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Lehigh Hanson West Region

Fourth 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)

March 18, 2011

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Hanson Aggregates West Region
12667 Alcosta Blvd., Suite 400
San Ramon, CA 94583

March 18, 2011

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

Subject: **Fourth 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 Fourth 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 fourth quarter of 2010 (October 1 through December 31, 2010; "the current quarter") in the asphalt plant area of the Site.

In the First Quarter 2010 Air Injection System (AIS) 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 concurred with the decision to shut down the AIS coupled with the continuation of groundwater monitoring to assess groundwater quality after the AIS was shut down. In response to the July 7, 2010 letter, the AIS was shut down on July 15, 2010. This report presents two sets of groundwater quality data collected since AIS shutdown as the basis for an analysis of whether or not concentrations of total petroleum hydrocarbons (TPH) as diesel (TPHd) and as gasoline (TPHg) and other TPH-related compounds have rebounded to their pre-air injection concentrations.

In summary, the findings of this report indicate that the gains achieved by the AIS in reducing TPH and TPH-related compound concentrations in the vicinity of the AIS have continued through the previous (third) and current (fourth) quarter monitoring periods. The analytical results for samples collected during the current quarter indicate that TPH and TPH-related compounds were detected at concentrations that are stable or lower than concentrations detected in samples collected during the first and second quarters of 2010. This data trend indicates that there has not been a rebound of contaminants of concern (COCs) to date as a result of shutting down the AIS.

Given the absence of contaminant concentration rebound, the long-term downward trend of COCs, the low risk factors associated with the COCs in their current concentrations and locations, ARCADIS, on behalf of Hanson , is requesting a meeting to discuss the potential case closure for this Site (see Section 5 of the attached report).

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,

Lee W. Cover
Environmental Manager
Lehigh Hanson West Region

Attachment

ARCADIS

E. Max MacLeod, P.E.
Project Engineer

Ron Goloubow, P.G.
Principal Geologist

Fourth 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)

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Date:
March 18, 2011

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ARCADIS

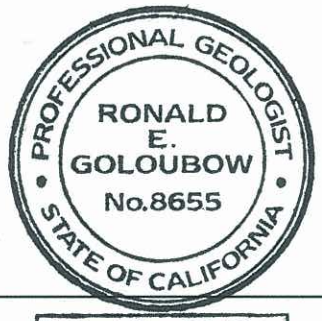
Certification

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.*

March 18, 2011

E. Max MacLeod, P.E. Date
Project Engineer
California Professional Engineer No. C69846



March 18, 2011

Ron Goloubow, P.G. Date
Expires Nov. 30, 2011
Principal Geologist
California Professional Geologist No. 8655

* A registered geologist's or registered engineer's certification of conditions comprises a declaration of his or her professional judgment. It does not constitute a warranty or guarantee, expressed or implied, nor does it relieve any other party of its responsibility to abide by contract documents, applicable codes, standards, regulations, and ordinances.

Executive Summary

This Groundwater Monitoring 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 October 1 through December 31, 2010. This report also presents an evaluation of whether or not "rebound" of contaminant concentrations is occurring in surrounding monitoring wells since the shutdown of the air injection system (AIS). All groundwater monitoring and sampling were conducted by ARCADIS U.S., Inc. (ARCADIS) on behalf of Lehigh Hanson West Region ("Hanson").

The AIS was shut down on July 15, 2010 after Hanson received a letter from Alameda County Environmental Health (ACEH), dated July 7, 2010 ("the July 7 letter"), indicating that they "*had no objection*" to terminating operation of the system. The AIS had been in operation since April 6, 2009, during which time it demonstrated effectiveness in reducing the concentrations of petroleum hydrocarbons in groundwater samples collected from wells within approximately 30 feet of the air injection wells. In the July 7 letter, ACEH requested that monitoring and sampling be continued on the existing schedule, and that the data collected during these events "*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.*"

Total petroleum hydrocarbons (TPH) as diesel (TPHd) and as gasoline (TPHg) and methyl tertiary-butyl ether (MTBE) are the primary compounds of potential concern at the Site. Considering all historical data, long-term concentration trends of these compounds throughout the Site generally are decreasing or stable. In samples from the two sampling events since the cessation of AIS operation, the short-term trend in concentrations of petroleum hydrocarbons is stable or downward with few exceptions. A majority of the concentrations of TPHd, TPHg, and MTBE in the fourth quarter of 2010 were either equal to or less than the concentrations found in samples from the same wells in one or both of the two sampling events conducted prior to AIS shutdown (78 of 87 samples, or approximately 90%).

ARCADIS

1. Introduction

ARCADIS U.S., Inc. (ARCADIS) has prepared this "Fourth 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 groundwater monitoring results and air injection system (AIS) operation and maintenance (O&M) activities for the quarterly monitoring period from October 1 through December 31, 2010 ("the current quarter").

The AIS was shut down on July 15, 2010. The basis for shutting down the AIS was a letter from Alameda County Environmental Health (ACEH) dated July 7, 2010 ("the July 7 ACEH Letter"), in which ACEH indicated that it *"had no objection"* to terminating operation of the AIS as had been previously requested by ARCADIS. The letter also requested the continuation of *"groundwater monitoring to assess possible rebound effects."* Two technical groundwater monitoring reports were requested for sampling events scheduled to occur after AIS shutdown by the July 7 ACEH Letter. The reports were requested to address the issue of "*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."*

This monitoring report is the second of the two monitoring reports requested by ACEH and presents the results of the groundwater monitoring and sampling of all site wells conducted on a quarterly basis, as well as an analysis of short- and long-term concentration trends for the AIS area and other wells.

2. Air Injection System Operation

A pilot AIS was installed during January and February 2008 to test the effectiveness of injecting air into the subsurface to enhance the natural biodegradation of petroleum hydrocarbons (LFR 2008a). Two wells from the pilot AIS (OXY-1D and OXY-1LF) were later used as the injection wells for the full-time AIS, which was started up on April 6, 2009. The AIS was shut down on July 15, 2010, approximately 10½ weeks before the September 27 through September 30, 2010 (third quarter) groundwater monitoring and sampling event, and approximately five months before the December 13 and 14, 2010 (fourth quarter) groundwater monitoring and sampling event. During the time that the system was operational, it ran constantly (with the exception of two unscheduled shutdowns) and delivered approximately 120 pounds of oxygen per day 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 "Air Injection System Installation, Start-up, and First Quarter Operations Report" (LFR 2009). Additionally, the quarterly groundwater monitoring and sampling reports since AIS start-up contain operational details for the system, including injection flow rates, sequencing, and routine operations and maintenance information.

3. Groundwater Monitoring

The routine groundwater monitoring event conducted during the current quarter consisted of measuring depth to groundwater in 26 monitoring wells and purging and sampling 29 monitoring and injection wells on December 13 and 14, 2010. The wells monitored included 26 groundwater monitoring wells (designated by "MW" and the well number) and the three air injection (AI) wells (designated by "OXY" and the well number; Figure 2). Groundwater monitoring results from the current quarter are summarized in Tables 1, 2, and 3 and are presented on Figures 3 through 8. Historical groundwater monitoring data are presented in summary tables in Appendix A. Appendix B includes field sheets from groundwater monitoring conducted during the current quarter. Certified analytical reports are kept on file by ARCADIS and will be made available to ACEH upon request.

3.1 Methodology

3.1.1 Groundwater Elevation Monitoring

Depth to groundwater was measured in the 26 groundwater monitoring wells during the current quarter. Depth to groundwater was not measured in the three AI wells.

The depth to groundwater was measured relative to the top of casing (TOC) using a water-level indicator, and measurements were recorded on field sheets. 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 (Table A-1).

3.1.2 Groundwater Well Purging and Sampling

All 29 wells sampled during the current quarter were purged and sampled using low-flow sampling protocols to minimize the drawdown during purging. An electrical peristaltic pump was used in conjunction with dedicated tubing. 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 parameters were recorded on field sheets. Groundwater samples were collected after general water-quality parameters stabilized for three successive readings to approximately within the standard criteria for pH (±0.1 standard units), electrical conductivity (±3%), DO (±10%), and ORP (±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 table 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 (Table A-3).

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 laboratories. A field duplicate sample collected from monitoring well MW-7D and a trip blank were submitted to the laboratory for quality control purposes.

3.1.3 Groundwater Sample Analyses

Groundwater samples for laboratory analyses were collected and submitted to TestAmerica Laboratories, Inc., a California state-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 (using silica gel cleanup preparation)
- 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 Monitoring Results

Groundwater elevations and analytical results for the current quarter are summarized in Tables 1 and 2 and presented on Figures 3 through 8. Historical groundwater elevation and analytical results are presented in Tables A-1, A-2, and A-3 of Appendix A.

3.2.1 Groundwater Elevation Monitoring Results

Groundwater elevation contour maps (Figures 3 through 5) were prepared for the shallow interval, the deep interval, and the Livermore Formation, respectively. Based on the interpreted groundwater elevation contours, the local groundwater flow direction was approximately to the southeast in wells completed in the shallow and deep intervals, and approximately to the east in wells completed in the Livermore Formation (note that the general groundwater flow direction for the Livermore Formation is based on groundwater elevation data from only four monitoring wells). These results are consistent with groundwater flow directions observed during previous monitoring events, and are inconsistent with the regional groundwater flow direction, which is presumed to be toward the northwest, based on the general surface topography in the vicinity of the Site. The hydraulic gradient for each of the three intervals was approximately 0.18 in the shallow interval, approximately 0.14 in the deep interval, and approximately 0.013 in the Livermore Formation. These values are consistent with results from previous groundwater monitoring events.

3.2.2 Analytical Results of Petroleum Hydrocarbons and Related Compounds

The primary TPH and TPH-related compounds detected in groundwater samples collected at the Site continue to be TPHd, TPHg, and MTBE. Analytical results for TPHd, TPHg, and MTBE are presented on Figures 6 through 8 for the shallow interval, the deep interval, and the Livermore Formation, respectively. Analytical results were compared to the Environmental Screening Levels (ESLs) published by the San Francisco Bay Regional Water Quality Control Board (RWQCB) for groundwater beneath residential land use areas where groundwater is a current or potential source of drinking water (RWQCB 2008). Results that exceed the ESLs are presented in boxes with bold borders in Table 2, while detections of any value are presented in bold typeface.

The following sections discuss concentrations and concentration trends of TPH and TPH-related compounds during the current quarter in each of the three hydrological

zones (shallow, deep, and Livermore Formation) of the Site. Additionally, the current quarter's analytical results are compared with results from the two samples from the same well prior to AIS shutdown and evaluated for concentration rebound. For the purpose of a discussion about the potential rebound of TPH and TPH-related compounds, we will define rebound as a detected concentration in a groundwater sample that meets the following three criteria:

1. The concentration in the current quarter is greater than the concentration found in the last two samples before AIS shutdown;

2. The location of the well where the sample was collected is within the demonstrated radius of influence (ROI) of injection wells OXY-1D and OXY-1LF; and

3. The concentration in the current quarter is greater than the residential ESL for the specific compound.

Table 3 presents groundwater analytical data for the two sampling events before and two sampling events since AIS shutdown in July 2010 for each well. For some wells, the two sampling events before shutdown were conducted in September 2009 and March 2010, while for others they were conducted in March 2010 and June 2010. The following sections use the three criteria listed above to assess whether or not TPHd, TPHg, and MTBE concentrations show signs of rebound during the current quarter.

3.2.2.1 Rebound Assessment for Wells Screened in the Shallow Zone

The 13 shallow-zone wells include MW-1, MW-2S, MW-3, MW-4S, MW-5S, MW-6S, MW-7S, MW-8, MW-9S, MW-10S, MW-11S, MW-12S, and OXY-1S. The following table summarizes analytical results for TPHd, TPHg, and MTBE in shallow-zone samples from the current quarter, and identifies wells within the ROI of the AIS. These data are evaluated according to the three criteria listed in Section 3.2.2 to determine if rebound has occurred in the shallow zone since the shutdown of the AIS.

Table A. Current Quarter Summary of TPHd, TPHg, and MTBE Concentrations in Shallow-Zone Groundwater

COC	Shallow Wells with a Concentration Increase Over Both Pre-AIS Shutdown Values		Shallow Wells with Concentration > Residential ESL		Shallow Wells within the ROI of OXY-1D and/or OXY1-LF	
	Wells	#	Wells	#	Wells	#
TPHd	MW-10S	1	MW-2S, MW-5S, MW-6S, MW-10S, & MW-11S	5	MW-1, MW-7S*, MW-8, MW-9S, & OXY-1S	5
TPHg	none	0	MW-6S & MW-7S	2		
MTBE	MW-5S	1	MW-2S, MW-3, & MW-6S	2		

Notes:
COC = constituent of concern
ROI = radius of influence
* = well is located at fringe of the ROI
> = greater than

TPHd in Shallow-Zone Wells

Analytical results for samples collected during the current quarter indicate that TPHd was not detected above laboratory reporting limits in samples collected from seven of the 13 shallow-zone wells. Only one well screened in the shallow zone (MW-10S) had a higher concentration of TPHd in the current quarter's sample than was detected in samples from both of the two sampling events prior to AIS shutdown. The groundwater sample from MW-10S contained a TPHd concentration of 1,500 micrograms per liter (µg/L), which represents the highest TPHd detection from MW-10S to date. However, MW-10S is located approximately 85 feet from the nearest AI well (OXY-1D), and is far beyond the demonstrated ROI of the AI wells of approximately 30 feet.

Of the five wells screened in the shallow zone that had TPHd concentrations in excess of residential ESLs, all but MW-10S had analytical results that were greater than the current quarter's in at least one of the two sampling events prior to AIS shutdown.

None of the analytical results for TPHd in samples from the current quarter meet all three of the criteria listed in Section 3.2.2, indicating that rebound of TPHd in the source area shallow zone is not occurring.

Moreover, an examination of historical TPHd concentrations site-wide indicates that the analytical results for samples collected from the majority of shallow wells have long-term stable or decreasing concentrations (see Appendix A, Table A-2).

TPHg in Shallow-Zone Wells

Analytical results from samples collected from the shallow-zone wells during the current quarter indicate that TPHg was not detected above laboratory reporting limits in samples collected from nine of the 13 shallow-zone wells. Samples collected from four of the 13 shallow-zone wells (MW-2S, MW-3, MW-6S, and MW-7S) contained concentrations of TPHg above laboratory reporting limits, but none were detected at concentrations greater than both of the detections from the two samples collected prior to AIS shutdown. Only two samples (from MW-6S and MW-7S) contained concentrations of TPHg that were higher than the residential ESL, and none of the shallow-zone TPHg concentrations during the current quarter meet all three of the criteria listed in Section 3.2.2. These results indicate that rebound of TPHg is not occurring in the source area shallow zone.

MTBE in Shallow-Zone Wells

Analytical results from samples collected from the 13 shallow-zone wells during the current quarter indicate that MTBE was not detected in samples from eight of the 13 shallow-zone wells. Of the five wells that contained a detection of MTBE (MW-2S, MW-3, MW-5S, MW-6S, and MW-11S), three had concentrations of MTBE that were higher than the residential ESL of 5 µg/L. Only the sample from MW-5S had an MTBE concentration that was greater than both of the detections from the two samples collected prior to the AIS shutdown, but its MTBE concentration (2.8 µg/L) was below the residential ESL of 5 µg/L and the location of MW-5S (more than 80 feet from the AI wells) is well beyond the demonstrated ROI of the AIS.

None of the shallow-zone MTBE concentrations during the current quarter meet even two of the three criteria listed in Section 3.2.2. These results indicate that rebound of MTBE in the shallow zone has not occurred since the shutdown of the AIS.

Shallow-Zone Analytical Results Summary

A comparison of pre-AIS shutdown analytical data and analytical data from the current quarter reveals the following:

- Only one of the 13 shallow wells (MW-10S) had a TPHd concentration in the current quarter that was higher than was found in the two samples collected before the AIS shutdown. This detection of TPHd in MW-10S is not considered an indicator of rebound because MW-10S is approximately twice as far from the sparging wells as the demonstrated ROI.

- Only one of the 13 shallow wells (MW-6S) had a TPHd concentration in the current quarter that was higher than was found in the two samples collected before the AIS shutdown. This detection of TPHd in MW-6S is not considered an indicator of rebound because MW-6S is approximately twice as far from the sparging wells as the demonstrated ROI.

- None of the 13 shallow wells had a higher concentration of MTBE in the current quarter than was found in the two samples collected before the AIS shutdown.

- Concentrations of the primary TPH and TPH-related compounds in the shallow zone show a downward trend over the long term (years) as well as over the short term (from the most recent previous sampling event to the current quarter; see Table A-2).

- Most TPH and TPH-related compounds are below their respective reporting limits for the majority of wells in the shallow zone (see Table 2).

- Of the 39 combinations of TPHd, TPHd, and MTBE concentrations in the 13 shallow-zone wells, 36 were either below their respective detection limits or below the historical average concentration for the given compound in the specified well.

3.2.2.2 Analytical Results for Wells Screened in the Deep Zone

The 11 deep-zone wells are MW-2M, MW-2D, MW-4D, MW-5D, MW-6D, MW-7D, MW-9D, MW-10D, MW-11D, MW-12D, and OXY-1D. The following table summarizes analytical results for TPHd, TPHg, and MTBE in deep-zone samples from the current quarter, and identifies wells within the ROI of the AIS. These data are evaluated according to the three screening criteria of Section 3.2.2 to determine if they meet the definition of rebound.

Table B. Current Quarter Summary of TPHd, TPHg, and MTBE Concentrations in Deep-Zone Groundwater

COC	Deep Wells with a Concentration Increase Over Both Pre-AIS Shutdown Values		Deep Wells with Concentration > Residential ESL		Deep Wells within the ROI of OXY-1S and/or OXY1-LF	
	Wells	#	Wells	#	Wells	#
TPHd	MW-11D	1	MW-2M, MW-7D, MW-11D, & OXY-1D	4	MW-7D*, MW-9D, & OXY-1D	3
TPHg	MW-10D, MW-11D, & OXY-1D	3	MW-2M, MW-7D*, MW-9D, MW-10D, & MW-11D	5		
MTBE	MW-12D	1	MW-2M, MW-2D, MW-6D, & MW-11D	4		

Notes:
COC = Constituent of concern
ROI = radius of influence
* = well is located at fringe of ROI
> = greater than

TPHd in Deep-Zone Wells

Analytical results for the current quarter indicate that TPHd was not detected above laboratory reporting limits in samples collected from six of the 11 deep-zone wells. Only one well screened in the deep zone (MW-11D) had a higher concentration of TPHd in the current quarter's sample than was detected in samples from both of the two sampling events prior to the AIS shutdown. The groundwater sample from MW-11D had a TPHd concentration of 54,000 µg/L, less than its historical high concentration (210,000 µg/L in September 2006; Table A2), but greater than the TPHd concentration in the two samples collected prior to the AIS shutdown. Field personnel reported that free product was observed in this well during the current quarter (as has been the case in previous sampling events). The well is located approximately 150 feet from the nearest AI well (OXY-1S), and is far beyond the demonstrated ROI of the AI wells (approximately 30 feet).

None of the analytical results for TPHd in the current quarter meet all three of the criteria listed in Section 3.2.2, indicating that rebound of TPHd is not occurring in the source area deep zone.

TPHg in Deep-Zone Wells

Analytical results from the samples collected from deep-zone wells during the current quarter indicate that TPHg was not detected above laboratory reporting limits in samples collected from five of the 11 deep-zone wells (MW-2D, MW-4D, MW-5D, MW-6D, and MW-12D). Samples collected from three wells (MW-10D, MW-11D, and OXY-1D) contained higher concentrations of TPHg relative to both of the two samples collected before the AIS shutdown. Of those three wells, two are much farther from the AI wells than the demonstrated ROI (MW-10D and MW-11D), while the third (OXY-1D) had a TPHg concentration of 70 µg/L, which is below the residential ESL for TPHg (100 µg/L). Of the five deep-zone wells that exceeded the residential ESL, MW-7D had the highest concentration of TPHg (6,800 µg/L) and is considered to be on the fringe of the ROI of the AIS. However, both of the samples collected from MW-7D prior to the AIS shutdown had a higher TPHg concentration than the sample collected during the current quarter.

None of the analytical results for TPHg in the current quarter meet all three of the criteria listed in Section 3.2.2, indicating that rebound of TPHg is not occurring in the source area deep zone.

MTBE in Deep-Zone Wells

Analytical results from the 11 deep-zone wells in the current quarter indicate that MTBE was not detected above laboratory reporting limits in samples from five of the 11 deep-zone wells (MW-4D, MW-7D, MW-9D, MW-10D, and OXY-1D). Of the samples collected from the six wells with detections of MTBE above laboratory reporting limits (MW-2M, MW-2D, MW-5D, MW-6D, MW-11D, and MW-12D), only one well (MW-12D) contained a concentration of MTBE that was higher than in the two samples that were collected before AIS shutdown. The MTBE detection in MW-12D was equal to its laboratory reporting limit (0.5 µg/L) and below the residential ESL of 5 µg/L.

