5/4/05		ND<50	250	ND<0.5	ND<0.5	4.6	1.6	72	ND<2.0	ND<10
MW-2D	8/12/05		ND<50	ND<50	ND<0.5	ND<0.5	2.8	1.1	51	ND<2.0	ND<10
MW-2D	12/12/05		ND<50	200	ND<0.5	ND<0.5	ND<0.5	ND<1.0	39	ND<2.0	ND<10
MW-2D	3/3/06		ND<50	140	ND<0.5	ND<0.5	ND<0.5	ND<1.0	38	ND<2.0	ND<10
MW-2D	6/13/06		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	36	ND<2.0	ND<10
MW-2D	9/6/06		1,700	230	ND<0.5	ND<0.5	ND<0.5	ND<1.0	27	ND<2.0	ND<10
MW-2D	12/5/06		3,000	150	ND<0.5	ND<0.5	ND<0.5	ND<1.0	37	ND<2.0	ND<10
MW-2D	2/27/07		1,100	140	ND<0.5	ND<0.5	0.63	1.1	25	ND<2.0	ND<10
MW-2D	6/12/07		ND<500	140	ND<0.5	ND<0.5	ND<0.5	ND<1.0	19	ND<2.0	ND<10
MW-2D	9/11/07		4,600	120	ND<0.5	ND<0.5	ND<0.5	ND<1.0	15	ND<2.0	ND<10
MW-2D	12/11/07		ND<500	250	ND<0.5	ND<0.5	ND<0.5	ND<1.0	22	ND<2.0	ND<10
MW-2D	3/11/08		3,400	98	ND<0.5	ND<0.5	ND<0.5	ND<1.0	7.5	ND<2.0	ND<10
MW-2D	6/10/08		2,900	170	ND<0.5	ND<0.5	ND<0.5	ND<1.0	15	ND<2.0	ND<10
MW-2D	9/9/08		3,600	65	ND<0.5	ND<0.5	ND<0.5	ND<1.0	19	ND<2.0	ND<10
MW-2D	12/9/08		3,500	72	ND<0.5	ND<0.5	ND<0.5	ND<1.0	21	ND<2.0	ND<10
MW-2D	3/9/09		1,500	98	ND<0.5	ND<0.5	ND<0.5	ND<1.0	21	ND<2.0	ND<10
MW-2D	6/10/09		1,800	99	ND<0.5	ND<0.5	ND<0.5	ND<1.0	19	ND<2.0	ND<10
MW-2D	9/22/09		1,200	81	ND<0.5	ND<0.5	ND<0.5	ND<1.0	33	ND<2.0	ND<10
MW-2D	3/3/10		2,000	110	ND<0.5	ND<0.5	ND<0.5	ND<1.0	27	-	-
MW-3	6/23/98		12,000	300	0.80	ND<0.5	ND<0.5	ND<0.5	150	ND<2.0	ND<10
MW-3	10/1/98		6,400	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.0	ND<10
MW-3	1/5/99		5,600	ND<100	1.6	1.4	ND<1.0	ND<1.0	110	ND<2.0	ND<10
MW-3	3/29/99		150	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.0	ND<10
MW-3	6/10/99		620	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.0	ND<10

**Table A-2**  
**Historical Analytical Results of TPH and TPH-Related Compounds**  
**Lehigh Hanson Sunol Facility Asphalt Plant**  
**7999 Athenour Way, Sunol, California**

Well	Sample Date	Notes	TPHd (ug/l)	TPHg (ug/l)	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Xylenes (ug/l)	MTBE (ug/l)	TAME (ug/l)	TBA (ug/l)
MW-3	9/17/99		1,500	230	ND<0.5	ND<0.5	ND<0.5	ND<0.5	89	ND<2.0	ND<10
MW-3	12/27/99		58	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.0	ND<10
MW-3	3/22/00		94	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.0	ND<10
MW-3	6/30/00		240	170	ND<0.5	0.52	ND<0.5	ND<0.5	100	ND<2.0	ND<10
MW-3	9/14/00		850	170	0.81	ND<0.5	ND<0.5	ND<0.5	68	ND<2.0	ND<10
MW-3	12/20/00		1,600	230	ND<1.0	ND<1.0	ND<1.0	ND<3.0	80	ND<2.0	ND<10
MW-3	3/22/01		1,100	140	ND<1.0	ND<1.0	ND<1.0	ND<1.0	83	ND<2.0	ND<10
MW-3	6/27/01	NS	-	-	-	-	-	-	-	-	-
MW-3	9/21/01		3,800	ND<100	ND<1.0	ND<1.0	ND<1.0	ND<1.0	45	ND<2.0	ND<10
MW-3	12/27/01		3,100	340	1.4	1.1	10	3.8	45	ND<2.0	ND<10
MW-3	3/29/02		1,500	ND<100	ND<1.0	ND<1.0	ND<1.0	ND<1.0	50	ND<2.0	ND<10
MW-3	6/13/02		ND<1000	160	ND<1.0	ND<1.0	ND<1.0	ND<1.0	36	ND<2.0	ND<10
MW-3	9/27/02		ND<1000	ND<1000	ND<1.0	ND<1.0	ND<1.0	ND<1.0	43	ND<2.0	ND<10
MW-3	12/3/02		ND<1000	ND<100	ND<1.0	ND<1.0	ND<1.0	ND<1.0	41	ND<2.0	ND<10
MW-3	3/31/03		ND<1000	ND<100	ND<2.5	ND<2.5	ND<2.5	ND<2.5	92	ND<2.0	ND<10
MW-3	6/27/03		1,200	ND<100	ND<2.0	ND<2.0	ND<2.0	ND<2.0	93	ND<2.0	ND<10
MW-3	9/19/03		ND<1000	ND<100	ND<2.0	ND<2.0	ND<2.0	ND<2.0	65	ND<2.0	ND<10
MW-3	12/22/03		5,700	190	ND<2.0	ND<2.0	ND<2.0	ND<2.0	56	ND<2.0	ND<10
MW-3	1/17/05		ND<50	590	ND<0.5	ND<0.5	ND<0.5	ND<0.5	47	ND<2.0	ND<10
MW-3	5/4/05		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	190	ND<2.0	ND<10
MW-3	8/11/05		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	110	ND<2.0	ND<10
MW-3	12/13/05		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	75	ND<2.0	ND<10
MW-3	3/3/06		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	140	ND<2.0	ND<10
MW-3	6/12/06		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	100	ND<2.0	ND<10
MW-3	9/6/06		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	67	ND<2.0	ND<10
MW-3	12/5/06		ND<50	82	ND<0.5	ND<0.5	ND<0.5	ND<0.5	39	ND<2.0	ND<10
MW-3	2/27/07		56	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	43	ND<2.0	ND<10
MW-3	6/12/07		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	45	ND<2.0	ND<10
MW-3	9/11/07		ND<500	60	ND<0.5	ND<0.5	ND<0.5	ND<1.0	27	ND<2.0	ND<10
MW-3	12/11/07		ND<500	180	ND<0.5	ND<0.5	ND<0.5	ND<1.0	24	ND<2.0	ND<10
MW-3	3/11/08		ND<50	98	ND<0.5	ND<0.5	ND<0.5	ND<1.0	36	ND<2.0	120
MW-3	6/9/08	NS	-	-	-	-	-	-	-	-	-
MW-3	9/9/08		ND<50	70	ND<0.5	ND<0.5	ND<0.5	ND<1.0	24	ND<2.0	ND<10
MW-3	12/8/08		ND<50	59	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-3	3/10/09		ND<50	78	ND<0.5	ND<0.5	ND<0.5	ND<1.0	45	ND<2.0	ND<10
MW-3	6/9/09		660	79	ND<0.5	ND<0.5	ND<0.5	ND<1.0	87	ND<2.0	ND<10

**Table A-2**  
**Historical Analytical Results of TPH and TPH-Related Compounds**  
**Lehigh Hanson Sunol Facility Asphalt Plant**  
**7999 Athenour Way, Sunol, California**

Well	Sample Date	Notes	TPHd (ug/l)	TPHg (ug/l)	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Xylenes (ug/l)	MTBE (ug/l)	TAME (ug/l)	TBA (ug/l)
MW-3	9/22/09		ND<50	<b>74</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	<b>61</b>	ND<2.0	ND<10
MW-3	3/5/10		<b>1,500</b>	<b>72</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	<b>44</b>	-	-
MW-4S	1/17/05		ND<50	<b>65</b>	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<2.0	ND<10
MW-4S	5/4/05		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<2.0	ND<10
MW-4S	8/12/05		ND<50	ND<50	ND<0.5	ND<0.5	<b>2.2</b>	<b>5.8</b>	ND<1.0	ND<2.0	ND<10
MW-4S	12/12/05		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-4S	3/3/06		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-4S	6/12/06		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-4S	9/5/06		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-4S	12/4/06		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-4S	2/26/07		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-4S	6/11/07		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-4S	9/10/07		ND<500	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-4S	12/10/07		ND<500	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-4S	3/10/08		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-4S	6/9/08		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-4S	9/8/08		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-4S	12/8/08		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-4S	3/10/09		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-4S	6/9/09		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-4S	9/21/09		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-4S	3/3/10		<b>360</b>	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
MW-4D	1/17/05		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<2.0	ND<10
MW-4D	5/4/05		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<2.0	ND<10
MW-4D	8/12/05		ND<50	<b>410</b>	ND<0.5	<b>2.2</b>	<b>10</b>	<b>25.5</b>	ND<1.0	ND<2.0	ND<10
MW-4D	12/12/05		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-4D	3/3/06		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-4D	6/12/06		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	<b>7.8</b>	ND<2.0	ND<10
MW-4D	9/5/06		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-4D	12/4/06		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-4D	2/26/07		ND<500	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<2.0	ND<10
MW-4D	6/11/07		ND<500	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<2.0	ND<10
MW-4D	9/10/07		ND<500	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-4D	12/10/07		ND<500	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10



**Table A-2**  
**Historical Analytical Results of TPH and TPH-Related Compounds**  
**Lehigh Hanson Sunol Facility Asphalt Plant**  
**7999 Athenour Way, Sunol, California**

Well	Sample Date	Notes	TPHd (ug/l)	TPHg (ug/l)	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Xylenes (ug/l)	MTBE (ug/l)	TAME (ug/l)	TBA (ug/l)
MW-4D	3/10/08		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-4D	6/9/08		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-4D	9/8/08		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-4D	12/8/08		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-4D	3/10/09		ND<50	<b>75</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-4D	6/9/09		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-4D	9/21/09		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-4D	3/3/10		<b>780</b>	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
MW-5S	1/17/05		ND<50	ND<50	ND<0.5	<b>4.5</b>	ND<0.5	ND<0.5	ND<1.0	ND<2.0	ND<10
MW-5S	5/4/05		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<2.0	ND<10
MW-5S	8/11/05		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	<b>5.8</b>	ND<2.0	ND<10
MW-5S	12/12/05		ND<50	ND<50	<b>3.4</b>	<b>1.3</b>	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-5S	3/3/06		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-5S	6/12/06		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-5S	9/5/06		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	<b>5.4</b>	ND<2.0	ND<10
MW-5S	12/4/06		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	<b>5.8</b>	ND<2.0	ND<10
MW-5S	2/26/07		<b>360</b>	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	<b>3.2</b>	ND<2.0	ND<10
MW-5S	6/11/07		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	<b>2.2</b>	ND<2.0	ND<10
MW-5S	9/10/07		ND<500	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	<b>2</b>	ND<2.0	ND<10
MW-5S	12/10/07		ND<500	<b>140</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	<b>2.6</b>	ND<2.0	ND<10
MW-5S	3/10/08		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	<b>1.1</b>	ND<2.0	ND<10
MW-5S	6/9/08		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	<b>4.2</b>	ND<2.0	ND<10
MW-5S	9/8/08		<b>62</b>	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-5S	12/8/08		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-5S	3/10/09		ND<50	<b>220</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	<b>2.4</b>	ND<2.0	ND<10
MW-5S	6/9/09		<b>690</b>	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-5S	9/21/09		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	<b>2</b>	ND<2.0	ND<10
MW-5S	3/4/10		<b>3,600</b>	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	<b>0.57</b>	-	-
MW-5S	3/4/10	D	<b>3,400</b>	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	<b>0.59</b>	-	-
MW-5D	1/17/05		ND<50	<b>210</b>	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<2.0	ND<10
MW-5D	5/4/05		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	<b>10</b>	ND<2.0	ND<10
MW-5D	8/11/05		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	<b>6.4</b>	ND<2.0	ND<10
MW-5D	12/12/05		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10

**Table A-2**  
**Historical Analytical Results of TPH and TPH-Related Compounds**  
**Lehigh Hanson Sunol Facility Asphalt Plant**  
**7999 Athenour Way, Sunol, California**

Well	Sample Date	Notes	TPHd (ug/l)	TPHg (ug/l)	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Xylenes (ug/l)	MTBE (ug/l)	TAME (ug/l)	TBA (ug/l)
MW-5D	3/3/06		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	4.7	ND<2.0	ND<10
MW-5D	6/12/06		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	5.0	ND<2.0	ND<10
MW-5D	9/5/06		ND<50	ND<50	ND<0.5	0.60	ND<0.5	ND<1.0	5.3	ND<2.0	ND<10
MW-5D	12/5/06		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	1.9	ND<2.0	ND<10
MW-5D	2/28/07		ND<500	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	1.6	ND<2.0	ND<10
MW-5D	6/12/07		ND<500	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	2.4	ND<2.0	ND<10
MW-5D	9/11/07		ND<500	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	1.2	ND<2.0	ND<10
MW-5D	12/11/07		ND<500	140	ND<0.5	ND<0.5	ND<0.5	ND<1.0	1.2	ND<2.0	ND<10
MW-5D	3/10/08		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	1.2	ND<2.0	ND<10
MW-5D	6/9/08		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	3.8	ND<2.0	ND<10
MW-5D	9/8/08		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-5D	12/8/08		ND<50	53	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-5D	3/10/09		ND<50	55	ND<0.5	ND<0.5	ND<0.5	ND<1.0	2.3	ND<2.0	ND<10
MW-5D	6/9/09		300	110	ND<0.5	ND<0.5	ND<0.5	ND<1.0	2.6	ND<2.0	ND<10
MW-5D	9/21/09		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	2.6	ND<2.0	ND<10
MW-5D	3/4/10		2,500	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	0.84	-	-
MW-6S	1/17/05		2,800	1,600	6.1	ND<0.5	3.6	2.3	160	ND<2.0	ND<10
MW-6S	5/4/05		ND<50	750	ND<0.5	ND<0.5	3.0	ND<0.5	160	ND<2.0	ND<10
MW-6S	8/12/05		1,300	1,100	ND<0.5	ND<0.5	ND<0.5	ND<0.5	410	ND<2.0	ND<10
MW-6S	12/12/05		ND<50	1,000	ND<0.5	ND<0.5	1.4	ND<1.0	190	ND<2.0	ND<10
MW-6S	3/3/06		ND<50	940	ND<0.5	ND<0.5	4.9	ND<1.0	60	ND<2.0	ND<10
MW-6S	6/14/06		1,300	650	ND<0.5	1.7	1.9	2.0	ND<1.0	ND<2.0	ND<10
MW-6S	9/6/06		2,400	750	ND<0.5	ND<0.5	0.7	0.5	200	ND<2.0	ND<10
MW-6S	12/5/06		2,600	1,000	ND<0.5	ND<0.5	1.2	ND<1.0	110	ND<2.0	ND<10
MW-6S	2/27/07		3,000	1,100	0.79	ND<0.5	1.1	ND<1.0	54	ND<2.0	ND<10
MW-6S	6/12/07		490	1,200	ND<0.5	ND<0.5	1.6	ND<1.0	47	ND<2.0	ND<10
MW-6S	9/11/07		930	370	ND<0.5	ND<0.5	1.3	ND<1.0	48	ND<2.0	ND<10
MW-6S	12/11/07		5,200	680	1.3	ND<0.5	12	1.1	28	ND<2.0	ND<10
MW-6S	3/11/08		770	1,400	13	1.6	210	21	5.3	ND<2.0	ND<10
MW-6S	6/10/08		5,600	690	ND<0.5	ND<0.5	22	1.8	23	ND<2.0	ND<10
MW-6S	9/9/08		3,200	460	ND<0.5	ND<0.5	2.5	ND<1	48	ND<2.0	ND<10
MW-6S	12/9/08		1,300	220	ND<0.5	ND<0.5	ND<0.5	ND<1	ND<1.0	ND<2.0	ND<10
MW-6S	3/9/09		270	290	ND<0.5	ND<0.5	0.96	ND<1	100	ND<2.0	ND<10
MW-6S	6/10/09		1,800	260	ND<0.5	ND<0.5	ND<0.5	ND<1.0	61	ND<2.0	ND<10

**Table A-2**  
**Historical Analytical Results of TPH and TPH-Related Compounds**  
**Lehigh Hanson Sunol Facility Asphalt Plant**  
**7999 Athenour Way, Sunol, California**

Well	Sample Date	Notes	TPHd (ug/l)	TPHg (ug/l)	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Xylenes (ug/l)	MTBE (ug/l)	TAME (ug/l)	TBA (ug/l)
MW-6S	9/22/09		<b>940</b>	<b>230</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	<b>58</b>	ND<2.0	ND<10
MW-6S	3/5/10		<b>1,400</b>	<b>270</b>	<b>2.2</b>	ND<0.5	<b>2.8</b>	ND<1.0	<b>31</b>	-	-
MW-6D	1/17/05		<b>2,100</b>	<b>1,200</b>	<b>10</b>	ND<0.5	<b>1.6</b>	<b>2.2</b>	<b>180</b>	ND<2.0	ND<10
MW-6D	5/4/05		ND<50	<b>360</b>	<b>2</b>	ND<0.5	ND<0.5	ND<0.5	<b>360</b>	ND<2.0	ND<10
MW-6D	8/12/05		ND<50	<b>480</b>	<b>2</b>	ND<0.5	ND<0.5	ND<0.5	<b>270</b>	ND<2.0	ND<10
MW-6D	12/12/05		ND<50	<b>240</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	<b>92</b>	ND<2.0	ND<10
MW-6D	3/3/06		ND<50	<b>310</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	<b>93</b>	ND<2.0	ND<10
MW-6D	6/14/06		ND<50	<b>130</b>	ND<0.5	<b>3.0</b>	<b>1.1</b>	<b>2.6</b>	<b>69</b>	ND<2.0	ND<10
MW-6D	9/6/06		ND<50	<b>230</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	<b>74</b>	ND<2.0	ND<10
MW-6D	12/6/06		<b>1,300</b>	<b>500</b>	<b>0.98</b>	<b>8.1</b>	<b>16</b>	<b>38.8</b>	<b>59</b>	ND<2.0	ND<10
MW-6D	2/27/07		<b>470</b>	<b>150</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	<b>48</b>	ND<2.0	ND<10
MW-6D	6/13/07		ND<500	<b>180</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	<b>39</b>	ND<2.0	ND<10
MW-6D	9/12/07		ND<500	<b>130</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	<b>28</b>	ND<2.0	ND<10
MW-6D	12/12/07		ND<500	<b>250</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	<b>19</b>	ND<2.0	ND<10
MW-6D	3/12/08		ND<50	<b>110</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	<b>24</b>	ND<2.0	ND<10
MW-6D	6/10/08		ND<50	<b>140</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	<b>31</b>	ND<2.0	ND<10
MW-6D	9/9/08		<b>120</b>	<b>82</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	<b>30</b>	ND<2.0	ND<10
MW-6D	12/9/08		<b>970</b>	<b>91</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	<b>51</b>	ND<2.0	ND<10
MW-6D	3/9/09		ND<50	<b>120</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	<b>43</b>	ND<2.0	ND<10
MW-6D	6/10/09		<b>670</b>	<b>3,700</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	<b>43</b>	ND<2.0	ND<10
MW-6D	9/22/09		<b>550</b>	<b>65</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	<b>65</b>	ND<2.0	ND<10
MW-6D	3/3/10		<b>1,100</b>	<b>66</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	<b>39</b>	-	-
MW-7S	1/17/05		ND<50	<b>12,000</b>	<b>10</b>	<b>89</b>	<b>590</b>	<b>1,670</b>	ND<1.0	ND<2.0	ND<10
MW-7S	5/4/05		<b>520</b>	<b>1,600</b>	ND<0.5	ND<0.5	<b>31</b>	<b>18.4</b>	ND<1.0	ND<2.0	ND<10
MW-7S	8/12/05		ND<50	<b>660</b>	ND<0.5	ND<0.5	<b>5.5</b>	ND<0.5	ND<1.0	ND<2.0	ND<10
MW-7S	12/12/05		ND<50	<b>610</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-7S	3/3/06		ND<50	<b>630</b>	<b>1.1</b>	<b>9</b>	<b>31</b>	<b>78</b>	ND<1.0	ND<2.0	ND<10
MW-7S	6/14/06		ND<50	<b>430</b>	ND<0.5	ND<0.5	<b>6.1</b>	<b>14.5</b>	ND<1.0	ND<2.0	ND<10
MW-7S	9/7/06		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-7S	12/4/06		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-7S	2/26/07		ND<500	<b>55</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-7S	6/11/07		ND<500	<b>64</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-7S	9/10/07		ND<500	<b>76</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-7S	12/10/07		ND<500	<b>170</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10

