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First 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)

May 17, 2010

ARCADIS

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Senior Project Engineer

Katrin M. Schliewen, P.G.
Senior Hydrogeologist

First Quarter 2010 Air Injection System and Groundwater Monitoring Report

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

Prepared for:
Lehigh Hanson West Region
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Our Ref.:
EM009480.0011

Date:
May 17, 2010

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

May 17, 2010

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

Subject: **First 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 First 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 first quarter of 2010 (January 1 through March 31, 2010; "the current quarter") throughout the Site. This report also provides a summary of air injection system (AIS) performance monitoring and routine operation and maintenance activities conducted during the current quarter.

In summary, the findings of this report indicate that the AIS has been effective at reducing total petroleum hydrocarbon (TPH) concentrations in the vicinity of the AIS. In particular, concentrations in well cluster MW-9, where historically the highest TPH concentrations have been detected, have for the most part decreased to below laboratory reporting limits since the start of AIS operation. Site-wide, concentrations of the primary compounds detected, including TPH as diesel (TPHd) and as gasoline (TPHg), and methyl tertiary-butyl ether (MTBE), indicate mostly decreasing or stable trends. There are a few locations where TPHd and MTBE concentrations remain relatively elevated and concentrations appear to be relatively stable or slightly increasing, particularly when considering data from approximately 2008 to the present.

Based on historical concentration trends and results from the current quarter, it is recommended that the AIS be temporarily shut down and that groundwater monitoring be conducted according to the current program to evaluate for rebound. The next routine groundwater monitoring event is scheduled to be conducted during the second quarter of 2010 and will consist of sampling the 10 wells located in the vicinity of the AIS.

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 Katrin Schliewen of ARCADIS at (510) 652-4500.

Sincerely,

Lee W. Cover
Environmental Manager
Lehigh Hanson West Region

Attachment

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Certification

ARCADIS U.S., Inc., has prepared this Air Sparge 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.*

May 17, 2010

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

Date

May 17, 2010

Katrin M. Schliewen, P.G.
Senior Hydrogeologist
California Professional Geologist No. 7808

Date

* 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 January 1 through March 31, 2010 ("the current quarter"). This report also presents a summary of the air injection system (AIS) operation and effectiveness at remediation of groundwater in the source area. All groundwater monitoring and AIS operation and maintenance activities were conducted by ARCADIS U.S., Inc. (ARCADIS) on behalf of Lehigh Hanson West Region ("Hanson").

Routine AIS operation and maintenance was conducted approximately biweekly during the current quarter. Routine quarterly groundwater monitoring was conducted during March 2 through 5, 2010. The AIS has been in operation since April 6, 2009 and consists of compressed air injected into wells OXY-1D and OXY-1LF. The AIS was shut down temporarily to reduce pressure buildup in the wells and to allow the routine groundwater monitoring event to be conducted safely after pressure buildup dissipated.

Analytical results confirm that 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, concentrations of these compounds throughout the Site generally are decreasing or stable, with few exceptions. Considering only data since approximately 2008, concentrations of TPHd and MTBE in a few wells (MW 2, -3, -6, -7, and -11) have either stabilized at concentrations above the San Francisco Bay Regional Water Quality Control Board's Environmental Screening Levels, or exhibit a slightly increasing concentration trend. However, when the entire monitoring record is considered, concentration trends in all of these wells are generally decreasing.

The existing AIS has been effective at significantly reducing TPH concentrations in groundwater beneath the Site, especially in the vicinity of the MW-9 well cluster. For example, concentrations of most individual hydrocarbon constituents have decreased to below laboratory reporting limits in the MW-9 well cluster. Based on results of quarterly monitoring, ARCADIS and Hanson recommend that the AIS be shut down and that groundwater be monitored for rebound according to the current routine monitoring program.

ARCADIS

First Quarter 2010 Air Injection System and Groundwater Monitoring

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

1. Introduction

ARCADIS U.S., Inc. (ARCADIS) has prepared this "First 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 January 1 through March 31, 2010 ("the current quarter").

During the current quarter, routine AIS performance and groundwater monitoring were conducted in accordance with the July 23, 2009 Alameda County Environmental Health (ACEH) comment letter (ACEH 2009) and the August 17, 2009 report by LFR Inc. (LFR) titled "Air Injection System Installation, Start-up, and First Quarter Operations Report" ("the Start-up Report"; LFR 2009). As requested by ACEH, routine groundwater monitoring of select wells located in the vicinity of the AIS is conducted on a quarterly basis to monitor the performance of the AIS; routine groundwater monitoring of all site wells is conducted on a semiannual basis during the first and third quarters. This monitoring report presents the results of the routine groundwater monitoring and sampling of all site wells conducted on a semiannual basis during the current quarter. This report also presents a discussion of site-wide subsurface conditions with emphasis on groundwater remediation progress.

2. Air Injection System Operation

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

Routine O&M activities of the AIS are conducted by ARCADIS approximately biweekly. Operating parameters are recorded on field sheets and the system is adjusted as necessary. Below is a summary of performance monitoring and results for the current quarter.

2.1 AIS Operation Parameters

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

Air Injection Sequence

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

2.2 Routine O&M Observations

The AIS operated continuously during the current quarter with only one unscheduled shutdown that occurred at the end of the previous quarter and beginning of the current quarter. During the routine O&M visit conducted on January 8, 2010, the field technician found the system was not operating due to a leak in the compressor tank and estimated that the AIS had not been operating for a period of approximately 10 days. The source of the leak was a gauge on the tank that had come unscrewed from its threaded mounting hole, allowing air to escape through the hole. The gauge was re-mounted into its threaded hole and the AIS resumed operation. No other unscheduled shutdowns occurred during the current quarter.

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

- Replacing a cracked flow gauge;
- Adding oil and performing an oil change for the compressor;
- Upgrading well caps to pressure-sealed plugs;
- Replacing old and faded traffic cones;
- Replacing a broken well lid for MW-7S/D;
- Cleaning or changing the compressor's air filter; and
- Field verification of the programmed sparging sequence.

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 during March 2 through 5, 2010. The wells monitored included 26 groundwater monitoring wells (designated by "MW" and the well number) and the three air injection wells (designated by "OXY" and the well number; Figure 2). Groundwater monitoring results from the current quarter are summarized in Tables 1 and 2 and are presented on Figures 3 through 8. Historical groundwater monitoring data are presented in summary tables included in Appendix A and on concentration hydrographs included in Appendix B. Certified analytical reports and field sheets from groundwater monitoring conducted during the current quarter are included in Appendices C and D, respectively.

3.1 Methodology

3.1.1 Temporary AIS Shutdown

Before the groundwater monitoring event was conducted, the AIS was temporarily shut down to stop the flow of compressed air into injection wells OXY-1D and OXY-1LF and allow the injection wells and nearby monitoring wells to be accessed safely after pressure buildup dissipated. The system was shut down approximately one hour before depth to groundwater monitoring was measured, and was turned back on after all groundwater sampling was completed.

3.1.2 Groundwater Elevation Monitoring

Depth to groundwater was measured in 23 of the 26 groundwater monitoring wells on March 2, 2010. Additional effort was required to open three of the groundwater monitoring wells; therefore, depth to groundwater was measured in well MW 4D on March 3 and in wells MW 7D and MW-9S on March 4. Depth to groundwater was not monitored in the three injection wells.

The depth to groundwater was measured relative to the top of casing (TOC) using a Solinst 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.

3.1.3 Groundwater Well Purging and Sampling

The 29 monitoring and injection wells were sampled during the current quarter, during March 3 through 5, 2010. All wells were purged and sampled using “low-flow” sampling protocols to minimize the drawdown during purging, including using an electrical peristaltic pump and dedicated flexible 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 of general water-quality parameters including ferrous iron concentrations measured during monitoring events conducted approximately since the pilot study was completed in early 2008 is included in Appendix A.

Groundwater samples for laboratory analyses were collected into clean, laboratory-provided sample containers using the low-flow pump. Containers were properly labeled and transported in ice-chilled coolers under standard chain-of-custody protocol to the analytical laboratories. Field duplicate samples were collected daily, at wells MW-9LF, MW-2S, MW-5S, and MW-11S, and submitted to the laboratory for quality control purposes.

3.1.4 Groundwater Sample Analyses

As noted above, all groundwater samples were analyzed in the field for the general water-quality field parameters and for ferrous iron. Groundwater samples for laboratory analyses were collected and submitted to TestAmerica Laboratories, Inc., a California-certified analytical laboratory located in Pleasanton, California, and were analyzed for the following parameters:

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

3.2 Groundwater Monitoring Results

Groundwater monitoring results are summarized in Tables 1 and 2, and presented on Figures 3 through 8.

3.2.1 Groundwater Elevation Monitoring Results

Groundwater elevation contour maps were prepared for three intervals, the shallow interval (Figure 3), the deep interval (Figure 4), and the Livermore Formation

(Figure 5). Based on the interpreted groundwater 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 (however. 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 continue to be 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 0.02 during the current quarter, consistent with results from previous groundwater monitoring events.

Vertical groundwater flow gradients generally were downward, with the exception of well cluster MW-12 where groundwater elevations indicate an upward gradient. These results are consistent with results from previous groundwater monitoring events.

3.2.2 Analytical Results of Petroleum Hydrocarbons and Related Compounds

A summary of analytical data for the current quarter is presented in Table 2, and historical analytical data are presented in a summary table included in Appendix A and in concentrations hydrographs presented in Appendix B.

The primary TPH and TPH-related compounds detected in groundwater samples collected at this 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 highlighted in Table 2.

Results for the current quarter indicate that TPHd was detected in almost every sample collected, and generally at concentrations that exceed the ESL for TPHd (100 micrograms per liter [µg/l]). TPHd was not detected above the ESL in the samples collected from wells MW-9S, MW 9LF, and well cluster MW-12. TPHg was detected at concentrations that exceed the ESL (100 µg/l) in wells MW-2, MW-6, MW-7, MW-10, and MW-11D. MTBE was detected at concentrations that exceed the ESL (5 µg/l) only in wells MW-2, MW-6, and MW-11. As has been observed during previous monitoring

events, MTBE was detected predominantly in wells located in the southern portion of the Site whereas TPHg was detected predominantly in wells located in the northern portion of the Site. The distribution of TPHd detections was relatively more widespread throughout the Site. Note that this is the first time TPHd was detected in wells MW-4S, MW-4D, and MW-12D; however, BTEX and MTBE were not detected in these wells and results from the next monitoring event will indicate whether the presence of TPHd is confirmed.