None of the analytical results for MTBE in the current quarter meet all three of the criteria listed in Section 3.2.2, indicating that rebound of MTBE is not occurring in the source area deep zone.

Deep-Zone Analytical Results Summary

- There is no indication of TPHd, TPHg, or MTBE concentration rebound in deep-zone wells during the current quarter.

- As has been the case in previous quarters, elevated concentrations of TPH and TPH-related compounds persist in the deep zone in the areas of MW-11 and MW-7D, and the deep-zone wells have the highest concentrations of TPH and TPH-related compounds at the Site. The concentration of TPHd in MW-11D was 54,000 µg/L, which is less than its historical average of 57,500 µg/L.

- TPHd concentrations in the current quarter decreased in six of 11 deep-zone wells when compared with results from the previous quarter.

- TPHd concentrations in samples collected from well MW-11D remain elevated, although not as high as in some previous quarters (see Table A-2), and field staff noted what appeared to be free product on the water-level gauge when it was retrieved from the well, although measurable free product has never been measured in this well.

- In general, the analytical results for samples collected from the deep zone during this monitoring period are consistent with the long-term declines in concentrations of TPH and TPH-related compounds in groundwater.

- Of the 33 combinations of TPHd, TPHd, and MTBE concentrations in the 11 deep-zone wells, 32 were either below their respective detection limits or below the historical average concentration for the given compound in the specified well.

3.2.2.3 Analytical Results for Wells Screened in the Livermore Formation (LF zone)

The five LF-zone wells are MW-9LF, MW-10LF, MW-11LF, MW-12LF, and OXY-1LF. Of the three monitored water-bearing zones at the Site (shallow, deep, and LF), the LF zone has the lowest concentrations of TPH and TPH-related compounds. With the single exception of MTBE concentrations in MW-11D, a review of the historical analytical data indicates that concentrations of TPHd, TPHg, BTEX compounds, and MTBE have more frequently been below their respective detection limits than above

them (Table A2). In the current quarter, there were no detections of TPHd or BTEX compounds in the five LF-zone wells.

The following table summarizes analytical results for TPHd, TPHg, and MTBE in LF-zone samples from the current quarter, and identifies wells within the ROI of the AIS. These data are evaluated according to the three screening criteria listed in Section 3.2.2 to determine if they meet the definition of rebound.

Table C. Current Quarter Summary of TPHd, TPHg, and MTBE Concentrations in LF-Zone Groundwater

COC	LF-Zone Wells with a Concentration Increase Over Both Pre-AIS Shutdown Values		LF-Zone Wells with Concentration > Residential ESL		LF-Zone Wells within the ROI of OXY-1S and/or OXY1-LF	
	Wells	#	Wells	#	Wells	#
TPHd	none	0	none	0	MW-9LF & OXY-1LF	2
TPHg	MW-LF	1	MW-10LF & MW-11LF	2		
MTBE	MW-10LF, MW-11LF, & MW12LF	0	MW-11LF	1		

Notes:
COC = Constituent of concern
ROI = radius of influence
> = greater than

TPHd

Analytical results for samples collected during the current quarter from wells completed in the LF zone indicate that TPHd was not detected in samples from any of the five wells screened in this zone. In the absence of a detection of TPHd in the shallow zone, it is clear that rebound of TPHd is not occurring in the source area LF zone.

TPHg

Analytical results for samples collected from wells completed in the Livermore Formation during the current quarter indicate that TPHg was detected in one sample

(from well MW-10LF) at a concentration of 240 µg/L, which is higher than the historical average concentration for TPHg (104 µg/L) in this well. Because MW-10LF is approximately twice as far from the sparging wells as the demonstrated ROI, there is no indication that rebound of TPHg concentrations is occurring in the source area LF zone.

MTBE

MTBE has been detected in all 18 historical samples collected from MW-11LF with a high concentration of 260 µg/L and a low concentration of 86 µg/L. The current quarter's concentration of MTBE in the sample from MW-11LF (160 µg/L) is less than the average MTBE concentration for all MW-11LF samples (167 µg/L). Low concentrations of MTBE (less than the residential ESL) were detected in the samples from MW-10LF and MW-12LF, while MTBE was below the reporting limit in samples collected from MW-9LF and OXY-1LF. The only well that exceeded the residential ESL for MTBE (MW-11D) is approximately five times farther from the AI wells than the demonstrated ROI, indicating that rebound of MTBE is not occurring in the LF zone source area..

Livermore Formation Analytical Results Summary

- As has been the case in previous quarters, the samples collected from wells completed in the Livermore Formation have the lowest concentrations of TPH and TPH-related compounds at the Site.

- In the current quarter, there were no detections of TPHg or BTEX compounds in LF-zone wells.

- The two samples with the highest concentrations of TPH and TPH-related compounds were collected from wells MW-10LF (with a TPHg concentration of 250 µg/L in the current quarter) and MW-11LF (with a TPHg concentration of 140 µg/L and an MTBE concentration of 160 µg/L in the current quarter).

3.2.2.4 Analytical Results Summary and Evaluation of Potential Post-Treatment Concentration Rebound

Historically, the highest concentrations were detected in the areas of wells MW-7, MW-9, and MW-11, and typically in the well from those clusters that is screened in the deep interval. In general, considering all historical analytical data, concentrations of

petroleum hydrocarbons and related compounds have decreased or remained stable throughout the Site. More specifically, since the shutdown of the AIS, there have been no detections of TPH and/or TPH-related compounds that clearly indicate there has been rebound of these compounds due to the discontinuation of operating the AIS.

In the area of well MW-9, which was identified as the primary source area and where the active remediation was conducted, concentrations have significantly decreased since the operation of the AIS began in April 2009, to below laboratory reporting limits for almost all compounds.

Sampling was conducted on December 13 and 14, 2010, approximately five months after the shutdown of the AIS. The analytical results of the current quarter's sampling indicate that to date there is no evidence of rebound in the source area, and that concentrations in surrounding wells are either decreasing or stable. In the Third Quarter 2010 Air Injection System and Groundwater Monitoring Report, Hanson/ARCADIS stated that "*The groundwater monitoring planned for the next quarter," i.e., the current quarter, "will be used to further assess whether the active remediation conducted in the source area has permanently enhanced the degradation of contaminants in the asphalt area of the plant.*" The analytical results presented in Tables 2, 3, and A-3 in conjunction with the analysis provided in Section 3.2 and its subsections above all point to a conclusion that the concentration reductions achieved by the operation of the AIS have been sustained through the current monitoring period.

3.2.3 Evidence of Free Product

Historically, measurable free product was detected only in former well MW-2 from the time the well was installed in 1998 until approximately 2002 (well MW-2 was abandoned in 2005). Elsewhere, the presence of free product has been observed occasionally as sheen (although no measurable free product was present), including during the drilling of well MW-9D and during well purging in wells MW-3 (1999), MW-9D (2007), and MW-11D (2007). Hydrocarbon odor continues to be noted occasionally during purging of wells, and periodically field personnel have noted the presence of what appeared to be separate-phase product on retrieved down-hole equipment in wells MW-7S, MW-11D, and OXY-1D. During the current quarter, field personnel reported a petroleum hydrocarbon-like liquid on the depth-to-water probe when it was retracted from well MW-11D. Well MW-11D had the highest concentrations of TPHd in the current quarter. Pockets of residual free product are likely present in certain areas of the Site but do not appear to be mobile.

4. Conclusions and Recommendations

In general, the analytical results for the samples collected during this monitoring period are consistent with the long-term declining trend of concentrations of TPH and TPH-related compounds in groundwater.

4.1 Conclusions

The AIS was shut down on July 15, 2010 and has not operated since that day. Since then, groundwater monitoring was conducted in September and December 2010. Rebound of petroleum hydrocarbons (TPHg, TPHd, benzene, MTBE) as a result of shutting down the AIS is not occurring in the source area. Considering all historical data, long-term concentration trends of these compounds throughout the Site generally are decreasing or stable.

4.2 Recommendations

ARCADIS and Hanson would recommend a meeting with representatives of ACEH to discuss the long-term liabilities and the steps necessary to achieve case closure given the current site conditions. Hanson will contact representatives of ACEH to arrange the meeting.

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.

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.

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Table 1
Groundwater Elevation Data - December 2010
Lehigh Hanson Sunol Facility Asphalt Plant Area
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	258.68	12/13/10	3.27	255.41	ND
MW-2S	258.84	12/13/10	4.46	254.38	ND
MW-2M	258.99	12/13/10	4.57	254.42	ND
MW-2D	258.91	12/13/10	4.80	254.11	ND
MW-3	259.08	12/13/10	5.59	253.49	Odor
MW-4S	259.14	12/13/10	4.44	254.70	ND
MW-4D	259.22	12/13/10	5.64	253.58	ND
MW-5S	259.43	12/13/10	4.70	254.73	ND
MW-5D	259.40	12/13/10	4.85	254.55	ND
MW-6S	258.75	12/13/10	4.40	254.35	ND
MW-6D	259.27	12/13/10	5.23	254.04	ND
MW-7S	258.84	12/14/10	3.53	255.31	Odor
MW-7D	258.80	12/14/10	4.09	254.71	Odor
MW-8	258.84	12/13/10	3.27	255.57	ND
MW-9S	258.41	12/13/10	2.90	255.51	ND
MW-9D	258.86	12/14/10	4.15	254.71	Odor
MW-9LF	258.94	12/14/10	4.31	254.63	ND
MW-10S	260.67	12/13/10	5.15	255.52	ND
MW-10D	260.64	12/13/10	6.30	254.34	ND
MW-10LF	260.58	12/13/10	7.15	253.43	ND
MW-11S	258.96	12/14/10	4.63	254.33	ND
MW-11D	258.98	12/14/10	5.41	253.57	Observed
MW-11LF	259.01	12/14/10	5.25	253.76	ND
MW-12S	262.69	12/14/10	7.04	255.65	ND
MW-12D	262.70	12/14/10	6.85	255.85	ND
MW-12LF	262.90	12/14/10	7.06	255.84	ND

Notes:
feet MSL = feet relative to mean sea level
feet TOC = feet below top of casing
ND = not detected
Odor = Moderate to strong fuel hydrocarbon odor observed during the purging of the well
Observed = retracted water-level probe had petroleum product on it

Table 2
Summary of Groundwater Analytical Results - December 2010
Lehigh Hanson Sunol Facility Asphalt Plant Area
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	12/13/10		ND<51	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5
MW-2S	12/13/10		**340**	**53**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**24**
MW-2M	12/13/10		**140**	**150**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**12**
MW-2D	12/13/10		ND<51	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**19**
MW-3	12/13/10		**55**	**64**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**43**
MW-4S	12/13/10		ND<51	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5
MW-4D	12/13/10		ND<51	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5
MW-5S	12/13/10		**640**	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**2.8**
MW-5D	12/13/10		ND<51	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**1.8**
MW-6S	12/13/10		**160**	**320**	ND<0.5	ND<0.5	**0.94**	ND<1.0	**9.8**
MW-6D	12/13/10		ND<51	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**32**
MW-7S	12/14/10		ND<51	**240**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5
MW-7D	12/14/10		**2,200**	**6,800**	**37**	**17**	**360**	**130**	ND<5
MW-7D	12/14/10	D	**2,500**	**6,500**	**38**	**19**	**400**	**140**	ND<5
MW-8	12/13/10		ND<51	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5
MW-9S	12/13/10		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5
MW-9D	12/14/10		ND<51	**260**	**1.3**	**0.61**	**5.4**	**3.1**	ND<0.5
MW-9LF	12/14/10		ND<51	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5
MW-10S	12/13/10		**1,500**	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5
MW-10D	12/13/10		**55**	**1,200**	ND<0.5	**0.58**	**4.2**	**2.0**	ND<0.5
MW-10LF	12/13/10		ND<50	**250**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**1.2**
MW-11S	12/14/10		**110**	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	**2.8**
MW-11D	12/14/10		**54,000**	**1,400**	**4.4**	ND<0.5	**4.6**	**1.1**	**13**
MW-11LF	12/14/10		ND<51	**140**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**160**
MW-12S	12/14/10		ND<52	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5
MW-12D	12/14/10		ND<51	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**0.50**
MW-12LF	12/14/10		ND<51	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**0.64**

Table 2
Summary of Groundwater Analytical Results - December 2010
Lehigh Hanson Sunol Facility Asphalt Plant Area
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)
OXY-1S	12/14/10		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5
OXY-1D	12/14/10		**310**	**70**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5
OXY-1LF	12/14/10		ND<51	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5
ESLs			*100*	*100*	*1*	*40*	*30*	*20*	*5*

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.

Table 3
Recent Analytical Results for TPH and TPH-Related Compounds
for the Evaluation of Post-AIS Operation Rebound
Lehigh Hanson Sunol Facility Asphalt Plant Area
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)
MW-1	3/2/10		**150**	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-1	9/29/10		ND<51	**50***	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5
MW-1	9/29/10	D	**57***	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5
MW-1	12/13/10		ND<51	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5
MW-2S	9/22/09		**10,000**	**54***	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**40**
MW-2S	3/3/10		**12,000**	**100**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**19**
MW-2S	3/3/10	D	**10,000**	**100**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**20**
MW-2S	9/28/10		**1,200**	**74***	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**21**
MW-2S	12/13/10		**340**	**53***	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**24**
MW-2M	9/22/09		**1,700**	**230**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**18**
MW-2M	3/3/10		**3,700**	**220**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**18**
MW-2M	9/28/10		**450**	**170**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**12**
MW-2M	12/13/10		**140**	**150**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**12**
MW-2D	9/22/09		**1,200**	**81***	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**33**
MW-2D	3/3/10		**2,000**	**110**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**27**
MW-2D	9/28/10		**280**	**50***	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**19**
MW-2D	12/13/10		ND<51	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**19**
MW-3	9/22/09		ND<50	**74***	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**61**
MW-3	3/5/10		**1,500**	**72***	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**44**
MW-3	9/29/10		**190**	**80***	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**48**
MW-3	12/13/10		**55***	**64***	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**43**
MW-4S	9/21/09		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0
MW-4S	3/3/10		**360**	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5
MW-4S	9/27/10		ND<51	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5
MW-4S	9/27/10	D	ND<51	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5
MW-4S	12/13/10		ND<51	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5
MW-4D	9/21/09		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0
MW-4D	3/3/10		**780**	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5
MW-4D	9/27/10		ND<51	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5
MW-4D	12/13/10		ND<51	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5
MW-5S	9/21/09		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**2.0***
MW-5S	3/4/10		**3,600**	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**0.57***
MW-5S	3/4/10	D	**3,400**	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**0.59***
MW-5S	9/30/10		ND<51	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**1.4***
MW-5S	12/13/10		**640**	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**2.8***
MW-5D	9/21/09		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**2.6***
MW-5D	3/4/10		**2,500**	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**0.84***
MW-5D	9/29/10		**51***	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**1.2***
MW-5D	12/13/10		ND<51	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**1.8***
MW-6S	9/22/09		**940**	**230**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**58**
MW-6S	3/5/10		**1,400**	**270**	**2.2**	ND<0.5	**2.8***	ND<1.0	**31**
MW-6S	9/29/10		**180**	**470**	ND<0.5	ND<0.5	**0.70***	ND<1.0	**23**
MW-6S	12/13/10		**160**	**320**	ND<0.5	ND<0.5	**0.94***	ND<1.0	**9.8**
MW-6D	9/22/09		**550**	**65***	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**65**
MW-6D	3/3/10		**1,100**	**66***	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**39**
MW-6D	9/27/10		ND<52	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**33**
MW-6D	12/13/10		ND<51	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**32**

Table 3
Recent Analytical Results for TPH and TPH-Related Compounds
for the Evaluation of Post-AIS Operation Rebound
Lehigh Hanson Sunol Facility Asphalt Plant Area
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)
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-7S	9/28/10		**75***	**430**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5
MW-7S	12/14/10		ND<51	**240**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5
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-7D	9/28/10		**1,600**	**13,000**	**55**	**29***	**490**	**270**	ND<25
MW-7D	12/14/10		**2,200**	**6,800**	**37**	**17***	**360**	**130**	ND<5
MW-7D	12/14/10	D	**2,500**	**6,500**	**38**	**19***	**400**	**140**	ND<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
MW-8	9/28/10		ND<51	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5
MW-8	9/28/10	D	ND<51	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5
MW-8	12/13/10		ND<51	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-9S	9/28/10		ND<55	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5
MW-9S	12/13/10		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	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-9D	9/28/10		ND<55	**320**	**1.2**	ND<0.5	**3.5***	ND<1.0	ND<0.5
MW-9D	12/14/10		ND<51	**260**	**1.3**	**0.61***	**5.4***	**3.1***	ND<0.5
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-9LF	9/28/10		ND<52	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5
MW-9LF	12/14/10		ND<51	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5
MW-10S	9/23/09		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0
MW-10S	3/3/10		**1,300**	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5
MW-10S	9/29/10		ND<52	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5
MW-10S	12/13/10		**1,500**	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5
MW-10D	9/23/09		ND<50	**760**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0
MW-10D	3/3/10		**700**	**450**	ND<0.5	ND<0.5	**0.85***	ND<1.0	ND<0.5
MW-10D	9/29/10		**150**	**2,300**	ND<0.5	ND<0.5	**14***	ND<1.0	ND<0.5
MW-10D	12/13/10		**55***	**1,200**	ND<0.5	**0.58***	**4.2***	**2.0***	ND<0.5
MW-10LF	9/23/09		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0
MW-10LF	3/3/10		**460**	**320**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**1.2***
MW-10LF	9/29/10		ND<52	**240**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**0.83***
MW-10LF	12/13/10		ND<50	**250**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**1.2***
MW-11S	9/22/09		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**2.5***
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-11S	9/30/10		ND<51	ND<50	ND<0.5	ND<0.5	ND<0.5	**1.0***	**3.3***
MW-11S	9/30/10	D	ND<51	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**3.1***
MW-11S	12/14/10		**110**	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	**2.8***
MW-11D	9/22/09		**6,800**	**500**	**1.3**	ND<0.5	**2.2***	**3.22***	**15**
MW-11D	3/5/10		**6,700**	**450**	**1.2**	ND<0.5	**1.3***	ND<1.0	**11**
MW-11D	9/30/10		**47,000**	**1,100**	**5.4**	ND<0.5	**5.8***	**1.7***	**14**
MW-11D	12/14/10		**54,000**	**1,400**	**4.4**	ND<0.5	**4.6***	**1.1***	**13**

Table 3
Recent Analytical Results for TPH and TPH-Related Compounds
for the Evaluation of Post-AIS Operation Rebound
Lehigh Hanson Sunol Facility Asphalt Plant Area
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)
MW-11LF	9/22/09		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**210**
MW-11LF	3/5/10		**150**	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**110**
MW-11LF	9/30/10		ND<51	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**110**
MW-11LF	12/14/10		ND<51	**140**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**160**
MW-12S	9/22/09		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0
MW-12S	3/5/10		ND<51	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**0.51***
MW-12S	9/29/10		ND<51	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5
MW-12S	12/14/10		ND<52	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5
MW-12D	9/22/09		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0
MW-12D	3/5/10		**60***	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5
MW-12D	9/29/10		ND<52	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5
MW-12D	12/14/10		ND<51	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**0.5***
MW-12LF	9/22/09		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0
MW-12LF	3/5/10		ND<51	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**0.77***
MW-12LF	9/29/10		ND<52	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**0.61***
MW-12LF	12/14/10		ND<51	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**0.64***
OXY-1S	3/5/10		**140**	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-1S	9/28/10		ND<53	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5
OXY-1S	12/14/10		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5
OXY-1D	3/4/10		**3,800**	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5
OXY-1D	6/10/10		**1,300**	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5
OXY-1D	9/28/10		**390**	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5
OXY-1D	12/14/10		**310**	**70***	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5
OXY-1LF	3/4/10		**130**	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
OXY-1LF	9/28/10		ND<53	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5
OXY-1LF	12/14/10		ND<51	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5
ESLs			*100*	*100*	*1*	*40*	*30*	*20*	*5*

Notes:

TPHd = total petroleum hydrocarbons as diesel
TPHg = total petroleum hydrocarbons as gasoline
MTBE = methyl tertiary-butyl ether
ug/l = micrograms per liter
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.