**Table A-2**  
**Historical Analytical Results of TPH and TPH-Related Compounds**  
**Lehigh Hanson Sunol Facility Asphalt Plant**  
**7999 Athenour Way, Sunol, California**

Well	Sample Date	Notes	TPHd (ug/l)	TPHg (ug/l)	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Xylenes (ug/l)	MTBE (ug/l)	TAME (ug/l)	TBA (ug/l)
MW-7S	1/22/08		460	68	ND<0.5	ND<0.5	ND<0.5	0.99	ND<0.5	-	-
MW-7S	2/18/08		1,000	2,800	15	68	74	152	ND<0.5	-	-
MW-7S	3/10/08		ND<50	1,500	13	16	25	24.5	ND<1.0	ND<2.0	ND<10
MW-7S	6/9/08		ND<50	1,300	3.6	2.4	5.8	2.2	ND<1.0	ND<2.0	ND<10
MW-7S	9/8/08		79	620	0.83	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-7S	12/8/08		ND<50	190	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-7S	3/10/09		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-7S	5/6/09		ND<50	440	ND<0.5	ND<0.5	1.1	1.1	ND<0.5	-	-
MW-7S	6/8/09		ND<50	500	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-7S	7/14/09		ND<50	240	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
MW-7S	9/22/09		210	360	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-7S	12/18/09		1,800	290	ND<0.5	ND<0.5	1.5	ND<1.0	ND<0.5	-	-
MW-7S	3/4/10		2,000	280	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
MW-7S	6/9/10		140	900	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
MW-7D	1/17/05		ND<50	23,000	350	1,000	1,800	5,200	ND<1.0	ND<2.0	ND<10
MW-7D	5/4/05	NS	-	-	-	-	-	-	-	-	-
MW-7D	8/12/05		37	83,000	550	2,200	4,400	10,600	ND<50	ND<2.0	ND<10
MW-7D	12/12/05		150,000	1,300,000	640	3,100	21,000	54,800	ND<50	ND<2.0	ND<10
MW-7D	3/3/06		45,000	71,000	420	2,400	4,400	11,300	ND<1.0	ND<2.0	ND<10
MW-7D	6/14/06		ND<50	160,000	310	2,400	4,500	9,800	ND<1.0	ND<2.0	ND<10
MW-7D	9/7/06		22,000	71,000	360	8,600	33,000	87,000	ND<1.0	ND<2.0	ND<10
MW-7D	12/6/06		12,000	58,000	160	1,300	3,900	5,800	ND<1.0	ND<2.0	ND<10
MW-7D	2/28/07		790	6,800	29	51	460	491	ND<1.0	ND<2.0	ND<10
MW-7D	6/13/07		23,000	100,000	270	950	4,000	950	ND<1.0	ND<2.0	ND<10
MW-7D	9/12/07		3,500	15,000	72	340	1,300	1,940	ND<1.0	ND<2.0	ND<10
MW-7D	12/12/07		2,500	19,000	64	160	1,100	2,000	ND<1.0	ND<2.0	ND<10
MW-7D	1/22/08		2,700	13,000	47	67	760	801	<5.0	-	-
MW-7D	2/19/08		13,000	56,000	140	520	2,500	3,470	ND<0.5	-	-
MW-7D	3/12/08		3,100	32,000	64	250	1,800	2,800	ND<1.0	ND<2.0	ND<10
MW-7D	6/11/08		4,000	17,000	67	100	610	610	ND<1.0	ND<2.0	ND<10
MW-7D	9/9/08		3,400	9,100	61	65	510	579	ND<1.0	ND<2.0	ND<10
MW-7D	12/9/08		2,300	6,200	50	46	420	362	ND<1.0	ND<2.0	ND<10
MW-7D	3/10/09		1,200	7,600	47	45	530	310	ND<1.0	ND<2.0	ND<10
MW-7D	5/6/09		3,300	12,000	95	110	1,100	520	<8.3	-	-

**Table A-2**  
**Historical Analytical Results of TPH and TPH-Related Compounds**  
**Lehigh Hanson Sunol Facility Asphalt Plant**  
**7999 Athenour Way, Sunol, California**

Well	Sample Date	Notes	TPHd (ug/l)	TPHg (ug/l)	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Xylenes (ug/l)	MTBE (ug/l)	TAME (ug/l)	TBA (ug/l)
MW-7D	6/8/09		2,000	12,000	85	110	1,000	413	ND<1.0	ND<2.0	ND<10
MW-7D	7/15/09		1,200	12,000	60	78	830	320	ND<0.5	-	-
MW-7D	9/23/09		1,200	8,400	72	78	170	190	ND<1.0	ND<2.0	ND<10
MW-7D	12/18/09		5,300	40,000	100	94	1,100	800	ND<12	-	-
MW-7D	3/4/10		1,400	11,000	ND<0.5	ND<0.5	570	280	ND<0.5	-	-
MW-7D	6/9/10		12,000	16,000	44	32	780	480	ND<5	-	-
MW-8	1/17/05		ND<50	120	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<2.0	ND<10
MW-8	5/4/05		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<2.0	ND<10
MW-8	8/12/05		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<2.0	ND<10
MW-8	12/12/05		830	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-8	3/3/06		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-8	6/12/06		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-8	9/7/06		ND<50	ND<50	ND<0.5	3.3	ND<0.5	5.5	ND<1.0	ND<2.0	ND<10
MW-8	12/4/06		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-8	2/26/07		ND<500	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-8	6/11/07		ND<500	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-8	9/10/07		ND<500	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-8	12/10/07		ND<500	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-8	1/22/08		530	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	-	-
MW-8	2/18/08		450	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	-	-
MW-8	3/10/08		ND<50	54	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-8	6/9/08		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-8	9/8/08		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-8	12/8/08		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-8	3/10/09		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-8	5/6/09		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	-	-
MW-8	6/8/09		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-8	7/14/09		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
MW-8	7/14/09	D	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
MW-8	9/23/09	NS	-	-	-	-	-	-	-	-	-
MW-8	12/17/09		280	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
MW-8	3/2/10		500	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
MW-8	6/9/10		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
MW-8	6/9/10	D	ND<53	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-

**Table A-2**  
**Historical Analytical Results of TPH and TPH-Related Compounds**  
**Lehigh Hanson Sunol Facility Asphalt Plant**  
**7999 Athenour Way, Sunol, California**

Well	Sample Date	Notes	TPHd (ug/l)	TPHg (ug/l)	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Xylenes (ug/l)	MTBE (ug/l)	TAME (ug/l)	TBA (ug/l)
MW-9S	5/5/06		ND<50	1,300	8.6	24	40	29.8	ND<1.0	ND<2.0	ND<10
MW-9S	6/14/06		ND<50	330	ND<0.5	ND<0.5	3.0	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-9S	9/7/06		ND<50	240	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-9S	12/5/06		ND<50	190	ND<0.5	ND<0.5	0.76	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-9S	2/27/07		ND<500	130	0.79	0.58	8.4	1.0	ND<1.0	ND<2.0	ND<10
MW-9S	6/12/07		ND<500	210	0.76	ND<0.5	5.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-9S	9/11/07		ND<500	52	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-9S	12/11/07		ND<500	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-9S	1/21/08		540	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	-	-
MW-9S	2/19/08		9,500	25,000	9.8	75	18	4,000	ND<0.5	-	-
MW-9S	3/11/08		3,000	10,000	4.6	20	12	1,800	ND<1.0	ND<2.0	ND<10
MW-9S	6/10/08		2,700	1,400	0.62	ND<0.5	1.1	42	ND<1.0	ND<2.0	ND<10
MW-9S	9/10/08		320	270	ND<0.5	ND<0.5	0.59	14.8	ND<1.0	ND<2.0	ND<10
MW-9S	12/10/08		160	17,000	ND<0.5	ND<0.5	0.81	6.9	ND<1.0	ND<2.0	ND<10
MW-9S	3/10/09		ND<50	140	ND<0.5	ND<0.5	ND<0.5	3	ND<1.0	ND<2.0	ND<10
MW-9S	5/6/09		160	810	ND<0.5	1.2	1.6	87	ND<0.5	-	-
MW-9S	6/8/09		370	400	ND<0.5	ND<0.5	ND<0.5	32	ND<1.0	-	-
MW-9S	6/8/09		370	400	ND<0.5	ND<0.5	ND<0.5	32	ND<1.0	ND<2.0	ND<10
MW-9S	7/15/09		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
MW-9S	9/23/09		ND<50	53	ND<0.5	ND<0.5	ND<0.5	2.32	ND<1.0	ND<2.0	ND<10
MW-9S	12/18/09		77	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
MW-9S	3/4/10		11	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
MW-9S	6/9/10		ND<51	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
MW-9D	5/5/06		13	88,000	5,500	15,000	4,200	15,000	ND<1.0	ND<2.0	ND<10
MW-9D	6/14/06		ND<50	76,000	3,200	13,000	2,700	9,200	ND<1.0	ND<2.0	ND<10
MW-9D	9/7/06		5,400	58,000	1,800	7,400	2,400	8,000	ND<1.0	ND<2.0	ND<10
MW-9D	12/6/06		9,100	170,000	1,800	6,700	3,400	7,400	ND<1.0	ND<2.0	ND<10
MW-9D	2/28/07		4,500	210,000	1,900	6,200	2,400	9,000	ND<1.0	ND<2.0	ND<10
MW-9D	6/13/07		11,000	42,000	1,600	5,100	2,600	2,131	ND<1.0	13	39
MW-9D	9/12/07		4,400	36,000	990	5,700	2,800	4,600	ND<1.0	ND<2.0	30
MW-9D	12/12/07		3,400	57,000	880	5,800	2,800	9,100	ND<1.0	ND<2.0	ND<10
MW-9D	1/21/08		4,700	54,000	1,000	3,100	2,300	5,250	<10	-	-
MW-9D	2/19/08		15,000	34,000	290	1,300	840	4,200	<7.1	-	-

**Table A-2**  
**Historical Analytical Results of TPH and TPH-Related Compounds**  
**Lehigh Hanson Sunol Facility Asphalt Plant**  
**7999 Athenour Way, Sunol, California**

Well	Sample Date	Notes	TPHd (ug/l)	TPHg (ug/l)	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Xylenes (ug/l)	MTBE (ug/l)	TAME (ug/l)	TBA (ug/l)
MW-9D	3/12/08		6,600	44,000	510	3,700	1,500	8,500	ND<1.0	ND<2.0	ND<10
MW-9D	6/11/08		6,600	39,000	220	530	750	2,070	ND<1.0	ND<2.0	ND<10
MW-9D	9/10/08		4,900	19,000	540	710	1,500	4,130	ND<1.0	ND<2.0	ND<10
MW-9D	12/10/08		4,000	15,000	180	210	780	1,420	ND<1.0	ND<2.0	ND<10
MW-9D	3/10/09		2,800	19,000	550	660	1,400	1,950	ND<1.0	ND<2.0	ND<10
MW-9D	5/6/09		2,900	9,400	61	150	91	1,440	<3.6	-	-
MW-9D	6/8/09		740	870	3.2	4.0	2.9	136	ND<1.0	ND<2.0	ND<10
MW-9D	7/15/09		170	180	1.0	1.4	2.8	32	ND<0.5	-	-
MW-9D	9/23/09		92	130	ND<0.5	ND<0.5	1.8	11.3	ND<1.0	ND<2.0	ND<10
MW-9D	12/18/09		ND<50	ND<50	ND<0.5	ND<0.5	1.6	2.0	ND<0.5	-	-
MW-9D	3/4/10	2	160	ND<50	ND<0.5	ND<0.5	1.2	ND<1.0	ND<0.5	-	-
MW-9D	6/9/10		1,300	5,200	0.58	2.5	82	120	ND<0.5	-	-
MW-9LF	5/5/06		ND<50	5,400	12	17	190	150	ND<1.0	ND<2.0	ND<10
MW-9LF	6/14/06		ND<50	1,800	13	17	30	36	ND<1.0	ND<2.0	ND<10
MW-9LF	9/7/06		ND<50	1,100	58	23	31	58	ND<1.0	ND<2.0	ND<10
MW-9LF	12/5/06		290	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	31	ND<2.0	ND<10
MW-9LF	2/27/07		ND<500	530	39	5	31	25.4	ND<1.0	ND<2.0	ND<10
MW-9LF	6/12/07		ND<500	280	14	0.92	3.8	4.5	ND<1.0	ND<2.0	ND<10
MW-9LF	9/11/07		ND<500	320	2.5	0.59	ND<0.5	1.94	ND<1.0	ND<2.0	ND<10
MW-9LF	12/11/07		ND<500	310	ND<0.5	0.89	ND<0.5	2.22	ND<1.0	ND<2.0	ND<10
MW-9LF	1/21/08		100 <sup>1</sup>	90	ND<0.5	ND<0.5	ND<0.5	0.92	ND<0.5	-	-
MW-9LF	2/19/08		180 <sup>1</sup>	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	-	-
MW-9LF	3/11/08		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-9LF	6/11/08		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-9LF	9/10/08		37	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-9LF	12/9/08		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-9LF	3/10/09		ND<50	72	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-9LF	5/6/09		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	-	-
MW-9LF	6/8/09		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	-	-
MW-9LF	6/8/09		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-9LF	7/15/09		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
MW-9LF	9/23/09		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-9LF	12/17/09		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-

**Table A-2**  
**Historical Analytical Results of TPH and TPH-Related Compounds**  
**Lehigh Hanson Sunol Facility Asphalt Plant**  
**7999 Athenour Way, Sunol, California**

Well	Sample Date	Notes	TPHd (ug/l)	TPHg (ug/l)	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Xylenes (ug/l)	MTBE (ug/l)	TAME (ug/l)	TBA (ug/l)
MW-9LF	3/2/10		ND<51	ND<51	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
MW-9LF	3/2/10	D	ND<51	ND<51	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
MW-9LF	6/9/10		ND<51	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
MW-10S	5/5/06		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-10S	6/13/06		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-10S	9/7/06		ND<50	<b>93</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-10S	12/5/06		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-10S	2/27/07		ND<500	<b>54</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-10S	6/12/07		ND<500	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-10S	9/11/07		ND<500	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-10S	12/11/07		ND<500	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-10S	3/11/08		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-10S	6/10/08		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-10S	9/9/08		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-10S	12/9/08		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-10S	3/11/09		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-10S	6/9/09		<b>220</b>	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-10S	9/23/09		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-10S	3/3/10		<b>1,300</b>	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
MW-10D	5/5/06		ND<50	<b>5,900</b>	<b>24</b>	<b>9</b>	<b>260</b>	<b>23</b>	ND<1.0	ND<2.0	ND<10
MW-10D	6/13/06		ND<50	<b>2,300</b>	<b>7.6</b>	<b>2.4</b>	<b>66</b>	<b>6.6</b>	ND<1.0	ND<2.0	ND<10
MW-10D	9/7/06		ND<50	<b>2,400</b>	<b>3.9</b>	<b>2.0</b>	<b>54</b>	<b>11.89</b>	ND<1.0	ND<2.0	ND<10
MW-10D	12/6/06		ND<50	<b>1,600</b>	<b>2.5</b>	<b>1.0</b>	<b>28</b>	<b>4</b>	ND<1.0	ND<2.0	ND<10
MW-10D	2/27/07		<b>200</b>	<b>850</b>	<b>2.7</b>	<b>0.90</b>	<b>28</b>	<b>2.3</b>	ND<1.0	ND<2.0	ND<10
MW-10D	6/12/07		ND<500	<b>830</b>	<b>1.0</b>	ND<0.5	<b>14</b>	<b>2.0</b>	ND<1.0	ND<2.0	ND<10
MW-10D	9/11/07		ND<500	<b>780</b>	ND<0.5	ND<0.5	<b>1.7</b>	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-10D	12/11/07		ND<500	<b>1,300</b>	ND<0.5	ND<0.5	<b>0.61</b>	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-10D	3/11/08		ND<50	<b>590</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-10D	6/10/08		ND<50	<b>590</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-10D	9/9/08		ND<50	<b>540</b>	ND<0.5	ND<0.5	<b>0.73</b>	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-10D	12/9/08		ND<50	<b>490</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-10D	3/11/09		ND<50	<b>640</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-10D	6/10/09		<b>280</b>	<b>560</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10



**Table A-2**  
**Historical Analytical Results of TPH and TPH-Related Compounds**  
**Lehigh Hanson Sunol Facility Asphalt Plant**  
**7999 Athenour Way, Sunol, California**

Well	Sample Date	Notes	TPHd (ug/l)	TPHg (ug/l)	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Xylenes (ug/l)	MTBE (ug/l)	TAME (ug/l)	TBA (ug/l)
MW-10D	9/23/09		ND<50	<b>760</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-10D	3/3/10		<b>700</b>	<b>450</b>	ND<0.5	ND<0.5	<b>0.85</b>	ND<1.0	ND<0.5	-	-
MW-10LF	5/5/06		ND<50	<b>860</b>	ND<0.5	<b>11</b>	ND<0.5	<b>4.6</b>	ND<1.0	ND<2.0	ND<10
MW-10LF	6/13/06		ND<50	<b>780</b>	<b>2.0</b>	<b>2.4</b>	<b>1.1</b>	<b>4.2</b>	ND<1.0	ND<2.0	ND<10
MW-10LF	9/7/06		ND<50	<b>780</b>	<b>1.7</b>	<b>1.6</b>	<b>1.7</b>	<b>7.8</b>	ND<1.0	ND<2.0	ND<10
MW-10LF	12/5/06		<b>190</b>	<b>610</b>	<b>0.5</b>	<b>0.56</b>	ND<0.5	<b>1.5</b>	<b>3.7</b>	ND<2.0	ND<10
MW-10LF	2/27/07		ND<500	<b>580</b>	<b>1.0</b>	<b>1.1</b>	<b>0.51</b>	<b>3.6</b>	ND<1.0	ND<2.0	ND<10
MW-10LF	6/12/07		<b>260</b>	<b>440</b>	<b>0.5</b>	<b>0.7</b>	ND<0.5	<b>2.5</b>	<b>2.0</b>	ND<2.0	ND<10
MW-10LF	9/11/07		ND<500	<b>130</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	<b>3</b>	ND<2.0	ND<10
MW-10LF	12/11/07		ND<500	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	<b>1.6</b>	ND<2.0	ND<10
MW-10LF	3/11/08		ND<50	<b>210</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-10LF	6/10/08		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	<b>1.2</b>	ND<2.0	ND<10
MW-10LF	9/8/08		<b>51</b>	<b>50</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-10LF	12/9/08		<b>160</b>	<b>50</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-10LF	3/9/09		ND<50	<b>160</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-10LF	6/10/09		ND<50	<b>140</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-10LF	9/23/09		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-10LF	3/3/10		<b>460</b>	<b>320</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	<b>1.2</b>	-	-
MW-11S	5/5/06		ND<50	<b>11,000</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	<b>8.4</b>	ND<2.0	ND<10
MW-11S	6/14/06		ND<50	<b>730</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-11S	9/6/06		<b>3,300</b>	<b>1,400</b>	ND<0.5	ND<0.5	ND<0.5	ND<0.5	<b>4.8</b>	ND<2.0	ND<10
MW-11S	12/6/06		<b>1,700</b>	<b>130</b>	<b>0.71</b>	ND<0.5	<b>0.64</b>	<b>0.51</b>	<b>11</b>	ND<2.0	ND<10
MW-11S	2/27/07		<b>540</b>	<b>300</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	<b>4.3</b>	ND<2.0	ND<10
MW-11S	6/12/07		ND<500	<b>1,800</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	<b>4.3</b>	ND<2.0	ND<10
MW-11S	9/11/07		ND<500	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	<b>2.8</b>	ND<2.0	ND<10
MW-11S	12/11/07		ND<500	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	<b>1.5</b>	ND<2.0	ND<10
MW-11S	3/11/08		ND<50	ND<50	<b>1</b>	ND<0.5	ND<0.5	ND<1.0	<b>2.9</b>	ND<2.0	ND<10
MW-11S	6/10/08		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	<b>2.4</b>	ND<2.0	ND<10
MW-11S	9/8/08		<b>360</b>	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-11S	12/8/08		<b>140</b>	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-11S	3/10/09		ND<50	<b>51</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	<b>1.8</b>	ND<2.0	ND<10
MW-11S	6/9/09		<b>270</b>	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	<b>3.5</b>	ND<2.0	ND<10
MW-11S	9/22/09		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	<b>2.5</b>	ND<2.0	ND<10