Historically, the highest concentrations were detected in the areas of wells MW-7, MW-9, and MW-11. In general, considering all historical analytical data, concentrations of petroleum hydrocarbons and related compounds have decreased or remained stable throughout the Site. In the area of well MW-9, which was identified as the primary source area and where the active remediation currently is being conducted, concentrations have significantly decreased since the operation of the AIS began approximately one year ago (April 2009), to below laboratory reporting limits for almost all compounds. These results confirm that the AIS has been effective at significantly reducing concentrations in the source area. Additional groundwater monitoring will be required to further assess whether the active remediation conducted in the source area will enhance the degradation of contaminant throughout the Site and downgradient.

Observed concentrations trends are discussed in more detail below for those wells and/or areas where concentrations remain above the ESLs for one or more compounds. For purposes of this data review, wells containing TPH concentrations greater than 10,000 µg/l and BTEX and MTBE concentrations greater than their respective ESLs are discussed in more detail. Analytical results for the current quarter indicate that concentrations greater than the ESLs were detected in samples collected from wells MW-2, MW-3, MW 6, MW-7, and MW-11.

MW-2S/M/D

Monitoring wells MW-2S/M/D are located approximately 85 feet south-southeast of and downgradient from the AIS and historically have contained predominantly TPHd and MTBE concentrations. TPHd concentrations in the shallowest well (MW-2S) fluctuate significantly although they average approximately 10,000 µg/l, and MTBE concentrations in this well have remained at approximately 30 µg/l with comparatively less fluctuation. MTBE concentrations in wells MW-2M and MW-2D exhibited generally decreasing trends until approximately 2008, but since then they show slightly increasing trends and are now at approximately 20 and 30 µg/l, respectively. TPHd concentrations in wells MW-2M/D show generally decreasing trends and historically

have been below approximately 5,000 µg/l. TPHg concentrations have remained relatively low in all three MW-2 wells, below approximately 500 µg/l. There is no evidence that the AIS operation in the source area has had a significant effect on the well MW-2 area concentrations, although the apparent increase in MTBE concentrations in wells MW-2M/D coincides somewhat with the start of the pilot study conducted in January-February 2008.

MW-3

Well MW-3 is located approximately 125 feet southeast of and downgradient from the AIS. TPHd/g concentrations have been relatively low historically although TPHd concentrations occasionally have spiked up during single monitoring events. MTBE concentrations have fluctuated significantly with no discernable trend and generally average approximately 60 µg/l. MTBE was detected at a concentration of 44 µg/l during the current quarter.

MW-6S/D

Wells MW-6S/D are located approximately 95 feet south-southeast of and downgradient from the AIS. Similar to well MW-3, TPHd/g concentrations historically have been relatively low (generally less than 5,000 µg/l and more recently below 2,000 µg/l) while MTBE concentrations have fluctuated significantly and continue to be above the ESL (MTBE concentrations currently are at approximately 30 to 40 µg/l). Historically, MTBE concentrations were upwards of 200 µg/l when monitoring began in 2005-2006; concentrations since then have decreased significantly, although a slight increasing trend can be observed since approximately 2008.

MW-7S/D

Wells MW-7S/D are located approximately 30 feet south of and cross-gradient or downgradient from the AIS. The results of the pilot study indicated that the effective radius of influence (ROI) reached wells MW 7S/D. During the pilot study, a notable increase in TPH and BTEX concentrations was observed in well MW-7S, and to a lesser extent in well MW-7D. This increase was attributed to contaminants being mobilized by the injection of air into the subsurface. A similar but less significant increase in TPHg concentrations was observed when the AIS was started in full-time operation at a somewhat lower injection rate than was used during the pilot test.

Historically, some of the highest TPHd and TPHg concentrations detected at the Site have been detected in samples collected from well MW-7D. TPH concentrations have decreased significantly since monitoring began in 2005, and decreasing trends were present prior to the start of the AIS. However, since approximately 2008, TPHg concentrations in well MW-7D appear to have stabilized somewhat at an elevated concentration of approximately 10,000 µg/l. For well MW-7S, concentrations have remained comparatively low, although TPHd concentrations increased sharply during the previous quarter and remained at approximately 2,000 µg/l during the current quarter. MTBE has never been detected in either MW-7 well.

MW-11S/D/LF

Wells MW-11S/D/LF are located approximately 155 feet south-southeast of and downgradient from the AIS. This well cluster is the farthest downgradient groundwater monitoring location at the Site. TPH concentrations generally have been stable at low to non-detect concentrations in wells MW-11S and MW-11LF, as have MTBE concentrations in well MW-11S. TPHd concentrations in well MW-11D have been elevated, historically, generally greater than 10,000 µg/l and up to 100,000 µg/l in 2007, although TPHd concentrations were approximately 8,000 µg/l during the current and previous sampling events. No clear trend is evident in TPHd concentrations in well MW-11D.

In the well MW-11 area, MTBE concentrations indicated a decreasing trend in well MW-11D until 2008 and since then have generally been stable at approximately 10 µg/l. MTBE concentrations in well MW-11LF have essentially remained stable since monitoring began in 2007, ranging approximately between 100 and 200 µg/l. The MTBE concentrations in well MW-11LF are consistently the highest concentrations detected at the Site, and this well is the deepest and farthest downgradient well at the Site.

The site characterization investigation conducted in 2007 included advancing several temporary soil borings, using a membrane interface probe, and collecting confirmation grab groundwater samples at locations farther downgradient and deeper than well MW-11LF. Based on those results, it was concluded that the Site was sufficiently well characterized. Concentrations, including MTBE, generally have been stable in well MW-11LF; therefore, no additional site characterization activities are required or proposed.

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 MW-4, MW-6, MW-7, MW 9, MW-10, and MW-11, most recently during the current quarter. Based on these results, it is assumed that residual free product may be present in certain areas of the Site, and that it appears to be relatively immobile.

3.2.4 Effectiveness of the AIS

Based on groundwater monitoring results, the AIS has been effective at significantly reducing concentrations in the source area (MW-9 well cluster). The results of the pilot study indicated that an effective ROI of approximately 35 feet could be reached by injecting air into injection wells OXY-1D and OXY-1LF. As discussed in Section 2, currently, air is injected into each of these two wells individually and in combination at a somewhat lower rate than was used for the pilot study. Groundwater monitoring results indicate that the current ROI is approximately 30 feet as it appears that wells MW-7S/D are located approximately at the fringe of the ROI.

4. Conclusions and Recommendations

4.1 Conclusions

Groundwater monitoring results show that the AIS has been effective at reducing concentrations in the source area to below the ESLs and, for most compounds, to below laboratory reporting limits (well cluster MW-9). Site-wide, groundwater quality has significantly improved since groundwater monitoring began in 1998, and concentration trends generally are downward or stable throughout the Site. The effective ROI of the AIS appears to extend to approximately 30 feet. As such, it appears that the MW-7 well cluster is located near the boundary of the ROI. There are a few locations where hydrocarbon concentrations, in particular TPHd and MTBE, remain above the ESLs and/or concentrations appear to be increasing (considering more recent data since approximately 2008); however, the historical concentration trend observed in these wells is generally decreasing.

These include the following wells:

Well	Recent Concentration Trends (2008 to present)
MW-2S	TPHd concentrations generally stable at approximately 10,000 µg/l
	MTBE concentrations generally stable at approximately 30 µg/l
MW-2M	MTBE concentrations generally increasing and currently at approximately 15 to 20 µg/l
MW-2D	MTBE concentrations generally increasing and currently at approximately 25 to 30 µg/l
MW-3	MTBE concentrations generally stable at an average concentration of approximately 60 µg/l
MW-6S	MTBE concentrations fluctuating significantly with an average concentration of approximately 40 µg/l
MW-6D	MTBE concentrations increasing and currently at approximately 40 to 60 µg/l
MW-7D	TPHd concentrations appear to have stabilized at approximately 10,000 µg/l
MW-11D	TPHd concentrations generally greater than approximately 10,000 µg/l
	MTBE concentrations increasing slightly and currently at approximately 10 to 15 µg/l
MW-11LF	MTBE concentrations generally range approximately from 100 to 200 µg/l

Evaluation of current and historical groundwater and AIS operation data indicate that, overall,

- Long-term, site-wide trends in hydrocarbon concentrations are generally downward or stable; and

- The AIS has been effective at significantly reducing concentrations in the source area.

4.2 Recommendations and Proposed Monitoring Schedule

Based on the effectiveness of the AIS at reducing hydrocarbon concentrations, ARCADIS and Hanson recommend that the AIS be shut down and that groundwater be monitored as needed to assess for potential rebound effects.

In accordance with the Start-up Report (LFR 2009), if the AIS continues to be operated, soil-gas samples will be collected approximately at the end of the dry season to confirm that no significant soil-gas concentrations are produced during the operation of the AIS.

The following table provides a summary of the existing groundwater monitoring and reporting schedule.

Groundwater Monitoring and Reporting Schedule for 2010

Quarter	Water Level Monitoring	Groundwater Sampling Event	Reporting Schedule (report due date 45 days after end of the quarter)
1Q10 (January through March)	Site-wide	Site-wide: 26 monitoring wells and 3 injection wells	Monitoring Report (due May 15, 2010)
2Q10 (April through June)	--	AIS vicinity: 7 monitoring wells and 3 injection wells	Data transmittal report (due August 15, 2010)
3Q10 (July through September)	Site-wide	Site-wide: 26 monitoring wells and 3 injection wells	Monitoring Report (due November 15, 2010)
4Q10 (October through December)	--	AIS vicinity: 7 monitoring wells and 3 injection wells	Data transmittal report (due February 15, 2011)

Note: 1Q10, 2Q10, 3Q10, and 4Q10 refer to the first, second, third, and fourth quarters of 2010, respectively.

5. Limitations Statement

The opinions and recommendations presented in this report are based upon the scope of services, information obtained through the performance of the services, and the schedule as agreed upon by ARCADIS and the party for whom this report was originally prepared. This report is an instrument of professional service and was prepared in accordance with the generally accepted standards and level of skill and care under similar conditions and circumstances established by the environmental consulting industry. No representation, warranty, or guarantee, express or implied, is intended or given. To the extent that ARCADIS relied upon any information prepared by other parties not under contract to ARCADIS, ARCADIS makes no representation as to the accuracy or completeness of such information. This report is expressly for the sole and exclusive use of the party for whom this report was originally prepared for a particular purpose. Only the party for whom this report was originally prepared and/or

other specifically named parties have the right to make use of and rely upon this report. Reuse of this report or any portion thereof for other than its intended purpose, or if modified, or if used by third parties, shall be at the user's sole risk.

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

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

6. References

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

———. 2006a. Letter to Mr. W.M. Calvert of Mission Valley Rock Company from Jerry Wickham, re: Fuel Leak Case No. RO0000207, Mission Valley Rock and Asphalt, 7999 Athenour Way, Sunol, California – Work Plan Approval. February 3.