ND = not detected above given laboratory reporting limit
D = duplicate sample
* = Detection is below applicable ESL

Med. Gray = Analytical results from the two sampling events prior to AIS shutdown.
Lt. Gray = Results from first sampling event after AIS shutdown.
No Fill = Current quarter's concentration. Rebound is not indicated as value is not greater than one or both values from the two sampling events before AIS shutdown.
Yellow cell = Concentration is above both of the detections in samples collected during the two sampling events prior to AIS shutdown. Possible minor rebound since AIS shutdown. Concentration is more than one order of magnitude lower than pre AIS operation baseline values (seeTable A-2).
Green cell = Concentration is above both of the detections in samples collected during the two sampling events prior to AIS shutdown. Well is located beyond the demonstrated radius of influence of the injection wells and concentrations are more than one order of magnitude below historical highs (Table A-2).
Blue cell = Concentration is above both of the detections from the two sampling events prior to AIS shutdown. Well is located beyond the demonstrated radius of influence of the injection wells and post-AIS operation concentrations are below historical highs (Table A-2).
Violet cell = Concentration is the highest result for TPHd in this well. The well is beyond the demonstrated radius of influence of the air injection wells.

CITY: DIV/GROUP: DB: LD: PIC: PM: TM: TR:
Project (Project #)
K:\001_EMV\P00000_PROPOSALS\Hanson_sunol\HansonSunol_Arcadis.mxd - 5/13/2010 @ 11:24:04 AM

0 700 1,400
Feet

GRAPHIC SCALE

HANSON AGGREGATES, 7999 ATHENOUR WAY,
SUNOL, CALIFORNIA

SITE LOCATION MAP

ARCADIS

FIGURE
1

CITY:(Reqd) DIV/GROUP:(Reqd) DB:(Reqd) LD:(Opt) PIC:(Opt) PM:(Reqd) TM:(Opt) LYR:(Opt)ON=*:OFF=*REF*
G:\ENVCAD\Emeryville\ACT\EM009480\0011\00004\Dec 2010\Figure 2.dwg LAYOUT: 2 SAVED: 1/20/2011 12:39 PM ACADVER: 18.0S (LMS TECH) PAGESETUP: -- PLOTSTYLETABLE: ARCADIS.CTB PLOTTED: 3/14/2011 9:23 AM BY: BEARDSLEY, DANIEL
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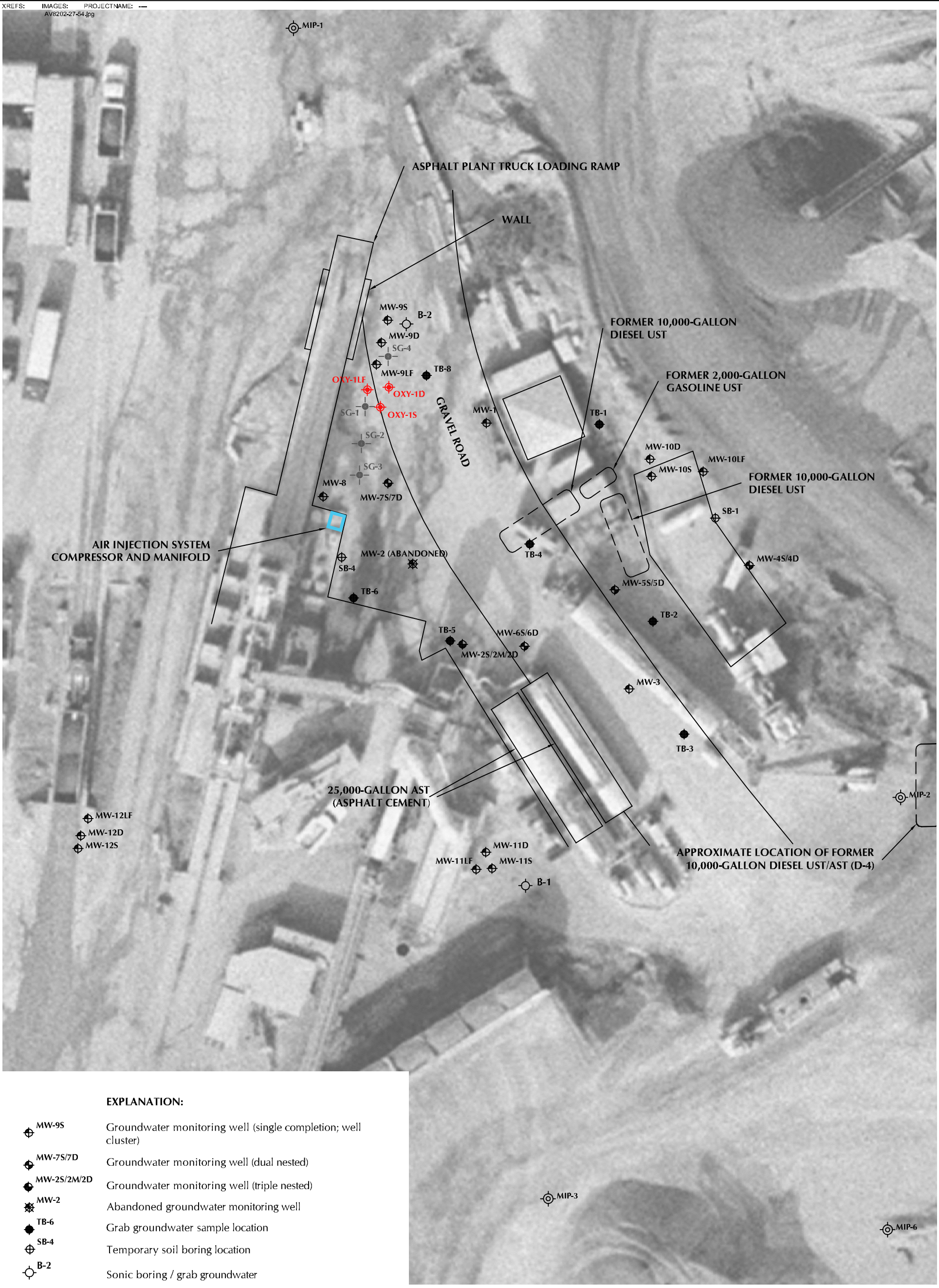

EXPLANATION:

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)

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

N

0 30 FEET
APPROXIMATE SCALE

HANSON AGGREGATES, SUNOL, CALIFORNIA

SITE PLAN

ARCADIS

FIGURE 2

CITY:(Reqd) DIV/GROUP:(Reqd) DB:(Reqd) LD:(Opt) PIC:(Opt) PM:(Reqd) TM:(Opt) LYR:(Opt)ON=*;OFF=*REF*
G:\ENVCAD\Emeryville\ACT\EM009480\0011\00004\Dec 2010\Figure 3 GWE Shallow.dwg LAYOUT: 3 SAVED: 3/14/2011 9:37 AM ACADVER: 18.0S (LMS TECH) PAGESETUP: -- PLOTSTYLETABLE: ARCADIS.CTB PLOTTED: 3/18/2011 11:22 AM BY: BEARDSLEY, DANIEL
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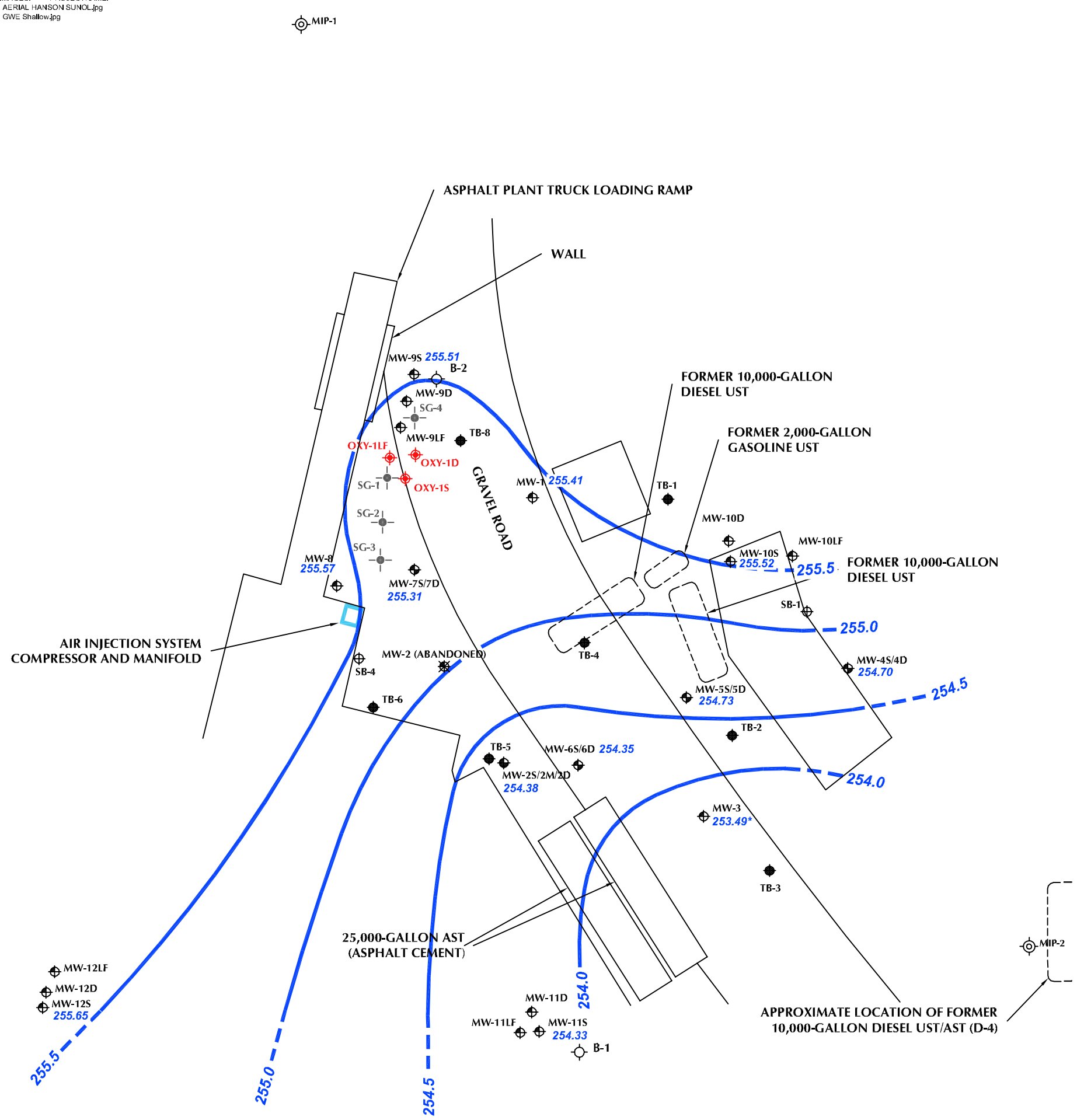
AERIAL HANSON SUNOL.jpg
GWE Shallow.jpg



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
SG-1	Soil gas monitoring probe (approximate location)
OXY-1S	Air injection well (approximate location)
258	Groundwater elevation contour (feet above mean sea level), dashed where inferred
257.57	Groundwater elevation (feet above mean sea level)

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

MIP-3

MIP-6

N

0 30 FEET
APPROXIMATE SCALE

HANSON AGGREGATES, SUNOL, CALIFORNIA

GROUNDWATER ELEVATION CONTOURS FOR THE SHALLOW INTERVAL (DECEMBER 2010)

ARCADIS

FIGURE 3

CITY:(Reqd) DIV/GROUP:(Reqd) DB:(Reqd) LD:(Opt) PIC:(Opt) PM:(Reqd) TM:(Opt) LYR:(Opt)ON=*:OFF=*REF*
G:\ENVCAD\Emeryville\ACT\EM009480\0011\00004\Dec 2010\Figure 4 GWE Deep.dwg LAYOUT: 4 SAVED: 3/18/2011 11:21 AM ACADVER: 18.0S (LMS TECH) PAGESETUP: -- PLOTSTYLETABLE: ARCADIS.CTB PLOTTED: 3/18/2011 11:21 AM BY: BEARDSLEY, DANIEL
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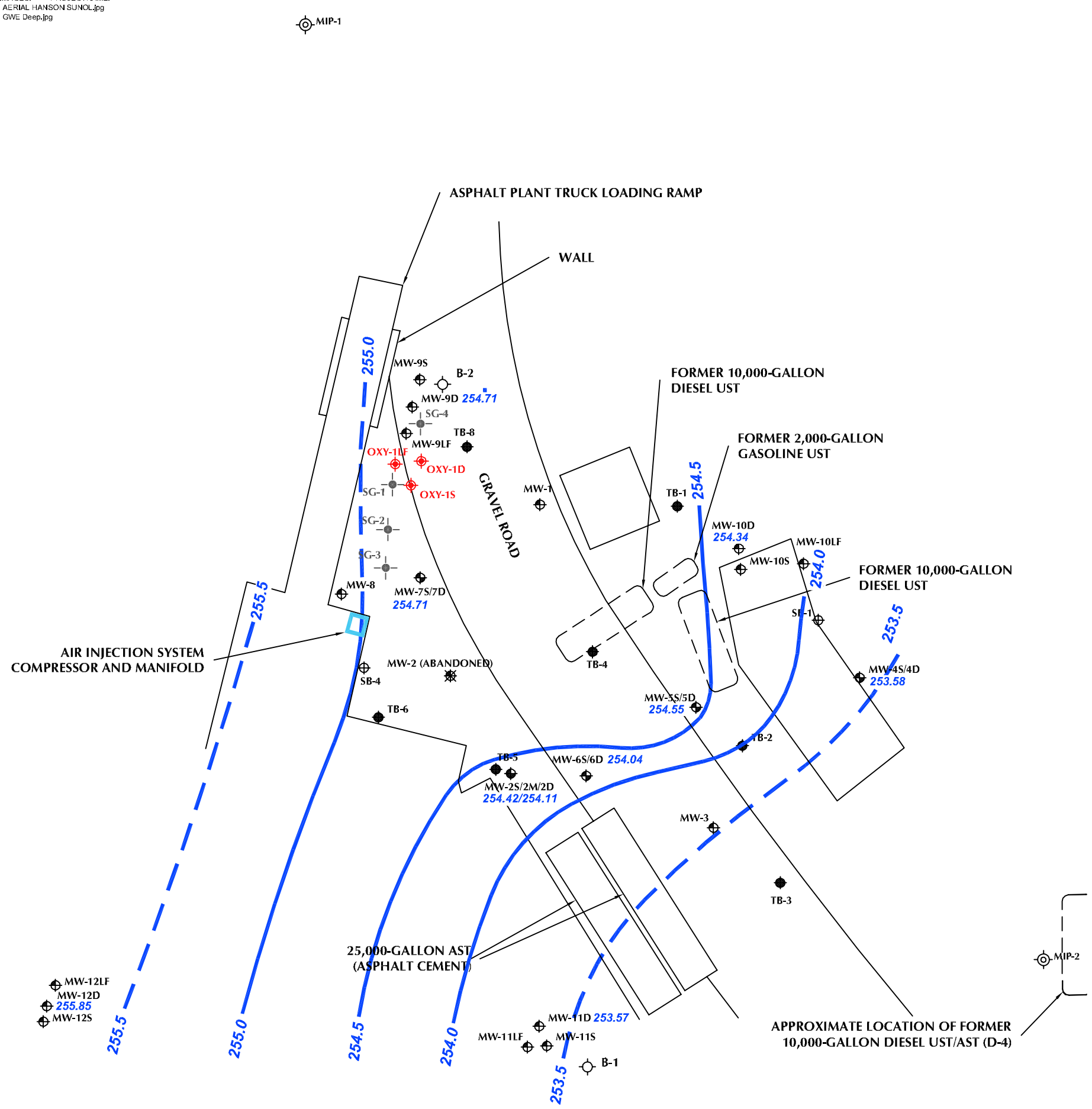
AERIAL HANSON SUNOL.jpg
GWE Deep.jpg



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
SG-1	Soil gas monitoring probe (approximate location)
OXY-1S	Air injection well (approximate location)
258	Groundwater elevation contour (feet above mean sea level), dashed where inferred
257.57	Groundwater elevation (feet above mean sea level)

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

MIP-3

MIP-6

N

0 30 FEET
APPROXIMATE SCALE

HANSON AGGREGATES, SUNOL, CALIFORNIA

GROUNDWATER ELEVATION CONTOURS FOR THE DEEP INTERVAL (DECEMBER 2010)

ARCADIS

FIGURE 4

CITY:(Reqd) DIV/GROUP:(Reqd) DB:(Reqd) LD:(Opt) PIC:(Opt) PM:(Reqd) TM:(Opt) LYR:(Opt)ON=*:OFF=*REF*
G:\ENVCAD\Emeryville\ACT\EM009480\0011\00004\Dec 2010\Figure 5 GWE Livermore.dwg LAYOUT: 5 SAVED: 3/14/2011 9:37 AM ACADVER: 18.0S (LMS TECH) PAGESETUP: -- PLOTSTYLETABLE: ARCADIS.CTB PLOTTED: 3/18/2011 11:20 AM BY: BEARDSLEY, DANIEL
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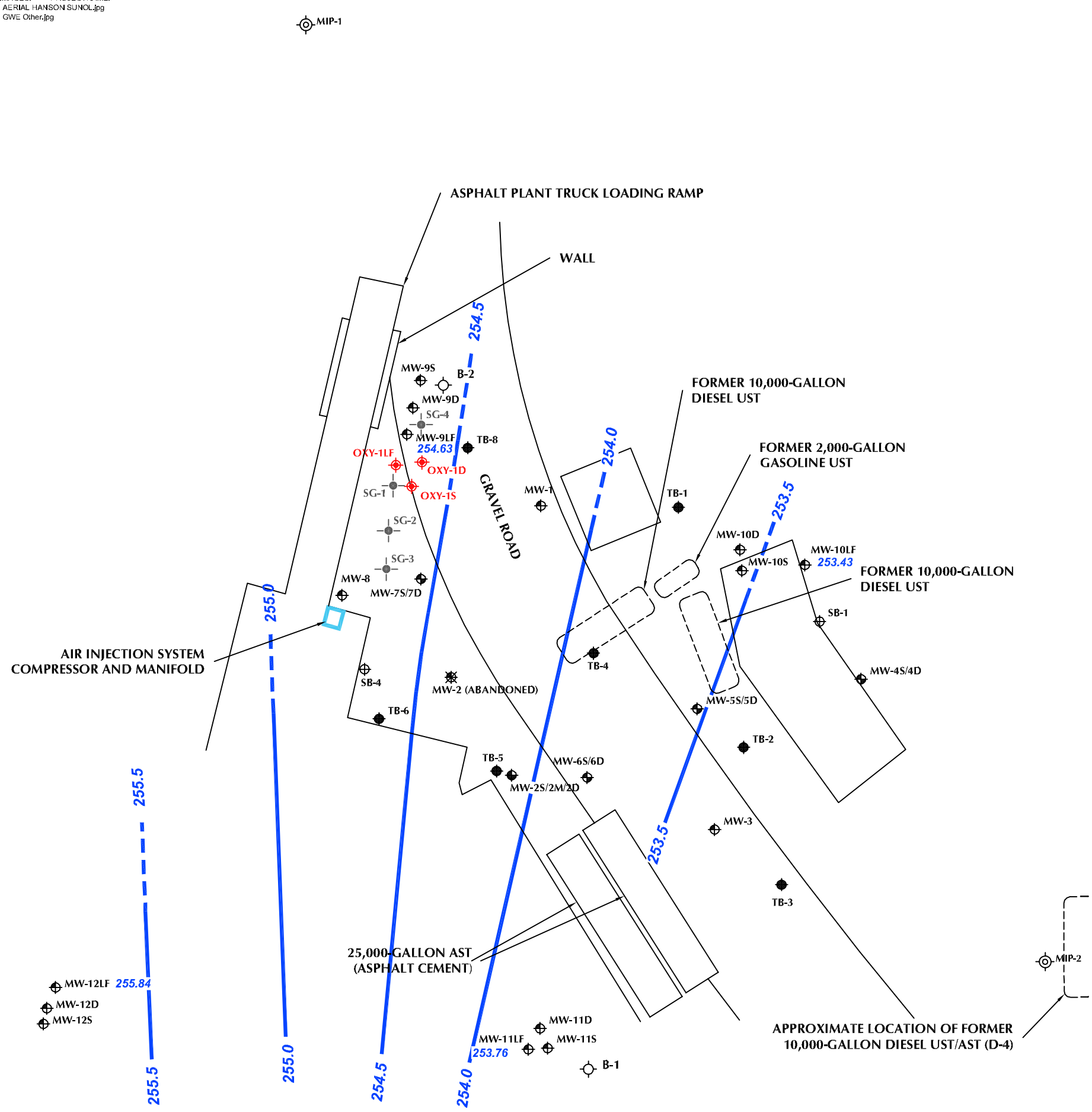
AERIAL HANSON SUNOL.jpg
GWE Other.jpg



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
SG-1	Soil gas monitoring probe (approximate location)
OXY-1S	Air injection well (approximate location)
255	Groundwater elevation contour (feet above mean sea level), dashed where inferred
253.73	Groundwater elevation (feet above mean sea level)