**Table A-2**  
**Historical Analytical Results of TPH and TPH-Related Compounds**  
**Lehigh Hanson Sunol Facility Asphalt Plant**  
**7999 Athenour Way, Sunol, California**

Well	Sample Date	Notes	TPHd (ug/l)	TPHg (ug/l)	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Xylenes (ug/l)	MTBE (ug/l)	TAME (ug/l)	TBA (ug/l)
MW-11S	3/5/10		460	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	3.4	-	-
MW-11S	3/5/10	D	440	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	3.3	-	-
MW-11D	5/5/06		ND<50	13,000	20	20	26	77	47	ND<2.0	ND<10
MW-11D	6/14/06		18,000	6,500	12	4.4	11	22	26	ND<2.0	ND<10
MW-11D	9/6/06		210,000	33,000	25	30	28	97	31	ND<2.0	ND<10
MW-11D	12/6/06		190,000	2,100	15	23	29	101	19	ND<2.0	ND<10
MW-11D	2/28/07		13,000	7,400	8.4	16	17	54	18	ND<2.0	ND<10
MW-11D	6/13/07		6,700	11,000	6.2	7	13	39	15	ND<2.0	ND<10
MW-11D	9/12/07		21,000	3,000	3.6	4	7.9	22	8.5	ND<2.0	ND<10
MW-11D	12/12/07		48,000	7,700	3	3	11	30	7	ND<2.0	ND<10
MW-11D	3/12/08		63,000	37,000	2.2	0.82	7	20.4	8.9	ND<2.0	21
MW-11D	6/10/08		60,000	2,700	2.5	0.74	6.2	15.4	13	ND<2.0	ND<10
MW-11D	9/8/08		100,000	6,000	4.4	1.1	11	21.5	13	ND<2.0	ND<10
MW-11D	12/9/08		40,000	1,200	1.5	ND<0.5	4.5	9.2	ND<1.0	ND<2.0	ND<10
MW-11D	3/10/09		100,000	23,000	1.8	ND<0.5	5.7	9	15	ND<2.0	ND<10
MW-11D	6/10/09		50,000	ND<50	2.8	ND<0.5	4.2	5.81	10	ND<2.0	ND<10
MW-11D	9/22/09		6,800	500	1.3	ND<0.5	2.2	3.22	15	ND<2.0	ND<10
MW-11D	3/5/10		6,700	450	1.2	ND<0.5	1.3	ND<1.0	11	-	-
MW-11LF	5/5/06		ND<50	1,300	ND<0.5	ND<0.5	ND<0.5	3	250	ND<2.0	ND<10
MW-11LF	6/14/06		1,100	99	ND<0.5	ND<0.5	ND<0.5	ND<1.0	240	ND<2.0	ND<10
MW-11LF	9/6/06		5,300	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	160	ND<2.0	ND<10
MW-11LF	12/4/06		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	240	ND<2.0	ND<10
MW-11LF	2/27/07		ND<500	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	110	ND<2.0	ND<10
MW-11LF	6/11/07		ND<500	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	110	ND<2.0	ND<10
MW-11LF	9/10/07		ND<500	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	190	ND<2.0	13
MW-11LF	12/10/07		ND<500	120	ND<0.5	ND<0.5	ND<0.5	ND<1.0	86	ND<2.0	ND<10
MW-11LF	3/10/08		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	92	ND<2.0	30
MW-11LF	6/9/08		ND<50	120	ND<0.5	ND<0.5	ND<0.5	ND<1.0	150	ND<2.0	ND<10
MW-11LF	9/8/08		ND<50	95	ND<0.5	ND<0.5	ND<0.5	ND<1.0	170	ND<2.0	100
MW-11LF	12/8/08		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	260	ND<2.0	ND<10
MW-11LF	3/10/09		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	200	ND<2.0	ND<10
MW-11LF	6/9/09		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	160	ND<2.0	ND<10
MW-11LF	9/22/09		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	210	ND<2.0	ND<10

**Table A-2**  
**Historical Analytical Results of TPH and TPH-Related Compounds**  
**Lehigh Hanson Sunol Facility Asphalt Plant**  
**7999 Athenour Way, Sunol, California**

Well	Sample Date	Notes	TPHd (ug/l)	TPHg (ug/l)	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Xylenes (ug/l)	MTBE (ug/l)	TAME (ug/l)	TBA (ug/l)
MW-11LF	3/5/10		<b>150</b>	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	<b>110</b>	-	-
MW-12S	5/5/06		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-12S	6/13/06		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-12S	9/7/06		ND<50	<b>81</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-12S	12/5/06		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	<b>210</b>
MW-12S	2/27/07		ND<500	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-12S	6/11/07		ND<500	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	<b>19</b>
MW-12S	9/10/07		ND<500	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-12S	12/10/07		ND<500	<b>120</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-12S	3/10/08		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-12S	6/9/08		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-12S	9/9/08		<b>28</b>	ND<50	ND<0.5	<b>2</b>	<b>1.6</b>	<b>7</b>	ND<1.0	ND<2.0	ND<10
MW-12S	12/8/08		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-12S	3/11/09		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-12S	6/9/09		ND<50	ND<50	ND<0.5	<b>0.95</b>	ND<0.5	<b>1.4</b>	ND<1.0	ND<2.0	ND<10
MW-12S	9/22/09		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-12S	3/5/10		ND<51	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	<b>0.51</b>	-	-
MW-12D	5/5/06		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-12D	6/13/06		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-12D	9/6/06		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-12D	12/4/06		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-12D	2/28/07		ND<500	<b>51</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-12D	6/11/07		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-12D	9/11/07		ND<500	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-12D	12/10/07		ND<500	<b>140</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-12D	3/10/08		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-12D	6/9/08		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-12D	9/9/08		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-12D	12/9/08		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-12D	3/11/09		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-12D	6/9/09		ND<50	<b>51</b>	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-12D	9/22/09		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-12D	3/5/10		<b>60</b>	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-

**Table A-2**  
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**Lehigh Hanson Sunol Facility Asphalt Plant**  
**7999 Athenour Way, Sunol, California**

Well	Sample Date	Notes	TPHd (ug/l)	TPHg (ug/l)	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Xylenes (ug/l)	MTBE (ug/l)	TAME (ug/l)	TBA (ug/l)
MW-12LF	5/5/06		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-12LF	6/13/06		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-12LF	9/6/06		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-12LF	12/5/06		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-12LF	2/26/07		ND<500	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-12LF	6/11/07		ND<500	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-12LF	9/11/07		ND<500	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-12LF	12/11/07		ND<500	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-12LF	3/10/08		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-12LF	6/9/08		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-12LF	9/9/08		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-12LF	12/9/08		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-12LF	3/11/09		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-12LF	6/9/09		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-12LF	9/22/09		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-12LF	3/5/10		ND<51	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	<b>0.77</b>	-	-
OXY-1S	1/25/08		<b>3,800</b>	<b>10,000</b>	<b>73</b>	<b>44</b>	<b>650</b>	<b>182</b>	ND<1.0	-	-
OXY-1S	2/20/08		<b>3,700</b>	<b>2,000</b>	<b>3.3</b>	<b>6.4</b>	<b>24</b>	<b>41</b>	ND<0.50	-	-
OXY-1S	7/14/09		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
OXY-1S	9/21/09		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
OXY-1S	12/17/09		<b>71</b>	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
OXY-1S	3/5/10		<b>140</b>	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
OXY-1S	6/10/10		ND<53	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
OXY-1S	6/10/10	D	ND<51	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
OXY-1D	1/25/08		<b>1,000</b>	<b>2,400</b>	<b>23</b>	<b>5</b>	<b>92</b>	<b>58</b>	<b>0.51</b>	-	-
OXY-1D	2/20/08		<b>1,300</b>	<b>280</b>	<b>3.7</b>	<b>3.2</b>	<b>0.52</b>	<b>18</b>	ND<0.50	-	-
OXY-1D	7/14/09		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
OXY-1D	9/21/09		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
OXY-1D	12/18/09		ND<52	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
OXY-1D	3/4/10		<b>3,800</b>	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
OXY-1D	6/10/10		<b>1,300</b>	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-

**Table A-2**  
**Historical Analytical Results of TPH and TPH-Related Compounds**  
**Lehigh Hanson Sunol Facility Asphalt Plant**  
**7999 Athenour Way, Sunol, California**

Well	Sample Date	Notes	TPHd (ug/l)	TPHg (ug/l)	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Xylenes (ug/l)	MTBE (ug/l)	TAME (ug/l)	TBA (ug/l)
OXY-1LF	1/25/08		<b>160</b>	<b>60</b>	<b>0.73</b>	ND<0.5	<b>0.65</b>	<b>0.70</b>	ND<0.5	-	-
OXY-1LF	2/20/08		<b>110</b>	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	-	-
OXY-1LF	7/15/09		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
OXY-1LF	9/21/09		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
OXY-1LF	12/17/09		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
OXY-1LF	12/17/09	D	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
OXY-1LF	3/4/10		<b>130</b>	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
OXY-1LF	6/10/10		ND<51	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
<i>ESIs</i>			<i>100</i>	<i>100</i>	<i>1</i>	<i>40</i>	<i>30</i>	<i>20</i>	<i>5</i>	<i>-</i>	<i>12</i>

**Table A-2**  
**Historical Analytical Results of TPH and TPH-Related Compounds**  
**Lehigh Hanson Sunol Facility Asphalt Plant**  
**7999 Athenour Way, Sunol, California**

Well	Sample Date	Notes	TPHd (ug/l)	TPHg (ug/l)	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Xylenes (ug/l)	MTBE (ug/l)	TAME (ug/l)	TBA (ug/l)
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**Notes:**  
TPHd = total petroleum hydrocarbons as diesel  
TPHg = total petroleum hydrocarbons as gasoline  
MTBE = methyl tert butyl ether  
TAME = tert-amyl-methyl ether  
TBA = tert-butyl alcohol  
ug/l = micrograms per liter  
ND = not detected above given laboratory reporting limit  
D = duplicate sample  
NS = well not sampled  
Dash indicates not analyzed for given compound, or, no ESL available  
**Bold** values indicate detection above given laboratory reporting limit  
ESL = Environmental Screening Levels by San Francisco Bay Regional Water Quality Control Board, May 2008, for groundwater beneath Residential Land Use Areas where Groundwater is a Current or Potential Source of Drinking Water.  
1 = well abandoned  
2 = sampled twice in same quarter due to broken sample containers

**Table A-3**  
**Groundwater Monitoring Inorganic Results - During AIS Operation**  
**Lehigh Hanson Sunol Facility Asphalt Plant**  
**7999 Athenour Way, Sunol, California**

Well	Sample Date	Notes	DO (mg/l)	ORP (mV)	Ferrous Iron Fe2 <sup>+</sup> (mg/l)*	pH (SU)	Conductivity (µS/cm)	Field Parameters Measured by:
MW-1	1/22/08	PT	0.62	-124.3	-	6.88	3,956	LFR
MW-1	2/18/08	PT	0.54	-54	-	6.85	3,148	LFR
MW-1	5/6/09		2.08	1.7	-	7.26	2,689	LFR
MW-1	6/9/09		3.30	-94	-	6.26	2,700	(Tait)
MW-1	7/14/09		1.34	-68.4	-	6.89	2,811	LFR
MW-1	9/22/09		3.41	-81	-	6.01	-	(Tait)
MW-1	12/17/09		3.50	21.2	0.11	6.61	2,795	AUS
MW-1	3/2/10		1.80	113	0.04	6.75	2,495	AUS
MW-1	6/9/10		3.67	296.2	0.02	6.40	2,382	AUS
MW-2S	9/22/09		2.42	-156	-	6.60	-	(Tait)
MW-2S	3/3/10		0.25	-64.1	2.6	6.79	1,673	AUS
MW-2M	9/22/09		2.71	-182	-	6.63	-	(Tait)
MW-2M	3/3/10		0.10	-125.2	3.12	6.77	2,286	AUS
MW-2D	9/22/09		2.97	-162	-	6.82	-	(Tait)
MW-2D	3/3/10		0.12	-105.3	2.1	6.80	2,243	AUS
MW-3	9/22/09		2.40	-170	-	6.65	-	(Tait)
MW-3	3/5/10		0.10	-226.5	1.59	6.75	2,889	AUS
MW-4S	9/21/09		3.95	-71	-	7.14	-	(Tait)
MW-4S	3/3/10		1.30	-22.5	0.03	7.88	859	AUS
MW-4D	9/21/09		3.19	-90	-	7.16	-	(Tait)
MW-4D	3/3/10		0.13	-81.5	0.15	7.26	2,368	AUS
MW-5S	9/21/09		2.33	-134	-	6.90	-	(Tait)
MW-5S	3/4/10		1.20	-	1.27	-	-	AUS
MW-5D	9/21/09		2.90	-135	-	7.00	-	(Tait)
MW-5D	3/4/10		-	-	1.53	-	-	AUS
MW-6S	9/22/09		2.40	-182	-	6.81	-	(Tait)
MW-6S	3/5/10		0.11	-229.9	1.01	6.89	1,445	AUS
MW-6D	9/22/09		2.07	-164	-	6.85	-	(Tait)
MW-6D	3/3/10		0.29	-184.2	1.86	10.61	2,513	AUS
MW-7S	1/22/08	PT	0.43	-122.6	-	6.68	2,168	LFR
MW-7S	2/18/08	PT	0.50	-12.8	-	6.80	1,542	LFR
MW-7S	5/6/09		0.14	-99.1	-	6.46	2,005	LFR
MW-7S	6/8/09		3.07	-190	-	6.44	2,300	(Tait)
MW-7S	7/14/09		0.43	-221.1	-	6.69	2,156	LFR
MW-7S	9/22/09		4.52	-189	-	6.81	-	(Tait)
MW-7S	12/18/09		0.71	-81.4	1.62	6.59	1,939	AUS
MW-7S	3/4/10		-	-	1.8	-	-	AUS
MW-7S	6/9/10		0.13	-73.2	2.28	6.80	1,969	AUS

**Table A-3**  
**Groundwater Monitoring Inorganic Results - During AIS Operation**  
**Lehigh Hanson Sunol Facility Asphalt Plant**  
**7999 Athenour Way, Sunol, California**

Well	Sample Date	Notes	DO (mg/l)	ORP (mV)	Ferrous Iron Fe <sup>2+</sup> (mg/l)*	pH (SU)	Conductivity (μS/cm)	Field Parameters Measured by:
MW-7D	1/22/08	PT	0.44	-186.7	-	6.77	2,068	LFR
MW-7D	2/19/08	PT	0.27	-125.3	12	6.91	2,035	LFR
MW-7D	5/6/09		0.10	-196.3	-	6.93	1,855	LFR
MW-7D	6/8/09		2.27	-220	-	6.46	2,100	(Tait)
MW-7D	7/15/09		0.50	-238.7	2.6	6.77	1,904	LFR
MW-7D	9/23/09		2.31	-224	-	6.51	-	(Tait)
MW-7D	12/18/09		2.20	-96	2.6	6.70	1,798	AUS
MW-7D	3/4/10		-	-	1.7	-	-	AUS
MW-7D	6/9/10		0.03	-89.4	2.24	6.75	1,923	AUS
MW-8	1/22/08	PT	0.55	14.9	-	0.55	1,548	LFR
MW-8	2/18/08	PT	0.38	40.1	-	6.75	1,238	LFR
MW-8	5/6/09		0.24	-16	-	7.22	1,711	LFR
MW-8	6/8/09		2.22	-93	-	6.45	1,900	(Tait)
MW-8	7/14/09		0.35	-59.5	-	6.82	1,776	LFR
MW-8	9/23/09		-	-	-	-	-	-
MW-8	12/17/09		2.25	28.1	0.01	6.65	1,489	AUS
MW-8	3/2/10		0.35	115.7	0	6.94	1,658	AUS
MW-8	6/9/10		0.13	141.9	0.03	6.74	1,796	AUS
MW-9S	1/21/08	PT	0.94	-196.2	-	6.76	3,825	LFR
MW-9S	2/19/08	PT	0.73	11.5	0.51	7.16	3,053	LFR
MW-9S	5/6/09		0.77	17.4	-	7.48	2,234	LFR
MW-9S	6/8/09		3.53	47	-	6.75	2,400	Tait
MW-9S	6/8/09		6.26	166.3	-	7.24	2,181	LFR
MW-9S	7/15/09		3.53	-4.5	0.15	7.10	2,273	LFR
MW-9S	9/23/09		3.51	47	-	6.71	-	(Tait)
MW-9S	12/18/09		7.40	42	0.0	7.26	2,389	AUS
MW-9S	3/4/10		5.42	-231.5	0.06	9.95	2,677	AUS
MW-9S	6/9/10		7.53	243.9	0.14	7.35	2,182	AUS
MW-9D	1/21/08	PT	0.86	-267.2	-	6.65	3,111	LFR
MW-9D	2/19/08	PT	0.17	-102.2	30	6.98	2,664	LFR
MW-9D	5/6/09		0.31	-13.9	-	6.99	2,259	LFR
MW-9D	6/8/09		3.70	-338	-	6.75	3,000	(Tait)
MW-9D	7/15/09		4.61	18	1.5	6.99	2,010	LFR
MW-9D	9/23/09		4.11	-343	-	6.79	-	(Tait)
MW-9D	12/18/09		7.64	27.4	0.18	7.28	1,606	AUS
MW-9D	3/2/10		5.22	133.9	0	7.31	1,878	AUS
MW-9D	6/9/10		3.07	96	0.66	7.28	1,939	AUS



**Table A-3**  
**Groundwater Monitoring Inorganic Results - During AIS Operation**  
**Lehigh Hanson Sunol Facility Asphalt Plant**  
**7999 Athenour Way, Sunol, California**