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

———. 2006c. Letter to Lee Cover of Hanson Aggregates West Region from Jerry Wickham, re: Fuel Leak Case No. RO0000207, Mission Valley Rock and Asphalt, 7999 Athenour Way, Sunol, California – Work Plan Approval. November 3.

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Table 1
Groundwater Elevation Data (March 2-4, 2010)
Lehigh Hanson Sunol Facility Asphalt Plant
7999 Athenour Way, Sunol, California

Well	Top of Casing Elevation (feet MSL)	Date Measured	Depth to Water (feet TOC)	Groundwater Elevation (feet MSL)	Product Observation or Thickness (feet)
MW-1	258.68	3/2/10	1.83	256.85	ND
MW-2S	258.84	3/2/10	2.13	256.71	ND
MW-2M	258.99	3/2/10	2.40	256.59	ND
MW-2D	258.91	3/2/10	2.60	256.31	ND
MW-3	256.72	3/2/10	3.24	253.48	ND
MW-4S	259.14	3/2/10	3.14	256.00	Slight Gasoline Odor
MW-4D	259.22	3/3/10	3.41	255.81	Gasoline Odor
MW-5S	259.43	3/2/10	2.50	256.93	ND
MW-5D	259.40	3/2/10	2.79	256.61	ND
MW-6S	258.75	3/2/10	2.10	256.65	ND
MW-6D	259.27	3/2/10	3.13	256.14	Gasoline Odor
MW-7S	258.84	3/2/10	1.95	256.89	Gasoline Odor
MW-7D	258.8	3/4/10	1.23	257.57	Strong Gasoline Odor
MW-8	258.84	3/2/10	1.19	257.65	ND
MW-9S	258.41	3/4/10	0.50	257.91	ND
MW-9D	258.86	3/2/10	2.83	256.03	ND
MW-9LF	258.94	3/2/10	2.74	256.20	ND
MW-10S	260.67	3/2/10	4.21	256.46	ND
MW-10D	260.64	3/2/10	4.35	256.29	Gasoline Odor
MW-10LF	260.58	3/2/10	4.94	255.64	Gasoline Odor
MW-11S	258.96	3/2/10	2.54	256.42	ND
MW-11D	258.98	3/2/10	2.88	256.10	ND
MW-11LF	259.01	3/2/10	2.82	256.19	ND
MW-12S	262.69	3/2/10	4.2	258.49	ND
MW-12D	262.7	3/2/10	3.75	258.95	ND
MW-12LF	262.9	3/2/10	3.89	259.01	ND

Notes:
feet MSL = feet relative to mean sea level
feet TOC = feet below top of casing
ND = not detected

Table 2
Summary of Groundwater Analytical Results (March 2010)
Lehigh Hanson Sunol Facility Asphalt Plant
7999 Athenour Way, Sunol, California

Sample ID	Sample Date	Notes	TPHd (ug/l)	TPHg (ug/l)	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Xylenes (ug/l)	MTBE (ug/l)
MW-1	3/2/10		**150**	ND<51	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5
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-2M	3/3/10		**3,700**	**220**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**18**
MW-2D	3/3/10		**2,000**	**110**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**27**
MW-3	3/5/10		**1,500**	**72**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**44**
MW-4S	3/3/10		**360**	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5
MW-4D	3/3/10		**780**	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5
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-5D	3/4/10		**2,500**	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**0.84**
MW-6S	3/5/10		**1,400**	**270**	**2.2**	ND<0.5	**2.8**	ND<1.0	**31**
MW-6D	3/3/10		**1,100**	**66**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**39**
MW-7S	3/4/10		**2,000**	**280**	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<50	ND<50	**570**	**280**	ND<50
MW-8	3/2/10		**500**	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-9D	3/2/10		**160**	ND<51	ND<0.5	ND<0.5	**1.2**	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-10S	3/3/10		**1,300**	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5
MW-10D	3/3/10		**700**	**450**	ND<0.5	ND<0.5	**0.85**	ND<1.0	ND<0.5
MW-10LF	3/3/10		**460**	**320**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**1.2**
MW-11S	3/5/10		**460**	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**3.4**
MW-11S	3/5/10	D	**440**	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**3.3**
MW-11D	3/5/10		**6,700**	**450**	**1.2**	ND<0.5	**1.3**	ND<1.0	**11**
MW-11LF	3/5/10		**150**	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**110**
MW-12S	3/5/10		ND<51	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**0.51**
MW-12D	3/5/10		**60**	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5
MW-12LF	3/5/10		ND<51	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**0.77**
OXY-1S	3/5/10		**140**	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-1LF	3/4/10		**130**	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*

Table 2
Summary of Groundwater Analytical Results (March 2010)
Lehigh Hanson Sunol Facility Asphalt Plant
7999 Athenour Way, Sunol, California

Sample ID	Sample Date	Notes	TPHd (ug/l)	TPHg (ug/l)	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Xylenes (ug/l)	MTBE (ug/l)

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.
Boxed values indicate result exceeds the ESL.

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\Figure 2.dwg LAYOUT: 2 SAVED: 5/13/2010 1:34 PM ACADVER: 17.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: STANDARD.CTB PLOTTED: 5/13/2010 1:34 PM BY: REYES, ALEC
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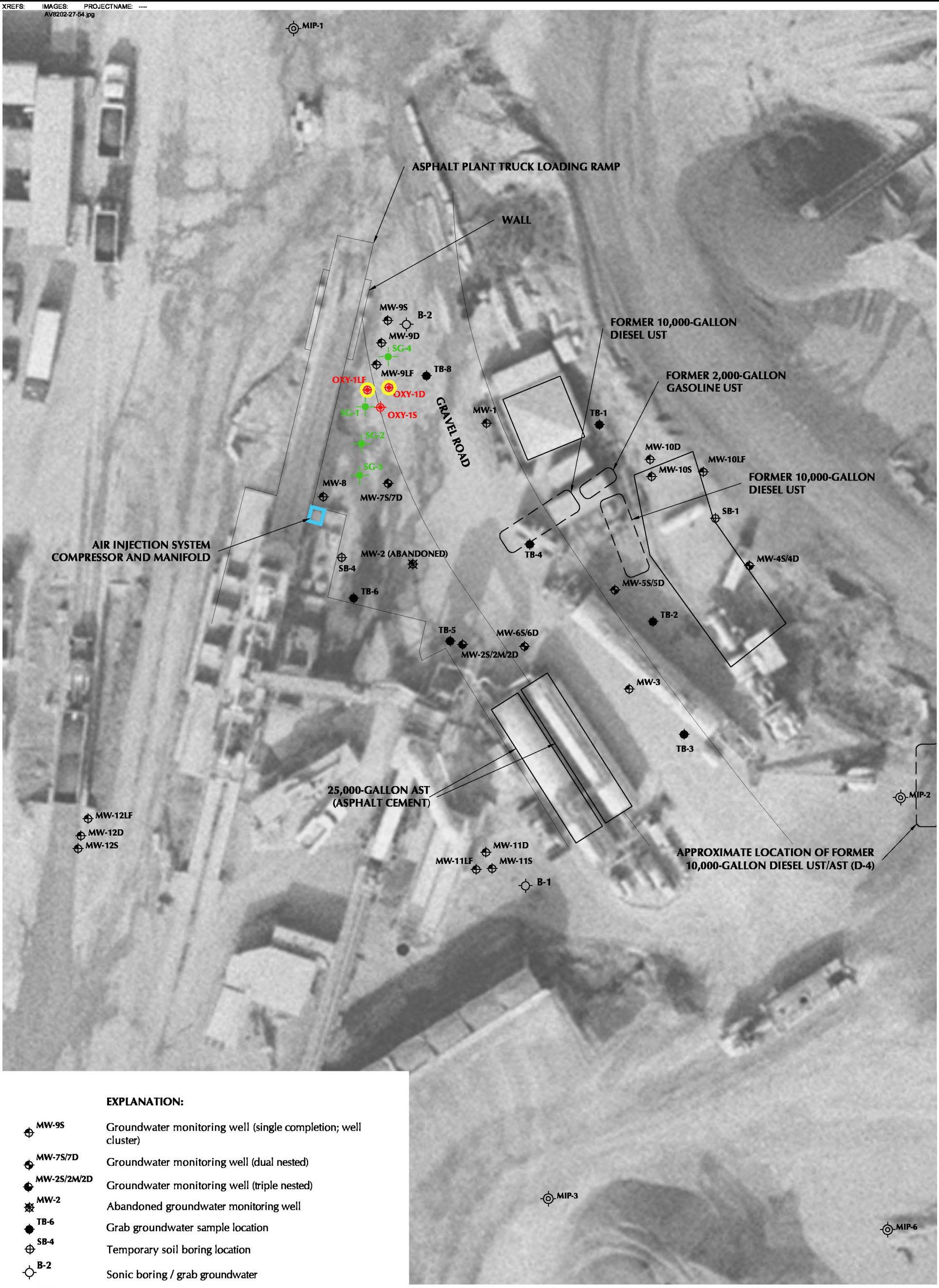

EXPLANATION:

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)
OXY-1S	Used for air injeciton