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

MIP-3

MIP-6

N

0 30 FEET
APPROXIMATE SCALE

HANSON AGGREGATES, SUNOL, CALIFORNIA

GROUNDWATER ELEVATION CONTOURS FOR THE LIVERMORE FORMATION (DECEMBER 2010)

ARCADIS

FIGURE
5

CITY:(Reqd) DIV/GROUP:(Reqd) DB:(Reqd) LD:(Opt) PIC:(Opt) PM:(Reqd) TM:(Opt) LYR:(Opt)ON=*:OFF=*REF*
G:\ENVCAD\Emeryville\ACT\EM009480\0011\00004\Dec 2010\Figure 6 TPH-MtBE Shallow.dwg LAYOUT: 6 SAVED: 3/18/2011 11:18 AM ACADVER: 18.0S (LMS TECH) PAGESETUP: -- PLOTSTYLETABLE: ARCADIS.CTB PLOTTED: 3/18/2011 11:19 AM BY: BEARDSLEY, DANIEL
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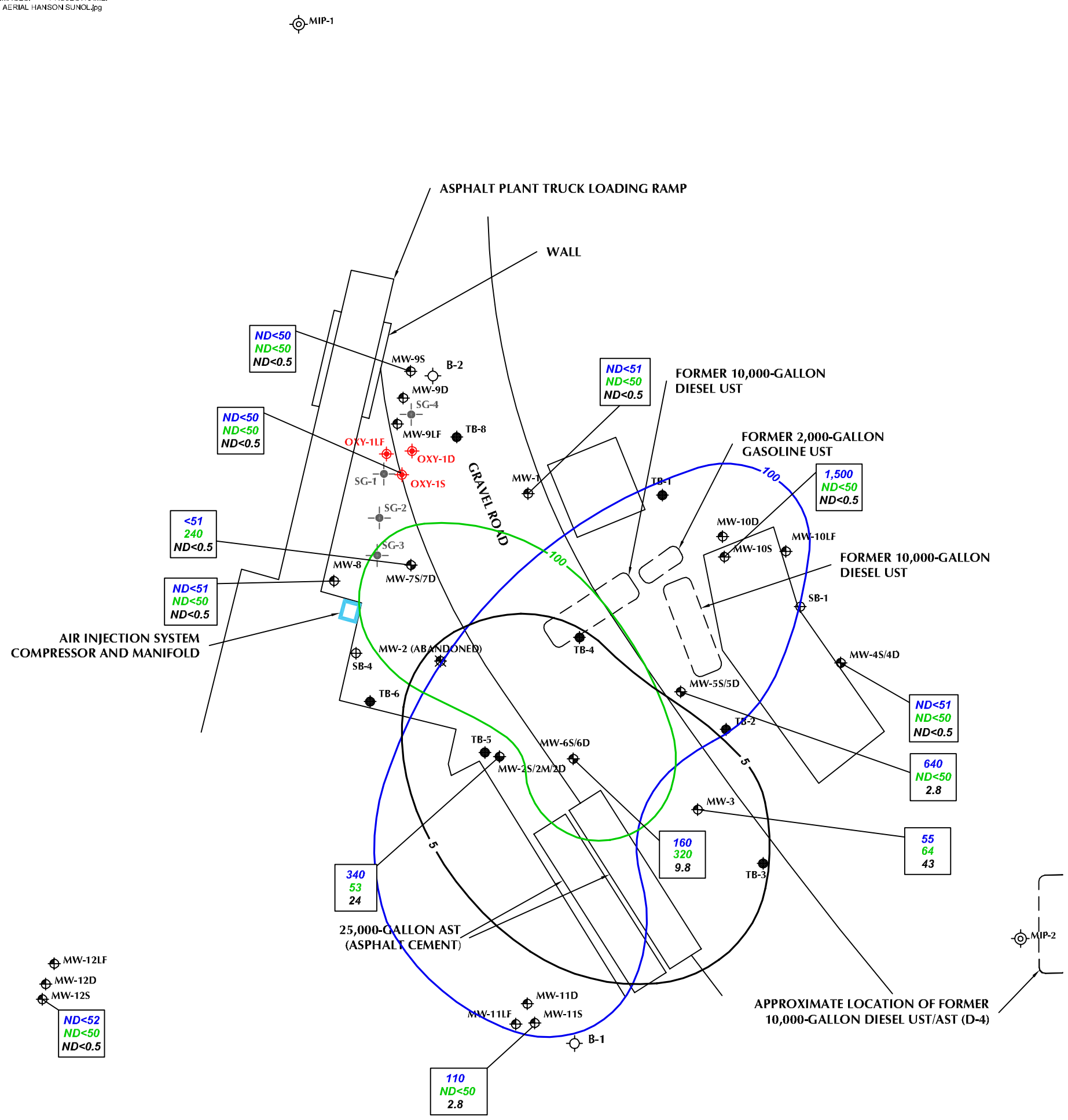
AERIAL HANSON SUNOL.jpg



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)
75 / 430 / 3.3	TPHd - Total petroleum hydrocarbons as diesel (measured in µg/L) TPHg - Total petroleum hydrocarbons as gasoline (measured in µg/L) MTBE - Methyl tert-butyl ether (measured in µg/L)
100	TPHd
100	TPHg
10	MTBE

AST = Aboveground storage tank
UST = Underground storage tank
MIP = Membrane Interface Probe
µg/L = Micrograms per liter
ND< = Not detected at the given reporting limit

N

0 30 FEET
APPROXIMATE SCALE

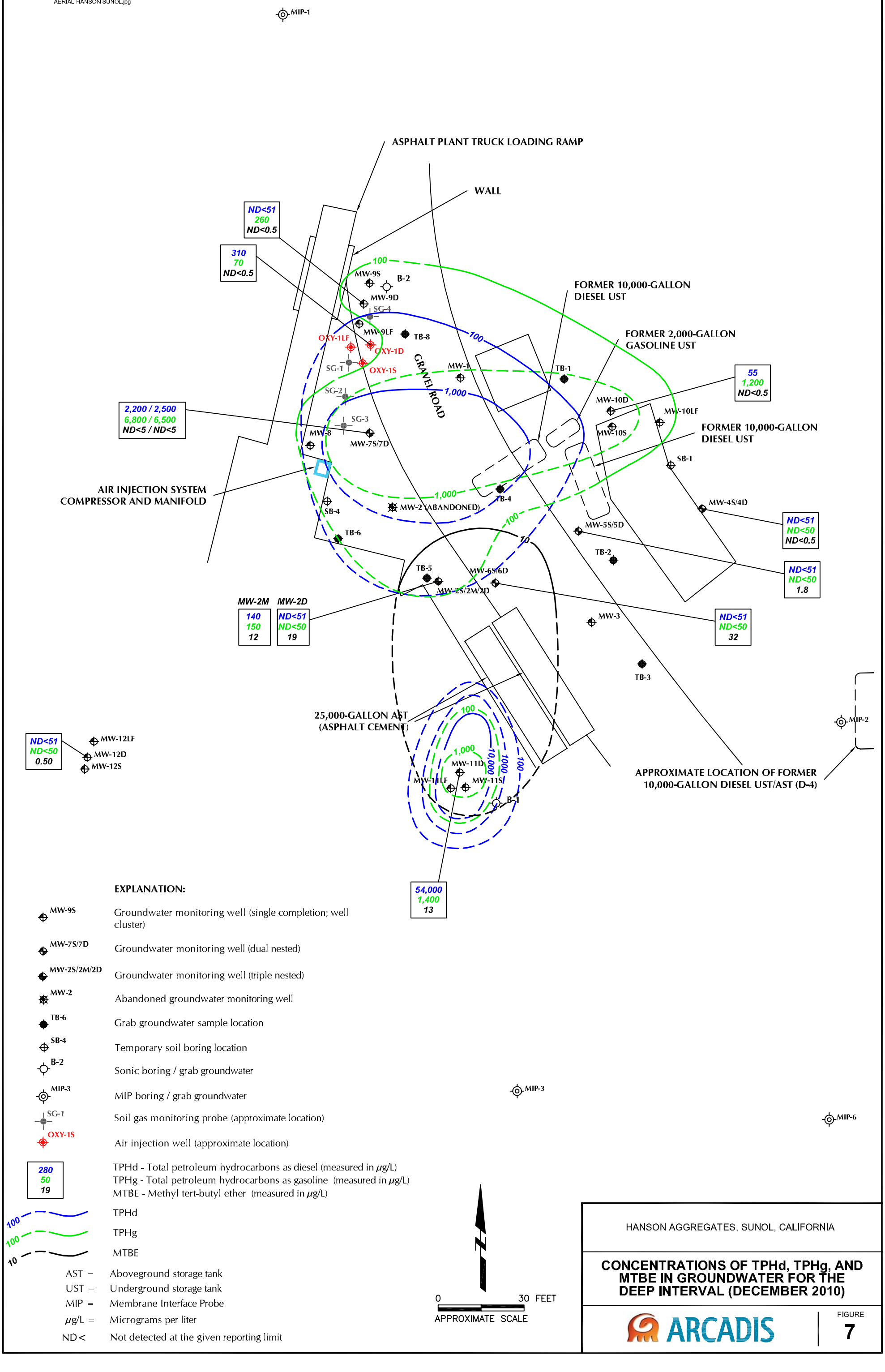
HANSON AGGREGATES, SUNOL, CALIFORNIA

CONCENTRATIONS OF TPHd, TPHg, AND MTBE IN GROUNDWATER FOR THE SHALLOW INTERVAL (DECEMBER 2010)

ARCADIS

FIGURE
6

CITY:(Reqd) DIV/GROUP:(Reqd) DB:(Reqd) LD:(Opt) PIC:(Opt) PM:(Reqd) TM:(Opt) LYR:(Opt)ON=*:OFF=*REF*
G:\ENVCAD\Emeryville\ACT\EM009480\0011\00004\Dec 2010\Figure 7 TPH-MtBE Deep.dwg LAYOUT: 7 SAVED: 3/14/2011 9:36 AM ACADVER: 18.0S (LMS TECH) PAGESETUP: -- PLOTSTYLETABLE: ARCADIS.CTB PLOTTED: 3/18/2011 11:17 AM BY: BEARDSLEY, DANIEL
XREFS: IMAGES: PROJECTNAME: --
AERIAL HANSON SUNOL.jpg



HANSON AGGREGATES, SUNOL, CALIFORNIA

CONCENTRATIONS OF TPHd, TPHg, AND MTBE IN GROUNDWATER FOR THE DEEP INTERVAL (DECEMBER 2010)

ARCADIS

FIGURE
7

CITY:(Reqd) DIV/GROUP:(Reqd) DB:(Reqd) LD:(Opt) PIC:(Opt) PM:(Reqd) TM:(Opt) LYR:(Opt)ON=*:OFF=*REF*
G:\ENVCAD\Emeryville\ACT\EM009480\0011\00004\Dec 2010\Figure 8 TPH-MtBE Livermore.dwg LAYOUT: 8 SAVED: 3/14/2011 9:36 AM ACADVER: 18.0S (LMS TECH) PAGESETUP: -- PLOTSTYLETABLE: ARCADIS.CTB PLOTTED: 3/18/2011 11:20 AM BY: BEARDSLEY, DANIEL
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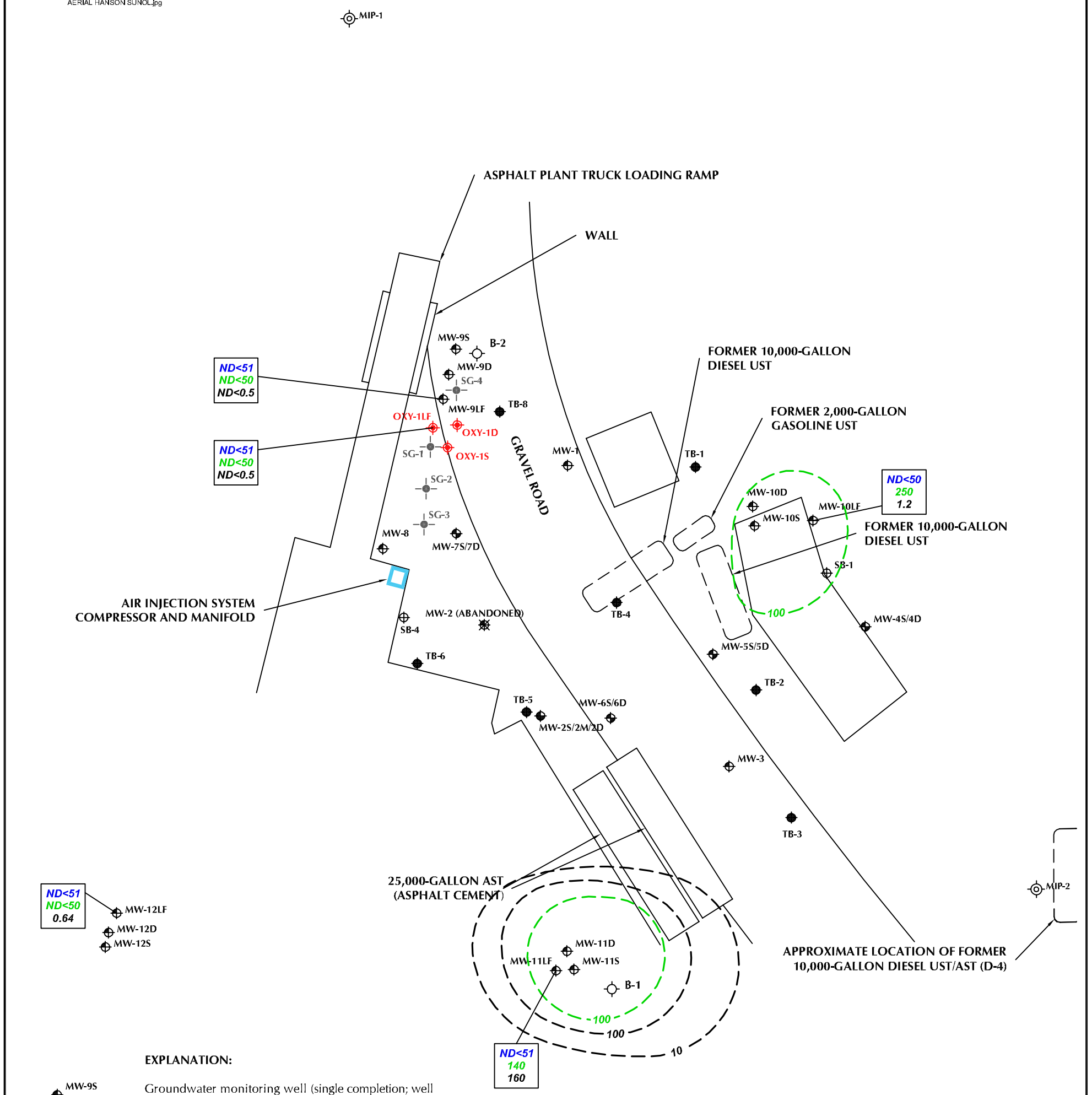
AERIAL HANSON SUNOL.jpg



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
- SG-1 — Soil gas monitoring probe (approximate location)
- OXY-1S — Air injection well (approximate location)

ND<50
ND<50
0.83

TPHd - Total petroleum hydrocarbons as diesel (measured in µg/L)
TPHg - Total petroleum hydrocarbons as gasoline (measured in µg/L)
MTBE - Methyl tert-butyl ether (measured in µg/L)

TPHd was not detected in samples from any of the Livermore formation wells; therefore, no concentration contours are provided.

100 — TPHg
10 — MTBE

AST = Aboveground storage tank
UST = Underground storage tank
MIP = Membrane Interface Probe
µg/L = Micrograms per liter
ND< = Not detected at the given reporting limit

MIP-3
MIP-6

N

0 30 FEET
APPROXIMATE SCALE

HANSON AGGREGATES, SUNOL, CALIFORNIA

CONCENTRATIONS OF TPHd, TPHg, AND MTBE IN GROUNDWATER FOR THE LIVERMORE FORMATION (DECEMBER 2010)

ARCADIS

FIGURE 8

ARCADIS

Appendix A

Historical Groundwater Elevation and Analytical Data

Table A-1
Historical Groundwater Elevation Data
Lehigh Hanson Sunol Facility Asphalt Plant Area
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	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

Table A-1
Historical Groundwater Elevation Data
Lehigh Hanson Sunol Facility Asphalt Plant Area
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		6/9/09	3.50	255.18	ND
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-1		9/27/10	3.43	255.25	ND
MW-1		12/13/10	3.27	255.41	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

Table A-1
Historical Groundwater Elevation Data
Lehigh Hanson Sunol Facility Asphalt Plant Area
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-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
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-2S		9/27/10	4.38	254.46	ND
MW-2S		12/13/10	4.46	254.38	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-2M		9/27/10	4.61	254.38	ND
MW-2M		12/13/10	4.57	254.42	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

Table A-1
Historical Groundwater Elevation Data
Lehigh Hanson Sunol Facility Asphalt Plant Area
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		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
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-2D		9/27/10	4.80	254.11	ND
MW-2D		12/13/10	4.80	254.11	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

Table A-1
Historical Groundwater Elevation Data
Lehigh Hanson Sunol Facility Asphalt Plant Area
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-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
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-3		9/27/10	5.82	253.26	ND
MW-3		12/13/10	5.59	253.49	Odor
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-4S		9/27/10	4.94	254.20	ND
MW-4S		12/13/10	4.44	254.70	ND

Table A-1
Historical Groundwater Elevation Data
Lehigh Hanson Sunol Facility Asphalt Plant Area
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	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
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 (1)	3.41	255.81	Gasoline Odor
MW-4D		9/27/10	6.05	253.17	ND
MW-4D		12/13/10	5.64	253.58	ND
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

Table A-1
Historical Groundwater Elevation Data
Lehigh Hanson Sunol Facility Asphalt Plant Area
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-5S		9/21/09	5.27	254.16	ND
MW-5S		3/2/10	2.50	256.93	ND
MW-5S		9/27/10	4.89	254.54	ND
MW-5S		12/13/10	4.70	254.73	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
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-5D		9/27/10	5.03	254.37	ND
MW-5D		12/13/10	4.85	254.55	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

Table A-1
Historical Groundwater Elevation Data
Lehigh Hanson Sunol Facility Asphalt Plant Area
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-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-6S		9/27/10	4.42	254.33	ND
MW-6S		12/13/10	4.40	254.35	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
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-6D		9/27/10	5.31	253.96	ND
MW-6D		12/13/10	5.23	254.04	ND
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

Table A-1
Historical Groundwater Elevation Data
Lehigh Hanson Sunol Facility Asphalt Plant Area
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-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-7S		9/27/10	3.70	255.14	Observed
MW-7S		12/14/10	3.53	255.31	Odor
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
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 (2)	1.23	257.57	Strong Gasoline Odor
MW-7D		6/9/10	3.03	255.77	ND
MW-7D		9/27/10	3.82	254.98	ND

Table A-1
Historical Groundwater Elevation Data
Lehigh Hanson Sunol Facility Asphalt Plant Area
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		12/14/10	4.09	254.71	Odor
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
MW-8		9/27/10	3.42	255.42	ND
MW-8		12/13/10	3.27	255.57	ND
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

Table A-1
Historical Groundwater Elevation Data
Lehigh Hanson Sunol Facility Asphalt Plant Area
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-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 (2)	0.50	257.91	ND
MW-9S		6/9/10	1.45	256.96	ND
MW-9S		9/27/10	3.11	255.30	ND
MW-9S		12/13/10	2.90	255.51	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-9D		9/27/10	4.31	254.55	ND
MW-9D		12/14/10	4.15	254.71	Odor
MW-9LF	258.94	6/12/06	3.46	255.48	ND
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

Table A-1
Historical Groundwater Elevation Data
Lehigh Hanson Sunol Facility Asphalt Plant Area
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-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-9LF		9/27/10	4.44	254.50	ND
MW-9LF		12/14/10	4.31	254.63	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-10S		9/27/10	5.25	255.42	ND
MW-10S		12/13/10	5.15	255.52	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
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

Table A-1
Historical Groundwater Elevation Data
Lehigh Hanson Sunol Facility Asphalt Plant Area
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		12/8/08	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-10D		9/27/10	6.50	254.14	ND
MW-10D		12/13/10	6.30	254.34	ND
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-10LF		9/27/10	7.38	253.20	ND
MW-10LF		12/13/10	7.15	253.43	ND
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-11S		9/27/10	5.04	253.92	ND

Table A-1
Historical Groundwater Elevation Data
Lehigh Hanson Sunol Facility Asphalt Plant Area
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-11S		12/14/10	4.63	254.33	ND
MW-11D	258.98	6/12/06	3.70	255.28	ND
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-11D		9/27/10	5.49	253.49	Observed
MW-11D		12/14/10	5.41	253.57	Observed
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-11LF		9/27/10	5.28	253.73	ND
MW-11LF		12/14/10	5.25	253.76	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