Well	Sample Date	Notes	DO (mg/l)	ORP (mV)	Ferrous Iron Fe <sup>2+</sup> (mg/l)*	pH (SU)	Conductivity (µS/cm)	Field Parameters Measured by:
MW-9LF	1/21/08	PT	0.62	-216.1	-	6.91	2,065	LFR
MW-9LF	2/19/08	PT	6.44	375	1.4	7.48	1,607	LFR
MW-9LF	5/6/09		7.87	6.4	-	7.43	1,749	LFR
MW-9LF	6/8/09		3.65	77	-	7.16	1,900	(Tait)
MW-9LF	6/8/09		12.10	211.8	-	7.38	1,716	LFR
MW-9LF	7/15/09		10.09	-15.6	0.89	7.53	1,671	LFR
MW-9LF	9/23/09		3.68	75	-	7.21	-	(Tait)
MW-9LF	12/17/09		7.17	66	0.06	7.72	1,342	AUS
MW-9LF	3/2/10		8.05	104.7	0.15	7.61	1,603	AUS
MW-9LF	6/9/10		9.31	155.3	2.53	7.68	1,587	AUS
MW-10S	9/23/09		2.94	-112	-	7.01	-	(Tait)
MW-10S	3/3/10		0.22	-38.3	0.14	7.23	1,862	AUS
MW-10D	9/23/09		2.31	-220	-	6.70	-	(Tait)
MW-10D	3/3/10		0.09	-255.9	0	7.37	2,463	AUS
MW-10LF	9/23/09		2.80	-198	-	6.76	-	(Tait)
MW-10LF	3/3/10		0.31	-164.9	1.89	7.03	3,736	AUS
MW-11S	9/22/09		2.10	-155	-	7.08	-	(Tait)
MW-11S	3/5/10		0.17	-251.6	1.33	6.71	1,852	AUS
MW-11D	9/22/09		2.64	-214	-	6.83	-	(Tait)
MW-11D	3/5/10		0.10	-307.4	0.59	6.68	1,748	AUS
MW-11LF	9/22/09		2.37	-162	-	7.11	-	(Tait)
MW-11LF	3/5/10		0.15	-147.7	1.16	6.60	1,353	AUS
MW-12S	9/22/09		3.92	-19	-	7.00	-	(Tait)
MW-12S	3/5/10		0.17	-175.4	0.26	6.60	1,809	AUS
MW-12D	9/22/09		3.62	70	-	6.75	-	(Tait)
MW-12D	3/5/10		0.09	-267.9	0.11	6.65	1,526	AUS
MW-12LF	9/22/09		7.31	14	-	6.70	-	(Tait)
MW-12LF	3/5/10		0.22	-228.1	0	6.74	1,533	AUS
OXY-1S	1/25/08	PT	-	-	-	7.16	3,540	LFR
OXY-1S	2/20/08	PT	0.12	20.5	-	7.44	3,065	LFR
OXY-1S	5/6/09		7.56	12.5	-	8.23	2,240	LFR
OXY-1S	6/8/09		3.27	20	-	7.42	2,300	Tait
OXY-1S	6/8/09		9.24	143.9	-	7.84	2,129	LFR
OXY-1S	7/14/09		8.22	-143.1	-	7.72	2,159	LFR
OXY-1S	9/21/09		17.09	21	-	7.30	-	(Tait)
OXY-1S	12/17/09		6.52	63.7	0.1	7.48	2,307	AUS
OXY-1S	3/5/10		2.12	-169.9	0	7.28	2,417	AUS
OXY-1S	6/10/10		5.80	165.2	0.07	7.59	1,940	AUS

**Table A-3**  
**Groundwater Monitoring Inorganic Results - During AIS Operation**  
**Lehigh Hanson Sunol Facility Asphalt Plant**  
**7999 Athenour Way, Sunol, California**

Well	Sample Date	Notes	DO (mg/l)	ORP (mV)	Ferrous Iron Fe <sup>2+</sup> (mg/l)*	pH (SU)	Conductivity (µS/cm)	Field Parameters Measured by:
OXY-1D	1/25/08	PT	-	-	-	7.27	2,380	LFR
OXY-1D	2/20/08	PT	0.64	83.4	-	7.33	2,228	LFR
OXY-1D	5/6/09		-	-	-	-	-	-
OXY-1D	6/8/09		-	-	-	-	-	-
OXY-1D	7/14/09		6.71	-44	-	7.55	1,663	LFR
OXY-1D	9/21/09		>19.99	78	-	7.20	-	(Tait)
OXY-1D	12/18/09		10.33	57.3	0.21	7.51	1,422	AUS
OXY-1D	3/4/10		5.42	-231.5	0.19	9.23	1,689	AUS
OXY-1D	6/10/10		7.40	196	0.24	7.61	1,699	AUS
OXY-1LF	1/25/08	PT	-	-	-	7.53	1,750	LFR
OXY-1LF	2/20/08	PT	1.11	77.4	-	7.32	1,943	LFR
OXY-1LF	5/6/09		-	-	-	-	-	-
OXY-1LF	6/8/09		-	-	-	-	-	-
OXY-1LF	7/15/09		5.30	-83	-	7.11	1,779	LFR
OXY-1LF	9/21/09		14.80	95	-	7.19	-	(Tait)
OXY-1LF	12/17/09		3.67	69.1	0.01	6.99	1,563	AUS
OXY-1LF	3/4/10		3.84	-126.4	0	7.11	1,320	AUS
OXY-1LF	6/10/10		6.40	164.8	0.05	7.33	1,846	AUS

**Notes:**

AIS = Air Injection System  
DO = Dissolved Oxygen  
ORP = Oxidation-Reduction Potential  
\* = Measured with field kit  
AUS = ARCADIS U.S., Inc.  
LFR = LFR Inc.  
Tait = Tait Environmental Management, Inc.  
mV = MilliVolts  
mg/l = Milligrams per liter  
µS/cm = micro-Siemens per centimeter  
SU = Standard units  
PT = Pilot Test; sample collected during the air injection pilot test  
Dash indicates that no measurement was made or no sample was collected.

ARCADIS

**Appendix B**

Certified Laboratory Analytical  
Reports

## ANALYTICAL REPORT

Job Number: 720-28670-1  
Job Description: Hanson Sunol, CA

For:  
ARCADIS U.S., Inc.  
1900 Powell Street, 12th Floor  
Emeryville, CA 94608  
Attention: Ms. Katrin Schliewen

*Melissa Brewer*

Approved for release.  
Melissa Brewer  
Project Manager I  
6/17/2010 12:43 PM

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Designee for  
Afsaneh Salimpour  
Project Manager I  
afsaneh.salimpour@testamericainc.com  
06/17/2010

CA ELAP Certification # 2496

The Chain(s) of Custody are included and are an integral part of this report.

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A trip blank is required to be provided for volatile analyses. If trip blank results are not included in the report, either the trip blank was not submitted or requested to be analyzed.

**TestAmerica Laboratories, Inc.**

TestAmerica San Francisco 1220 Quarry Lane, Pleasanton, CA 94566

Tel (925) 484-1919 Fax (925) 600-3002 [www.testamericainc.com](http://www.testamericainc.com)

**Job Narrative**  
**Job Narrative**  
**720-28670-1**

**Comments**

No additional comments.

**Receipt**

All samples were received in good condition within temperature requirements.

**GC/MS VOA**

Method(s) 8260B\_LL: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 73038 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

No other analytical or quality issues were noted.

**GC Semi VOA**

Method(s) 8015B: Capric acid surrogate recovery for the following sample was outside control limits: OXY-1D (720-28670-10). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

No other analytical or quality issues were noted.

**Organic Prep**

No analytical or quality issues were noted.

## EXECUTIVE SUMMARY - Detections

Client: ARCADIS U.S., Inc.

Job Number: 720-28670-1

Lab Sample ID	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
<b>720-28670-6</b>	<b>MW-7S</b>				
Gasoline Range Organics (GRO)-C5-C12		900	50	ug/L	8260B/CA_LUFTMS
<i>Silica Gel Cleanup</i>					
Diesel Range Organics [C10-C28]		140	54	ug/L	8015B
<b>720-28670-7</b>	<b>MW-7D</b>				
Benzene		44	5.0	ug/L	8260B/CA_LUFTMS
Ethylbenzene		780	5.0	ug/L	8260B/CA_LUFTMS
Toluene		32	5.0	ug/L	8260B/CA_LUFTMS
Xylenes, Total		480	10	ug/L	8260B/CA_LUFTMS
Gasoline Range Organics (GRO)-C5-C12		16000	500	ug/L	8260B/CA_LUFTMS
<i>Silica Gel Cleanup</i>					
Diesel Range Organics [C10-C28]		12000	250	ug/L	8015B
<b>720-28670-9</b>	<b>MW-9D</b>				
Benzene		0.58	0.50	ug/L	8260B/CA_LUFTMS
Ethylbenzene		82	0.50	ug/L	8260B/CA_LUFTMS
Toluene		2.5	0.50	ug/L	8260B/CA_LUFTMS
Xylenes, Total		120	1.0	ug/L	8260B/CA_LUFTMS
Gasoline Range Organics (GRO)-C5-C12		5200	250	ug/L	8260B/CA_LUFTMS
<i>Silica Gel Cleanup</i>					
Diesel Range Organics [C10-C28]		1300	51	ug/L	8015B
<b>720-28670-10</b>	<b>OXY-1D</b>				
<i>Silica Gel Cleanup</i>					
Diesel Range Organics [C10-C28]		1300	53	ug/L	8015B

## METHOD SUMMARY

Client: ARCADIS U.S., Inc.

Job Number: 720-28670-1

Description		Lab Location	Method	Preparation Method
<b>Matrix</b>	<b>Water</b>			
8260B / CA LUFT MS		TAL SF	SW846 8260B/CA_LUFTMS	
Purge and Trap		TAL SF		SW846 5030B
Diesel Range Organics (DRO) (GC)		TAL SF	SW846 8015B	
Liquid-Liquid Extraction (Separatory Funnel)		TAL SF		SW846 3510C SGC

### Lab References:

TAL SF = TestAmerica San Francisco

### Method References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

## METHOD / ANALYST SUMMARY

Client: ARCADIS U.S., Inc.

Job Number: 720-28670-1

<b>Method</b>	<b>Analyst</b>	<b>Analyst ID</b>
SW846 8260B/CA_LUFTMS	Ali, Badri	BA
SW846 8260B/CA_LUFTMS	Le, Lien	LL
SW846 8015B	Hayashi, Derek	DH



## SAMPLE SUMMARY

Client: ARCADIS U.S., Inc.

Job Number: 720-28670-1

<b>Lab Sample ID</b>	<b>Client Sample ID</b>	<b>Client Matrix</b>	<b>Date/Time Sampled</b>	<b>Date/Time Received</b>
720-28670-1TB	TB-060910	Water	06/09/2010 0000	06/10/2010 1348
720-28670-2	MW-1	Water	06/09/2010 1120	06/10/2010 1348
720-28670-3	MW-8	Water	06/09/2010 1210	06/10/2010 1348
720-28670-4	MW-8-D	Water	06/09/2010 1220	06/10/2010 1348
720-28670-5	MW-9LF	Water	06/09/2010 1410	06/10/2010 1348
720-28670-6	MW-7S	Water	06/09/2010 1320	06/10/2010 1348
720-28670-7	MW-7D	Water	06/09/2010 1405	06/10/2010 1348
720-28670-8	MW-9S	Water	06/09/2010 1140	06/10/2010 1348
720-28670-9	MW-9D	Water	06/09/2010 1300	06/10/2010 1348
720-28670-10	OXY-1D	Water	06/10/2010 0940	06/10/2010 1348
720-28670-11	OXY-1S	Water	06/10/2010 1055	06/10/2010 1348
720-28670-12	OXY-1S-D	Water	06/10/2010 1105	06/10/2010 1348
720-28670-13	OXY-1LF	Water	06/10/2010 1215	06/10/2010 1348

Analytical Data

Client: ARCADIS U.S., Inc.

Job Number: 720-28670-1

Client Sample ID: TB-060910

Lab Sample ID: 720-28670-1TB

Date Sampled: 06/09/2010 0000

Client Matrix: Water

Date Received: 06/10/2010 1348

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8260B/CA\_LUFTMS 8260B / CA LUFT MS

Method: 8260B/CA\_LUFTMS      Analysis Batch: 720-73038      Instrument ID: SAT 3900C  
Preparation: 5030B      Lab File ID: 28670-A-1 6-12-2010  
Dilution: 1.0      Initial Weight/Volume: 10 mL  
Date Analyzed: 06/12/2010 1311      Final Weight/Volume: 10 mL  
Date Prepared: 06/12/2010 1311

---

Analyte	Result (ug/L)	Qualifier	RL
Methyl tert-butyl ether	ND		0.50
Benzene	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
Gasoline Range Organics (GRO)-C5-C12	ND		50

---

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	105		67 - 130
1,2-Dichloroethane-d4 (Surr)	101		67 - 130
Toluene-d8 (Surr)	94		70 - 130

**Analytical Data**

Client: ARCADIS U.S., Inc.

Job Number: 720-28670-1

**Client Sample ID:** MW-1

Lab Sample ID: 720-28670-2

Date Sampled: 06/09/2010 1120

Client Matrix: Water

Date Received: 06/10/2010 1348

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**8260B/CA\_LUFTMS 8260B / CA LUFT MS**

Method: 8260B/CA\_LUFTMS      Analysis Batch: 720-73038      Instrument ID: SAT 3900C  
Preparation: 5030B      Lab File ID: 28670-A-2 6-12-2010  
Dilution: 1.0      Initial Weight/Volume: 10 mL  
Date Analyzed: 06/12/2010 1339      Final Weight/Volume: 10 mL  
Date Prepared: 06/12/2010 1339

Analyte	Result (ug/L)	Qualifier	RL
Methyl tert-butyl ether	ND		0.50
Benzene	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
Gasoline Range Organics (GRO)-C5-C12	ND		50

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	98		67 - 130
1,2-Dichloroethane-d4 (Surr)	97		67 - 130
Toluene-d8 (Surr)	99		70 - 130

Analytical Data

Client: ARCADIS U.S., Inc.

Job Number: 720-28670-1

Client Sample ID: MW-8

Lab Sample ID: 720-28670-3

Date Sampled: 06/09/2010 1210

Client Matrix: Water

Date Received: 06/10/2010 1348

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8260B/CA\_LUFTMS 8260B / CA LUFT MS

Method: 8260B/CA\_LUFTMS      Analysis Batch: 720-73038      Instrument ID: SAT 3900C  
Preparation: 5030B      Lab File ID: 28670-A-3 6-12-2010  
Dilution: 1.0      Initial Weight/Volume: 10 mL  
Date Analyzed: 06/12/2010 1407      Final Weight/Volume: 10 mL  
Date Prepared: 06/12/2010 1407

Analyte	Result (ug/L)	Qualifier	RL
Methyl tert-butyl ether	ND		0.50
Benzene	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
Gasoline Range Organics (GRO)-C5-C12	ND		50

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	101		67 - 130
1,2-Dichloroethane-d4 (Surr)	105		67 - 130
Toluene-d8 (Surr)	99		70 - 130

**Analytical Data**

Client: ARCADIS U.S., Inc.

Job Number: 720-28670-1

**Client Sample ID: MW-8-D**

Lab Sample ID: 720-28670-4

Date Sampled: 06/09/2010 1220

Client Matrix: Water

Date Received: 06/10/2010 1348

---

**8260B/CA\_LUFTMS 8260B / CA LUFT MS**

Method: 8260B/CA\_LUFTMS      Analysis Batch: 720-73038      Instrument ID: SAT 3900C  
Preparation: 5030B      Lab File ID: 28670-A-4 6-12-2010  
Dilution: 1.0      Initial Weight/Volume: 10 mL  
Date Analyzed: 06/12/2010 1434      Final Weight/Volume: 10 mL  
Date Prepared: 06/12/2010 1434

Analyte	Result (ug/L)	Qualifier	RL
Methyl tert-butyl ether	ND		0.50
Benzene	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
Gasoline Range Organics (GRO)-C5-C12	ND		50

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	103		67 - 130
1,2-Dichloroethane-d4 (Surr)	103		67 - 130
Toluene-d8 (Surr)	99		70 - 130

**Analytical Data**

Client: ARCADIS U.S., Inc.

Job Number: 720-28670-1

**Client Sample ID: MW-9LF**

Lab Sample ID: 720-28670-5

Date Sampled: 06/09/2010 1410

Client Matrix: Water

Date Received: 06/10/2010 1348

---

**8260B/CA\_LUFTMS 8260B / CA LUFT MS**

Method: 8260B/CA\_LUFTMS      Analysis Batch: 720-73038      Instrument ID: SAT 3900C  
Preparation: 5030B      Lab File ID: 28670-A-5 6-12-2010  
Dilution: 1.0      Initial Weight/Volume: 10 mL  
Date Analyzed: 06/12/2010 1502      Final Weight/Volume: 10 mL  
Date Prepared: 06/12/2010 1502

Analyte	Result (ug/L)	Qualifier	RL
Methyl tert-butyl ether	ND		0.50
Benzene	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
Gasoline Range Organics (GRO)-C5-C12	ND		50

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	101		67 - 130
1,2-Dichloroethane-d4 (Surr)	95		67 - 130
Toluene-d8 (Surr)	96		70 - 130

Analytical Data

Client: ARCADIS U.S., Inc.

Job Number: 720-28670-1

Client Sample ID: MW-7S

Lab Sample ID: 720-28670-6

Date Sampled: 06/09/2010 1320

Client Matrix: Water

Date Received: 06/10/2010 1348

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8260B/CA\_LUFTMS 8260B / CA LUFT MS

Method: 8260B/CA\_LUFTMS      Analysis Batch: 720-73038      Instrument ID: SAT 3900C  
Preparation: 5030B      Lab File ID: 28670-A-6 6-12-2010  
Dilution: 1.0      Initial Weight/Volume: 10 mL  
Date Analyzed: 06/12/2010 1529      Final Weight/Volume: 10 mL  
Date Prepared: 06/12/2010 1529

Analyte	Result (ug/L)	Qualifier	RL
Methyl tert-butyl ether	ND		0.50
Benzene	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
Gasoline Range Organics (GRO)-C5-C12	900		50

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	105		67 - 130
1,2-Dichloroethane-d4 (Surr)	106		67 - 130
Toluene-d8 (Surr)	100		70 - 130

Analytical Data

Client: ARCADIS U.S., Inc.

Job Number: 720-28670-1

Client Sample ID: MW-7D

Lab Sample ID: 720-28670-7

Date Sampled: 06/09/2010 1405

Client Matrix: Water

Date Received: 06/10/2010 1348

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8260B/CA\_LUFTMS 8260B / CA LUFT MS

Method: 8260B/CA\_LUFTMS      Analysis Batch: 720-73038      Instrument ID: SAT 3900C  
Preparation: 5030B      Lab File ID: 28670-A-7 6-12-2010  
Dilution: 10      Initial Weight/Volume: 10 mL  
Date Analyzed: 06/12/2010 1557      Final Weight/Volume: 10 mL  
Date Prepared: 06/12/2010 1557

---

Analyte	Result (ug/L)	Qualifier	RL
Methyl tert-butyl ether	ND		5.0
Benzene	44		5.0
Ethylbenzene	780		5.0
Toluene	32		5.0
Xylenes, Total	480		10
Gasoline Range Organics (GRO)-C5-C12	16000		500

---

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	100		67 - 130
1,2-Dichloroethane-d4 (Surr)	107		67 - 130
Toluene-d8 (Surr)	97		70 - 130



Analytical Data

Client: ARCADIS U.S., Inc.