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\Figure 3 GWE Shallow Mar2010.dwg LAYOUT: 3 SAVED: 5/11/2010 4:24 PM ACADVER: 17.1S (LMS TECH) PAGESETUP: -- PLOTSTYLETABLE: ARCADIS.CTB PLOTTED: 5/12/2010 10:35 AM BY: REYES, ALEC
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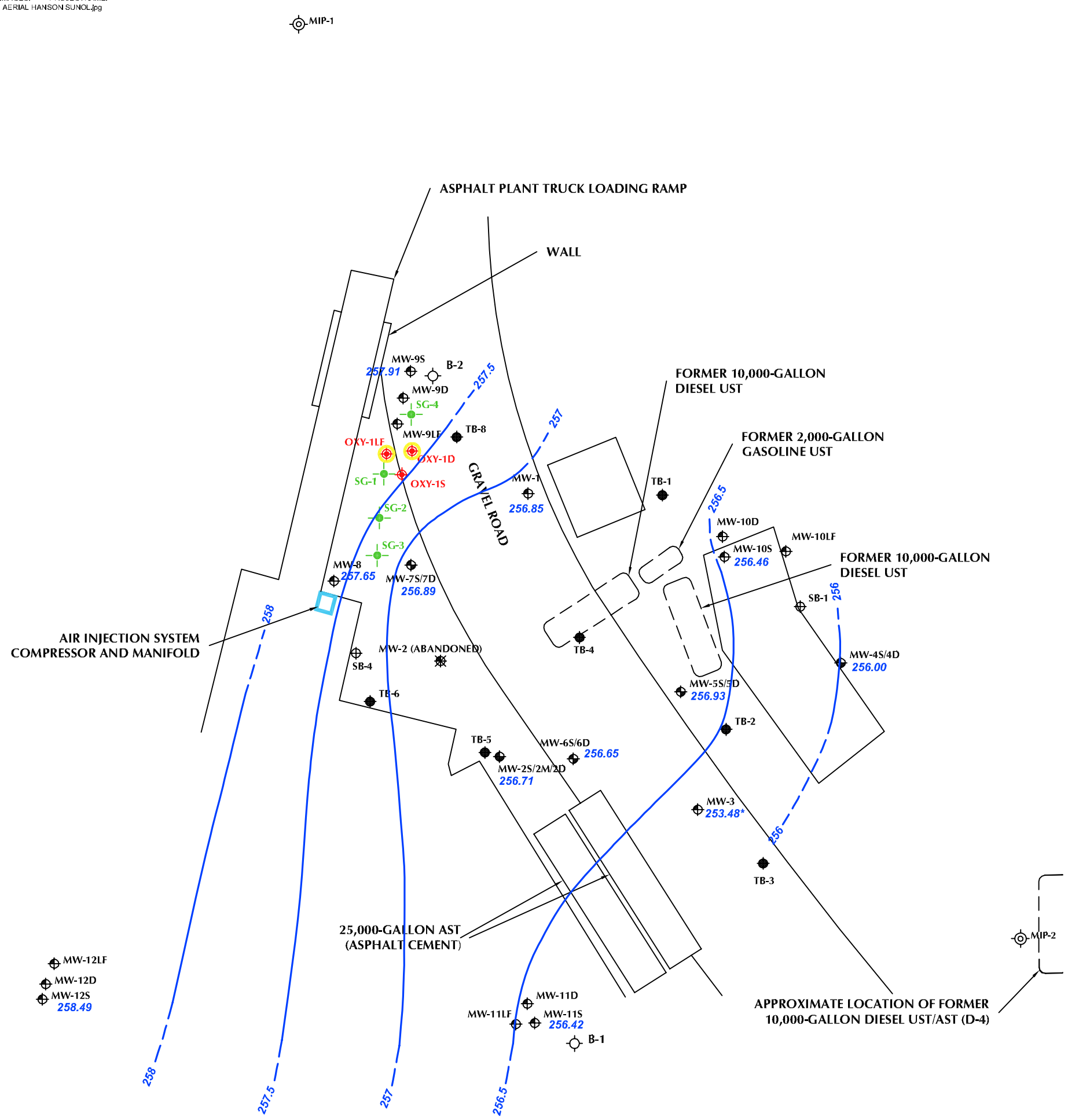


EXPLANATION:

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
SG-1	Soil gas monitoring probe (approximate location)
OXY-1S	Air injection well (approximate location)
OXY-1S	Used for air injection
258	Groundwater elevation contour (feet above mean sea level), dashed where inferred
256.89	Groundwater elevation (feet above mean sea level)
*	Not used in contouring

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

MIP-3

MIP-6

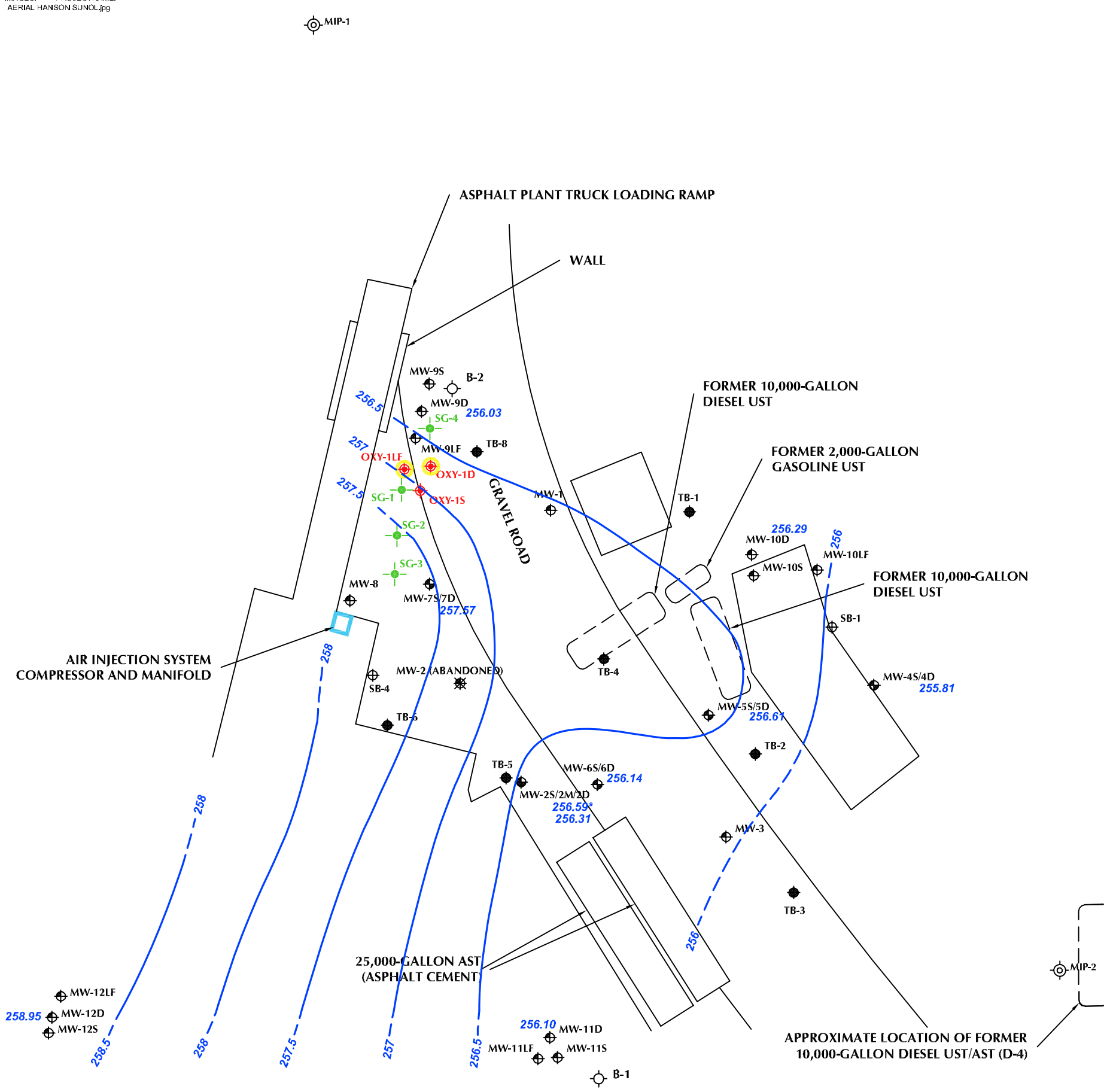
HANSON AGGREGATES, SUNOL, CALIFORNIA

GROUNDWATER ELEVATION CONTOURS FOR THE SHALLOW INTERVAL (MARCH 2 - 4, 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\Figure 4 GWE Deep Mar2010.dwg LAYOUT: 4 SAVED: 5/12/2010 10:40 AM ACADVER: 17.1S (LMS TECH) PAGESETUP: -- PLOTSTYLETABLE: ARCADIS.CTB PLOTTED: 5/12/2010 10:40 AM BY: REYES, ALEC
XREFS: IMAGES: PROJECTNAME: --
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)
OXY-1S	Used for air injection
258	Groundwater elevation contour (feet above mean sea level), dashed where inferred
257.57	Groundwater elevation (feet above mean sea level)
*	Not used in contouring

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

MIP-3

MIP-6

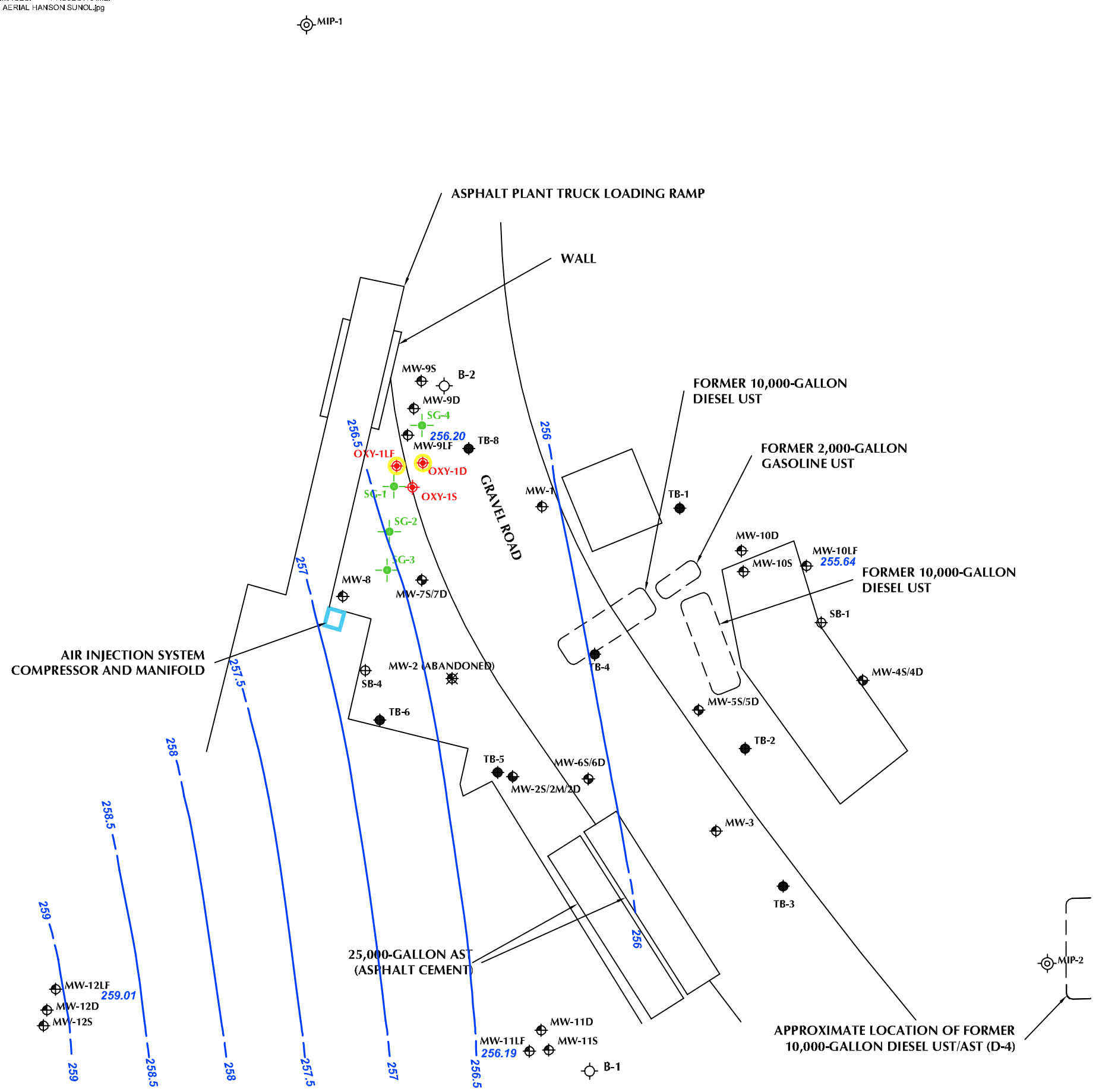
0 30 FEET
APPROXIMATE SCALE

HANSON AGGREGATES, SUNOL, CALIFORNIA

GROUNDWATER ELEVATION CONTOURS FOR THE DEEP INTERVAL (MARCH 2 - 4, 2010)