Table A-1
Historical Groundwater Elevation Data
Lehigh Hanson Sunol Facility Asphalt Plant Area
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		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
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-12S		9/27/10	6.94	255.75	ND
MW-12S		12/14/10	7.04	255.65	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-12D		9/27/10	6.62	256.08	ND
MW-12D		12/14/10	6.85	255.85	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

Table A-1
Historical Groundwater Elevation Data
Lehigh Hanson Sunol Facility Asphalt Plant Area
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-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
MW-12LF		9/27/10	6.85	256.05	ND
MW-12LF		12/14/10	7.06	255.84	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	-	-
MW-1	3/11/08		ND<50	**660**	ND<0.5	ND<0.5	**4**	**4.9**	ND<1.0	ND<2.0	ND<10
MW-1	6/10/08		ND<50	**220**	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		**210**	**130**	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	**160**	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	**100**	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		**54**	**380**	ND<0.5	ND<0.5	**2.4**	**1.7**	ND<0.5	-	-
MW-1	5/6/09		ND<50	**380**	ND<0.5	ND<0.5	**2.4**	**1.8**	ND<0.5	-	-
MW-1	6/9/09		**470**	**250**	ND<0.5	ND<0.5	**2.0**	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-1	7/14/09		ND<50	**97**	**0.51**	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
MW-1	9/22/09		**550**	**310**	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		**230**	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
MW-1	3/2/10		**150**	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-1	9/29/10		ND<51	**50**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
MW-1	9/29/10	D	**57**	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
MW-1	12/13/10		ND<51	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
MW-2	6/23/98		**12,000**	**2,500**	**0.68**	ND<0.50	**1.2**	**0.57**	**14**	ND<2.0	ND<10
MW-2	10/1/98		**4,300**	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		**38,000**	ND<5,000	ND<50	ND<50	**51**	**190**	ND<500	ND<2.0	ND<10
MW-2	3/29/99		**580**	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		**4,500**	**24,000**	**38**	**27**	**41**	**98**	ND<0.5	ND<2.0	ND<10
MW-2	9/17/99		**24,000**	**1,400**	ND<0.5	ND<0.5	ND<0.5	ND<0.5	**27**	ND<2.0	ND<10
MW-2	12/27/99		**2,300**	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		**620**	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		**1,700**	**270**	ND<0.5	ND<0.5	ND<0.5	ND<0.5	**17**	ND<2.0	ND<10
MW-2	9/14/00		**5,800**	**130**	ND<0.5	ND<0.5	ND<0.5	**0.94**	**12**	ND<2.0	ND<10
MW-2	12/20/00		**19,000**	**1,700**	ND<50	ND<50	ND<50	ND<150	ND<250	ND<2.0	ND<10
MW-2	3/22/01		**610,000**	**3,300**	ND<1.0	ND<1.0	ND<1.0	ND<1.0	**9**	ND<2.0	ND<10
MW-2	6/27/01		**8,800**	**1,800**	ND<1.0	ND<1.0	ND<1.0	ND<1.0	**6.7**	ND<2.0	ND<10
MW-2	9/21/01		**530,000**	**7,000**	ND<50	ND<50	ND<50	ND<50	ND<50	ND<2.0	ND<10
MW-2	12/27/01		**27,000**	**310**	ND<1.0	ND<1.0	ND<1.0	ND<1.0	**62**	ND<2.0	ND<10
MW-2	3/29/02		**65,000**	**130**	ND<1.0	ND<1.0	ND<1.0	ND<1.0	**30**	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	6/13/02		**130,000**	**460**	ND<1.0	ND<1.0	ND<1.0	ND<1.0	**24**	ND<2.0	ND<10
MW-2	9/27/02		**480,000**	**290**	ND<1.0	ND<1.0	ND<1.0	ND<1.0	**16**	ND<2.0	ND<10
MW-2	12/3/02		**61,000**	**1,800**	ND<1.0	ND<1.0	ND<1.0	ND<1.0	**10**	ND<2.0	ND<10
MW-2	3/31/03		**5,000**	ND<100	ND<1.0	ND<1.0	ND<1.0	ND<1.0	**14**	ND<2.0	ND<10
MW-2	6/27/03		**8.1**	**360**	ND<1.0	ND<1.0	ND<1.0	ND<1.0	**20**	ND<2.0	ND<10
MW-2	9/19/03		**85**	**12**	ND<1.0	ND<1.0	ND<1.0	ND<1.0	**15**	ND<2.0	ND<10
MW-2	1/17/05	(1)	-	-	-	-	-	-	-	-	-
MW-2S	1/17/05		**1,100**	**730**	ND<0.5	ND<0.5	**1.0**	**3.5**	**50**	ND<2.0	ND<10
MW-2S	5/4/05		**8,200**	**190**	ND<0.5	ND<0.5	ND<0.5	ND<0.5	**44**	ND<2.0	ND<10
MW-2S	8/12/05		**6,100**	**120**	ND<0.5	ND<0.5	ND<0.5	ND<0.5	**77**	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	**26**	ND<2.0	ND<10
MW-2S	3/3/06		**5,900**	**160**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**21**	ND<2.0	ND<10
MW-2S	6/13/06		**8,700**	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**22**	ND<2.0	ND<10
MW-2S	9/6/06		**11,000**	**190**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**29**	ND<2.0	ND<10
MW-2S	12/5/06		**18,000**	ND<50	ND<0.5	ND<50	ND<0.5	ND<1.0	**38**	ND<2.0	ND<10
MW-2S	2/28/07		**6,600**	**140**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**33**	ND<2.0	ND<10
MW-2S	6/12/07		**3,700**	**90**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**19**	ND<2.0	**12**
MW-2S	9/11/07		**17,000**	ND<50	ND<2.5	ND<2.5	ND<2.5	ND<5.0	**46**	ND<10	ND<50
MW-2S	12/11/07		**16,000**	ND<50	ND<2.5	ND<2.5	ND<2.5	ND<5.0	**16**	ND<10	ND<50
MW-2S	3/11/08		**8,900**	**50**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**17**	ND<2.0	ND<10
MW-2S	6/10/08		**1,100**	**72**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**25**	ND<2.0	ND<10
MW-2S	9/9/08		**10,000**	**62**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**41**	ND<2.0	ND<10
MW-2S	12/9/08		**13,000**	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**37**	ND<2.0	ND<10
MW-2S	3/9/09		**9,800**	**59**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**31**	ND<2.0	ND<10
MW-2S	6/10/09		**9,900**	**140**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**30**	ND<2.0	ND<10
MW-2S	9/22/09		**10,000**	**54**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**40**	ND<2.0	ND<10
MW-2S	3/3/10		**12,000**	**100**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**19**	-	-
MW-2S	3/3/10	D	**10,000**	**100**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**20**	-	-
MW-2S	9/28/10		**1,200**	**74**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**21**	-	-
MW-2S	12/13/10		**340**	**53**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**24**	-	-
MW-2M	1/17/05		**4,100**	**3,300**	**6.5**	**1.7**	**89**	**82.2**	**38**	ND<2.0	ND<10
MW-2M	5/4/05		ND<50	**610**	ND<0.5	ND<0.5	**16**	**10.6**	**32**	ND<2.0	ND<10
MW-2M	8/12/05		ND<50	**460**	ND<0.5	ND<0.5	**2.5**	**1.2**	**56**	ND<2.0	ND<10
MW-2M	12/12/05		ND<50	**410**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**28**	ND<2.0	ND<10
MW-2M	3/3/06		ND<50	**290**	ND<0.5	ND<0.5	**0.5**	ND<1.0	**17**	ND<2.0	ND<10
MW-2M	6/13/06		ND<50	**130**	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		**1,900**	**330**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**22**	ND<2.0	ND<10
MW-2M	12/5/06		**6,100**	**340**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**37**	ND<2.0	ND<10
MW-2M	2/27/07		ND<500	**310**	ND<0.5	ND<0.5	**0.65**	ND<1.0	**25**	ND<2.0	ND<10
MW-2M	6/12/07		**350**	**290**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**14**	ND<2.0	ND<10
MW-2M	9/11/07		**4,900**	**220**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**14**	ND<2.0	ND<10
MW-2M	12/11/07		ND<500	**370**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**9.4**	ND<2.0	ND<10
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-2M	9/28/10		**450**	**170**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**12**	-	-
MW-2M	12/13/10		**140**	**150**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**12**	-	-
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

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-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-2D	9/28/10		**280**	**50**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**19**	-	-
MW-2D	12/13/10		ND<51	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**19**	-	-
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
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
MW-3	9/22/09		ND<50	**74**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**61**	ND<2.0	ND<10
MW-3	3/5/10		**1,500**	**72**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**44**	-	-
MW-3	9/29/10		**190**	**80**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**48**	-	-
MW-3	12/13/10		**55**	**64**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**43**	-	-
MW-4S	1/17/05		ND<50	**65**	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	**2.2**	**5.8**	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

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-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		**360**	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
MW-4S	9/27/10		ND<51	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
MW-4S	9/27/10	D	ND<51	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
MW-4S	12/13/10		ND<51	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	**410**	ND<0.5	**2.2**	**10**	**25.5**	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	**7.8**	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
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	**75**	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		**780**	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
MW-4D	9/27/10		ND<51	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
MW-4D	12/13/10		ND<51	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	**4.5**	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	**5.8**	ND<2.0	ND<10
MW-5S	12/12/05		ND<50	ND<50	**3.4**	**1.3**	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	**5.4**	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	**5.8**	ND<2.0	ND<10
MW-5S	2/26/07		**360**	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	**3.2**	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	**2.2**	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	**2**	ND<2.0	ND<10
MW-5S	12/10/07		ND<500	**140**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**2.6**	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	**1.1**	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	**4.2**	ND<2.0	ND<10
MW-5S	9/8/08		**62**	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	**220**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**2.4**	ND<2.0	ND<10
MW-5S	6/9/09		**690**	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	**2**	ND<2.0	ND<10
MW-5S	3/4/10		**3,600**	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**0.57**	-	-
MW-5S	3/4/10	D	**3,400**	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**0.59**	-	-
MW-5S	9/30/10		ND<51	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**1.4**	-	-
MW-5S	12/13/10		**640**	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**2.8**	-	-
MW-5D	1/17/05		ND<50	**210**	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	**10**	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	**6.4**	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
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

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	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-5D	9/29/10		**51**	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**1.2**	-	-
MW-5D	12/13/10		ND<51	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**1.8**	-	-
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
MW-6S	9/22/09		**940**	**230**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**58**	ND<2.0	ND<10
MW-6S	3/5/10		**1,400**	**270**	**2.2**	ND<0.5	**2.8**	ND<1.0	**31**	-	-
MW-6S	9/29/10		**180**	**470**	ND<0.5	ND<0.5	**0.7**	ND<1.0	**23**	-	-
MW-6S	12/13/10		**160**	**320**	ND<0.5	ND<0.5	**0.94**	ND<1.0	**9.8**	-	-
MW-6D	1/17/05		**2,100**	**1,200**	**10**	ND<0.5	**1.6**	**2.2**	**180**	ND<2.0	ND<10
MW-6D	5/4/05		ND<50	**360**	**2**	ND<0.5	ND<0.5	ND<0.5	**360**	ND<2.0	ND<10
MW-6D	8/12/05		ND<50	**480**	**2**	ND<0.5	ND<0.5	ND<0.5	**270**	ND<2.0	ND<10
MW-6D	12/12/05		ND<50	**240**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**92**	ND<2.0	ND<10
MW-6D	3/3/06		ND<50	**310**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**93**	ND<2.0	ND<10
MW-6D	6/14/06		ND<50	**130**	ND<0.5	**3.0**	**1.1**	**2.6**	**69**	ND<2.0	ND<10
MW-6D	9/6/06		ND<50	**230**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**74**	ND<2.0	ND<10
MW-6D	12/6/06		**1,300**	**500**	**0.98**	**8.1**	**16**	**38.8**	**59**	ND<2.0	ND<10
MW-6D	2/27/07		**470**	**150**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**48**	ND<2.0	ND<10
MW-6D	6/13/07		ND<500	**180**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**39**	ND<2.0	ND<10
MW-6D	9/12/07		ND<500	**130**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**28**	ND<2.0	ND<10
MW-6D	12/12/07		ND<500	**250**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**19**	ND<2.0	ND<10
MW-6D	3/12/08		ND<50	**110**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**24**	ND<2.0	ND<10
MW-6D	6/10/08		ND<50	**140**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**31**	ND<2.0	ND<10
MW-6D	9/9/08		**120**	**82**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**30**	ND<2.0	ND<10
MW-6D	12/9/08		**970**	**91**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**51**	ND<2.0	ND<10
MW-6D	3/9/09		ND<50	**120**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**43**	ND<2.0	ND<10
MW-6D	6/10/09		**670**	**3,700**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**43**	ND<2.0	ND<10
MW-6D	9/22/09		**550**	**65**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**65**	ND<2.0	ND<10
MW-6D	3/3/10		**1,100**	**66**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**39**	-	-
MW-6D	9/27/10		ND<52	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**33**	-	-
MW-6D	12/13/10		ND<51	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**32**	-	-
MW-7S	1/17/05		ND<50	**12,000**	**10**	**89**	**590**	**1,670**	ND<1.0	ND<2.0	ND<10
MW-7S	5/4/05		**520**	**1,600**	ND<0.5	ND<0.5	**31**	**18.4**	ND<1.0	ND<2.0	ND<10
MW-7S	8/12/05		ND<50	**660**	ND<0.5	ND<0.5	**5.5**	ND<0.5	ND<1.0	ND<2.0	ND<10
MW-7S	12/12/05		ND<50	**610**	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	**630**	**1.1**	**9**	**31**	**78**	ND<1.0	ND<2.0	ND<10
MW-7S	6/14/06		ND<50	**430**	ND<0.5	ND<0.5	**6.1**	**14.5**	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	**55**	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	**64**	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	**76**	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	**170**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
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

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	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-7S	9/28/10		**75**	**430**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
MW-7S	12/14/10		ND<51	**240**	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	-	-
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-7D	9/28/10		**1,600**	**13,000**	**55**	**29**	**490**	**270**	ND<25	-	-
MW-7D	12/14/10		**2,200**	**6,800**	**37**	**17**	**360**	**130**	ND<5	-	-
MW-7D	12/14/10	D	**2,500**	**6,500**	**38**	**19**	**400**	**140**	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	-	-

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-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-8	9/28/10		ND<51	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
MW-8	9/28/10	D	ND<51	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
MW-8	12/13/10		ND<51	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
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-9S	9/28/10		ND<55	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
MW-9S	12/13/10		ND<50	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	-	-
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		**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-9D	9/28/10		ND<55	**320**	**1.2**	ND<0.5	**3.5**	ND<1.0	ND<0.5	-	-
MW-9D	12/14/10		ND<51	**260**	**1.3**	**0.61**	**5.4**	**3.1**	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** [1]	**90**	ND<0.5	ND<0.5	ND<0.5	**0.92**	ND<0.5	-	-
MW-9LF	2/19/08		**180** [1]	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

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-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	-	-
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-9LF	9/28/10		ND<52	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
MW-9LF	12/14/10		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	**93**	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	**54**	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		**220**	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		**1,300**	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
MW-10S	9/29/10		ND<52	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
MW-10S	12/13/10		**1,500**	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
MW-10D	5/5/06		ND<50	**5,900**	**24**	**9**	**260**	**23**	ND<1.0	ND<2.0	ND<10
MW-10D	6/13/06		ND<50	**2,300**	**7.6**	**2.4**	**66**	**6.6**	ND<1.0	ND<2.0	ND<10
MW-10D	9/7/06		ND<50	**2,400**	**3.9**	**2.0**	**54**	**11.89**	ND<1.0	ND<2.0	ND<10
MW-10D	12/6/06		ND<50	**1,600**	**2.5**	**1.0**	**28**	**4**	ND<1.0	ND<2.0	ND<10
MW-10D	2/27/07		**200**	**850**	**2.7**	**0.90**	**28**	**2.3**	ND<1.0	ND<2.0	ND<10
MW-10D	6/12/07		ND<500	**830**	**1.0**	ND<0.5	**14**	**2.0**	ND<1.0	ND<2.0	ND<10
MW-10D	9/11/07		ND<500	**780**	ND<0.5	ND<0.5	**1.7**	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-10D	12/11/07		ND<500	**1,300**	ND<0.5	ND<0.5	**0.61**	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-10D	3/11/08		ND<50	**590**	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	**590**	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	**540**	ND<0.5	ND<0.5	**0.73**	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-10D	12/9/08		ND<50	**490**	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	**640**	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		**280**	**560**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-10D	9/23/09		ND<50	**760**	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		**700**	**450**	ND<0.5	ND<0.5	**0.85**	ND<1.0	ND<0.5	-	-
MW-10D	9/29/10		**150**	**2,300**	ND<0.5	ND<0.5	**14**	ND<1.0	ND<0.5	-	-
MW-10D	12/13/10		**55**	**1,200**	ND<0.5	**0.58**	**4.2**	**2.0**	ND<0.5	-	-
MW-10LF	5/5/06		ND<50	**860**	ND<0.5	**11**	ND<0.5	**4.6**	ND<1.0	ND<2.0	ND<10
MW-10LF	6/13/06		ND<50	**780**	**2.0**	**2.4**	**1.1**	**4.2**	ND<1.0	ND<2.0	ND<10
MW-10LF	9/7/06		ND<50	**780**	**1.7**	**1.6**	**1.7**	**7.8**	ND<1.0	ND<2.0	ND<10
MW-10LF	12/5/06		**190**	**610**	**0.5**	**0.56**	ND<0.5	**1.5**	**3.7**	ND<2.0	ND<10
MW-10LF	2/27/07		ND<500	**580**	**1.0**	**1.1**	**0.51**	**3.6**	ND<1.0	ND<2.0	ND<10
MW-10LF	6/12/07		**260**	**440**	**0.5**	**0.7**	ND<0.5	**2.5**	**2.0**	ND<2.0	ND<10
MW-10LF	9/11/07		ND<500	**130**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**3**	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	**1.6**	ND<2.0	ND<10
MW-10LF	3/11/08		ND<50	**210**	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	**1.2**	ND<2.0	ND<10
MW-10LF	9/8/08		**51**	**50**	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		**160**	**50**	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	**160**	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	**140**	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		**460**	**320**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**1.2**	-	-

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-10LF	9/29/10		ND<52	**240**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**0.83**	-	-
MW-10LF	12/13/10		ND<50	**250**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**1.2**	-	-
MW-11S	5/5/06		ND<50	**11,000**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**8.4**	ND<2.0	ND<10
MW-11S	6/14/06		ND<50	**730**	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		**3,300**	**1,400**	ND<0.5	ND<0.5	ND<0.5	ND<0.5	**4.8**	ND<2.0	ND<10
MW-11S	12/6/06		**1,700**	**130**	**0.71**	ND<0.5	**0.64**	**0.51**	**11**	ND<2.0	ND<10
MW-11S	2/27/07		**540**	**300**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**4.3**	ND<2.0	ND<10
MW-11S	6/12/07		ND<500	**1,800**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**4.3**	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	**2.8**	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	**1.5**	ND<2.0	ND<10
MW-11S	3/11/08		ND<50	ND<50	**1.0**	ND<0.5	ND<0.5	ND<1.0	**2.9**	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	**2.4**	ND<2.0	ND<10
MW-11S	9/8/08		**360**	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		**140**	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	**51**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**1.8**	ND<2.0	ND<10
MW-11S	6/9/09		**270**	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**3.5**	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	**2.5**	ND<2.0	ND<10
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-11S	9/30/10		ND<51	ND<50	ND<0.5	ND<0.5	ND<0.5	**1.0**	**3.3**	-	-
MW-11S	9/30/10	D	ND<51	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**3.1**	-	-
MW-11S	12/14/10		**110**	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	**2.8**	-	-
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-11D	9/30/10		**47,000**	**1,100**	**5.4**	ND<0.5	**5.8**	**1.7**	**14**	-	-
MW-11D	12/14/10		**54,000**	**1,400**	**4.4**	ND<0.5	**4.6**	**1.1**	**13**	-	-
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
MW-11LF	3/5/10		**150**	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**110**	-	-
MW-11LF	9/30/10		ND<51	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**110**	-	-
MW-11LF	12/14/10		ND<51	**140**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**160**	-	-
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	**81**	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	**210**
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	**19**
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	**120**	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-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		**28**	ND<50	ND<0.5	**2**	**1.6**	**7**	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	**0.95**	ND<0.5	**1.4**	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	**0.51**	-	-
MW-12S	9/29/10		ND<51	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
MW-12S	12/14/10		ND<52	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
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	**51**	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	**140**	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	**51**	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		**60**	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
MW-12D	9/29/10		ND<52	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
MW-12D	12/14/10		ND<51	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**0.50**	-	-
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	**0.77**	-	-
MW-12LF	9/29/10		ND<52	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**0.61**	-	-
MW-12LF	12/14/10		ND<51	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**0.64**	-	-
OXY-1S	1/25/08		**3,800**	**10,000**	**73**	**44**	**650**	**182**	ND<1.0	-	-
OXY-1S	2/20/08		**3,700**	**2,000**	**3.3**	**6.4**	**24**	**41**	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		**71**	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
OXY-1S	3/5/10		**140**	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-1S	9/28/10		ND<53	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
OXY-1S	12/14/10		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
OXY-1D	1/25/08		**1,000**	**2,400**	**23**	**5**	**92**	**58**	**0.51**	-	-
OXY-1D	2/20/08		**1,300**	**280**	**3.7**	**3.2**	**0.52**	**18**	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		**3,800**	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
OXY-1D	6/10/10		**1,300**	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
OXY-1D	9/28/10		**390**	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
OXY-1D	12/14/10		**310**	**70**	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		**160**	**60**	**0.73**	ND<0.5	**0.65**	**0.70**	ND<0.5	-	-
OXY-1LF	2/20/08		**110**	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		**130**	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	-	-
OXY-1LF	9/28/10		ND<53	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
OXY-1LF	12/14/10		ND<51	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
ESLs			*100*	*100*	*1*	*40*	*30*	*20*	*5*	-	12