Job Number: 720-28670-1

Client Sample ID: MW-9S

Lab Sample ID: 720-28670-8

Client Matrix: Water

Date Sampled: 06/09/2010 1140

Date Received: 06/10/2010 1348

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8260B/CA\_LUFTMS 8260B / CA LUFT MS

Method: 8260B/CA\_LUFTMS      Analysis Batch: 720-73038      Instrument ID: SAT 3900C  
Preparation: 5030B      Lab File ID: 28670-A-8 6-12-2010  
Dilution: 1.0      Initial Weight/Volume: 10 mL  
Date Analyzed: 06/12/2010 1720      Final Weight/Volume: 10 mL  
Date Prepared: 06/12/2010 1720

Analyte	Result (ug/L)	Qualifier	RL
Methyl tert-butyl ether	ND		0.50
Benzene	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
Gasoline Range Organics (GRO)-C5-C12	ND		50

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	98		67 - 130
1,2-Dichloroethane-d4 (Surr)	98		67 - 130
Toluene-d8 (Surr)	97		70 - 130

**Analytical Data**

Client: ARCADIS U.S., Inc.

Job Number: 720-28670-1

**Client Sample ID: MW-9D**

Lab Sample ID: 720-28670-9

Date Sampled: 06/09/2010 1300

Client Matrix: Water

Date Received: 06/10/2010 1348

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**8260B/CA\_LUFTMS 8260B / CA LUFT MS**

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-73038	Instrument ID:	SAT 3900C
Preparation:	5030B		Lab File ID:	28670-A-9 6-12-2010
Dilution:	1.0		Initial Weight/Volume:	10 mL
Date Analyzed:	06/12/2010 1748		Final Weight/Volume:	10 mL
Date Prepared:	06/12/2010 1748			

---

Analyte	Result (ug/L)	Qualifier	RL
Methyl tert-butyl ether	ND		0.50
Benzene	0.58		0.50
Ethylbenzene	82		0.50
Toluene	2.5		0.50
Xylenes, Total	120		1.0

---

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	114		67 - 130
1,2-Dichloroethane-d4 (Surr)	110		67 - 130
Toluene-d8 (Surr)	104		70 - 130

**Analytical Data**

Client: ARCADIS U.S., Inc.

Job Number: 720-28670-1

**Client Sample ID: MW-9D**

Lab Sample ID: 720-28670-9

Date Sampled: 06/09/2010 1300

Client Matrix: Water

Date Received: 06/10/2010 1348

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**8260B/CA\_LUFTMS 8260B / CA LUFT MS**

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-73058	Instrument ID:	HP9
Preparation:	5030B		Lab File ID:	06141017.D
Dilution:	5.0		Initial Weight/Volume:	10 mL
Date Analyzed:	06/14/2010 1745		Final Weight/Volume:	10 mL
Date Prepared:	06/14/2010 1745			

Analyte	Result (ug/L)	Qualifier	RL
Gasoline Range Organics (GRO)-C5-C12	5200		250
Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	95		67 - 130
1,2-Dichloroethane-d4 (Surr)	95		67 - 130
Toluene-d8 (Surr)	100		70 - 130

Analytical Data

Client: ARCADIS U.S., Inc.

Job Number: 720-28670-1

Client Sample ID: OXY-1D

Lab Sample ID: 720-28670-10

Date Sampled: 06/10/2010 0940

Client Matrix: Water

Date Received: 06/10/2010 1348

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8260B/CA\_LUFTMS 8260B / CA LUFT MS

Method: 8260B/CA\_LUFTMS      Analysis Batch: 720-73058      Instrument ID: HP9  
Preparation: 5030B      Lab File ID: 06141018.D  
Dilution: 1.0      Initial Weight/Volume: 10 mL  
Date Analyzed: 06/14/2010 1817      Final Weight/Volume: 10 mL  
Date Prepared: 06/14/2010 1817

---

Analyte	Result (ug/L)	Qualifier	RL
Methyl tert-butyl ether	ND		0.50
Benzene	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
Gasoline Range Organics (GRO)-C5-C12	ND		50

---

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	89		67 - 130
1,2-Dichloroethane-d4 (Surr)	97		67 - 130
Toluene-d8 (Surr)	97		70 - 130

**Analytical Data**

Client: ARCADIS U.S., Inc.

Job Number: 720-28670-1

**Client Sample ID: OXY-1S**

Lab Sample ID: 720-28670-11

Date Sampled: 06/10/2010 1055

Client Matrix: Water

Date Received: 06/10/2010 1348

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**8260B/CA\_LUFTMS 8260B / CA LUFT MS**

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-73038	Instrument ID:	SAT 3900C
Preparation:	5030B		Lab File ID:	28670-A-11
Dilution:	1.0		Initial Weight/Volume:	10 mL
Date Analyzed:	06/12/2010 1843		Final Weight/Volume:	10 mL
Date Prepared:	06/12/2010 1843			

Analyte	Result (ug/L)	Qualifier	RL
Methyl tert-butyl ether	ND		0.50
Benzene	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
Gasoline Range Organics (GRO)-C5-C12	ND		50

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	98		67 - 130
1,2-Dichloroethane-d4 (Surr)	99		67 - 130
Toluene-d8 (Surr)	95		70 - 130

Analytical Data

Client: ARCADIS U.S., Inc.

Job Number: 720-28670-1

Client Sample ID: OXY-1S-D

Lab Sample ID: 720-28670-12

Date Sampled: 06/10/2010 1105

Client Matrix: Water

Date Received: 06/10/2010 1348

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8260B/CA\_LUFTMS 8260B / CA LUFT MS

Method: 8260B/CA\_LUFTMS      Analysis Batch: 720-73038      Instrument ID: SAT 3900C  
Preparation: 5030B      Lab File ID: 28670-A-12  
Dilution: 1.0      Initial Weight/Volume: 10 mL  
Date Analyzed: 06/12/2010 1910      Final Weight/Volume: 10 mL  
Date Prepared: 06/12/2010 1910

Analyte	Result (ug/L)	Qualifier	RL
Methyl tert-butyl ether	ND		0.50
Benzene	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
Gasoline Range Organics (GRO)-C5-C12	ND		50

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	98		67 - 130
1,2-Dichloroethane-d4 (Surr)	106		67 - 130
Toluene-d8 (Surr)	97		70 - 130

**Analytical Data**

Client: ARCADIS U.S., Inc.

Job Number: 720-28670-1

**Client Sample ID:** OXY-1LF

Lab Sample ID: 720-28670-13

Date Sampled: 06/10/2010 1215

Client Matrix: Water

Date Received: 06/10/2010 1348

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**8260B/CA\_LUFTMS 8260B / CA LUFT MS**

Method: 8260B/CA\_LUFTMS      Analysis Batch: 720-73038      Instrument ID: SAT 3900C  
Preparation: 5030B      Lab File ID: 28670-A-13  
Dilution: 1.0      Initial Weight/Volume: 10 mL  
Date Analyzed: 06/12/2010 1938      Final Weight/Volume: 10 mL  
Date Prepared: 06/12/2010 1938

Analyte	Result (ug/L)	Qualifier	RL
Methyl tert-butyl ether	ND		0.50
Benzene	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
Gasoline Range Organics (GRO)-C5-C12	ND		50

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	100		67 - 130
1,2-Dichloroethane-d4 (Surr)	102		67 - 130
Toluene-d8 (Surr)	97		70 - 130

**Analytical Data**

Client: ARCADIS U.S., Inc.

Job Number: 720-28670-1

**Client Sample ID:** MW-1

Lab Sample ID: 720-28670-2

Date Sampled: 06/09/2010 1120

Client Matrix: Water

Date Received: 06/10/2010 1348

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**8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup**

Method:	8015B	Analysis Batch: 720-73035	Instrument ID:	CHDRO5
Preparation:	3510C SGC	Prep Batch: 720-73004	Initial Weight/Volume:	910 mL
Dilution:	1.0		Final Weight/Volume:	2 mL
Date Analyzed:	06/12/2010 1112		Injection Volume:	1 uL
Date Prepared:	06/11/2010 1442		Result Type:	PRIMARY

---

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	ND		54

---

Surrogate	%Rec	Qualifier	Acceptance Limits
Capric Acid (Surr)	0		0 - 5
p-Terphenyl	86		31 - 150



**Analytical Data**

Client: ARCADIS U.S., Inc.

Job Number: 720-28670-1

**Client Sample ID: MW-8**

Lab Sample ID: 720-28670-3

Date Sampled: 06/09/2010 1210

Client Matrix: Water

Date Received: 06/10/2010 1348

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**8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup**

Method:	8015B	Analysis Batch: 720-73035	Instrument ID:	CHDRO5
Preparation:	3510C SGC	Prep Batch: 720-73004	Initial Weight/Volume:	990 mL
Dilution:	1.0		Final Weight/Volume:	2 mL
Date Analyzed:	06/12/2010 1137		Injection Volume:	1 uL
Date Prepared:	06/11/2010 1442		Result Type:	PRIMARY

---

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	ND		50

---

Surrogate	%Rec	Qualifier	Acceptance Limits
Capric Acid (Surr)	2		0 - 5
p-Terphenyl	92		31 - 150

**Analytical Data**

Client: ARCADIS U.S., Inc.

Job Number: 720-28670-1

**Client Sample ID: MW-8-D**

Lab Sample ID: 720-28670-4

Date Sampled: 06/09/2010 1220

Client Matrix: Water

Date Received: 06/10/2010 1348

---

**8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup**

Method:	8015B	Analysis Batch: 720-73035	Instrument ID:	CHDRO5
Preparation:	3510C SGC	Prep Batch: 720-73004	Initial Weight/Volume:	940 mL
Dilution:	1.0		Final Weight/Volume:	2 mL
Date Analyzed:	06/12/2010 1202		Injection Volume:	1 uL
Date Prepared:	06/11/2010 1442		Result Type:	PRIMARY

---

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	ND		53

---

Surrogate	%Rec	Qualifier	Acceptance Limits
Capric Acid (Surr)	1		0 - 5
p-Terphenyl	105		31 - 150

**Analytical Data**

Client: ARCADIS U.S., Inc.

Job Number: 720-28670-1

**Client Sample ID: MW-9LF**

Lab Sample ID: 720-28670-5

Date Sampled: 06/09/2010 1410

Client Matrix: Water

Date Received: 06/10/2010 1348

---

**8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup**

Method:	8015B	Analysis Batch: 720-73035	Instrument ID:	CHDRO5
Preparation:	3510C SGC	Prep Batch: 720-73004	Initial Weight/Volume:	970 mL
Dilution:	1.0		Final Weight/Volume:	2 mL
Date Analyzed:	06/12/2010 1227		Injection Volume:	1 uL
Date Prepared:	06/11/2010 1442		Result Type:	PRIMARY

---

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	ND		51

---

Surrogate	%Rec	Qualifier	Acceptance Limits
Capric Acid (Surr)	0		0 - 5
p-Terphenyl	93		31 - 150

**Analytical Data**

Client: ARCADIS U.S., Inc.

Job Number: 720-28670-1

**Client Sample ID: MW-7S**

Lab Sample ID: 720-28670-6

Date Sampled: 06/09/2010 1320

Client Matrix: Water

Date Received: 06/10/2010 1348

---

**8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup**

Method:	8015B	Analysis Batch: 720-73035	Instrument ID:	CHDRO5
Preparation:	3510C SGC	Prep Batch: 720-73004	Initial Weight/Volume:	920 mL
Dilution:	1.0		Final Weight/Volume:	2 mL
Date Analyzed:	06/12/2010 1252		Injection Volume:	1 uL
Date Prepared:	06/11/2010 1442		Result Type:	PRIMARY

---

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	140		54

---

Surrogate	%Rec	Qualifier	Acceptance Limits
Capric Acid (Surr)	0		0 - 5
p-Terphenyl	101		31 - 150

**Analytical Data**

Client: ARCADIS U.S., Inc.

Job Number: 720-28670-1

**Client Sample ID: MW-7D**

Lab Sample ID: 720-28670-7

Date Sampled: 06/09/2010 1405

Client Matrix: Water

Date Received: 06/10/2010 1348

---

**8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup**

Method:	8015B	Analysis Batch: 720-73066	Instrument ID:	CHDRO5
Preparation:	3510C SGC	Prep Batch: 720-73004	Initial Weight/Volume:	980 mL
Dilution:	5.0		Final Weight/Volume:	2 mL
Date Analyzed:	06/14/2010 1238		Injection Volume:	1 uL
Date Prepared:	06/11/2010 1442		Result Type:	PRIMARY

---

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	12000		250

---

Surrogate	%Rec	Qualifier	Acceptance Limits
Capric Acid (Surr)	39	D	0 - 5
p-Terphenyl	51	D	31 - 150

**Analytical Data**

Client: ARCADIS U.S., Inc.

Job Number: 720-28670-1

**Client Sample ID: MW-9S**

Lab Sample ID: 720-28670-8

Date Sampled: 06/09/2010 1140

Client Matrix: Water

Date Received: 06/10/2010 1348

---

**8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup**

Method:	8015B	Analysis Batch: 720-73035	Instrument ID:	CHDRO5
Preparation:	3510C SGC	Prep Batch: 720-73004	Initial Weight/Volume:	980 mL
Dilution:	1.0		Final Weight/Volume:	2 mL
Date Analyzed:	06/12/2010 1342		Injection Volume:	1 uL
Date Prepared:	06/11/2010 1442		Result Type:	PRIMARY

---

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	ND		51

---

Surrogate	%Rec	Qualifier	Acceptance Limits
Capric Acid (Surr)	0		0 - 5
p-Terphenyl	99		31 - 150

**Analytical Data**

Client: ARCADIS U.S., Inc.

Job Number: 720-28670-1

**Client Sample ID: MW-9D**

Lab Sample ID: 720-28670-9

Date Sampled: 06/09/2010 1300

Client Matrix: Water

Date Received: 06/10/2010 1348

---

**8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup**

Method:	8015B	Analysis Batch: 720-73035	Instrument ID:	CHDRO5
Preparation:	3510C SGC	Prep Batch: 720-73004	Initial Weight/Volume:	980 mL
Dilution:	1.0		Final Weight/Volume:	2 mL
Date Analyzed:	06/12/2010 1407		Injection Volume:	1 uL
Date Prepared:	06/11/2010 1442		Result Type:	PRIMARY

---

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	1300		51

---

Surrogate	%Rec	Qualifier	Acceptance Limits
Capric Acid (Surr)	3		0 - 5
p-Terphenyl	60		31 - 150

**Analytical Data**

Client: ARCADIS U.S., Inc.

Job Number: 720-28670-1

**Client Sample ID: OXY-1D**

Lab Sample ID: 720-28670-10

Date Sampled: 06/10/2010 0940

Client Matrix: Water

Date Received: 06/10/2010 1348

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**8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup**

Method:	8015B	Analysis Batch: 720-73035	Instrument ID:	CHDRO5
Preparation:	3510C SGC	Prep Batch: 720-73004	Initial Weight/Volume:	940 mL
Dilution:	1.0		Final Weight/Volume:	2 mL
Date Analyzed:	06/12/2010 1432		Injection Volume:	1 uL
Date Prepared:	06/11/2010 1442		Result Type:	PRIMARY

---

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	1300		53

---

Surrogate	%Rec	Qualifier	Acceptance Limits
Capric Acid (Surr)	6	X	0 - 5
p-Terphenyl	71		31 - 150



**Analytical Data**

Client: ARCADIS U.S., Inc.

Job Number: 720-28670-1

**Client Sample ID: OXY-1S**

Lab Sample ID: 720-28670-11

Date Sampled: 06/10/2010 1055

Client Matrix: Water

Date Received: 06/10/2010 1348

---

**8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup**

Method:	8015B	Analysis Batch: 720-73035	Instrument ID:	CHDRO5
Preparation:	3510C SGC	Prep Batch: 720-73004	Initial Weight/Volume:	940 mL
Dilution:	1.0		Final Weight/Volume:	2 mL
Date Analyzed:	06/12/2010 1458		Injection Volume:	1 uL
Date Prepared:	06/11/2010 1442		Result Type:	PRIMARY

---

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	ND		53

---

Surrogate	%Rec	Qualifier	Acceptance Limits
Capric Acid (Surr)	0		0 - 5
p-Terphenyl	106		31 - 150

**Analytical Data**

Client: ARCADIS U.S., Inc.

Job Number: 720-28670-1

**Client Sample ID:** OXY-1S-D

Lab Sample ID: 720-28670-12

Date Sampled: 06/10/2010 1105

Client Matrix: Water

Date Received: 06/10/2010 1348

---

**8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup**

Method:	8015B	Analysis Batch: 720-73035	Instrument ID:	CHDRO5
Preparation:	3510C SGC	Prep Batch: 720-73004	Initial Weight/Volume:	980 mL
Dilution:	1.0		Final Weight/Volume:	2 mL
Date Analyzed:	06/12/2010 1523		Injection Volume:	1 uL
Date Prepared:	06/11/2010 1442		Result Type:	PRIMARY

---

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	ND		51

---

Surrogate	%Rec	Qualifier	Acceptance Limits
Capric Acid (Surr)	0		0 - 5
p-Terphenyl	99		31 - 150

**Analytical Data**

Client: ARCADIS U.S., Inc.

Job Number: 720-28670-1

**Client Sample ID:** OXY-1LF

Lab Sample ID: 720-28670-13

Date Sampled: 06/10/2010 1215

Client Matrix: Water

Date Received: 06/10/2010 1348

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**8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup**

Method:	8015B	Analysis Batch: 720-73035	Instrument ID:	CHDRO5
Preparation:	3510C SGC	Prep Batch: 720-73004	Initial Weight/Volume:	980 mL
Dilution:	1.0		Final Weight/Volume:	2 mL
Date Analyzed:	06/12/2010 1548		Injection Volume:	1 uL
Date Prepared:	06/11/2010 1442		Result Type:	PRIMARY

---

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	ND		51

---

Surrogate	%Rec	Qualifier	Acceptance Limits
Capric Acid (Surr)	0		0 - 5
p-Terphenyl	110		31 - 150

## DATA REPORTING QUALIFIERS

Client: ARCADIS U.S., Inc.

Job Number: 720-28670-1

<b>Lab Section</b>	<b>Qualifier</b>	<b>Description</b>
GC/MS VOA		
	F	MS or MSD exceeds the control limits
GC Semi VOA		
	X	Surrogate is outside control limits
	D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.

## Quality Control Results

Client: ARCADIS U.S., Inc.

Job Number: 720-28670-1

### QC Association Summary

Lab Sample ID	Client Sample ID	Report		Method	Prep Batch
		Basis	Client Matrix		
<b>GC/MS VOA</b>					
<b>Analysis Batch:720-73038</b>					
LCS 720-73038/19	Lab Control Sample	T	Water	8260B/CA_LUFT	
LCS 720-73038/21	Lab Control Sample	T	Water	8260B/CA_LUFT	
LCSD 720-73038/20	Lab Control Sample Duplicate	T	Water	8260B/CA_LUFT	
LCSD 720-73038/22	Lab Control Sample Duplicate	T	Water	8260B/CA_LUFT	
MB 720-73038/18	Method Blank	T	Water	8260B/CA_LUFT	
720-28670-1TB	TB-060910	T	Water	8260B/CA_LUFT	
720-28670-2	MW-1	T	Water	8260B/CA_LUFT	
720-28670-3	MW-8	T	Water	8260B/CA_LUFT	
720-28670-4	MW-8-D	T	Water	8260B/CA_LUFT	
720-28670-5	MW-9LF	T	Water	8260B/CA_LUFT	
720-28670-6	MW-7S	T	Water	8260B/CA_LUFT	
720-28670-7	MW-7D	T	Water	8260B/CA_LUFT	
720-28670-7MS	Matrix Spike	T	Water	8260B/CA_LUFT	
720-28670-7MSD	Matrix Spike Duplicate	T	Water	8260B/CA_LUFT	
720-28670-8	MW-9S	T	Water	8260B/CA_LUFT	
720-28670-9	MW-9D	T	Water	8260B/CA_LUFT	
720-28670-11	OXY-1S	T	Water	8260B/CA_LUFT	
720-28670-12	OXY-1S-D	T	Water	8260B/CA_LUFT	
720-28670-13	OXY-1LF	T	Water	8260B/CA_LUFT	
<b>Analysis Batch:720-73058</b>					
LCS 720-73058/5	Lab Control Sample	T	Water	8260B/CA_LUFT	
LCS 720-73058/7	Lab Control Sample	T	Water	8260B/CA_LUFT	
LCSD 720-73058/6	Lab Control Sample Duplicate	T	Water	8260B/CA_LUFT	
LCSD 720-73058/8	Lab Control Sample Duplicate	T	Water	8260B/CA_LUFT	
MB 720-73058/4	Method Blank	T	Water	8260B/CA_LUFT	
720-28670-9	MW-9D	T	Water	8260B/CA_LUFT	
720-28670-10	OXY-1D	T	Water	8260B/CA_LUFT	
720-28706-A-3 MS	Matrix Spike	T	Water	8260B/CA_LUFT	
720-28706-A-3 MSD	Matrix Spike Duplicate	T	Water	8260B/CA_LUFT	

**Report Basis**

T = Total

## Quality Control Results

Client: ARCADIS U.S., Inc.