ARCADIS

FIGURE 4



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)
OXY-1S	Used for air injection
258	Groundwater elevation contour (feet above mean sea level), dashed where inferred
256.89	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 (MARCH 2 - 4, 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\Figure 6 TPH-MtBE Shallow Mar2010.dwg LAYOUT: 6 SAVED: 5/12/2010 11:20 AM ACADVER: 17.1S (LMS TECH) PAGESETUP: — PLOTSTYLETABLE: ARCADIS.CTB PLOTTED: 5/17/2010 11:39 AM BY: REYES, ALEC
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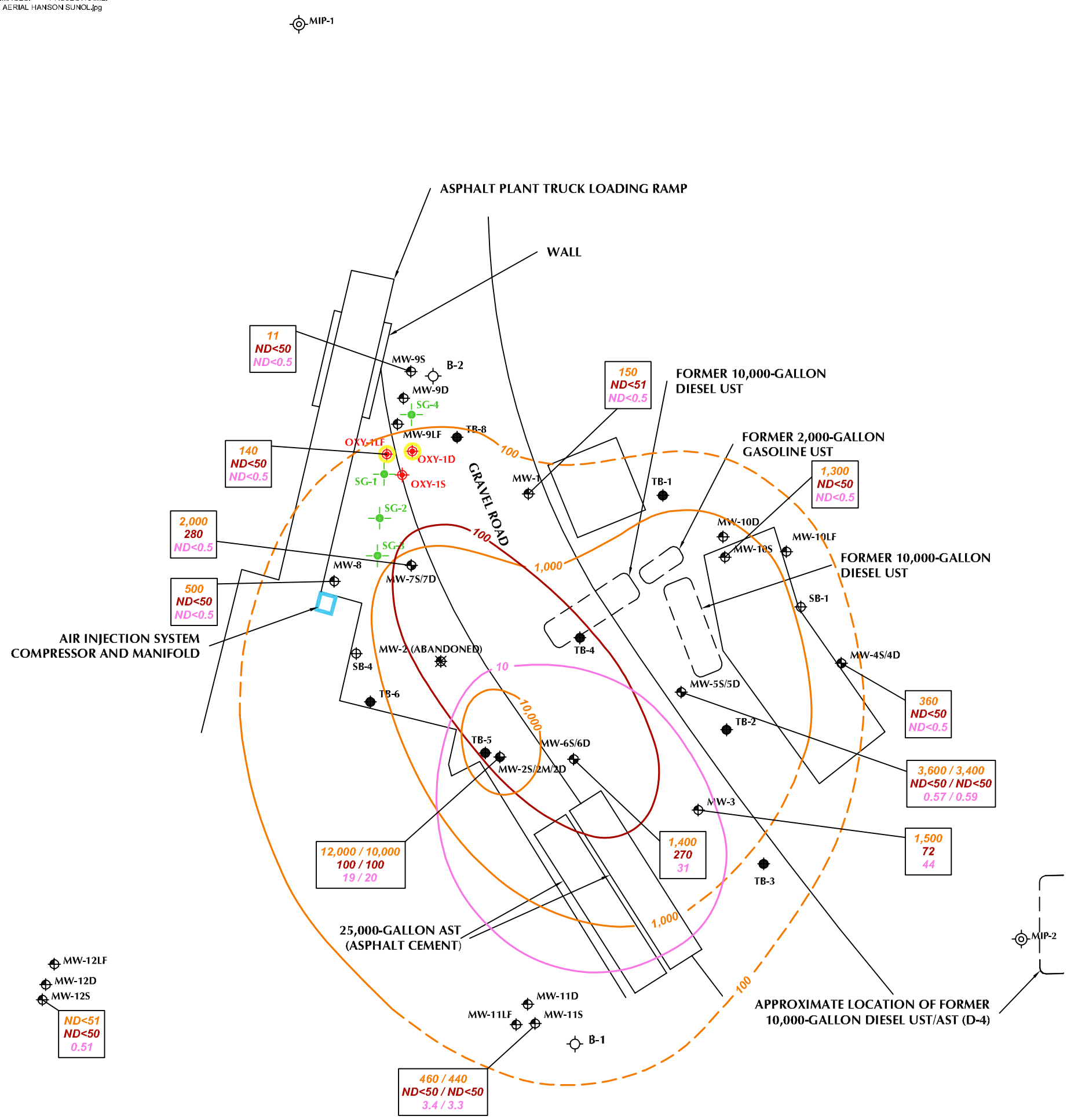

EXPLANATION:

- 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)
- OXY-1S — Used for air injection
- 360 / ND<50 / ND<0.5 — 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

N

0 30 FEET
APPROXIMATE SCALE

HANSON AGGREGATES, SUNOL, CALIFORNIA

CONCENTRATIONS OF TPHd, TPHg, AND MTBE IN GROUNDWATER FOR THE SHALLOW INTERVAL (MARCH 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\Figure 7 TPH-MtBE Deep Mar2010.dwg LAYOUT: 7 SAVED: 5/12/2010 11:20 AM ACADVER: 17.1S (LMS TECH) PAGESETUP: --- PLOTSTYLETABLE: ARCADIS.CTB PLOTTED: 5/17/2010 11:39 AM BY: REYES, ALEC
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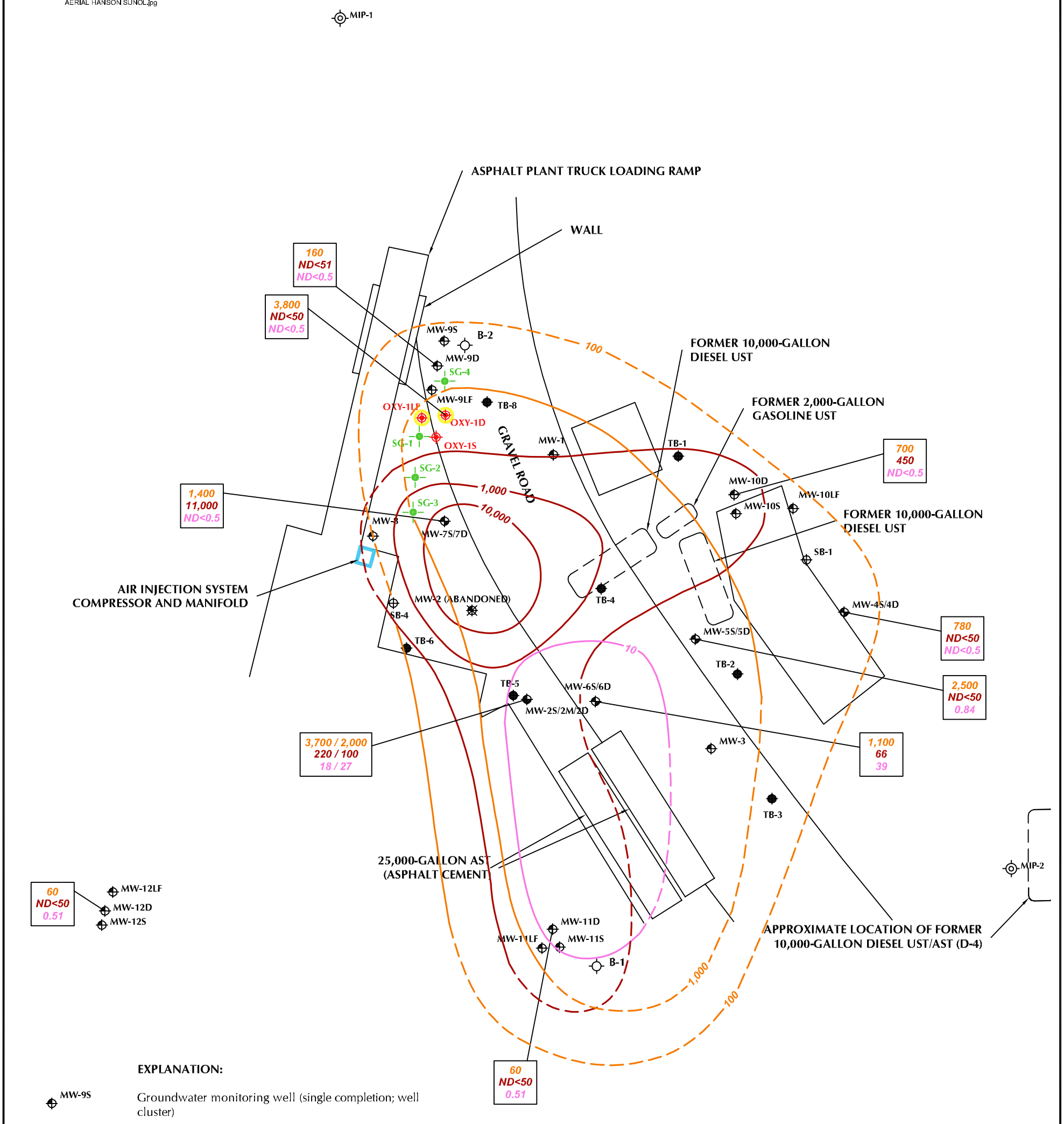