Notes:
TPHd = total petroleum hydrocarbons as diesel
TPHg = total petroleum hydrocarbons as gasoline
MTBE = methyl tertiary-butyl ether
TAME = tert-amyl-methyl ether
TBA = tert-butyl alcohol
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 Are where Groundwater is a Current or Potential Source of Drinking Water.
(1) = well abandoned

ug/l = micrograms per liter
ND = not detected above given laboratory reporting limit
D = duplicate sample
NS = well not sampled

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

Well	Sample Date	Notes	DO (mg/l)	ORP (mV)	Ferrous Iron $Fe2^{+}$ (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-1	9/29/10		0.28	91.4	0.2	6.96	2,099	AUS
MW-1	12/13/10		0.08	-82.2	0.61	6.87	2,128	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-2S	9/28/10		0.04	-136.4	3.3	6.71	2,418	AUS
MW-2S	12/13/10		0.12	-100.3	3.30	6.59	2,168	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-2M	9/28/10		0.08	-136.6	2.64	6.75	2,276	AUS
MW-2M	12/13/10		0.38	-57.4	2.76	6.60	2,010	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-2D	9/28/10		0.10	-129.9	1.76	6.79	2,297	AUS
MW-2D	12/13/10		0.42	-77.1	1.32	6.71	2,005	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-3	9/29/10		0.29	-91.5	2.5	6.70	2,948	AUS
MW-3	12/13/10		0.18	-93.6	3.30	6.97	2,670	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-4S	9/27/10		0.12	-105.7	0.5	7.35	2,584	AUS
MW-4S	12/13/10		0.16	-38.2	0.18	7.37	2,565	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-4D	9/27/10		0.15	-47.2	0.44	7.08	2,954	AUS
MW-4D	12/13/10		0.25	-41.9	0.34	7.34	2,618	AUS
MW-5S	9/21/09		2.33	-134	-	6.90	-	*(Tait)*
MW-5S	3/4/10		1.20	-	1.27	-	-	AUS
MW-5S	9/30/10		0.15	-54.5	1.65	6.98	2,030	AUS
MW-5S	12/13/10		0.17	-95.8	2.12	6.84	1,683	

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

Well	Sample Date	Notes	DO (mg/l)	ORP (mV)	Ferrous Iron $Fe2^{+}$ (mg/l)*	pH (SU)	Conductivity (µS/cm)	Field Parameters Measured by:
MW-5D	9/21/09		2.90	-135	-	7.00	-	*(Tait)*
MW-5D	3/4/10		-	-	1.53	-	-	AUS
MW-5D	9/29/10		0.08	-60.4	2.12	7.04	2,252	AUS
MW-5D	12/13/10		0.15	-93.0	2.05	7.12	2,307	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-6S	9/29/10		0.13	-81.6	3.3	6.77	2,139	AUS
MW-6S	12/13/10		0.30	-144.3	3.30	6.86	2,128	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-6D	9/27/10		0.21	-114.8	2.94	6.76	2,338	AUS
MW-6D	12/13/10		0.30	-88.3	2.62	6.95	2,120	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
MW-7S	9/28/10		0.12	-128.9	3.3	6.86	2,420	AUS
MW-7S	12/14/10		0.16	-56.6	2.96	7.15	2,058	AUS
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-7D	9/28/10		0.08	-77.3	3.3	6.71	2,216	AUS
MW-7D	12/14/10		0.26	-110.3	1.93	6.70	1,911	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-8	9/28/10		0.23	112	0.08	6.71	2,069	AUS
MW-8	12/13/10		0.19	4.5	0.55	6.85	1,876	AUS

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

Well	Sample Date	Notes	DO (mg/l)	ORP (mV)	Ferrous Iron $Fe2^{+}$ (mg/l)*	pH (SU)	Conductivity (µS/cm)	Field Parameters Measured by:
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-9S	9/28/10		0.52	63.9	0.01	7.16	2,421	AUS
MW-9S	12/13/10		0.08	-65.0	0.22	7.17	2,423	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
MW-9D	9/28/10		0.28	-61.7	1.27	6.94	2,257	AUS
MW-9D	12/14/10		0.09	-57.4	1.78	6.91	2,139	AUS
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-9LF	9/28/10		10.04	62.4	0	7.41	1,738	AUS
MW-9LF	12/14/10		0.09	-33.1	0.15	6.91	1,967	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-10S	9/29/10		0.31	-24.1	0	6.95	2,287	AUS
MW-10S	12/13/10		0.20	-56.7	0.13	6.87	1,949	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-10D	9/29/10		0.18	-162.5	0.13	7.16	3,084	AUS
MW-10D	12/13/10		0.06	-166.7	0.02	7.26	2,422	AUS

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

Well	Sample Date	Notes	DO (mg/l)	ORP (mV)	Ferrous Iron $Fe2^{+}$ (mg/l)*	pH (SU)	Conductivity (µS/cm)	Field Parameters Measured by:
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-10LF	9/29/10		0.22	-87.8	3.19	6.88	3,888	AUS
MW-10LF	12/13/10		0.08	-142.6	3.30	6.95	3,484	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-11S	9/30/10		0.18	-72.6	1.54	6.96	1,858	AUS
MW-11S	12/14/10		0.22	-68.3	1.87	6.93	1,821	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-11D	9/30/10		0.10	-57.8	1.97	6.71	1,696	AUS
MW-11D	12/14/10		0.08	-151.7	2.13	6.66	1,681	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-11LF	9/30/10		0.09	-76.8	2.14	7.13	1,368	AUS
MW-11LF	12/14/10		0.07	-173.9	2.33	6.99	1,389	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-12S	9/29/10		0.18	38.3	0	6.72	1,820	AUS
MW-12S	12/14/10		0.72	65.2	0.10	6.76	1,742	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-12D	9/29/10		0.32	34.4	0.05	6.63	1,493	AUS
MW-12D	12/14/10		0.35	-72.4	0.19	6.67	1,350	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
MW-12LF	9/29/10		0.34	27.7	0	6.67	2,054	AUS
MW-12LF	12/14/10		0.08	-119.5	0.33	6.74	1,440	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
OXY-1S	9/28/10		0.40	10	0.05	7.13	2,068	AUS
OXY-1S	12/14/10		0.23	0.4	0.16	7.23	2,073	AUS

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

Well	Sample Date	Notes	DO (mg/l)	ORP (mV)	Ferrous Iron $Fe2^{+}$ (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-1D	9/28/10		0.17	-15.4	-	7.38	1,764	AUS
OXY-1D	12/14/10		0.05	-228.4	0.09	6.96	2,168	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
OXY-1LF	9/28/10		6.21	61.6	0	7.38	1,905	AUS
OXY-1LF	12/14/10		1.19	37.1	0.11	7.41	1,790	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

Field Sheets

WATER-QUALITY SAMPLING LOG

Project No. EM009480.0011.00003 Date: December 13, 2010 Page 1 of 1

Project Name: Hanson Sunol Sampling Location: Sunol, California

Sampler's Name: Miljan Draganic Andrea Valdivia Sample No.: MW-1 ☐ DUP —

Purge Method: ☐ Centrifugal Pump ☐ Disposable Bailer ☐ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☒ Other Geo-pump / Low-flow

Purge Water Storage Container Type: 55-gallon drum Storage Location: On site

Analyses Requested	No. and Type of Bottles Used
TPHg, MTBE, BTEX (by EPA 8260)	VOA with HCl (x3)
TPHd w/ silica gel clean-up (by EPA 8015B)	1-L Amber (x2)

Lab Name: Test America

Delivery By: Hand

$Fe^{2+} = 0.61$ mg/L

Well No. MW-1 Depth of Water 3.27

Well Diameter: 2" Well Depth —

☐ 1" (0.04 gal/feet) ☒ 2" (0.16 gal/feet) Water Column Height —

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume —

Time	Depth to Water (ft.)	Volume Purged (gal)	DO (mg/L)	Temp (F°)	PH (SU)	Cond (uS/cm C)	ORP (mV)	Turbidity (NTU)	Remarks
1450	3.27	—	—	—	—	—	—	→	Start purging
1500	3.95	~1.0	0.08	17.48	6.89	2135	-89.2	7.78	
1503	3.97	—	0.08	17.43	6.88	2128	-86.1	—	
1506	3.97	—	0.08	17.41	6.87	2128	-83.9	—	
1509	3.97	~1.5	0.08	17.39	6.87	2128	-82.2	6.30	
1515	—	—	—	—	—	—	—	→	Sampling

Continue remarks on reverse, if needed.

WATER-QUALITY SAMPLING LOG

Project No. EM009480.0011.00003 Date: December 13, 2010 Page 1 of 1

Project Name: Hanson Sunol Sampling Location: Sunol, California

Sampler's Name: Miljan Draganic Andrea Valdivia Sample No.: MW-2S ☐ DUP —

Purge Method: ☐ Centrifugal Pump ☐ Disposable Bailer ☐ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☒ Other Geo-pump / Low-flow

Purge Water Storage Container Type: 55-gallon drum Storage Location: On site

Analyses Requested	No. and Type of Bottles Used
TPHg, MTBE, BTEX (by EPA 8260)	VOA with HCl (x3)
TPHd w/ silica gel clean-up (by EPA 8015B)	1-L Amber (x2)
Lab Name: Test America	
Delivery By: Hand	

$Fe^{2+} = 3.30^{+}$ mg/L (limit)

Well No. MW-2S Depth of Water 4.46

Well Diameter: 2" Well Depth —

☐ 1" (0.04 gal/feet) ☒ 2" (0.16 gal/feet) Water Column Height —

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume —

Time	Depth to Water (ft.)	Volume Purged (gal)	DO (mg/L)	Temp (F°)	PH (SU)	Cond (uS/cm C)	ORP (mV)	Turbidity (NTU)	Remarks
1049	4.46	—							Start purging
1059	5.61	~0.8	0.15	17.64	6.57	2169	-93.2	11.8	
1102	5.85	~1.1	0.13	17.63	6.58	2170	-96.0	14.9	decrease flow
1105	5.87	~1.5	0.12	17.62	6.59	2171	-98.5	12.7	
1108	5.89	~1.7	0.12	17.61	6.59	2168	-100.3	10.5	
1115	—								Sampling

Continue remarks on reverse, if needed.

WATER-QUALITY SAMPLING LOG

Project No. EM009480.0011.00003 Date: December 13, 2010 Page 1 of 1

Project Name: Hanson Sunol Sampling Location: Sunol, California

Sampler's Name: Miljan Draganic Andrea Valdivia Sample No.: MW-2M ☐ DUP —

Purge Method: ☐ Centrifugal Pump ☐ Disposable Bailer ☐ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☒ Other Geo-pump / Low-flow

Purge Water Storage Container Type: 55-gallon drum Storage Location: On site

Analyses Requested	No. and Type of Bottles Used
TPHg, MTBE, BTEX (by EPA 8260)	VOA with HCl (x3)
TPHd w/ silica gel clean-up (by EPA 8015B)	1-L Amber (x2)

Lab Name: Test America

Delivery By: Hand

$Fe^{2+} = 2.76 mg/L$

Well No. MW-2M Depth of Water 4.57

Well Diameter: 2" Well Depth —

☐ 1" (0.04 gal/feet) ☒ 2" (0.16 gal/feet) Water Column Height —

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume —

Time	Depth to Water (ft.)	Volume Purged (gal)	DO (mg/L)	Temp (F°)	PH (SU)	Cond (uS/cm C)	ORP (mV)	Turbidity (NTU)	Remarks
0930	4.57	—						→	Start purging
0940	5.35	—	0.53	18.60	6.53	2011	-14.2	2.46	
0943	5.40	~1.0	0.46	18.71	6.57	2012	-30.6	—	
0946	5.43	—	0.44	18.69	6.58	2013	-44.4	—	
0949	5.44	—	0.44	18.68	6.59	2011	-48.9	—	
0952	5.45	—	0.41	18.68	6.59	2011	-52.3	—	
0955	5.45	~1.8	0.38	18.70	6.60	2010	-57.4	1.05	
1005	—	—	—	—	—	—	—	→	Sampling

Continue remarks on reverse, if needed.

WATER-QUALITY SAMPLING LOG

Project No. EM009480.0011.00003 Date: December 13, 2010 Page 1 of 1

Project Name: Hanson Sunol Sampling Location: Sunol, California

Sampler's Name: Miljan Draganic Andrea Valdivia Sample No.: MW-2D ☐ DUP —

Purge Method: ☐ Centrifugal Pump ☐ Disposable Bailer ☐ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☒ Other Geo-pump / Low-flow

Purge Water Storage Container Type: 55-gallon drum Storage Location: On site

Analyses Requested	No. and Type of Bottles Used
TPHg, MTBE, BTEX (by EPA 8260)	VOA with HCl (x3)
TPHd w/ silica gel clean-up (by EPA 8015B)	1-L Amber (x2)

Lab Name: Test America

Delivery By: Hand

Fe^{2+} = 1.32 mg/L

Well No. MW-2D Depth of Water 4.80

Well Diameter: 2" Well Depth —

☐ 1" (0.04 gal/feet) ☒ 2" (0.16 gal/feet) Water Column Height —

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume —

Time	Depth to Water (ft.)	Volume Purged (gal)	DO (mg/L)	Temp (F°)	PH (SU)	Cond (uS/cm C)	ORP (mV)	Turbidity (NTU)	Remarks
1014	4.80	—	—	—	—	—	—	→	Start purging
1024	5.09	~0.7	0.41	18.34	6.71	2009	-73.5	5.46	
1027	5.10	~1.0	0.40	18.44	6.71	2007	-75.6	—	
1030	5.10	~1.2	0.42	18.48	6.71	2005	-77.1	1.84	
1040	—	—	—	—	—	—	—	→	Sampling

Continue remarks on reverse, if needed.

WATER-QUALITY SAMPLING LOG

Project No. EM009480.0011.00003 Date: December 13, 2010 Page 1 of 1

Project Name: Hanson Sunol Sampling Location: Sunol, California

Sampler's Name: Miljan Draganic ~~Andrea Valdivia~~ Sample No.: MW-3 ☐ DUP

Purge Method: ☐ Centrifugal Pump ☐ Disposable Bailer ☐ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☒ Other Geo-pump / Low-flow

Purge Water Storage Container Type: 55-gallon drum Storage Location: On site

Analyses Requested	No. and Type of Bottles Used
TPHg, MTBE, BTEX (by EPA 8260)	VOA with HCl (x3)
TPHd w/ silica gel clean-up (by EPA 8015B)	1-L Amber (x2)

Lab Name: Test America

Delivery By: Hand

Flow rate ≥ 200mL/min

★Ab or above limit

Well No. MW-3 Depth of Water 5.59'

Well Diameter: 2" Well Depth

☐ 1" (0.04 gal/feet) ☒ 2" (0.16 gal/feet) Water Column Height

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume

Time	Depth to Water (ft.)	Volume Purged (gal)	DO (mg/L)	Temp ~~(F°)~~ °C	PH (SU)	Cond (uS/cm C)	ORP (mV)	Turbidity (NTU)	Remarks
1306	5.59	0	Start	→				→	Start purge
1313	5.87	0.25	0.23	18.61	6.96	2665	-82.0	14.7	Water is clear
1316	5.92	0.4	0.24	18.71	6.97	2669	-94.5	12.4	gas-like odor
1319	5.92	0.6	0.17	18.74	6.98	2669	-92.4	11.1	
1322	5.92	0.8	0.18	18.75	6.97	2670	-93.6	11.3	
1330	—	—	End	→				→	Sample
									★ $Fe^{2+} \geq 3.30$ mg/L
									DO ≤ 0.8mg/L

Continue remarks on reverse, if needed.

WATER-QUALITY SAMPLING LOG

Project No. EM009480.0011.00003 Date: December 13, 2010 Page 1 of 1

Project Name: Hanson Sunol Sampling Location: Sunol, California

Sampler's Name: Miljan Draganic Andrea Valdivia Sample No.: MW-45 ☐ DUP

Purge Method: ☐ Centrifugal Pump ☐ Disposable Bailer ☐ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☒ Other Geo-pump / Low-flow

Purge Water Storage Container Type: 55-gallon drum Storage Location: On site

Analyses Requested	No. and Type of Bottles Used
TPHg, MTBE, BTEX (by EPA 8260)	VOA with HCl (x3)
TPHd w/ silica gel clean-up (by EPA 8015B)	1-L Amber (x2)
Lab Name: Test America	
Delivery By: Hand	

Flow rate ≈ 200mL/min

Well No. MW-45 Depth of Water 4.44'

Well Diameter: 2" Well Depth

☐ 1" (0.04 gal/feet) ☒ 2" (0.16 gal/feet) Water Column Height

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume

Time	Depth to Water (ft.)	Volume Purged (gal)	DO (mg/L)	Temp ~~(F°)~~ °C	PH (SU)	Cond (uS/cm C)	ORP (mV)	Turbidity (NTU)	Remarks
1357	4.44	0	Start	→				→	Starts purge
1403	4.67	0.3	0.22	15.82	7.32	2694	-37.7	18.2	Water is clear; no
1406	4.68	0.5	0.22	15.78	7.32	2677	-38.7	12.8	apparent odor
1410	4.68	0.75	0.17	15.56	7.35	2608	-39.8	6.04	
1413	4.68	1.0	0.17	15.49	7.36	2572	-39.0	3.29	
1416	4.70	1.25	0.14	15.45	7.37	2570	-39.2	2.47	
1419	4.70	1.5	0.16	15.48	7.37	2565	-38.2	2.20	
1425	—	—	End	→				→	Sample
									Fe^{2+} = 0.18mg/L

Continue remarks on reverse, if needed.

WATER-QUALITY SAMPLING LOG

Project No. EM009480.0011.00003 Date: December 13, 2010 Page 1 of 1

Project Name: Hanson Sunol Sampling Location: Sunol, California

Sampler's Name: Miljan Draganic (Andrea Valdivia) Sample No.: MW-4D ☐ DUP

Purge Method: ☐ Centrifugal Pump ☐ Disposable Bailer ☐ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☒ Other Geo-pump / Low-flow

Purge Water Storage Container Type: 55-gallon drum Storage Location: On site

Analyses Requested	No. and Type of Bottles Used
TPHg, MTBE, BTEX (by EPA 8260)	VOA with HCl (x3)
TPHd w/ silica gel clean-up (by EPA 8015B)	1-L Amber (x2)

Lab Name: Test America

Delivery By: Hand

Well No. MW-4D Depth of Water 5.64'

Well Diameter: 2" Well Depth

☐ 1" (0.04 gal/feet) ☒ 2" (0.16 gal/feet) Water Column Height

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume

Flow rate ≈ 250mL/min

Time	Depth to Water (ft.)	Volume Purged (gal)	DO (mg/L)	Temp ~~(F°)~~ °C	PH (SU)	Cond (uS/cm C)	ORP (mV)	Turbidity (NTU)	Remarks
1436	5.64	0	Start	———				→	Starts purge
1443	5.72	0.5	0.38	17.90	7.36	2609	-39.7	5.64	Water is clear,
1446	5.72	0.75	0.32	17.94	7.35	2612	-40.3	6.82	slight gas-like
1449	5.73	1.0	0.28	17.97	7.35	2615	-41.6	4.93	odor
1452	5.73	1.25	0.25	18.00	7.34	2618	-41.9	6.04	
1500	—	—	End	———				→	Sample
									$Fe^{2+} = 0.34 mg/L$
									$DO = 0.8 mg/L$

Continue remarks on reverse, if needed.