Job Number: 720-28670-1

### QC Association Summary

Lab Sample ID	Client Sample ID	Report		Method	Prep Batch
		Basis	Client Matrix		
<b>GC Semi VOA</b>					
<b>Prep Batch: 720-73004</b>					
LCS 720-73004/2-A	Lab Control Sample	A	Water	3510C SGC	
LCSD 720-73004/3-A	Lab Control Sample Duplicate	A	Water	3510C SGC	
MB 720-73004/1-A	Method Blank	A	Water	3510C SGC	
720-28670-2	MW-1	A	Water	3510C SGC	
720-28670-3	MW-8	A	Water	3510C SGC	
720-28670-4	MW-8-D	A	Water	3510C SGC	
720-28670-5	MW-9LF	A	Water	3510C SGC	
720-28670-6	MW-7S	A	Water	3510C SGC	
720-28670-7	MW-7D	A	Water	3510C SGC	
720-28670-8	MW-9S	A	Water	3510C SGC	
720-28670-9	MW-9D	A	Water	3510C SGC	
720-28670-10	OXY-1D	A	Water	3510C SGC	
720-28670-11	OXY-1S	A	Water	3510C SGC	
720-28670-12	OXY-1S-D	A	Water	3510C SGC	
720-28670-13	OXY-1LF	A	Water	3510C SGC	
<b>Analysis Batch:720-73035</b>					
LCS 720-73004/2-A	Lab Control Sample	A	Water	8015B	720-73004
LCSD 720-73004/3-A	Lab Control Sample Duplicate	A	Water	8015B	720-73004
MB 720-73004/1-A	Method Blank	A	Water	8015B	720-73004
720-28670-2	MW-1	A	Water	8015B	720-73004
720-28670-3	MW-8	A	Water	8015B	720-73004
720-28670-4	MW-8-D	A	Water	8015B	720-73004
720-28670-5	MW-9LF	A	Water	8015B	720-73004
720-28670-6	MW-7S	A	Water	8015B	720-73004
720-28670-8	MW-9S	A	Water	8015B	720-73004
720-28670-9	MW-9D	A	Water	8015B	720-73004
720-28670-10	OXY-1D	A	Water	8015B	720-73004
720-28670-11	OXY-1S	A	Water	8015B	720-73004
720-28670-12	OXY-1S-D	A	Water	8015B	720-73004
720-28670-13	OXY-1LF	A	Water	8015B	720-73004
<b>Analysis Batch:720-73066</b>					
720-28670-7	MW-7D	A	Water	8015B	720-73004

**Report Basis**

A = Silica Gel Cleanup

## Quality Control Results

Client: ARCADIS U.S., Inc.

Job Number: 720-28670-1

### Method Blank - Batch: 720-73038

Lab Sample ID: MB 720-73038/18  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 06/12/2010 1039  
Date Prepared: 06/12/2010 1039

Analysis Batch: 720-73038  
Prep Batch: N/A  
Units: ug/L

### Method: 8260B/CA\_LUFTMS Preparation: 5030B

Instrument ID: SAT 3900C  
Lab File ID: MB 6-12-2010 10;39;05 AM.d  
Initial Weight/Volume: 10 mL  
Final Weight/Volume: 10 mL

Analyte	Result	Qual	RL
Methyl tert-butyl ether	ND		0.50
Benzene	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
Gasoline Range Organics (GRO)-C5-C12	ND		50

Surrogate	% Rec	Acceptance Limits
4-Bromofluorobenzene	105	67 - 130
1,2-Dichloroethane-d4 (Surr)	100	67 - 130
Toluene-d8 (Surr)	100	70 - 130

## Quality Control Results

Client: ARCADIS U.S., Inc.

Job Number: 720-28670-1

**Lab Control Sample/  
Lab Control Sample Duplicate Recovery Report - Batch: 720-73038**

**Method: 8260B/CA\_LUFTMS  
Preparation: 5030B**

LCS Lab Sample ID: LCS 720-73038/19  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 06/12/2010 1106  
Date Prepared: 06/12/2010 1106

Analysis Batch: 720-73038  
Prep Batch: N/A  
Units: ug/L

Instrument ID: SAT 3900C  
Lab File ID: LCS 6-12-2010 11:06:46 AM.c  
Initial Weight/Volume: 10 mL  
Final Weight/Volume: 10 mL

LCSD Lab Sample ID: LCSD 720-73038/20  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 06/12/2010 1134  
Date Prepared: 06/12/2010 1134

Analysis Batch: 720-73038  
Prep Batch: N/A  
Units: ug/L

Instrument ID: SAT 3900C  
Lab File ID: LCSD 6-12-2010 11:34:23 AM.c  
Initial Weight/Volume: 10 mL  
Final Weight/Volume: 10 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Methyl tert-butyl ether	99	103	62 - 130	4	20		
Benzene	106	104	82 - 127	1	20		
Ethylbenzene	101	103	86 - 135	3	20		
Toluene	98	101	83 - 129	4	20		
Surrogate	LCS % Rec		LCSD % Rec		Acceptance Limits		
4-Bromofluorobenzene	101		100		67 - 130		
1,2-Dichloroethane-d4 (Surr)	108		111		67 - 130		
Toluene-d8 (Surr)	99		96		70 - 130		



**Quality Control Results**

Client: ARCADIS U.S., Inc.

Job Number: 720-28670-1

**Lab Control Sample/  
Lab Control Sample Duplicate Recovery Report - Batch: 720-73038**

**Method: 8260B/CA\_LUFTMS  
Preparation: 5030B**

LCS Lab Sample ID: LCS 720-73038/21  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 06/12/2010 1201  
Date Prepared: 06/12/2010 1201

Analysis Batch: 720-73038  
Prep Batch: N/A  
Units: ug/L

Instrument ID: SAT 3900C  
Lab File ID: LCS G 6-12-2010 12;01;52  
Initial Weight/Volume: 10 mL  
Final Weight/Volume: 10 mL

LCSD Lab Sample ID: LCSD 720-73038/22  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 06/12/2010 1229  
Date Prepared: 06/12/2010 1229

Analysis Batch: 720-73038  
Prep Batch: N/A  
Units: ug/L

Instrument ID: SAT 3900C  
Lab File ID: LCSD G 6-12-2010 12;29;26  
Initial Weight/Volume: 10 mL  
Final Weight/Volume: 10 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Gasoline Range Organics (GRO)-C5-C12	85	86	59 - 111	1	20		
Surrogate	LCS % Rec		LCSD % Rec		Acceptance Limits		
4-Bromofluorobenzene	100		98		67 - 130		
1,2-Dichloroethane-d4 (Surr)	103		101		67 - 130		
Toluene-d8 (Surr)	101		95		70 - 130		

## Quality Control Results

Client: ARCADIS U.S., Inc.

Job Number: 720-28670-1

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 720-73038**

**Method: 8260B/CA\_LUFTMS  
Preparation: 5030B**

MS Lab Sample ID: 720-28670-7  
 Client Matrix: Water  
 Dilution: 10  
 Date Analyzed: 06/12/2010 1625  
 Date Prepared: 06/12/2010 1625

Analysis Batch: 720-73038  
 Prep Batch: N/A

Instrument ID: SAT 3900C  
 Lab File ID: 28670-A-7MS 6-12-2010  
 Initial Weight/Volume: 10 mL  
 Final Weight/Volume: 10 mL

MSD Lab Sample ID: 720-28670-7  
 Client Matrix: Water  
 Dilution: 10  
 Date Analyzed: 06/12/2010 1653  
 Date Prepared: 06/12/2010 1653

Analysis Batch: 720-73038  
 Prep Batch: N/A

Instrument ID: SAT 3900C  
 Lab File ID: 28670-A-7MSD 6-12-2010  
 Initial Weight/Volume: 10 mL  
 Final Weight/Volume: 10 mL

Analyte	<u>% Rec.</u>		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Methyl tert-butyl ether	107	103	60 - 138	4	20		
Benzene	98	89	60 - 140	8	20		
Ethylbenzene	218	152	60 - 140	11	20	F	F
Toluene	106	103	60 - 140	2	20		
Surrogate	MS % Rec		MSD % Rec		Acceptance Limits		
4-Bromofluorobenzene	105		109		67 - 130		
1,2-Dichloroethane-d4 (Surr)	91		109		67 - 130		
Toluene-d8 (Surr)	97		98		70 - 130		

## Quality Control Results

Client: ARCADIS U.S., Inc.

Job Number: 720-28670-1

### Method Blank - Batch: 720-73058

Lab Sample ID: MB 720-73058/4  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 06/14/2010 1111  
Date Prepared: 06/14/2010 1111

Analysis Batch: 720-73058  
Prep Batch: N/A  
Units: ug/L

### Method: 8260B/CA\_LUFTMS Preparation: 5030B

Instrument ID: HP9  
Lab File ID: 06141005.D  
Initial Weight/Volume: 10 mL  
Final Weight/Volume: 10 mL

Analyte	Result	Qual	RL
Methyl tert-butyl ether	ND		0.50
Benzene	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
Gasoline Range Organics (GRO)-C5-C12	ND		50

Surrogate	% Rec	Acceptance Limits
4-Bromofluorobenzene	83	67 - 130
1,2-Dichloroethane-d4 (Surr)	97	67 - 130
Toluene-d8 (Surr)	92	70 - 130

## Quality Control Results

Client: ARCADIS U.S., Inc.

Job Number: 720-28670-1

**Lab Control Sample/  
Lab Control Sample Duplicate Recovery Report - Batch: 720-73058**

**Method: 8260B/CA\_LUFTMS  
Preparation: 5030B**

LCS Lab Sample ID: LCS 720-73058/5  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 06/14/2010 1143  
Date Prepared: 06/14/2010 1143

Analysis Batch: 720-73058  
Prep Batch: N/A  
Units: ug/L

Instrument ID: HP9  
Lab File ID: 06141006.D  
Initial Weight/Volume: 10 mL  
Final Weight/Volume: 10 mL

LCSD Lab Sample ID: LCSD 720-73058/6  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 06/14/2010 1215  
Date Prepared: 06/14/2010 1215

Analysis Batch: 720-73058  
Prep Batch: N/A  
Units: ug/L

Instrument ID: HP9  
Lab File ID: 06141007.D  
Initial Weight/Volume: 10 mL  
Final Weight/Volume: 10 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Methyl tert-butyl ether	88	88	62 - 130	1	20		
Benzene	96	95	82 - 127	1	20		
Ethylbenzene	101	100	86 - 135	2	20		
Toluene	98	97	83 - 129	2	20		
Surrogate	LCS % Rec		LCSD % Rec		Acceptance Limits		
4-Bromofluorobenzene	97		96		67 - 130		
1,2-Dichloroethane-d4 (Surr)	94		93		67 - 130		
Toluene-d8 (Surr)	97		97		70 - 130		

## Quality Control Results

Client: ARCADIS U.S., Inc.

Job Number: 720-28670-1

**Lab Control Sample/  
Lab Control Sample Duplicate Recovery Report - Batch: 720-73058**

**Method: 8260B/CA\_LUFTMS  
Preparation: 5030B**

LCS Lab Sample ID: LCS 720-73058/7  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 06/14/2010 1246  
Date Prepared: 06/14/2010 1246

Analysis Batch: 720-73058  
Prep Batch: N/A  
Units: ug/L

Instrument ID: HP9  
Lab File ID: 06141008.D  
Initial Weight/Volume: 10 mL  
Final Weight/Volume: 10 mL

LCSD Lab Sample ID: LCSD 720-73058/8  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 06/14/2010 1319  
Date Prepared: 06/14/2010 1319

Analysis Batch: 720-73058  
Prep Batch: N/A  
Units: ug/L

Instrument ID: HP9  
Lab File ID: 06141009.D  
Initial Weight/Volume: 10 mL  
Final Weight/Volume: 10 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Gasoline Range Organics (GRO)-C5-C12	85	85	59 - 111	0	20		
Surrogate	LCS % Rec		LCSD % Rec		Acceptance Limits		
4-Bromofluorobenzene	93		94			67 - 130	
1,2-Dichloroethane-d4 (Surr)	96		97			67 - 130	
Toluene-d8 (Surr)	98		98			70 - 130	

## Quality Control Results

Client: ARCADIS U.S., Inc.

Job Number: 720-28670-1

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 720-73058**

**Method: 8260B/CA\_LUFTMS  
Preparation: 5030B**

MS Lab Sample ID: 720-28706-A-3 MS  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 06/14/2010 1609  
Date Prepared: 06/14/2010 1609

Analysis Batch: 720-73058  
Prep Batch: N/A

Instrument ID: HP9  
Lab File ID: 06141014.D  
Initial Weight/Volume: 10 mL  
Final Weight/Volume: 10 mL

MSD Lab Sample ID: 720-28706-A-3 MSD  
Client Matrix: Water  
Dilution: 1.0  
Date Analyzed: 06/14/2010 1641  
Date Prepared: 06/14/2010 1641

Analysis Batch: 720-73058  
Prep Batch: N/A

Instrument ID: HP9  
Lab File ID: 06141015.D  
Initial Weight/Volume: 10 mL  
Final Weight/Volume: 10 mL

Analyte	<u>% Rec.</u>		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Methyl tert-butyl ether	92	91	60 - 138	1	20		
Benzene	97	96	60 - 140	1	20		
Ethylbenzene	99	99	60 - 140	0	20		
Toluene	95	96	60 - 140	1	20		
Surrogate	MS % Rec		MSD % Rec		Acceptance Limits		
4-Bromofluorobenzene	96		95		67 - 130		
1,2-Dichloroethane-d4 (Surr)	99		96		67 - 130		
Toluene-d8 (Surr)	96		96		70 - 130		

**Quality Control Results**

Client: ARCADIS U.S., Inc.

Job Number: 720-28670-1

**Method Blank - Batch: 720-73004**

Lab Sample ID: MB 720-73004/1-A  
 Client Matrix: Water  
 Dilution: 1.0  
 Date Analyzed: 06/12/2010 1818  
 Date Prepared: 06/11/2010 1442

Analysis Batch: 720-73035  
 Prep Batch: 720-73004  
 Units: ug/L

**Method: 8015B  
 Preparation: 3510C SGC  
 Silica Gel Cleanup**

Instrument ID: CHDRO5  
 Lab File ID: 0612105b\_024.d  
 Initial Weight/Volume: 1000 mL  
 Final Weight/Volume: 2 mL  
 Injection Volume: 1 uL  
 Column ID: PRIMARY

Analyte	Result	Qual	RL
Diesel Range Organics [C10-C28]	ND		50

Surrogate	% Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	122	31 - 150

**Lab Control Sample/  
 Lab Control Sample Duplicate Recovery Report - Batch: 720-73004**

LCS Lab Sample ID: LCS 720-73004/2-A  
 Client Matrix: Water  
 Dilution: 1.0  
 Date Analyzed: 06/12/2010 1728  
 Date Prepared: 06/11/2010 1442

Analysis Batch: 720-73035  
 Prep Batch: 720-73004  
 Units: ug/L

**Method: 8015B  
 Preparation: 3510C SGC  
 Silica Gel Cleanup**

Instrument ID: CHDRO5  
 Lab File ID: 0612105b\_022.d  
 Initial Weight/Volume: 1000 mL  
 Final Weight/Volume: 2 mL  
 Injection Volume: 1 uL  
 Column ID: PRIMARY

LCSD Lab Sample ID: LCSD 720-73004/3-A  
 Client Matrix: Water  
 Dilution: 1.0  
 Date Analyzed: 06/12/2010 1753  
 Date Prepared: 06/11/2010 1442

Analysis Batch: 720-73035  
 Prep Batch: 720-73004  
 Units: ug/L

Instrument ID: CHDRO5  
 Lab File ID: 0612105b\_023.d  
 Initial Weight/Volume: 1000 mL  
 Final Weight/Volume: 2 mL  
 Injection Volume: 1 uL  
 Column ID: PRIMARY

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Diesel Range Organics [C10-C28]	90	78	32 - 119	14	35		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
p-Terphenyl	92	102	31 - 150

# 720-28670

125002



ID#:

## CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:	Contact & Company Name: <b>Katrin Schliewen @ ARCADIS</b>		Telephone: <b>510.652.4500</b>		Preservative	<b>B</b>	<b>B</b>														
	Address: <b>1900 Powell Street</b>		Fax:		Filtered (✓)																
	City State Zip: <b>Emeryville CA 94608</b>		E-mail Address: <b>katrin.schliewen@arcadis-us.com</b>		# of Containers	<b>1</b>	<b>3</b>														
	Project Name/Location (City, State): <b>Hansen Sund / Sund, CA</b>		Project #: <b>EM009480.0011.00003</b>		Container Information	<b>2</b>	<b>1</b>														
Sampler's Printed Name: <b>Andrea Valdivia</b>		Sampler's Signature: <i>Andrea Valdivia</i>		<b>PARAMETER ANALYSIS &amp; METHOD</b>																	
<b>Sample ID</b>		<b>Collection</b>		<b>Type (✓)</b>		<b>Matrix</b>		<div style="display: flex; justify-content: space-between;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">TPHd w/ silica gel (8015B)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">TPHs/BTEX MTBE (8260)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Standard TAT</div> </div>										<b>REMARKS</b>			
		Date	Time	Comp	Grab																
1	TB-060910	06/09	—	—	W																
2	MW-1		1120	✓	W																
3	MW-8		1210	✓	W																
4	MW-8-D		1220	✓	W																
5	MW-9LF		1410	✓	W																
6	MW-7S		1320	✓	W																
7	MW-7D		1405	✓	W																
8	MW-9S		1140	✓	W																
9	MW-9D	06/09	1300	✓	W																
10	<del>TB-061010</del>	06/10	—	—	W																
11	OXY-1D		0940	✓	W																
12	OXY-1S		1055	✓	W																
13	OXY-1S-D		1105	✓	W																
	OXY-1LF	06/10	1215	✓	W																
Special Instructions/Comments: <b>* TPHd w/ silica gel cleanup</b>																Special QA/QC Instructions(✓):					
<b>Laboratory Information and Receipt</b>				<b>Relinquished By</b>				<b>Received By</b>				<b>Relinquished By</b>				<b>Laboratory Received By</b>					
Lab Name:		Cooler Custody Seal (✓)		Printed Name: <b>Andrea Valdivia</b>		Printed Name: <b>CRISTELA CAPARRAS</b>		Printed Name:		Printed Name:		Printed Name:		Printed Name:							
Cooler packed with ice (✓)		<input type="checkbox"/> Intact <input type="checkbox"/> Not Intact		Signature: <i>Andrea Valdivia</i>		Signature: <i>CRISTELA CAPARRAS</i>		Signature:		Signature:		Signature:		Signature:							
Specify Turnaround Requirements:		Sample Receipt:		Firm: <b>ARCADIS</b>		Firm: <b>TA-SE</b>		Firm/Courier:		Firm/Courier:		Firm:		Firm:							
Shipping Tracking #:		Condition/Cooler Temp: <b>4.9°/6.0°</b>		Date/Time: <b>06/10/10 1348</b>		Date/Time: <b>06/10/10 13:48</b>		Date/Time:		Date/Time:		Date/Time:		Date/Time:							

06/17/2010



## Login Sample Receipt Check List

Client: ARCADIS U.S., Inc.