HANSON AGGREGATES, SUNOL, CALIFORNIA

CONCENTRATIONS OF TPHd, TPHg, AND MTBE IN GROUNDWATER FOR THE DEEP INTERVAL (MARCH 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\Figure 8 TPH-MtBE LivermoreMar2010.dwg LAYOUT: 8 SAVED: 5/17/2010 11:37 AM ACADVER: 17.1S (LMS TECH) PAGESETUP: -- PLOTSTYLETABLE: ARCADIS.CTB PLOTTED: 5/17/2010 11:38 AM BY: REYES, ALEC
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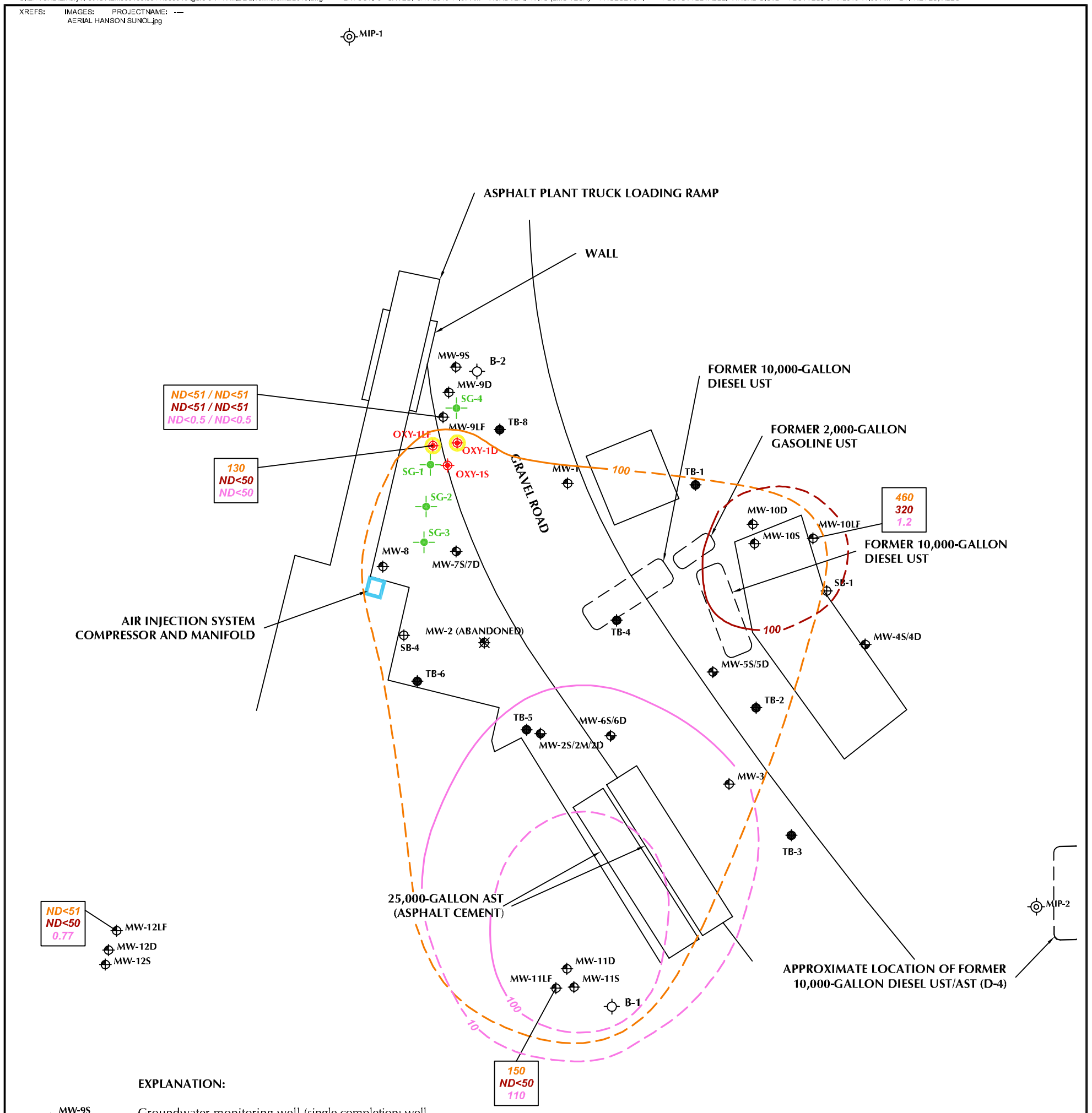

EXPLANATION:

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

150
ND<50
110

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

N

0 30 FEET
APPROXIMATE SCALE

MIP-3
MIP-6

HANSON AGGREGATES, SUNOL, CALIFORNIA

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

ARCADIS

FIGURE 8

ARCADIS

Appendix A

Historical Groundwater Elevation and Analytical Data

Table A1
Historical Groundwater Elevation Data
Lehigh Hanson Sunol Facility Asphalt Plant
7999 Athenour Way, Sunol, California

Well	Top of Casing Elevation (feet MSL)	Date Measured	Depth to Water (feet TOC)	Groundwater 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

Table A1
Historical Groundwater Elevation Data
Lehigh Hanson Sunol Facility Asphalt Plant
7999 Athenour Way, Sunol, California

Well	Top of Casing Elevation (feet MSL)	Date Measured	Depth to Water (feet TOC)	Groundwater Elevation (feet MSL)	Product Observation or Thickness (feet)
MW-1		5/6/09	3.39	255.29	ND
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-2	256.7	6/23/98	1.72	254.98	0.005
MW-2		1/5/99	2.69	254.01	4.00
MW-2		3/29/99	2.50	254.20	ND
MW-2		6/10/99	4.00	252.70	Sheen
MW-2		9/17/99	4.54	252.16	0.50
MW-2		12/27/99	3.85	252.85	0.13
MW-2		3/22/00	3.20	253.50	0.03
MW-2		6/30/00	4.62	252.08	0.02
MW-2		9/14/00	5.95	250.75	>0.01
MW-2		12/20/00	5.65	251.05	0.07
MW-2		3/22/01	3.21	253.49	0.10
MW-2		6/27/01	3.31	253.39	0.06
MW-2		9/21/01	7.08	249.62	0.34
MW-2		12/27/01	2.18	254.52	0.26
MW-2		3/29/02	3.40	253.30	0.90
MW-2		6/13/02	4.35	252.35	0.08
MW-2		9/27/02	5.54	251.16	ND
MW-2		12/3/02	4.30	252.40	ND
MW-2		3/31/03	1.78	254.92	ND
MW-2		6/27/03	3.10	253.60	ND
MW-2		9/19/03	5.02	251.68	ND
MW-2		1/5/05	Well abandoned		
MW-2S	258.84	1/17/05	4.25	254.59	ND
MW-2S		5/4/05	1.98	256.86	ND
MW-2S		8/12/05	5.46	253.38	ND
MW-2S		12/12/05	7.38	251.46	ND
MW-2S		3/2/06	2.24	256.60	ND
MW-2S		6/12/06	3.08	255.76	ND
MW-2S		9/5/06	7.01	251.83	ND
MW-2S		12/4/06	6.40	252.44	ND
MW-2S		2/26/07	3.52	255.32	ND
MW-2S		6/11/07	4.93	253.91	ND
MW-2S		9/11/07	6.45	252.39	ND

Table A1
Historical Groundwater Elevation Data
Lehigh Hanson Sunol Facility Asphalt Plant
7999 Athenour Way, Sunol, California

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

Table A1
Historical Groundwater Elevation Data
Lehigh Hanson Sunol Facility Asphalt Plant
7999 Athenour Way, Sunol, California

Well	Top of Casing Elevation (feet MSL)	Date Measured	Depth to Water (feet TOC)	Groundwater Elevation (feet MSL)	Product Observation or Thickness (feet)
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-3	256.72	6/23/98	2.66	254.06	ND
MW-3		1/5/99	4.47	252.25	Slight Odor
MW-3		3/29/99	3.96	252.76	Sheen
MW-3		6/10/99	5.54	251.18	ND
MW-3		9/17/99	6.18	250.54	Sheen
MW-3		12/27/99	5.52	251.20	Odor
MW-3		3/22/00	4.61	252.11	Odor
MW-3		6/30/00	6.35	250.37	Very Slight Odor
MW-3		9/14/00	7.30	249.42	Very Slight Odor
MW-3		12/20/00	7.29	249.43	ND
MW-3		3/22/01	4.73	251.99	ND
MW-3		6/27/01	-	-	-
MW-3		9/21/01	7.89	248.83	ND
MW-3		12/27/01	3.77	252.95	ND
MW-3		3/29/02	5.12	251.60	ND
MW-3		6/13/02	6.52	250.20	ND
MW-3		9/27/02	7.28	249.44	ND
MW-3		12/3/02	6.40	250.32	ND
MW-3		3/31/03	4.01	252.71	ND
MW-3		6/27/03	5.13	251.59	ND
MW-3		9/19/03	5.13	251.59	ND
MW-3		12/22/03	7.20	249.52	ND
MW-3	259.08	1/17/05	5.81	253.27	ND
MW-3		5/4/05	3.50	255.58	ND
MW-3		8/12/05	6.01	253.07	ND
MW-3		12/12/05	8.45	250.63	ND
MW-3		3/2/06	3.42	255.66	ND
MW-3		6/12/06	4.15	254.93	ND
MW-3		9/5/06	7.97	251.11	ND

Table A1
Historical Groundwater Elevation Data
Lehigh Hanson Sunol Facility Asphalt Plant
7999 Athenour Way, Sunol, California

Well	Top of Casing Elevation (feet MSL)	Date Measured	Depth to Water (feet TOC)	Groundwater Elevation (feet MSL)	Product Observation or Thickness (feet)
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-4S	259.14	1/17/05	4.62	254.52	ND
MW-4S		5/4/05	3.73	255.41	ND
MW-4S		8/12/05	3.45	255.69	ND
MW-4S		12/12/05	5.48	253.66	ND
MW-4S		3/2/06	3.10	256.04	ND
MW-4S		6/12/06	4.10	255.04	ND
MW-4S		9/5/06	3.90	255.24	ND
MW-4S		12/4/06	4.05	255.09	ND
MW-4S		2/26/07	3.40	255.74	ND
MW-4S		6/11/07	4.75	254.39	ND
MW-4S		9/11/07	4.77	254.37	ND
MW-4S		12/10/07	5.35	253.79	ND
MW-4S		3/10/08	3.20	255.94	ND
MW-4S		6/9/08	4.11	255.03	ND
MW-4S		9/8/08	4.60	254.54	ND
MW-4S		12/8/08	5.25	253.89	ND
MW-4S		3/9/09	4.10	255.04	ND
MW-4S		6/9/09	4.80	254.34	ND
MW-4S		9/21/09	4.98	254.16	ND
MW-4S		3/2/10	3.14	256.00	Slight Gasoline Odor
MW-4D	259.22	1/17/05	5.96	253.26	ND
MW-4D		5/4/05	3.93	255.29	ND
MW-4D		8/12/05	5.60	253.62	ND
MW-4D		12/12/05	8.50	250.72	ND
MW-4D		3/2/06	3.63	255.59	ND
MW-4D		6/12/06	4.51	254.71	ND

Table A1
Historical Groundwater Elevation Data
Lehigh Hanson Sunol Facility Asphalt Plant
7999 Athenour Way, Sunol, California