WATER-QUALITY SAMPLING LOG

Project No. EM009480.0011.00003 Date: December 13, 2010 Page 1 of 1

Project Name: Hanson Sunol Sampling Location: Sunol, California

Sampler's Name: Miljan Draganic Andrea Valdivia Sample No.: MW-5S ☐ DUP

Purge Method: ☐ Centrifugal Pump ☐ Disposable Bailer ☐ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☒ Other Geo-pump / Low-flow

Purge Water Storage Container Type: 55-gallon drum Storage Location: On site

Analyses Requested	No. and Type of Bottles Used
TPHg, MTBE, BTEX (by EPA 8260)	VOA with HCl (x3)
TPHd w/ silica gel clean-up (by EPA 8015B)	1-L Amber (x2)

Lab Name: Test America

Delivery By: Hand

* On lowest pump setting ≈ 175 mL/min

Well No. MW-5S Depth of Water 4.70'

Well Diameter: 2" Well Depth

☐ 1" (0.04 gal/feet) ☒ 2" (0.16 gal/feet) Water Column Height

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume

Time	Depth to Water (ft.)	Volume Purged (gal)	DO (mg/L)	Temp ~~°F~~ °C	PH (SU)	Cond (uS/cm C)	ORP (mV)	Turbidity (NTU)	Remarks
1055	4.70	0	Start	→				→	Start purge
1105	6.00*	0.25	0.22	16.80	6.76	1900	-99.2	5.02	Water is clear,
1108	5.91	0.3	0.18	16.80	6.79	1909	-99.0	2.57	very slight gas-
1111	5.88	0.4	0.16	16.79	6.82	1916	-96.4	2.11	like odor
1114	5.85	0.5	0.17	16.83	6.84	1927	-95.8	2.86	
1120	—	—	End	→				→	Sample
									$Fe^{2+} = 2.12$ mg/L
									DO ≤ 0.8 mg/L

Continue remarks on reverse, if needed.

WATER-QUALITY SAMPLING LOG

Project No. EM009480.0011.00003 Date: December 13, 2010 Page 1 of 1

Project Name: Hanson Sunol Sampling Location: Sunol, California

Sampler's Name: Miljan Draganic (Andrea Valdivia) Sample No.: MW-5D ☐ DUP

Purge Method: ☐ Centrifugal Pump ☐ Disposable Bailer ☐ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☒ Other Geo-pump / Low-flow

Purge Water Storage Container Type: 55-gallon drum Storage Location: On site

Analyses Requested	No. and Type of Bottles Used
TPHg, MTBE, BTEX (by EPA 8260)	VOA with HCl (x3)
TPHd w/ silica gel clean-up (by EPA 8015B)	1-L Amber (x2)
Lab Name: Test America	
Delivery By: Hand	

Flow rate ≈ 200mL/min

Well No. MW-5D Depth of Water 4.85'

Well Diameter: 2" Well Depth

☐ 1" (0.04 gal/feet) ☒ 2" (0.16 gal/feet) Water Column Height

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume

Time	Depth to Water (ft.)	Volume Purged (gal)	DO (mg/L)	Temp ~~(F°)~~ °C	PH (SU)	Cond (uS/cm C)	ORP (mV)	Turbidity (NTU)	Remarks
1134	4.85	0	Start	→	→	→	→	→	Start purge
1143	5.28	0.3	0.16	18.96	7.14	2305	-89.7	6.35	Water is clear; no
1146	5.24	0.5	0.17	18.93	7.14	2306	-92.8	4.38	apparent odor
1149	5.23	0.6	0.15	18.95	7.13	2305	-93.6	3.45	
1152	5.23	0.75	0.15	18.90	7.12	2307	-93.0	2.23	
1155	—	—	End	→	→	→	→	→	Sample
									$Fe^{2+} = 2.05$ mg/L

Continue remarks on reverse, if needed.

WATER-QUALITY SAMPLING LOG

Project No. EM009480.0011.00003 Date: December 13, 2010 Page 1 of 1

Project Name: Hanson Sunol Sampling Location: Sunol, California

Sampler's Name: Miljan Draganic Andrea Valdivia Sample No.: MW-65 ☐ DUP

Purge Method: ☐ Centrifugal Pump ☐ Disposable Bailer ☐ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☒ Other Geo-pump / Low-flow

Purge Water Storage Container Type: 55-gallon drum Storage Location: On site

Analyses Requested	No. and Type of Bottles Used
TPHg, MTBE, BTEX (by EPA 8260)	VOA with HCl (x3)
TPHd w/ silica gel clean-up (by EPA 8015B)	1-L Amber (x2)

Lab Name: Test America

Delivery By: Hand

Well box flooded above well MW-6S.

* Ch lowest pump setting ≈ 175mL/min

* At or above limit

Well No. MW-65 Depth of Water 4.40'

Well Diameter: 2" Well Depth

☐ 1" (0.04 gal/feet) ☒ 2" (0.16 gal/feet) Water Column Height

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume

Time	Depth to Water (ft.)	Volume Purged (gal)	DO (mg/L)	Temp (°F) °C	PH (SU)	Cond (uS/cm C)	ORP (mV)	Turbidity (NTU)	Remarks
1009	4.40	0	Start	→	→	→	→	→	Start purge
1019	5.01*	0.35	0.33	18.62	6.86	2129	-144.5	23.7	Water is clear;
1022	5.02	0.5	0.25	18.58	6.85	2131	-148.2	33.7	slight gas-like
1025	5.05	0.6	0.25	18.67	6.85	2129	-145.5	34.1	odor
1028	5.08	0.75	0.30	18.75	6.86	2128	-144.3	39.9	
1035	—	—	End	→	→	→	→	→	Sample
								*	$Fe^{2+} \cong 3.30 mg/L$

Continue remarks on reverse, if needed.

WATER-QUALITY SAMPLING LOG

Project No. EM009480.0011.00003 Date: December 13, 2010 Page 1 of 1

Project Name: Hanson Sunol Sampling Location: Sunol, California

Sampler's Name: Miljan Draganic Andrea Valdivia Sample No.: MW-6D ☐ DUP

Purge Method: ☐ Centrifugal Pump ☐ Disposable Bailer ☐ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☒ Other Geo-pump / Low-flow

Purge Water Storage Container Type: 55-gallon drum Storage Location: On site

Analyses Requested	No. and Type of Bottles Used
TPHg, MTBE, BTEX (by EPA 8260)	VOA with HCl (x3)
TPHd w/ silica gel clean-up (by EPA 8015B)	1-L Amber (x2)

Lab Name: Test America

Delivery By: Hand

Flow rate ≈ 175 mL/min

Well No. MW-6D Depth of Water 5.23'

Well Diameter: 2" Well Depth

☐ 1" (0.04 gal/feet) ☒ 2" (0.16 gal/feet) Water Column Height

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume

Time	Depth to Water (ft.)	Volume Purged (gal)	DO (mg/L)	Temp ~~(F)~~ °C	PH (SU)	Cond (uS/cm C)	ORP (mV)	Turbidity (NTU)	Remarks
0932	5.23	0	Start	———				→	Starts purge
0938	5.57	0.25	0.97	18.87	6.87	2089	-92.3	7.34	Water is clear; no
0941	5.61	0.35	0.67	18.96	6.91	2096	-91.0	4.32	apparent odor
0944	5.65	0.5	0.39	19.03	6.94	2111	-87.3	1.86	
0947	5.62	0.6	0.34	19.00	6.95	2116	-91.9	7.47	
0950	5.62	0.75	0.30	18.97	6.95	2120	-88.3	1.16	
1000	—	—	End	———				→	Sample
									Fe^{2+} = 2.62 mg/L
									DO ≤ 0.8 mg/L

Continue remarks on reverse, if needed.

WATER-QUALITY SAMPLING LOG

Project No. EM009480.0011.00003 Date: December 14, 2010 Page 1 of 1

Project Name: Hanson Sunol Sampling Location: Sunol, California

Sampler's Name: Miljan Draganic (Andrea Valdivia) Sample No.: MW-7S ☐ DUP

Purge Method: ☐ Centrifugal Pump ☐ Disposable Bailer ☐ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☒ Other Geo-pump / Low-flow

Purge Water Storage Container Type: 55-gallon drum Storage Location: On site

Analyses Requested	No. and Type of Bottles Used
TPHg, MTBE, BTEX (by EPA 8260)	VOA with HCl (x3)
TPHd w/ silica gel clean-up (by EPA 8015B)	1-L Amber (x2)
Lab Name: Test America	
Delivery By: Hand	

* on lowest pumpsetting flowrate ≈ 100mL/min

Well No. MW-7S Depth of Water 3.53'

Well Diameter: 2" Well Depth

☐ 1" (0.04 gal/feet) ~~☒~~ 2" (0.16 gal/feet) Water Column Height

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume

Time	Depth to Water (ft.)	Volume Purged (gal)	DO (mg/L)	Temp ~~(F°)~~ °C	PH (SU)	Cond (uS/cm C)	ORP (mV)	Turbidity (NTU)	Remarks
0949	3.53	0	Start	→	→	→	→	→	Start purge
1000	4.41*	0.25	0.26	15.97	7.22	2067	-59.2	68.8	Water is clear;
1003	4.39	0.35	0.19	15.99	7.17	2064	-59.8	61.2	gas-like odor
1006	4.38	0.4	0.17	16.00	7.17	2062	-62.2	57.4	
1009	4.38	0.5	0.16	16.02	7.15	2058	-56.6	56.3	
1015	—	—	End	→	→	→	→	→	Sample
									$Fe^{2+} = 2.96 mg/L$

Continue remarks on reverse, if needed.

WATER-QUALITY SAMPLING LOG

Project No. EM009480.0011.00003 Date: December 14, 2010 Page 1 of 1

Project Name: Hanson Sunol Sampling Location: Sunol, California

Sampler's Name: Miljan Draganic (Andrea Valdivia) Sample No.: MW-7D ☒ DUP MW-7D-D

Purge Method: ☐ Centrifugal Pump ☐ Disposable Bailer ☐ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☒ Other Geo-pump / Low-flow

Purge Water Storage Container Type: 55-gallon drum Storage Location: On site

Analyses Requested	No. and Type of Bottles Used
TPHg, MTBE, BTEX (by EPA 8260)	VOA with HCl (x3)
TPHd w/ silica gel clean-up (by EPA 8015B)	1-L Amber (x2)

Lab Name: Test America

Delivery By: Hand

* On lowest setting on pump ≈ 100mL/min; Not recharging fast enough.

Well No. MW-7D Depth of Water 4.09'

Well Diameter: 2" Well Depth

☐ 1" (0.04 gal/feet) ☒ 2" (0.16 gal/feet) Water Column Height

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume

Time	Depth to Water (ft.)	Volume Purged (gal)	DO (mg/L)	Temp ~~(F°)~~ °C	PH (SU)	Cond (uS/cm C)	ORP (mV)	Turbidity (NTU)	Remarks
0849	4.09	0	Start						Starts purge
0858	4.60*	0.2	0.34	16.87	6.64	1912	-98.1	18.5	Water is clear;
0901	4.62	0.3	0.35	16.91	6.68	1911	-100.3	21.1	strong gas-like
0904	4.72	0.4	0.30	16.95	6.69	1910	-107.7	26.7	odor
0907	4.78	0.5	0.26	16.94	6.70	1911	-110.3	20.8	
0910	—	—	End						Sample
0915									Duplicate
									$Fe^{2+} = 1.93$ mg/L
									$DO \leq 0.26$ mg/L

Continue remarks on reverse, if needed.

WATER-QUALITY SAMPLING LOG

Project No. EM009480.0011.00003 Date: December 13, 2010 Page 1 of 1

Project Name: Hanson Sunol Sampling Location: Sunol, California

Sampler's Name: Miljan Draganic Andrea Valdivia Sample No.: MW-8 ☐ DUP

Purge Method: ☐ Centrifugal Pump ☐ Disposable Bailer ☐ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☒ Other Geo-pump / Low-flow

Purge Water Storage Container Type: 55-gallon drum Storage Location: On site

Analyses Requested	No. and Type of Bottles Used
TPHg, MTBE, BTEX (by EPA 8260)	VOA with HCl (x3)
TPHd w/ silica gel clean-up (by EPA 8015B)	1-L Amber (x2)

Lab Name: Test America

Delivery By: Hand

Well No. MW-8 Depth of Water 3.27'

Well Diameter: 2" Well Depth

☐ 1" (0.04 gal/feet) ☒ 2" (0.16 gal/feet) Water Column Height

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume

Flow rate ≈ 200-250 mL/min

Time	Depth to Water (ft.)	Volume Purged (gal)	DO (mg/L)	Temp ~~(F)~~ °C	PH (SU)	Cond (uS/cm C)	ORP (mV)	Turbidity (NTU)	Remarks
1533	3.27	0	Start	→					Start purge
1539	3.35	0.6	0.30	17.01	6.77	1879	42.4	1.83	Water is clear.
1542	3.35	0.8	0.25	17.04	6.80	1879	24.9	2.99	no apparent odor
1545	3.35	1.0	0.23	17.05	6.82	1880	19.8	1.90	
1548	3.36	1.2	0.21	17.07	6.84	1878	11.0	1.12	
1551	3.37	1.4	0.19	17.08	6.85	1877	7.9	1.54	
1554	3.36	1.6	0.19	17.10	6.85	1876	4.5	1.06	
1600	—	—	End	→					Sample
									Fe^{2+} = 0.55 mg/L

Continue remarks on reverse, if needed.

WATER-QUALITY SAMPLING LOG

Project No. EM009480.0011.00003 Date: December 13, 2010 Page 1 of 1

Project Name: Hanson Sunol Sampling Location: Sunol, California

Sampler's Name: Miljan Draganic Andrea Valdivia Sample No.: MW-9S ☐ DUP —

Purge Method: ☐ Centrifugal Pump ☐ Disposable Bailer ☐ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☒ Other Geo-pump / Low-flow

Purge Water Storage Container Type: 55-gallon drum Storage Location: On site

Analyses Requested	No. and Type of Bottles Used
TPHg, MTBE, BTEX (by EPA 8260)	VOA with HCl (x3)
TPHd w/ silica gel clean-up (by EPA 8015B)	1-L Amber (x2)

Lab Name: Test America

Delivery By: Hand

$Fe^{2+} = 0.22$ mg/L

Well No. MW-9S Depth of Water 2.90

Well Diameter: 2" Well Depth —

☐ 1" (0.04 gal/feet) ☒ 2" (0.16 gal/feet) Water Column Height —

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume —

Time	Depth to Water (ft.)	Volume Purged (gal)	DO (mg/L)	Temp (F°)	PH (SU)	Cond (uS/cm C)	ORP (mV)	Turbidity (NTU)	Remarks
1535	2.90	—						→	Start purging
1545	3.30	~1.0	0.13	17.40	7.20	2429	-64.3	20.9	
1548	3.31	—	0.12	17.36	7.19	2426	-64.9	11.4	
1551	3.31	—	0.10	17.31	7.18	2425	-65.1	8.85	
1554	3.31	~1.5	0.08	17.29	7.17	2423	-65.0	5.80	
1600	—							→	Sampling

Continue remarks on reverse, if needed.

WATER-QUALITY SAMPLING LOG

Project No. EM009480.0011.00003 Date: December 14, 2010 Page 1 of 1

Project Name: Hanson Sunol Sampling Location: Sunol, California

Sampler's Name: Miljan Draganic Andrea Valdivia Sample No.: MW-9D ☐ DUP —

Purge Method: ☐ Centrifugal Pump ☐ Disposable Bailer ☐ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☒ Other Geo-pump / Low-flow

Purge Water Storage Container Type: 55-gallon drum Storage Location: On site

Analyses Requested	No. and Type of Bottles Used
TPHg, MTBE, BTEX (by EPA 8260)	VOA with HCl (x3)
TPHd w/ silica gel clean-up (by EPA 8015B)	1-L Amber (x2)

Lab Name: Test America

Delivery By: Hand

$Fe^{2+} = 1.78$ mg/L

Well No. MW-9D Depth of Water 4.15

Well Diameter: 2" Well Depth —

☐ 1" (0.04 gal/feet) ☒ 2" (0.16 gal/feet) Water Column Height —

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume —

Time	Depth to Water (ft.)	Volume Purged (gal)	DO (mg/L)	Temp (F°)	PH (SU)	Cond (uS/cm C)	ORP (mV)	Turbidity (NTU)	Remarks
0850	4.15	—						→	Start purging
0900	4.56	—	0.26	18.34	6.90	2108	28.4	28.2	Strong odor
0903	4.55	~1.0	0.16	18.32	6.91	2120	1.4	—	
0906	4.56	—	0.15	18.31	6.91	2122	-10.9	—	
0909	4.56	—	0.13	18.32	6.91	2127	-20.7	—	
0912	4.56	—	0.11	18.31	6.91	2129	-33.4	20.5	
0915	4.55	~2.0	0.11	18.27	6.91	2132	-37.9	—	
0918	4.55	—	0.10	18.20	6.91	2134	-44.7	—	
0921	4.56	—	0.09	18.17	6.91	2136	-49.4	14.7	
0924	4.55	—	0.10	18.20	6.91	2137	-53.7	10.8	
0927	4.56	~3.0	0.09	18.16	6.91	2139	-57.4	9.59	
0930	—							→	Sampling

Continue remarks on reverse, if needed.

WATER-QUALITY SAMPLING LOG

Project No. EM009480.0011.00003 Date: December 14, 2010 Page 1 of 1

Project Name: Hanson Sunol Sampling Location: Sunol, California

Sampler's Name: Miljan Draganic Andrea Valdivia Sample No.: MW-9LF ☐ DUP —

Purge Method: ☐ Centrifugal Pump ☐ Disposable Bailer ☐ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☒ Other Geo-pump / Low-flow

Purge Water Storage Container Type: 55-gallon drum Storage Location: On site

Analyses Requested	No. and Type of Bottles Used
TPHg, MTBE, BTEX (by EPA 8260)	VOA with HCl (x3)
TPHd w/ silica gel clean-up (by EPA 8015B)	1-L Amber (x2)
Lab Name: Test America	
Delivery By: Hand	

Fe^{2+} = 0.15 mg/L

Well No. MW-9LF Depth of Water 4.31

Well Diameter: 2" Well Depth —

☐ 1" (0.04 gal/feet) ☒ 2" (0.16 gal/feet) Water Column Height —

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume —

Time	Depth to Water (ft.)	Volume Purged (gal)	DO (mg/L)	Temp (F°)	PH (SU)	Cond (uS/cm C)	ORP (mV)	Turbidity (NTU)	Remarks
0949	4.31	—							Start purging
0959	4.39	~1.0	0.11	18.16	6.93	1964	-42.2	10.6	
1003	4.39	—	0.10	18.10	6.92	1966	-39.4	—	
1006	4.39	—	0.09	18.07	6.91	1965	-35.9	—	
1009	4.39	~1.5	0.09	18.06	6.91	1967	-33.1	3.5	
1015	—								Sampling.

Continue remarks on reverse, if needed.

WATER-QUALITY SAMPLING LOG

Project No. EM009480.0011.00003 Date: December 13, 2010 Page 1 of 1

Project Name: Hanson Sunol Sampling Location: Sunol, California

Sampler's Name: Miljan Draganic Andrea Valdivia Sample No.: MW-10S ☐ DUP —

Purge Method: ☐ Centrifugal Pump ☐ Disposable Bailer ☐ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☒ Other Geo-pump / Low-flow

Purge Water Storage Container Type: 55-gallon drum Storage Location: On site

Analyses Requested	No. and Type of Bottles Used
TPHg, MTBE, BTEX (by EPA 8260)	VOA with HCl (x3)
TPHd w/ silica gel clean-up (by EPA 8015B)	1-L Amber (x2)

Lab Name: Test America

Delivery By: Hand

$Fe^{2+} = 0.13$ mg/L

Well No. MW-10S Depth of Water 5.15

Well Diameter: 2" Well Depth —

☐ 1" (0.04 gal/feet) ☒ 2" (0.16 gal/feet) Water Column Height —

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume —

Time	Depth to Water (ft.)	Volume Purged (gal)	DO (mg/L)	Temp (F°)	PH (SU)	Cond (uS/cm C)	ORP (mV)	Turbidity (NTU)	Remarks
1145	5.15	—	—	—	—	—	—	→	Start purging
1155	5.18	—	0.30	16.55	6.86	1933	-70.3	21.9	
1158	5.18	~1.0	0.25	16.59	6.88	1955	-65.0	16.8	
1201	5.18	—	0.25	16.62	6.88	1954	-62.4	10.2	
1204	5.18	—	0.25	16.61	6.87	1951	-59.4	7.36	
1207	5.18	~1.5	0.2	16.60	6.87	1949	-56.7	3.11	
1210	—	—	—	—	—	—	—	→	Sampling

Continue remarks on reverse, if needed.