Job Number: 720-28670-1

Login Number: 28670

List Source: TestAmerica San Francisco

Creator: Caparas, Criselda

List Number: 1

Question	T / F / NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Is the Field Sampler's name present on COC?	True	
Sample Preservation Verified	True	

ARCADIS

**Appendix C**

Field Sheets

# ARCADIS

# WATER-LEVEL MEASUREMENTS LOG

Project No. EM009480.0011.00003

Date June 9, 2010 Page 1 of 1

Project Name Hanson Sunol

Day:  Sun  Mon  Tues  Weds  Thurs  Fri  Sat

Field Personnel Miljan Draganic and Andrea Valdivia

General Observations \_\_\_\_\_

*Time Opened*

*Time Measured*

WELL NO.	WELL ELEVATION	DEPTH TO WATER		WATER ELEVATION	WELL SECURE?		REMARKS (UNITS = FEET)
		1	2		Y	N	
MW-9S	09421	1.45	1.45	1020	Y		
MW-9D	09423	3.95	3.95	1022	Y		
MW-9LF	0924	3.49	3.49	1024	Y		
OXY-IS	NA	2.78	2.78	1052	Y		No bolts (2) - already open
OXY-ID	0946	<del>3.42</del> 2.81	<del>3.42</del> 2.81	1027	Y		
OXY-ILF	1008	2.60	2.60	1054	Y		Hard to remove AS attachment <span style="position: absolute; right: -100px; top: 0;">AV</span>
MW-7S	0941	1.82	1.82	1033	Y		1 bolt missing ] same well <span style="position: absolute; right: -100px; top: 0;">tested</span>
MW-7D	0942	3.03	3.03	1034	Y		1 bolt missing ] box
MW-8	0943	1.12	1.12	1030	Y		
MW-1	0958	1.67	1.67	1028	Y		1 bolt bent - will be removed from well box

Project No. EM009480.0011.00003 Date: June 9, 2010 Page 1 of 1  
 Project Name: Hanson Sunol Sampling Location: Sunol, CA  
 Sampler's Name: Miljan Draganic / Andrea Valdivia Sample No.: MW-1  FB  
 Sampling Plan By: Katrin Schliewen Dated: \_\_\_\_\_  DUP \_\_\_\_\_  
 Purge Method:  Centrifugal Pump  Disposable Bailer  Hand Bail  Submersible Pump  Teflon Bailer  Other Peristaltic Pump  
 Purge Water Storage Container Type: 55 gallon drum Storage Location: On-site near wells  
 Date Purge Water Disposed: \_\_\_\_\_ Where Disposed: \_\_\_\_\_

Analyses Requested	No. and Type of Bottles Used
<u>TPHd w/silica gel cleanup</u>	<u>1-1L Amber w/HCl</u>
<u>TPHg/BTEX/MTBE</u>	<u>3-40mL Amber VOAs w/HCl</u>
Lab Name: <input checked="" type="checkbox"/> <u>Test America</u> <input type="checkbox"/> _____	
Delivery By <input type="checkbox"/> <u>Courier</u>	

Flow rate  $\approx$  125 mL/min

Well No. MW-1 Depth of Water 1.78'  
 Well Diameter: 2" Well Depth \_\_\_\_\_  
 2" (0.16 gal/foot)  5" (1.02 gal/foot) Water Column Height \_\_\_\_\_  
 4" (0.65 gal/foot)  6" (1.47 gal/foot) Well Volume \_\_\_\_\_

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	DO (mg/L)	Temp (C°)	pH (SU)	Elec Cond (uS/cm C)	ORP (mV)	Turb (NTU)	Color / Remarks
1053	<del>Start</del>	1.78'								Start purge
1103		1.88'	0.25	4.04	19.14	6.40	2381	298.8	11.0	Water is clear
1106		1.91'		3.81	18.93	6.41	2382	297.9	9.19	
1109		1.91'		3.73	19.01	6.41	2383	297.2	10.6	
1112		1.90'	0.5	3.68	19.01	6.40	2382	296.6	7.88	
1115		1.90'		3.67	19.01	6.40	2382	296.2	5.97	
1120	End									Sample
										Fe <sup>2+</sup> = 0.02mg/L

Continue remarks on reverse, if needed.

# ARCADIS

# WATER-QUALITY SAMPLING LOG

Project No. EM009480.0011.00003 Date: June 9, 2010 Page 1 of 1  
 Project Name: Hanson Sunol Sampling Location: Sunol, CA  
 Sampler's Name: Miljan Draganic/ Andrea Valdivia Sample No.: MW-8  FB  
 Sampling Plan By: Katrin Schliewen Dated: DUP MW-8-D  
 Purge Method:  Centrifugal Pump  Disposable Bailer  Hand Bail  Submersible Pump  Teflon Bailer  Other Peristaltic Pump  
 Purge Water Storage Container Type: 55 gallon drum Storage Location: On-site near wells  
 Date Purge Water Disposed: \_\_\_\_\_ Where Disposed: \_\_\_\_\_

Analyses Requested	No. and Type of Bottles Used
<u>TPHd w/silica gel cleanup</u>	<u>1-1L Amber w/HCl</u>
<u>TPHg/BTEX/MTBE</u>	<u>3-40mL Amber VOAs w/HCl</u>
Lab Name: <input checked="" type="checkbox"/> Test America <input type="checkbox"/>	
Delivery By <input type="checkbox"/> Courier	

Flow rate ≈ 200mL/min

Well No. MW-8 Depth of Water 1.11'  
 Well Diameter: 2" Well Depth \_\_\_\_\_  
 3" (0.16 gal/feet)  5" (1.02 gal/feet) Water Column Height \_\_\_\_\_  
 4" (0.65 gal/feet)  6" (1.47 gal/feet) Well Volume \_\_\_\_\_

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	DO (mg/L)	Temp (C°)	pH (SU)	Elec Cond (uS/cm C)	ORP (mV)	Turb (NTU)	Color / Remarks
1143	<del>Start</del>	1.11'								Starts purge
1154		1.13'		0.17	17.06	6.73	1800	40.0	3.12	Water is clear
1157		1.14'	0.5	0.15	17.02	6.73	1799	40.4	1.08	
1201		1.13'		0.14	16.99	6.73	1797	41.3	1.07	
1204		1.13'	1.0	0.13	16.94	6.74	1796	41.9	0.93	
1210	End									Sample
1220										Duplicate
										Fe <sup>2+</sup> = 0.03mg/L

Continue remarks on reverse, if needed.

# ARCADIS

# WATER-QUALITY SAMPLING LOG

Project No. EM009480.0011.00003 Date: June 9, 2010 Page 1 of 1  
 Project Name: Hanson Sunol Sampling Location: Sunol, CA  
 Sampler's Name: Miljan Draganic / Andrea Valdivia Sample No.: MW-9LF  FB  
 Sampling Plan By: Katrin Schliewen Dated: \_\_\_\_\_  DUP  
 Purge Method:  Centrifugal Pump  Disposable Bailer  Hand Bail  Submersible Pump  Teflon Bailer  Other Peristaltic Pump  
 Purge Water Storage Container Type: 55 gallon drum Storage Location: On-site near wells  
 Date Purge Water Disposed: \_\_\_\_\_ Where Disposed: \_\_\_\_\_

**Analyses Requested** **No. and Type of Bottles Used**  
TPHd w/silica gel cleanup 1-1L Amber w/HCl  
TPHg/BTEX/MTBE 3-40mL Amber VOAs w/HCl  
 Lab Name:  Test America  \_\_\_\_\_  
 Delivery By  Courier

$Fe^{2+} \rightarrow 2.53 \text{ mg/L}$

Well No. MW-9LF Depth of Water 2.65  
 Well Diameter: 2" Well Depth \_\_\_\_\_  
 2" (0.16 gal/foot)  5" (1.02 gal/foot) Water Column Height \_\_\_\_\_  
 4" (0.65 gal/foot)  6" (1.47 gal/foot) Well Volume \_\_\_\_\_

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	DO (mg/L)	Temp (C°)	pH (SU)	Elec Cond (uS/cm C)	ORP (mV)	Turb (NTU)	Color / Remarks
1320	—	2.65	—	—	—	—	—	—	—	Start purging Water light gray/white. ↓ Sampling
1333	—	2.70	~0.5	9.90	18.06	7.71	1592	127.4	<1000	
1336	—	2.66	~0.6	9.88	18.13	7.71	1589	134.0		
1339	—	2.66	~0.7	10.40	18.18	7.71	1590	137.4		
1342	—	2.66	~0.8	9.94	18.17	7.70	1588	142.1		
1345	—	2.66	~0.9	9.51	18.16	7.69	1586	143.9		
1348	—	2.66	~1.0	9.18	18.13	7.69	1585	145.8		
1351	—	2.66	~1.1	9.56	18.09	7.68	1588	148.2		
1354	—	2.66	~1.2	9.77	18.05	7.69	1589	150.1		
1357	—	2.66	~1.3	9.22	18.00	7.67	1589	152.4		
1400	—	2.66	~1.4	9.24	18.01	7.67	1587	153.6		
1403	—	2.66	~1.5	9.31	18.02	7.68	1587	155.3		
1410	—	—	—	—	—	—	—	—	—	

Continue remarks on reverse, if needed.



Project No. EM009480.0011.00003 Date: June 9, 2010 Page 1 of 1  
 Project Name: Hanson Sunol Sampling Location: Sunol, CA  
 Sampler's Name: Miljan Draganic / Andrea Valdivia Sample No.: MW-7D  FB  
 Sampling Plan By: Katrin Schliewen Dated:                       DUP  
 Purge Method:  Centrifugal Pump  Disposable Bailer  Hand Bail  Submersible Pump  Teflon Bailer  Other Peristaltic Pump  
 Purge Water Storage Container Type: 55 gallon drum Storage Location: On-site near wells  
 Date Purge Water Disposed:                      Where Disposed:                     

Analyses Requested	No. and Type of Bottles Used
<u>TPHd w/silica gel cleanup</u>	<u>1-1L Amber w/HCl</u>
<u>TPHg/BTEX/MTBE</u>	<u>3-40mL Amber VOAs w/HCl</u>
Lab Name: <input checked="" type="checkbox"/> <u>Test America</u>	<input type="checkbox"/> <u>                    </u>
Delivery By <input type="checkbox"/> <u>Courier</u>	

Flow rate = 125 mL/min

Well No. MW-7D Depth of Water 2.18'  
 Well Diameter: 2" Well Depth                       
 2" (0.16 gal/feet)  5" (1.02 gal/feet) Water Column Height                       
 4" (0.65 gal/feet)  6" (1.47 gal/feet) Well Volume                     

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	DO (mg/L)	Temp (C°)	pH (SU)	Elec Cond (uS/cm C)	ORP (mV)	Turb (NTU)	Color / Remarks
<u>1330</u>	<u>Start</u>	<u>2.18'</u>	<u>0.5</u>							<u>Start purge</u>
<u>1345</u>		<u>2.56'</u>	<u>0.5</u>	<u>0.04</u>	<u>18.71</u>	<u>6.74</u>	<u>1929</u>	<u>-79.9</u>	<u>&gt;1,000</u>	<u>Water is murky</u>
<u>1348</u>		<u>2.56'</u>		<u>0.04</u>	<u>18.81</u>	<u>6.75</u>	<u>1925</u>	<u>-84.9</u>	<u>&gt;1,000</u>	<u>(gray) and has</u>
<u>1351</u>		<u>2.57'</u>	<u>0.75</u>	<u>0.03</u>	<u>18.86</u>	<u>6.75</u>	<u>1924</u>	<u>-86.7</u>	<u>&gt;1,000</u>	<u>gas-like odor</u>
<u>1354</u>		<u>2.56'</u>		<u>0.03</u>	<u>18.78</u>	<u>6.75</u>	<u>1923</u>	<u>-89.4</u>	<u>&gt;1,000</u>	
<u>1405</u>	<u>End</u>									<u>Sample</u>
										<u>Fe<sup>2+</sup> = 2.24 mg/L</u>

Continue remarks on reverse, if needed.



Project No. EM009480.0011.00003 Date: June 9, 2010 Page 1 of 1  
 Project Name: Hanson Sunol Sampling Location: Sunol, CA  
 Sampler's Name: Miljan Draganic / Andrea Valdivia Sample No.: MW-95  FB  
 Sampling Plan By: Katrin Schliewen Dated: \_\_\_\_\_  DUP  
 Purge Method:  Centrifugal Pump  Disposable Bailer  Hand Bail  Submersible Pump  Teflon Bailer  Other Peristaltic Pump  
 Purge Water Storage Container Type: 55 gallon drum Storage Location: On-site near wells  
 Date Purge Water Disposed: \_\_\_\_\_ Where Disposed: \_\_\_\_\_

Analyses Requested	No. and Type of Bottles Used
<u>TPHd w/silica gel cleanup</u>	<u>1-1L Amber w/HCl</u>
<u>TPHq/BTEX/MTBE</u>	<u>3-40mL Amber VOAs w/HCl</u>
Lab Name: <input checked="" type="checkbox"/> <u>Test America</u>	<input type="checkbox"/> _____
Delivery By <input type="checkbox"/> <u>Courier</u>	

$Fe^{2+} \rightarrow 0.14 \text{ mg/L}$

Well No. MW-95 Depth of Water 1.20  
 Well Diameter: 2" Well Depth \_\_\_\_\_  
 2" (0.16 gal/foot)  5" (1.02 gal/foot) Water Column Height \_\_\_\_\_  
 4" (0.65 gal/foot)  6" (1.47 gal/foot) Well Volume \_\_\_\_\_

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	DO (mg/L)	Temp (C°)	pH (SU)	Elec Cond (uS/cm C)	ORP (mV)	Turb (NTU)	Color / Remarks
1100	—	1.20	—							Start purging
1110	—	1.31	~1.1	7.64	18.45	7.37	2215	265.3	>1000	Silty water
1113	—	1.41	~1.2	8.04	18.43	7.35	2209	264.6	>1000	
1116	—	1.51	~1.3	7.96	18.40	7.36	2206	262.5	>1000	decreased flow rate
1119	—	1.51	~1.4	7.92	18.38	7.36	2201	260.2	>1000	
1122	—	1.51	~1.5	7.82	18.33	7.36	2195	256.4	1000	water begins to clear
1125	—	1.51	~1.6	7.84	18.30	7.37	2191	254.5	1000	↓
1128	—	1.50	~1.7	7.65	18.26	7.35	2189	251.2	910	
1131	—	1.50	~1.8	7.61	18.24	7.35	2187	248.6	776	
1134	—	1.50	~1.9	7.57	18.23	7.35	2186	245.6	473	
1137	—	1.50	~2.0	7.53	18.20	7.35	2182	243.9	270	
1140	—	—	—	—	—	—	—	—	—	Sampling.

Continue remarks on reverse, if needed.

# ARCADIS

# WATER-QUALITY SAMPLING LOG

Project No. EM009480.0011.00003 Date: June 9, 2010 Page 1 of 1  
 Project Name: Hanson Sunol Sampling Location: Sunol, CA  
 Sampler's Name: Miljan Draganic / Andrea Valdivia Sample No.: MW-9D  FB  
 Sampling Plan By: Katrin Schliewen Dated: \_\_\_\_\_  DUP  
 Purge Method:  Centrifugal Pump  Disposable Bailer  Hand Bail  Submersible Pump  Teflon Bailer  Other Peristaltic Pump  
 Purge Water Storage Container Type: 55 gallon drum Storage Location: On-site near wells  
 Date Purge Water Disposed: \_\_\_\_\_ Where Disposed: \_\_\_\_\_

Analyses Requested No. and Type of Bottles Used  
TPHd w/silica gel cleanup 1-1L Amber w/HCl  
TPHg/BTEX/MTBE 3-40mL Amber VOAs w/HCl  
 Lab Name:  Test America  \_\_\_\_\_  
 Delivery By  Courier

Well No. MW-9D Depth of Water 3.03  
 Well Diameter: 2" Well Depth \_\_\_\_\_  
 2" (0.16 gal/feet)  5" (1.02 gal/feet) Water Column Height \_\_\_\_\_  
 4" (0.65 gal/feet)  6" (1.47 gal/feet) Well Volume \_\_\_\_\_

*Fe<sup>2+</sup> → 0.66 mg/L*

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	DO (mg/L)	Temp (C°)	pH (SU)	Elec Cond (uS/cm C)	ORP (mV)	Turb (NTU)	Color / Remarks
1200	—	3.03	—	—	—	—	—	—	—	Start purging
1220	—	3.03	~2.5	1.81	17.98	7.31	1940	170.6	>1000	Water is muddy (grey) petroleum odor
1223	—	3.26	~2.8	2.15	17.94	7.31	1937	139.0		
1230	—	3.25	~3.0	2.21	17.84	7.34	1929	120.0		
1233	—	3.21	~3.2	1.26	17.86	7.35	1925	112.3		
1236	—	3.20	~3.3	1.38	17.88	7.34	1928	107.6		
1239	—	3.20	~3.4	1.70	17.88	7.33	1932	103.1		
1242	—	3.20	~3.5	2.00	17.92	7.32	1933	99.1		
1245	—	3.20	~3.6	2.25	17.93	7.31	1937	97.8		
1248	—	3.20	~3.7	2.75	17.92	7.30	1939	96.8		
1251	—	3.15	~3.8	2.98	17.98	7.29	1940	97.2		
1254	—	3.11	~3.9	3.01	18.00	7.28	1940	97.1		
1257	—	3.10	~4.0	3.07	18.03	7.28	1939	96.0		
1300	—	—	—	—	—	—	—	—	—	Sampling

Continue remarks on reverse, if needed.

# ARCADIS

# WATER-QUALITY SAMPLING LOG

Project No. EM009480.0011.00003 Date: June 10, 2010 Page 1 of 1  
 Project Name: Hanson Sunol Sampling Location: Sunol, CA  
 Sampler's Name: Miljan Draganic (Andrea Valdivia) Sample No.: OXY-1D  FB  
 Sampling Plan By: Katrin Schliewen Dated: \_\_\_\_\_  DUP  
 Purge Method:  Centrifugal Pump  Disposable Bailer  Hand Bail  Submersible Pump  Teflon Bailer  Other Peristaltic Pump  
 Purge Water Storage Container Type: 55 gallon drum Storage Location: On-site near wells  
 Date Purge Water Disposed: \_\_\_\_\_ Where Disposed: \_\_\_\_\_

Analyses Requested No. and Type of Bottles Used  
TPHd w/silica gel cleanup 1-1L Amber w/HCl  
TPHg/BTEX/MTBE 3-40mL Amber VOAs w/HCl  
 Lab Name:  Test America  \_\_\_\_\_  
 Delivery By  Courier

\* DO jumps around a lot  
 Flow rate = 150 mL/min

Well No. OXY-1D Depth of Water 1.81'  
 Well Diameter: 2" Well Depth \_\_\_\_\_  
 2" (0.16 gal/feet)  5" (1.02 gal/feet) Water Column Height \_\_\_\_\_  
 4" (0.65 gal/feet)  6" (1.47 gal/feet) Well Volume \_\_\_\_\_

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	DO* (mg/L)	Temp (C°)	pH (SU)	Elec Cond (uS/cm C)	ORP (mV)	Turb (NTU)	Color / Remarks
0903	Start	1.81'								Start purge
0916		1.88'	0.5	7.51	18.25	7.61	1696	211.1	188	Water is translucent
0919		1.88'		7.56	18.43	7.61	1696	206.8	157	
0922		1.88'	0.75	6.79	18.31	7.61	1695	204.5	141	
0925		1.88'		7.53	18.16	7.61	1694	200.9	126	
0928		1.88'	1.0	7.60	18.28	7.60	1694	198.9	117	
0931		1.88'		7.54	18.33	7.61	1699	196.0	112	
0940	End									Sample

Fe<sup>2+</sup> = 0.24 mg/L  
 \* DO ≈ 7.40 mg/L

\* DO measured by titration just prior to sampling

Continue remarks on reverse, if needed.