Well	Top of Casing Elevation (feet MSL)	Date Measured	Depth to Water (feet TOC)	Groundwater Elevation (feet MSL)	Product Observation or Thickness (feet)
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		3/3/10	3.41	255.81	Gasoline Odor
MW-5S	259.43	1/17/05	4.57	254.86	ND
MW-5S		5/4/05	2.50	256.93	ND
MW-5S		8/12/05	5.30	254.13	ND
MW-5S		12/12/05	7.68	251.75	ND
MW-5S		3/2/06	1.42	258.01	ND
MW-5S		6/12/06	3.73	255.70	ND
MW-5S		9/5/06	7.02	252.41	ND
MW-5S		12/4/06	6.31	253.12	ND
MW-5S		2/26/07	3.06	256.37	ND
MW-5S		6/11/07	5.10	254.33	ND
MW-5S		9/11/07	6.49	252.94	ND
MW-5S		12/10/07	6.84	252.59	ND
MW-5S		3/10/08	3.34	256.09	ND
MW-5S		6/9/08	4.44	254.99	ND
MW-5S		9/8/08	5.44	253.99	ND
MW-5S		12/8/08	7.03	252.40	ND
MW-5S		3/9/09	3.50	255.93	ND
MW-5S		6/9/09	4.83	254.60	ND
MW-5S		9/21/09	5.27	254.16	ND
MW-5S		3/2/10	2.50	256.93	ND
MW-5D	259.40	1/17/05	5.15	254.25	ND
MW-5D		5/4/05	2.75	256.65	ND
MW-5D		8/12/05	5.60	253.80	ND
MW-5D		12/12/05	7.92	251.48	ND
MW-5D		3/2/06	1.98	257.42	ND

Table A1
Historical Groundwater Elevation Data
Lehigh Hanson Sunol Facility Asphalt Plant
7999 Athenour Way, Sunol, California

Well	Top of Casing Elevation (feet MSL)	Date Measured	Depth to Water (feet TOC)	Groundwater Elevation (feet MSL)	Product Observation or Thickness (feet)
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-6S	258.75	1/17/05	4.30	254.45	ND
MW-6S		5/4/05	1.96	256.79	ND
MW-6S		8/12/05	5.17	253.58	ND
MW-6S		12/12/05	7.48	251.27	ND
MW-6S		3/2/06	1.95	256.80	ND
MW-6S		6/12/06	3.10	255.65	ND
MW-6S		9/5/06	6.94	251.81	ND
MW-6S		12/4/06	6.30	252.45	ND
MW-6S		2/26/07	3.44	255.31	ND
MW-6S		6/11/07	4.80	253.95	ND
MW-6S		9/11/07	6.32	252.43	ND
MW-6S		12/10/07	6.52	252.23	ND
MW-6S		3/10/08	2.89	255.86	ND
MW-6S		6/9/08	4.00	254.75	ND
MW-6S		9/8/08	5.40	253.35	ND
MW-6S		12/8/08	6.95	251.80	ND
MW-6S		3/9/09	3.30	255.45	ND
MW-6S		6/10/09	4.40	254.35	ND
MW-6S		9/21/09	4.96	253.79	ND
MW-6S		3/2/10	2.10	256.65	ND
MW-6D	259.27	1/17/05	5.17	254.10	ND
MW-6D		5/4/05	2.80	256.47	ND
MW-6D		8/12/05	6.30	252.97	ND
MW-6D		12/12/05	8.32	250.95	ND

Table A1
Historical Groundwater Elevation Data
Lehigh Hanson Sunol Facility Asphalt Plant
7999 Athenour Way, Sunol, California

Well	Top of Casing Elevation (feet MSL)	Date Measured	Depth to Water (feet TOC)	Groundwater Elevation (feet MSL)	Product Observation or Thickness (feet)
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-7S	258.82	1/17/05	3.42	255.40	ND
MW-7S		5/4/05	1.44	257.38	ND
MW-7S		8/12/05	4.80	254.02	ND
MW-7S		12/12/05	6.64	252.18	ND
MW-7S		3/2/06	0.95	257.87	ND
MW-7S	258.84	6/12/06	2.55	256.29	ND
MW-7S		9/5/06	6.30	252.54	ND
MW-7S		12/4/06	5.60	253.24	ND
MW-7S		2/26/07	2.61	256.23	ND
MW-7S		6/11/07	4.32	254.52	ND
MW-7S		9/11/07	5.76	253.08	ND
MW-7S		12/10/07	5.62	253.22	ND
MW-7S		3/10/08	2.15	256.69	ND
MW-7S		6/9/08	3.51	255.33	ND
MW-7S		9/8/08	4.80	254.04	ND
MW-7S		12/8/08	6.20	252.64	ND
MW-7S		3/9/09	2.75	256.09	ND
MW-7S		5/6/09	3.32	255.52	ND
MW-7S		6/8/09	2.90	255.94	ND
MW-7S		7/14/09	4.83	254.01	ND
MW-7S		9/21/09	4.67	254.17	ND
MW-7S		12/17/09	5.32	253.52	ND
MW-7S		3/2/10	1.95	256.89	Gasoline Odor

Table A1
Historical Groundwater Elevation Data
Lehigh Hanson Sunol Facility Asphalt Plant
7999 Athenour Way, Sunol, California

Well	Top of Casing Elevation (feet MSL)	Date Measured	Depth to Water (feet TOC)	Groundwater Elevation (feet MSL)	Product Observation or Thickness (feet)
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		3/4/10	1.23	257.57	Strong Gasoline 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

Table A1
Historical Groundwater Elevation Data
Lehigh Hanson Sunol Facility Asphalt Plant
7999 Athenour Way, Sunol, California

Well	Top of Casing Elevation (feet MSL)	Date Measured	Depth to Water (feet TOC)	Groundwater Elevation (feet MSL)	Product Observation or Thickness (feet)
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-9S	258.41	6/12/06	2.14	256.27	ND
MW-9S		9/5/06	5.92	252.49	ND
MW-9S		12/4/06	5.21	253.20	ND
MW-9S		2/26/07	3.28	255.13	ND
MW-9S		6/11/07	3.70	254.71	ND
MW-9S		9/11/07	5.26	253.15	ND
MW-9S		12/10/07	5.06	253.35	ND
MW-9S		3/10/08	1.55	256.86	ND
MW-9S		6/9/08	3.00	255.41	ND
MW-9S		9/8/08	4.29	254.12	ND
MW-9S		12/8/08	5.65	252.76	Odor
MW-9S		3/9/09	2.25	256.16	Odor
MW-9S		5/6/09	2.48	255.93	ND
MW-9S		6/8/09	4.10	254.31	ND
MW-9S		6/8/09	4.10	254.31	ND
MW-9S		7/15/09	4.35	254.06	ND
MW-9S		9/21/09	4.52	253.89	ND
MW-9S		12/17/09	4.60	253.81	ND
MW-9S		3/4/10	0.50	257.91	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

Table A1
Historical Groundwater Elevation Data
Lehigh Hanson Sunol Facility Asphalt Plant
7999 Athenour Way, Sunol, California

Well	Top of Casing Elevation (feet MSL)	Date Measured	Depth to Water (feet TOC)	Groundwater Elevation (feet MSL)	Product Observation or Thickness (feet)
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-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
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-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

Table A1
Historical Groundwater Elevation Data
Lehigh Hanson Sunol Facility Asphalt Plant
7999 Athenour Way, Sunol, California

Well	Top of Casing Elevation (feet MSL)	Date Measured	Depth to Water (feet TOC)	Groundwater Elevation (feet MSL)	Product Observation or Thickness (feet)
MW-10S		3/2/10	4.21	256.46	ND
MW-10D	260.64	6/12/06	5.42	255.22	ND
MW-10D		9/5/06	8.92	251.72	ND
MW-10D		12/4/06	8.18	252.46	ND
MW-10D		2/26/07	5.40	255.24	ND
MW-10D		6/11/07	7.13	253.51	ND
MW-10D		9/11/07	8.50	252.14	ND
MW-10D		12/10/07	8.81	251.83	ND
MW-10D		3/10/08	4.99	255.65	ND
MW-10D		6/9/08	6.17	254.47	ND
MW-10D		9/8/08	7.45	253.19	ND
MW-10D		12/8/08	8.88	251.76	Odor
MW-10D		3/9/09	5.45	255.19	Odor
MW-10D		6/10/09	6.70	253.94	ND
MW-10D		9/21/09	7.09	253.55	ND
MW-10D		3/2/10	4.35	256.29	Gasoline Odor
MW-10LF	260.58	6/12/06	5.99	254.59	ND
MW-10LF		9/5/06	9.65	250.93	ND
MW-10LF		12/4/06	9.02	251.56	ND
MW-10LF		2/26/07	6.23	254.35	ND
MW-10LF		6/11/07	7.86	252.72	ND
MW-10LF		9/11/07	9.24	251.34	ND
MW-10LF		12/10/07	9.73	250.85	ND
MW-10LF		3/10/08	5.65	254.93	ND
MW-10LF		6/9/08	6.71	253.87	ND
MW-10LF		9/8/08	8.08	252.50	ND
MW-10LF		12/8/08	9.75	250.83	Odor
MW-10LF		3/9/09	6.20	254.38	Odor
MW-10LF		6/10/09	7.15	253.43	ND
MW-10LF		9/21/09	7.77	252.81	ND
MW-10LF		3/2/10	4.94	255.64	Gasoline Odor
MW-11S	258.96	6/12/06	3.69	255.27	ND
MW-11S		9/5/06	7.69	251.27	ND
MW-11S		12/4/06	7.28	251.68	ND
MW-11S		2/26/07	4.20	254.76	ND
MW-11S		6/11/07	5.72	253.24	ND
MW-11S		9/11/07	7.10	251.86	ND
MW-11S		12/10/07	7.27	251.69	ND

Table A1
Historical Groundwater Elevation Data
Lehigh Hanson Sunol Facility Asphalt Plant
7999 Athenour Way, Sunol, California