WATER-QUALITY SAMPLING LOG

Project No. EM009480.0011.00003 Date: December 13, 2010 Page 1 of 1

Project Name: Hanson Sunol Sampling Location: Sunol, California

Sampler's Name: Miljan Draganic, Andrea Valdivia Sample No.: MW-10D ☐ DUP —

Purge Method: ☐ Centrifugal Pump ☐ Disposable Bailer ☐ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☒ Other Geo-pump / Low-flow

Purge Water Storage Container Type: 55-gallon drum Storage Location: On site

Analyses Requested	No. and Type of Bottles Used
TPHg, MTBE, BTEX (by EPA 8260)	VOA with HCl (x3)
TPHd w/ silica gel clean-up (by EPA 8015B)	1-L Amber (x2)

Lab Name: Test America

Delivery By: Hand

$Fe^{2+} = 0.02$ mg/L

Well No. MW-10D Depth of Water 6.30

Well Diameter: 2" Well Depth —

☐ 1" (0.04 gal/feet) ☒ 2" (0.16 gal/feet) Water Column Height —

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume —

Time	Depth to Water (ft.)	Volume Purged (gal)	DO (mg/L)	Temp (F°)	PH (SU)	Cond (uS/cm C)	ORP (mV)	Turbidity (NTU)	Remarks
1309	6.30	—	—	—	—	—	—	→	Start purging
1319	6.80	—	0.07	18.39	7.26	2371	-100.8	60.2	water is cloudy
1322	6.82	—	0.06	18.37	7.26	2377	-110.4	83.6	↓
1325	6.84	~1.0	0.07	18.36	7.26	2382	-119.8	81.0	
1328	6.85	—	0.06	18.30	7.27	2387	-127.4	77.5	
1331	6.85	—	0.06	18.26	7.27	2393	-133.4	74.8	
1334	6.86	—	0.06	18.26	7.27	2404	-143.7	76.9	
1337	6.86	~1.5	0.06	18.41	7.27	2408	-152.5	62.3	
1340	6.87	—	0.06	18.49	7.27	2410	-157.4	50.1	
1343	6.87	—	0.06	18.50	7.27	2416	-162.9	45.9	
1346	6.87	~2.0	0.06	18.43	7.26	2422	-166.7	43.6	
1350	—	—	—	—	—	—	—	→	Sampling

Continue remarks on reverse, if needed.

WATER-QUALITY SAMPLING LOG

Project No. EM009480.0011.00003 Date: December 13, 2010 Page 1 of 1

Project Name: Hanson Sunol Sampling Location: Sunol, California

Sampler's Name: Miljan Draganic Andrea Valdivia Sample No.: MW-10LF ☐ DUP —

Purge Method: ☐ Centrifugal Pump ☐ Disposable Bailer ☐ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☒ Other Geo-pump / Low-flow

Purge Water Storage Container Type: 55-gallon drum Storage Location: On site

Analyses Requested	No. and Type of Bottles Used
TPHg, MTBE, BTEX (by EPA 8260)	VOA with HCl (x3)
TPHd w/ silica gel clean-up (by EPA 8015B)	1-L Amber (x2)

Lab Name: Test America

Delivery By: Hand

$Fe^{2+} = 3.30^{+}$ mg/L (limit)

Well No. MW-10LF Depth of Water 7.15

Well Diameter: 2" Well Depth —

☐ 1" (0.04 gal/feet) ☒ 2" (0.16 gal/feet) Water Column Height —

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume —

Time	Depth to Water (ft.)	Volume Purged (gal)	DO (mg/L)	Temp (F°)	PH (SU)	Cond (uS/cm C)	ORP (mV)	Turbidity (NTU)	Remarks
1408	7.15	—						→	Start purging
1418	7.29	~1.0	0.16	17.77	6.91	3373	-137.3	10.8	
1421	7.29	—	0.09	17.76	6.93	3490	-139.0	—	
1424	7.29	—	0.09	17.77	6.95	3490	-141.5	—	
1427	7.29	~1.5	0.08	17.79	6.95	3484	-142.6	3.46	
1435	—							→	Sampling

Continue remarks on reverse, if needed.

WATER-QUALITY SAMPLING LOG

Project No. EM009480.0011.00003 Date: December 14, 2010 Page 1 of 1

Project Name: Hanson Sunol Sampling Location: Sunol, California

Sampler's Name: Miljan Draganic Andrea Valdivia Sample No.: MW-11S ☐ DUP

Purge Method: ☐ Centrifugal Pump ☐ Disposable Bailer ☐ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☒ Other Geo-pump / Low-flow

Purge Water Storage Container Type: 55-gallon drum Storage Location: On site

Analyses Requested	No. and Type of Bottles Used
TPHg, MTBE, BTEX (by EPA 8260)	VOA with HCl (x3)
TPHd w/ silica gel clean-up (by EPA 8015B)	1-L Amber (x2)

Lab Name: Test America

Delivery By: Hand

Flow rate ≈ 200 mL/min

Well No. MW-11S Depth of Water 4.63'

Well Diameter: 2" Well Depth

☐ 1" (0.04 gal/feet) ☒ 2" (0.16 gal/feet) Water Column Height

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume

Time	Depth to Water (ft.)	Volume Purged (gal)	DO (mg/L)	Temp ~~(F°)~~ °C	PH (SU)	Cond (uS/cm C)	ORP (mV)	Turbidity (NTU)	Remarks
1323	4.63	0	Start						Start purge
1329	4.92	0.3	0.32	17.26	6.81	1824	-59.6	1.65	Water is clear;
1332	4.94	0.4	0.30	17.27	6.86	1822	-63.1	1.60	slight gas-like
1335	4.96	0.6	0.26	17.33	6.89	1821	-65.6	2.50	odor
1338	4.98	0.7	0.22	17.38	6.93	1821	-68.3	1.82	
1345	—	—	End						Sample
									$Fe^{2+} = 1.87$ mg/L

Continue remarks on reverse, if needed.

WATER-QUALITY SAMPLING LOG

Project No. EM009480.0011.00003 Date: December 14, 2010 Page 1 of 1

Project Name: Hanson Sunol Sampling Location: Sunol, California

Sampler's Name: Miljan Draganic Andrea Valdivia Sample No.: MW-11D ☐ DUP ——

Purge Method: ☐ Centrifugal Pump ☐ Disposable Bailer ☐ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☒ Other Geo-pump / Low-flow

Purge Water Storage Container Type: 55-gallon drum Storage Location: On site

Analyses Requested	No. and Type of Bottles Used
TPHg, MTBE, BTEX (by EPA 8260)	VOA with HCl (x3)
TPHd w/ silica gel clean-up (by EPA 8015B)	1-L Amber (x2)

Lab Name: Test America

Delivery By: Hand

* Product present

Fe^{2+} = 2.13 mg/L

Well No. MW-11D Depth of Water 5.41

Well Diameter: 2" Well Depth ——

☐ 1" (0.04 gal/feet) ☒ 2" (0.16 gal/feet) Water Column Height ——

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume ——

Time	Depth to Water (ft.)	Volume Purged (gal)	DO (mg/L)	Temp (F°)	PH (SU)	Cond (uS/cm C)	ORP (mV)	Turbidity (NTU)	Remarks
1315	5.41	——						→	Start purging
1325	6.64	——	0.08	18.33	6.69	1688	-143.3	31.5	
1328	6.65	~1.0	0.08	18.39	6.67	1686	-144.9	——	
1331	6.64	——	0.08	18.43	6.66	1684	-147.8	35.0	
1334	6.64	——	0.08	18.48	6.66	1683	-149.2	38.6	
1337	6.65	~1.5	0.08	18.55	6.66	1681	-151.7	36.4	
1340	——							→	Sampling

Continue remarks on reverse, if needed.

WATER-QUALITY SAMPLING LOG

Project No. EM009480.0011.00003 Date: December 14 , 2010 Page 1 of 1

Project Name: Hanson Sunol Sampling Location: Sunol, California

Sampler's Name: Miljan Draganic Andrea Valdivia Sample No.: MW-11LF ☐ DUP ———

Purge Method: ☐ Centrifugal Pump ☐ Disposable Bailer ☐ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☒ Other Geo-pump / Low-flow

Purge Water Storage Container Type: 55-gallon drum Storage Location: On site

Analyses Requested	No. and Type of Bottles Used
TPHg, MTBE, BTEX (by EPA 8260)	VOA with HCl (x3)
TPHd w/ silica gel clean-up (by EPA 8015B)	1-L Amber (x2)

Lab Name: Test America

Delivery By: Hand

Fe^{2+} = 2.33 mg/L

Well No. MW-11LF Depth of Water 5.25

Well Diameter: 2" Well Depth ———

☐ 1" (0.04 gal/feet) ☒ 2" (0.16 gal/feet) Water Column Height ———

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume ———

Time	Depth to Water (ft.)	Volume Purged (gal)	DO (mg/L)	Temp (F°)	PH (SU)	Cond (uS/cm C)	ORP (mV)	Turbidity (NTU)	Remarks
1228	5.25	———						→	Start purging
1238	5.66	—	0.09	18.15	6.99	1402	-173.7	18.2	
1241	5.65	~1.0	0.08	18.18	6.99	1399	-173.7	—	
1244	5.66	—	0.08	18.16	6.99	1394	-173.8	9.52	
1247	5.66	~1.5	0.07	18.14	6.99	1389	-173.9	8.42	
1250	———							→	Sampling

Continue remarks on reverse, if needed.

WATER-QUALITY SAMPLING LOG

Project No. EM009480.0011.00003 Date: December 14 ,2010 Page 1 of 1

Project Name: Hanson Sunol Sampling Location: Sunol, California

Sampler's Name: Miljan Draganic Andrea Valdivia Sample No.: MW-12S ☐ DUP

Purge Method: ☐ Centrifugal Pump ☐ Disposable Bailer ☐ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☒ Other Geo-pump / Low-flow

Purge Water Storage Container Type: 55-gallon drum Storage Location: On site

Analyses Requested	No. and Type of Bottles Used
TPHg, MTBE, BTEX (by EPA 8260)	VOA with HCl (x3)
TPHd w/ silica gel clean-up (by EPA 8015B)	1-L Amber (x2)

Lab Name: Test America

Delivery By: Hand

Well No. MW-12S Depth of Water 7.04'

Well Diameter: 2" Well Depth

☐ 1" (0.04 gal/feet) ☒ 2" (0.16 gal/feet) Water Column Height

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume

*On lowest setting possible; to maintain suction, the flow rate ≈ 175 mL/min

Time	Depth to Water (ft.)	Volume Purged (gal)	DO (mg/L)	Temp ~~(F°)~~ °C	PH (SU)	Cond (uS/cm C)	ORP (mV)	Turbidity (NTU)	Remarks
1418	7.04	0	Start	→	→	→	→	→	Start purge
1427	"	"	Restart	→	→	→	→	→	Pump issue
1436	8.02*	0.5	1.17	17.17	6.72	1753	77.6	5.24	Water is clear; very
1439	8.04	0.7	0.74	17.25	6.73	1752	75.0	4.64	slight gas-like odor
1442	8.04	0.9	0.75	17.28	6.75	1750	69.1	2.95	
1445	8.05	1.0	0.72	17.36	6.76	1742	65.2	2.50	
1450	—	—	End	→	→	→	→	→	Sample
									Fe^{2+} = 0.10 mg/L
									DO ≤ 0.8 mg/L

Continue remarks on reverse, if needed.

WATER-QUALITY SAMPLING LOG

Project No. EM009480.0011.00003 Date: December 14, 2010 Page 1 of 1

Project Name: Hanson Sunol Sampling Location: Sunol, California

Sampler's Name: Miljan Draganic Andrea Valdivia Sample No.: MW-12D ☐ DUP —

Purge Method: ☐ Centrifugal Pump ☐ Disposable Bailer ☐ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☒ Other Geo-pump / Low-flow

Purge Water Storage Container Type: 55-gallon drum Storage Location: On site

Analyses Requested	No. and Type of Bottles Used
TPHg, MTBE, BTEX (by EPA 8260)	VOA with HCl (x3)
TPHd w/ silica gel clean-up (by EPA 8015B)	1-L Amber (x2)

Lab Name: Test America

Delivery By: Hand

Fe^{2+} = 0.19 mg/L

Well No. MW-12D Depth of Water 6.85

Well Diameter: 2" Well Depth —

☐ 1" (0.04 gal/feet) ☒ 2" (0.16 gal/feet) Water Column Height —

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume —

Time	Depth to Water (ft.)	Volume Purged (gal)	DO (mg/L)	Temp (F°)	PH (SU)	Cond (uS/cm C)	ORP (mV)	Turbidity (NTU)	Remarks
1458	6.85	—						→	Start purging
1508	7.02	~1.0	0.42	17.69	6.68	1349	-72.0	14.6	
1511	7.02	—	0.38	17.61	6.68	1349	-72.1	17.2	
1514	7.02	—	0.40	17.60	6.68	1349	-71.8	19.3	
1517	7.02	~2.0	0.35	17.57	6.67	1350	-72.4	18.4	
1520	—							→	Sampling

Continue remarks on reverse, if needed.

WATER-QUALITY SAMPLING LOG

Project No. EM009480.0011.00003 Date: December 14, 2010 Page 1 of 1

Project Name: Hanson Sunol Sampling Location: Sunol, California

Sampler's Name: Miljan Draganic, Andrea Valdivia Sample No.: MW-12LF ☐ DUP —

Purge Method: ☐ Centrifugal Pump ☐ Disposable Bailer ☐ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☒ Other Geo-pump / Low-flow

Purge Water Storage Container Type: 55-gallon drum Storage Location: On site

Analyses Requested	No. and Type of Bottles Used
TPHg, MTBE, BTEX (by EPA 8260)	VOA with HCl (x3)
TPHd w/ silica gel clean-up (by EPA 8015B)	1-L Amber (x2)

Lab Name: Test America

Delivery By: Hand

Fe^{2+} = 0.33 mg/L

Well No. MW-12LF Depth of Water 7.06

Well Diameter: 2" Well Depth —

☐ 1" (0.04 gal/feet) ☒ 2" (0.16 gal/feet) Water Column Height —

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume —

Time	Depth to Water (ft.)	Volume Purged (gal)	DO (mg/L)	Temp (F°)	PH (SU)	Cond (uS/cm C)	ORP (mV)	Turbidity (NTU)	Remarks
1417	7.06	—						→	Start purging
1427	7.31	~1.0	0.11	17.47	6.74	1441	-120.2	13.5	
1430	7.31	—	0.09	17.49	6.74	1440	-119.9	4.43	
1433	7.31	~1.5	0.08	17.51	6.74	1440	-119.5	3.04	
1435	—							→	Sampling

Continue remarks on reverse, if needed.

WATER-QUALITY SAMPLING LOG

Project No. EM009480.0011.00003 Date: December 14, 2010 Page 1 of 1

Project Name: Hanson Sunol Sampling Location: Sunol, California

Sampler's Name: Miljan Draganic, Andrea Valdivia Sample No.: OXY-1S ☐ DUP

Purge Method: ☐ Centrifugal Pump ☐ Disposable Bailer ☐ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☒ Other Geo-pump / Low-flow

Purge Water Storage Container Type: 55-gallon drum Storage Location: On site

Analyses Requested	No. and Type of Bottles Used
TPHg, MTBE, BTEX (by EPA 8260)	VOA with HCl (x3)
TPHd w/ silica gel clean-up (by EPA 8015B)	1-L Amber (x2)

Lab Name: Test America

Delivery By: Hand

* Due to system attachments cannot take DTW while purging

Well No. OXY-1S Depth of Water 3.99'

Well Diameter: 2" Well Depth

☐ 1" (0.04 gal/feet) ☒ 2" (0.16 gal/feet) Water Column Height

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume

Time	Depth to Water (ft.)	Volume Purged (gal)	DO (mg/L)	Temp (F°) °C	PH (SU)	Cond (uS/cm C)	ORP (mV)	Turbidity (NTU)	Remarks
1044	3.99	0	Start	→					Start purge
1054	—*	0.3	0.40	18.19	7.27	2049	-0.9	5.98	Water is clear; no
1057	—	0.4	0.27	18.26	7.24	2058	-1.0	3.48	apparent sudor
1100	—	0.5	0.25	18.29	7.24	2065	AV* 0.7	2.68	
1103	—	0.6	0.23	18.32	7.23	2073	0.4	3.10	
1105	—	—	End	→				→	Sample
									Fe^{2+} = 0.16mg/L
									DO = 0.8mg/L

Continue remarks on reverse, if needed.

WATER-QUALITY SAMPLING LOG

Project No. EM009480.0011.00003 Date: December 14, 2010 Page 1 of 1

Project Name: Hanson Sunol Sampling Location: Sunol, California

Sampler's Name: (Milijan Draganic) Andrea Valdivia Sample No.: OXY-1D ☐ DUP ——

Purge Method: ☐ Centrifugal Pump ☐ Disposable Bailer ☐ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☒ Other Geo-pump / Low-flow

Purge Water Storage Container Type: 55-gallon drum Storage Location: On site

Analyses Requested	No. and Type of Bottles Used
TPHg, MTBE, BTEX (by EPA 8260)	VOA with HCl (x3)
TPHd w/ silica gel clean-up (by EPA 8015B)	1-L Amber (x2)

Lab Name: Test America

Delivery By: Hand

Well No. OXY-1D Depth of Water 3.92

Well Diameter: 2" Well Depth ——

☐ 1" (0.04 gal/feet) ☒ 2" (0.16 gal/feet) Water Column Height ——

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume ——

* Product was observed on the depth to water meter

$Fe^{2+} = 0.09$ mg/L

Time	Depth to Water (ft.)	Volume Purged (gal)	DO (mg/L)	Temp (F°)	PH (SU)	Cond (uS/cm C)	ORP (mV)	Turbidity (NTU)	Remarks
1054	3.92	——						→	Start purging
1104	4.02	~1.0	0.08	18.75	7.04	2043	-147.5	8.54	
1107	4.02	——	0.06	18.76	7.04	2045	-176.9	——	
1110	4.02	~1.5	0.06	18.66	7.05	2048	-194.7	——	
1113	4.02	——	0.05	18.54	7.05	2050	-208.4	——	
1116	4.02	~2.0	0.05	18.52	7.04	2080	-231.0	——	
1119	4.02	——	0.06	18.50	7.03	2124	-238.1	——	
1122	4.02	——	0.06	18.47	7.01	2129	-235.8	——	
1125	4.02	~2.9	0.06	18.40	6.98	2145	-231.1	——	
1128	4.02	~3.0	0.05	18.38	6.96	2168	-228.4	6.33	
1135	——							→	Sampling

Continue remarks on reverse, if needed.

WATER-QUALITY SAMPLING LOG

Project No. EM009480.0011.00003 Date: December 14, 2010 Page 1 of 1

Project Name: Hanson Sunol Sampling Location: Sunol, California

Sampler's Name: Miljan Draganic Andrea Valdivia Sample No.: OXY-1LF ☐ DUP

Purge Method: ☐ Centrifugal Pump ☐ Disposable Bailer ☐ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☒ Other Geo-pump / Low-flow

Purge Water Storage Container Type: 55-gallon drum Storage Location: On site

Analyses Requested	No. and Type of Bottles Used
TPHg, MTBE, BTEX (by EPA 8260)	VOA with HCl (x3)
TPHd w/ silica gel clean-up (by EPA 8015B)	1-L Amber (x2)

Lab Name: Test America

Delivery By: Hand

Well No. OXY-1LF Depth of Water —*

Well Diameter: 2" Well Depth

☐ 1" (0.04 gal/feet) ☒ 2" (0.16 gal/feet) Water Column Height

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume

* Due to system attachments cannot gets DTW
Flow rate ≈ 175mL/min

Time	Depth to Water (ft.)	Volume Purged (gal)	DO (mg/L)	Temp ~~(F)~~ °C	PH (SU)	Cond (uS/cm C)	ORP (mV)	Turbidity (NTU)	Remarks
1206	—*	0	Starts	—				→	Starts purge
1214	—	0.4	1.70	18.45	7.53	1776	48.6	1.05	Water is clear;
1217	—	0.5	1.53	18.50	7.48	1778	45.5	0.77	gas-like color
1220	—	0.6	1.20	18.53	7.45	1782	42.5	0.90	
1223	—	0.8	1.21	18.56	7.42	1786	37.2	1.59	
1226	—	1.0	1.11	18.54	7.41	1789	36.0	0.52	
1229	—	1.2	1.19	18.54	7.41	1790	31.1	0.66	
1235	—	—	End	—				→	Sample
									Fe^{2+} = 0.11 mg/L
									DO = 1.4 mg/L

Continue remarks on reverse, if needed.