Project No. EM009480.0011.00003 Date: June 10, 2010 Page 1 of 1  
 Project Name: Hanson Sunol Sampling Location: Sunol, CA  
 Sampler's Name: Miljan Draganic / Andrea Valdivia Sample No.: OXY-15  FB  
 Sampling Plan By: Katrin Schliewen Dated: DUP OXY-15-D  
 Purge Method:  Centrifugal Pump  Disposable Bailer  Hand Bail  Submersible Pump  Teflon Bailer  Other Peristaltic Pump  
 Purge Water Storage Container Type: 55 gallon drum Storage Location: On-site near wells  
 Date Purge Water Disposed: \_\_\_\_\_ Where Disposed: \_\_\_\_\_

Analyses Requested	No. and Type of Bottles Used
<u>TPHd w/silica gel cleanup</u>	<u>1-1L Amber w/HCl</u>
<u>TPHg/BTEX/MTBE</u>	<u>3-40mL Amber VOAs w/HCl</u>
Lab Name: <input checked="" type="checkbox"/> <u>Test America</u>	<input type="checkbox"/> _____
Delivery By <input type="checkbox"/> <u>Courier</u>	

\* DTW taken not at casing but at metal attachment & 2" above TOC  
 Flow rate = <sup>AV</sup> ~~100~~ 125 mL/min

Well No. OXY-15 Depth of Water 1.89'\*  
 Well Diameter: 2" Well Depth \_\_\_\_\_  
 2" (0.16 gal/feet)  5" (1.02 gal/feet) Water Column Height \_\_\_\_\_  
 4" (0.65 gal/feet)  6" (1.47 gal/feet) Well Volume \_\_\_\_\_

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	DO (mg/L)	Temp (C°)	pH (SU)	Elec Cond (uS/cm C)	ORP (mV)	Turb (NTU)	Color / Remarks
1003	Start	1.89'								Start purge
1019		2.01'	0.5	7.38	18.24	7.67	1928	172.9	12.0	Water is clear
1024		2.01'		6.72	18.39	7.63	1935	170.6	5.65	
1027		2.01'		6.57	18.42	7.62	1937	169.5	4.44	
1030		2.02'	1.0	6.53	18.44	7.61	1937	168.8	4.02	
1033		2.01'		6.29	18.45	7.61	1938	167.8	3.66	
1036		2.01'	1.25	6.20	18.47	7.60	1939	166.8	3.47	
1039		2.01'		6.03	18.54	7.60	1938	166.5	3.38	
1042		2.01'	1.50	6.09	18.57	7.59	1940	165.5	3.25	
1045		2.01'		6.01	18.64	7.59	1940	165.2	3.34	
1055	End									Sample
1105										Duplicate

\* DO measured by titration just prior to sampling \* DO ≈ 5.80 mg/L  
 Fe<sup>2+</sup> = 0.07 mg/L

Continue remarks on reverse, if needed.

Project No. EM009480.0011.00003 Date: June 10, 2010 Page 1 of       
 Project Name: Hanson Sunol Sampling Location: Sunol, CA  
 Sampler's Name: Miljan Draganic / Andrea Valdivia Sample No.: OXY-1LF  FB   
 Sampling Plan By: Katrin Schliewen Dated:                       DUP   
 Purge Method:  Centrifugal Pump  Disposable Bailer  Hand Bail  Submersible Pump  Teflon Bailer  Other Peristaltic Pump  
 Purge Water Storage Container Type: 55 gallon drum Storage Location: On-site near wells  
 Date Purge Water Disposed:                      Where Disposed:                     

Analyses Requested	No. and Type of Bottles Used
<u>TPHd w/silica gel cleanup</u>	<u>1-1L Amber w/HCl</u>
<u>TPHg/BTEX/MTBE</u>	<u>3-40mL Amber VOAs w/HCl</u>
Lab Name: <input checked="" type="checkbox"/> <u>Test America</u>	<input type="checkbox"/> <u>                    </u>
Delivery By <input type="checkbox"/> <u>Courier</u>	

\* DTW taken not at casing but at metal attachment x 1" above TOC  
 Flow rate = 150ml/min

Well No. OXY-1LF Depth of Water 1.91'  
 Well Diameter: 2" Well Depth                       
 2" (0.16 gal/feet)  5" (1.02 gal/feet) Water Column Height                       
 4" (0.65 gal/feet)  6" (1.47 gal/feet) Well Volume                     

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	DO (mg/L)	Temp (C°)	pH (SU)	Elec Cond (uS/cm C)	ORP (mV)	Turb (NTU)	Color / Remarks
1133	<u>Start</u>	<u>1.91'</u>								<u>Start purge</u>
1150		<u>1.98'</u>	<u>0.05</u>	<u>6.32</u>	<u>18.59</u>	<u>7.33</u>	<u>1849</u>	<u>166.7</u>	<u>20.8</u>	<u>Water is clear</u>
115A		<u>1.98'</u>		<u>6.34</u>	<u>18.53</u>	<u>7.33</u>	<u>1848</u>	<u>166.2</u>	<u>19.7</u>	
1157		<u>1.98'</u>	<u>0.75</u>	<u>6.33</u>	<u>18.49</u>	<u>7.33</u>	<u>1847</u>	<u>165.5</u>	<u>19.0</u>	
1200		<u>1.98'</u>		<u>6.30</u>	<u>18.44</u>	<u>7.33</u>	<u>1846</u>	<u>164.8</u>	<u>19.7</u>	
1215	<u>End</u>									<u>Sample</u>

Fe<sup>2+</sup> = 0.05mg/L  
 \* DO = 6.40mg/L

\* DO measured by titration just prior to sampling

Continue remarks on reverse, if needed.

ID#:

# CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

125002

<b>Send Results to:</b>	Contact & Company Name: Robert Schliwen ARCADIS		Telephone: 510.652.4500		Preservative	B	B													
	Address: 1900 Powell Street		Fax:		Filtered (✓)															
	City State Zip Emeryville CA 94608		E-mail Address: Robert.Schliwen@arcadis-us.com		# of Containers	1	3													
					Container Information	2	1													
Project Name/Location (City, State): Hansen Sand / Sand, CA		Project #: EM09180.0011.0003		<b>PARAMETER ANALYSIS &amp; METHOD</b>																
Sampler's Printed Name: Andrea Valdivia		Sampler's Signature: <i>Andrea Valdivia</i>		<div style="display: flex; justify-content: space-between;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">TPHd (8015)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">TPHd (8015)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">TPHd (8015)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">TPHd (8015)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">TPHd (8015)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">TPHd (8015)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">TPHd (8015)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">TPHd (8015)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">TPHd (8015)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">TPHd (8015)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">TPHd (8015)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">TPHd (8015)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">TPHd (8015)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">TPHd (8015)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">TPHd (8015)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">TPHd (8015)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">TPHd (8015)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">TPHd (8015)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">TPHd (8015)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">TPHd (8015)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">TPHd (8015)</div> </div>																
<b>Sample ID</b>		<b>Collection</b>		<b>Type (✓)</b>		<b>Matrix</b>														
		Date	Time	Comp	Grab															
TB-060910		06/09				W														
MW-1			1120		✓	W														
MW-8			1210		✓	W														
MW-8-D			1220		✓	W														
MW-9LF			1410		✓	W														
MW-7S			1320		✓	W														
MW-7D			1405		✓	W														
MW-9S			1140		✓	W														
MW-9D		06/09	1300		✓	W														
<del>TB-061010</del>		<del>06/10</del>				<del>W</del>														
OXY-1D			0910		✓	W														
OXY-1S			1055		✓	W														
OXY-1S-D			1105		✓	W														
OXY-1LF		06/10	1215		✓	W														
Special Instructions/Comments: * TPHd w/ silica gel cleanup																				
<input type="checkbox"/> Special QA/QC Instructions(✓):																				

**Keys**

**Preservation Key:**  
 A. H<sub>2</sub>SO<sub>4</sub>  
 B. HCL  
 C. HNO<sub>3</sub>  
 D. NaOH  
 E. None  
 F. Other: \_\_\_\_\_  
 G. Other: \_\_\_\_\_  
 H. Other: \_\_\_\_\_

**Container Information Key:**  
 1. 40 ml Vial  
 2. 1 L Amber  
 3. 250 ml Plastic  
 4. 500 ml Plastic  
 5. Encore  
 6. 2 oz. Glass  
 7. 4 oz. Glass  
 8. 8 oz. Glass  
 9. Other: \_\_\_\_\_  
 10. Other: \_\_\_\_\_

**Matrix Key:**  
 SO - Soil  
 W - Water  
 T - Tissue

SE - Sediment  
 SL - Sludge  
 A - Air

NL - NAPL/Oil  
 SW - Sample Wipe  
 Other: \_\_\_\_\_

**REMARKS**

Laboratory Information and Receipt		Relinquished By		Received By		Relinquished By		Laboratory Received By	
Lab Name:	Cooler Custody Seal (✓) <input type="checkbox"/> Intact <input type="checkbox"/> Not Intact	Printed Name: <i>Andrea Valdivia</i>	Signature: <i>Andrea Valdivia</i>	Printed Name: ARCADIS	Signature: <i>[Signature]</i>	Printed Name:	Signature:	Printed Name:	Signature:
<input type="checkbox"/> Cooler packed with ice (✓)	Sample Receipt:	Firm: ARCADIS	Date/Time: 06/10/10 13:48	Firm/Courier: TA-SP	Date/Time: 06/10/10 13:48	Firm/Courier:	Date/Time:	Firm:	Date/Time:
Specify Turnaround Requirements:	Condition/Cooler Temp: _____								
Shipping Tracking #:									

ARCADIS

**Appendix D**

July 7, 2010 Letter from ACEH



ENVIRONMENTAL HEALTH SERVICES  
ENVIRONMENTAL PROTECTION  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502-6577  
(510) 567-6700  
FAX (510) 337-9335

July 7, 2010

Mr. Lee Cover (Sent via E-mail to: [Lee.Cover@hanson.biz](mailto:Lee.Cover@hanson.biz))  
Hanson Aggregates  
3000 Busch Road  
Pleasanton, CA 94566-8403

Subject: Groundwater Monitoring for Fuel Leak Case No. RO0000207 and Geotracker Global ID T0600102092, Mission Valley Rock and Asphalt, 7999 Athenour Way, Sunol, CA 94586

Dear Mr. Cover:

Alameda County Environmental Health (ACEH) staff has reviewed the fuel leak case file for the above-referenced site including the most recent groundwater monitoring report entitled, "*First Quarter 2010 Air Injection System and Groundwater Monitoring Report, Hansen Aggregates Mission Valley Rock Facility*," dated May 17, 2010. Results and recommendations from the May 17, 2010 Report were also discussed in a technical meeting held on June 23, 2010. The technical meeting was attended by Mr. Lee Cover of Hanson Aggregates, Katrin Schliewen, Ron Goloubow, and J. Scott Seyfried of ARCADIS, Jennifer Nyman and Fred Stanin of Malcolm Pirnie, and Jerry Wickham of ACEH.

The May 17, 2010 Monitoring Report recommends that operation of the air injection system be terminated and groundwater monitored to assess potential rebound effects. Based on the information presented, we have no objection to shutting down the air injection system at this time and conducting groundwater monitoring to assess possible rebound effects. Groundwater monitoring is to be conducted according to the existing groundwater monitoring program. The groundwater monitoring data is to be used to assess whether active remediation in the source area has been effective at reducing concentration over the long term and whether site-wide concentrations are stable or decreasing.

The effects of air injection system have generally been limited to the northern area of the site between monitoring wells MW-7 and MW-9. A plume of petroleum hydrocarbons extends a significant distance south beyond this area. As discussed during the June 23, 2010 meeting, site management requirements will be required to address residual groundwater contamination left in place. We request that you perform the proposed work and send us the reports requested below.

#### **TECHNICAL REPORT REQUEST**

Please submit technical reports to Alameda County Environmental Health (Attention: Jerry Wickham), according to the following schedule:

- **August 28, 2010** – Second Quarter 2010 Groundwater Monitoring Report
- **November 15, 2010** – Third Quarter 2010 Groundwater Monitoring Report
- **February 15, 2011** – Fourth Quarter 2010 Groundwater Monitoring Report



Mr. Lee Cover  
RO0000207  
July 7, 2010  
Page 2

If you have any questions, please call me at (510) 567-6791 or send me an electronic mail message at [jerry.wickham@acgov.org](mailto:jerry.wickham@acgov.org).

Sincerely,

Jerry Wickham, California PG 3766, CEG 1177, and CHG 297  
Senior Hazardous Materials Specialist

Attachment: Responsible Party(ies) Legal Requirements/Obligations

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

cc: Cheryl Dizon (QIC 8021), Zone 7 Water Agency, 100 North Canyons Pkwy, Livermore, CA 94551  
(Sent via E-mail to: [cdizon@zone7water.com](mailto:cdizon@zone7water.com))

Katrin Schliewen, ARCADIS, 1900 Powell Street, 12<sup>th</sup> Floor, Emeryville, CA 94608-1827 (Sent via E-mail to: [Katrin.Schliewen@arcadis-us.com](mailto:Katrin.Schliewen@arcadis-us.com))

Ron Goloubow, ARCADIS, 1900 Powell Street, 12<sup>th</sup> Floor, Emeryville, CA 94608-1827 (Sent via E-mail to: [Ron.Goloubow@arcadis-us.com](mailto:Ron.Goloubow@arcadis-us.com))

Fred Stanin, Malcolm Pirnie, 1900 Powell Street, Suite 1180, Emeryville, CA 94608-1827 (Sent via E-mail to: [fstanin@pirnie.com](mailto:fstanin@pirnie.com))

Jennifer Nyman, Malcolm Pirnie, 1900 Powell Street, Suite 1180, Emeryville, CA 94608-1827 (Sent via E-mail to: [jnyman@pirnie.com](mailto:jnyman@pirnie.com))

Donna Drogos, ACEH (Sent via E-mail to: [donna.drogos@acgov.org](mailto:donna.drogos@acgov.org))  
Jerry Wickham, ACEH  
Geotracker, File

Attachment 1  
**Responsible Party(ies) Legal Requirements/Obligations**

**REPORT REQUESTS**

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

**ELECTRONIC SUBMITTAL OF REPORTS**

ACEH's Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of reports in electronic form. The electronic copy replaces paper copies and is expected to be used for all public information requests, regulatory review, and compliance/enforcement activities. Instructions for submission of electronic documents to the Alameda County Environmental Cleanup Oversight Program FTP site are provided on the attached "Electronic Report Upload Instructions." Submission of reports to the Alameda County FTP site is an addition to existing requirements for electronic submittal of information to the State Water Resources Control Board (SWRCB) GeoTracker website. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for all groundwater cleanup programs. For several years, responsible parties for cleanup of leaks from underground storage tanks (USTs) have been required to submit groundwater analytical data, surveyed locations of monitoring wells, and [other](#) data to the GeoTracker database over the Internet. Beginning July 1, 2005, these same reporting requirements were added to Spills, Leaks, Investigations, and Cleanup (SLIC) sites. Beginning July 1, 2005, electronic submittal of a complete copy of all reports for all sites is required in GeoTracker (in PDF format). Please visit the SWRCB website for more information on these requirements ([http://www.swrcb.ca.gov/ust/electronic\\_submittal/report\\_rqmts.shtml](http://www.swrcb.ca.gov/ust/electronic_submittal/report_rqmts.shtml)).

**PERJURY STATEMENT**

All work plans, technical reports, or technical documents submitted to ACEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge." This letter must be signed by an officer or legally authorized representative of your company. Please include a cover letter satisfying these requirements with all future reports and technical documents submitted for this fuel leak case.

**PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS**

The California Business and Professions Code (Sections 6735, 6835, and 7835.1) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately registered or certified professional. For your submittal to be considered a valid technical report, you are to present site specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature, and statement of professional certification. Please ensure all that all technical reports submitted for this fuel leak case meet this requirement.

**UNDERGROUND STORAGE TANK CLEANUP FUND**

Please note that delays in investigation, later reports, or enforcement actions may result in your becoming ineligible to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse you for the cost of cleanup.

**AGENCY OVERSIGHT**

If it appears as though significant delays are occurring or reports are not submitted as requested, we will consider referring your case to the Regional Board or other appropriate agency, including the County District Attorney, for possible enforcement actions. California Health and Safety Code, Section 25299.76 authorizes enforcement including administrative action or monetary penalties of up to \$10,000 per day for each day of violation.

<b>Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC)</b>	<b>ISSUE DATE:</b> July 5, 2005
	<b>REVISION DATE:</b> March 27, 2009
	<b>PREVIOUS REVISIONS:</b> December 16, 2005, October 31, 2005
<b>SECTION:</b> Miscellaneous Administrative Topics & Procedures	<b>SUBJECT:</b> Electronic Report Upload (ftp) Instructions

The Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of all reports in electronic form to the county's ftp site. Paper copies of reports will no longer be accepted. The electronic copy replaces the paper copy and will be used for all public information requests, regulatory review, and compliance/enforcement activities.

#### REQUIREMENTS

- Entire report including cover letter must be submitted to the ftp site as **a single portable document format (PDF) with no password protection**. (Please do not submit reports as attachments to electronic mail.)
- It is **preferable** that reports be converted to PDF format from their original format, (e.g., Microsoft Word) rather than scanned.
- Signature pages and perjury statements **must** be included and have either original or electronic signature.
- **Do not password protect the document**. Once indexed and inserted into the correct electronic case file, the document will be secured in compliance with the County's current security standards and a password. **Documents with password protection will not be accepted.**
- Each page in the PDF document should be rotated in the direction that will make it easiest to read on a computer monitor.
- Reports must be named and saved using the following naming convention:  
RO#\_Report Name\_Year-Month-Date (e.g., RO#5555\_WorkPlan\_2005-06-14)

#### Additional Recommendations

- A separate copy of the tables in the document should be submitted by e-mail to your Caseworker in **Excel** format. These are for use by assigned Caseworker only.

#### Submission Instructions

- 1) Obtain User Name and Password:
  - a) Contact the Alameda County Environmental Health Department to obtain a User Name and Password to upload files to the ftp site.
    - i) Send an e-mail to [dehloptoxic@acgov.org](mailto:dehloptoxic@acgov.org)
    - Or
    - ii) Send a fax on company letterhead to (510) 337-9335, to the attention of My Le Huynh.
  - b) In the subject line of your request, be sure to include **"ftp PASSWORD REQUEST"** and in the body of your request, include the **Contact Information, Site Addresses**, and the **Case Numbers (RO# available in Geotracker) you will be posting for**.
- 2) Upload Files to the ftp Site
  - a) Using Internet Explorer (IE4+), go to <ftp://alcoftp1.acgov.org>
    - (i) Note: Netscape and Firefox browsers will not open the FTP site.
  - b) Click on File, then on Login As.
  - c) Enter your User Name and Password. (Note: Both are Case Sensitive.)
  - d) Open "My Computer" on your computer and navigate to the file(s) you wish to upload to the ftp site.
  - e) With both "My Computer" and the ftp site open in separate windows, drag and drop the file(s) from "My Computer" to the ftp window.
- 3) Send E-mail Notifications to the Environmental Cleanup Oversight Programs
  - a) Send email to [dehloptoxic@acgov.org](mailto:dehloptoxic@acgov.org) notify us that you have placed a report on our ftp site.
  - b) Copy your Caseworker on the e-mail. Your Caseworker's e-mail address is the entire first name then a period and entire last name @acgov.org. (e.g., firstname.lastname@acgov.org)
  - c) The subject line of the e-mail must start with the RO# followed by **Report Upload**. (e.g., Subject: RO1234 Report Upload) If site is a new case without an RO# use the street address instead.
  - d) If your document meets the above requirements and you follow the submission instructions, you will receive a notification by email indicating that your document was successfully uploaded to the ftp site.