Well	Top of Casing Elevation (feet MSL)	Date Measured	Depth to Water (feet TOC)	Groundwater Elevation (feet MSL)	Product Observation or Thickness (feet)
MW-11S		3/10/08	3.31	255.65	ND
MW-11S		6/9/08	4.50	254.46	ND
MW-11S		9/8/08	5.80	253.16	ND
MW-11S		12/8/08	7.50	251.46	ND
MW-11S		3/9/09	3.76	255.20	ND
MW-11S		6/9/09	4.75	254.21	ND
MW-11S		9/21/09	5.29	253.67	ND
MW-11S		3/2/10	2.54	256.42	ND
MW-11D	258.98	6/12/06	3.70	255.28	ND
MW-11D		9/5/06	8.50	250.48	ND
MW-11D		12/4/06	7.65	251.33	ND
MW-11D		2/26/07	4.48	254.50	Sheen
MW-11D		6/11/07	6.14	252.84	Sheen
MW-11D		9/11/07	8.08	250.90	Sheen
MW-11D		12/10/07	7.75	251.23	ND
MW-11D		3/10/08	3.56	255.42	ND
MW-11D		6/9/08	4.84	254.14	ND
MW-11D		9/8/08	6.35	252.63	ND
MW-11D		12/8/08	8.35	250.63	ND
MW-11D		3/9/09	4.26	254.72	ND
MW-11D		6/10/09	4.92	254.06	ND
MW-11D		9/21/09	5.59	253.39	ND
MW-11D		3/2/10	2.88	256.10	ND
MW-11LF	259.01	6/12/06	3.90	255.11	ND
MW-11LF		9/5/06	7.84	251.17	ND
MW-11LF		12/4/06	7.75	251.26	ND
MW-11LF		2/26/07	4.69	254.32	ND
MW-11LF		6/11/07	6.15	252.86	ND
MW-11LF		9/11/07	7.70	251.31	ND
MW-11LF		12/10/07	7.92	251.09	ND
MW-11LF		3/10/08	3.65	255.36	ND
MW-11LF		6/9/08	4.89	254.12	ND
MW-11LF		9/8/08	6.49	252.52	ND
MW-11LF		12/8/08	8.30	250.71	ND
MW-11LF		3/9/09	4.25	254.76	ND
MW-11LF		6/9/09	5.13	253.88	ND
MW-11LF		9/21/09	5.84	253.17	ND
MW-11LF		3/2/10	2.82	256.19	ND

Table A1
Historical Groundwater Elevation Data
Lehigh Hanson Sunol Facility Asphalt Plant
7999 Athenour Way, Sunol, California

Well	Top of Casing Elevation (feet MSL)	Date Measured	Depth to Water (feet TOC)	Groundwater Elevation (feet MSL)	Product Observation or Thickness (feet)
MW-12S	262.69	6/12/06	5.77	256.92	ND
MW-12S		9/5/06	10.51	252.18	ND
MW-12S		12/4/06	10.00	252.69	ND
MW-12S		2/26/07	6.45	256.24	ND
MW-12S		6/11/07	7.95	254.74	ND
MW-12S		9/11/07	9.54	253.15	ND
MW-12S		12/10/07	8.95	253.74	ND
MW-12S		3/10/08	4.90	257.79	ND
MW-12S		6/9/08	6.62	256.07	ND
MW-12S		9/8/08	8.27	254.42	ND
MW-12S		12/8/08	10.09	252.60	ND
MW-12S		3/9/09	5.84	256.85	ND
MW-12S		6/9/09	7.00	255.69	ND
MW-12S		9/21/09	7.35	255.34	ND
MW-12S		3/2/10	4.20	258.49	ND
MW-12D	262.70	6/12/06	5.69	257.01	ND
MW-12D		9/5/06	10.40	252.30	ND
MW-12D		12/4/06	9.94	252.76	ND
MW-12D		2/26/07	6.47	256.23	ND
MW-12D		6/11/07	7.96	254.74	ND
MW-12D		9/11/07	9.45	253.25	ND
MW-12D		12/10/07	8.74	253.96	ND
MW-12D		3/10/08	4.65	258.05	ND
MW-12D		6/9/08	6.42	256.28	ND
MW-12D		9/8/08	8.15	254.55	ND
MW-12D		12/8/08	10.00	252.70	ND
MW-12D		3/9/09	5.62	257.08	ND
MW-12D		6/9/09	6.80	255.90	ND
MW-12D		9/21/09	7.02	255.68	ND
MW-12D		3/2/10	3.75	258.95	ND
MW-12LF	262.90	6/12/06	5.92	256.98	ND
MW-12LF		9/5/06	10.69	252.21	ND
MW-12LF		12/4/06	10.25	252.65	ND
MW-12LF		2/26/07	6.65	256.25	ND
MW-12LF		6/11/07	8.10	254.80	ND
MW-12LF		9/11/07	9.71	253.19	ND
MW-12LF		12/10/07	9.02	253.88	ND
MW-12LF		3/10/08	4.85	258.05	ND
MW-12LF		6/9/08	6.65	256.25	ND

Table A1
Historical Groundwater Elevation Data
Lehigh Hanson Sunol Facility Asphalt Plant
7999 Athenour Way, Sunol, California

Well	Top of Casing Elevation (feet MSL)	Date Measured	Depth to Water (feet TOC)	Groundwater Elevation (feet MSL)	Product Observation or Thickness (feet)
MW-12LF		9/8/08	8.32	254.58	ND
MW-12LF		12/8/08	10.25	252.65	ND
MW-12LF		3/9/09	5.82	257.08	ND
MW-12LF		6/9/09	7.05	255.85	ND
MW-12LF		9/21/09	7.22	255.68	ND
MW-12LF		3/2/10	3.89	259.01	ND

Notes:
feet MSL = feet relative to mean sea level
feet TOC = feet below top of casing
ND = not detected

Table A2
Historical Groundwater Analytical Results (Organic 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

Table A2
Historical Groundwater Analytical Results (Organic 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	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-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 A2
Historical Groundwater Analytical Results (Organic 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	Well abandoned									
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-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

Table A2
Historical Groundwater Analytical Results (Organic Compounds)
Lehigh Hanson Sunol Facility Asphalt Plant
7999 Athenour Way, Sunol, California

Well	Sample Date	Notes	TPHd (ug/l)	TPHg (ug/l)	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Xylenes (ug/l)	MTBE (ug/l)	TAME (ug/l)	TBA (ug/l)
MW-2M	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-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 A2
Historical Groundwater Analytical Results (Organic 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-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

Table A2
Historical Groundwater Analytical Results (Organic Compounds)
Lehigh Hanson Sunol Facility Asphalt Plant
7999 Athenour Way, Sunol, California

Well	Sample Date	Notes	TPHd (ug/l)	TPHg (ug/l)	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Xylenes (ug/l)	MTBE (ug/l)	TAME (ug/l)	TBA (ug/l)
MW-3	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-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 A2
Historical Groundwater Analytical Results (Organic 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-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-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

Table A2
Historical Groundwater Analytical Results (Organic 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-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-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
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

Table A2
Historical Groundwater Analytical Results (Organic 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	9/21/09		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**2.6**	ND<2.0	ND<10
MW-5D	3/4/10		**2,500**	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**0.84**	-	-
MW-6S	1/17/05		**2,800**	**1,600**	**6.1**	ND<0.5	**3.6**	**2.3**	**160**	ND<2.0	ND<10
MW-6S	5/4/05		ND<50	**750**	ND<0.5	ND<0.5	**3.0**	ND<0.5	**160**	ND<2.0	ND<10
MW-6S	8/12/05		**1,300**	**1,100**	ND<0.5	ND<0.5	ND<0.5	ND<0.5	**410**	ND<2.0	ND<10
MW-6S	12/12/05		ND<50	**1,000**	ND<0.5	ND<0.5	**1.4**	ND<1.0	**190**	ND<2.0	ND<10
MW-6S	3/3/06		ND<50	**940**	ND<0.5	ND<0.5	**4.9**	ND<1.0	**60**	ND<2.0	ND<10
MW-6S	6/14/06		**1,300**	**650**	ND<0.5	**1.7**	**1.9**	**2.0**	ND<1.0	ND<2.0	ND<10
MW-6S	9/6/06		**2,400**	**750**	ND<0.5	ND<0.5	**0.7**	**0.5**	**200**	ND<2.0	ND<10
MW-6S	12/5/06		**2,600**	**1,000**	ND<0.5	ND<0.5	**1.2**	ND<1.0	**110**	ND<2.0	ND<10
MW-6S	2/27/07		**3,000**	**1,100**	**0.79**	ND<0.5	**1.1**	ND<1.0	**54**	ND<2.0	ND<10
MW-6S	6/12/07		**490**	**1,200**	ND<0.5	ND<0.5	**1.6**	ND<1.0	**47**	ND<2.0	ND<10
MW-6S	9/11/07		**930**	**370**	ND<0.5	ND<0.5	**1.3**	ND<1.0	**48**	ND<2.0	ND<10
MW-6S	12/11/07		**5,200**	**680**	**1.3**	ND<0.5	**12**	**1.1**	**28**	ND<2.0	ND<10
MW-6S	3/11/08		**770**	**1,400**	**13**	**1.6**	**210**	**21**	**5.3**	ND<2.0	ND<10
MW-6S	6/10/08		**5,600**	**690**	ND<0.5	ND<0.5	**22**	**1.8**	**23**	ND<2.0	ND<10
MW-6S	9/9/08		**3,200**	**460**	ND<0.5	ND<0.5	**2.5**	ND<1	**48**	ND<2.0	ND<10
MW-6S	12/9/08		**1,300**	**220**	ND<0.5	ND<0.5	ND<0.5	ND<1	ND<1.0	ND<2.0	ND<10
MW-6S	3/9/09		**270**	**290**	ND<0.5	ND<0.5	**0.96**	ND<1	**100**	ND<2.0	ND<10
MW-6S	6/10/09		**1,800**	**260**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**61**	ND<2.0	ND<10
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-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

Table A2
Historical Groundwater Analytical Results (Organic 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-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-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
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

Table A2
Historical Groundwater Analytical Results (Organic 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	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-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		**2700**	**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-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

Table A2
Historical Groundwater Analytical Results (Organic 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	8/12/05		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<2.0	ND<10
MW-8	12/12/05		**830**	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-8	3/3/06		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-8	6/12/06		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-8	9/7/06		ND<50	ND<50	ND<0.5	**3.3**	ND<0.5	**5.5**	ND<1.0	ND<2.0	ND<10
MW-8	12/4/06		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-8	2/26/07		ND<500	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-8	6/11/07		ND<500	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-8	9/10/07		ND<500	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-8	12/10/07		ND<500	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-8	1/22/08		**530**	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	-	-
MW-8	2/18/08		**450**	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	-	-
MW-8	3/10/08		ND<50	**54**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-8	6/9/08		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-8	9/8/08		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-8	12/8/08		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-8	3/10/09		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-8	5/6/09		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	-	-
MW-8	6/8/09		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<1.0	ND<2.0	ND<10
MW-8	7/14/09		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
MW-8	7/14/09	D	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
MW-8	9/23/09	NS	-	-	-	-	-	-	-	-	-
MW-8	12/17/09		**280**	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
MW-8	3/2/10		**500**	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	-	-
MW-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

Table A2
Historical Groundwater Analytical Results (Organic Compounds)
Lehigh Hanson Sunol Facility Asphalt Plant
7999 Athenour Way, Sunol, California

Well	Sample Date	Notes	TPHd (ug/l)	TPHg (ug/l)	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Xylenes (ug/l)	MTBE (ug/l)	TAME (ug/l)	TBA (ug/l)
MW-9S	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-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	-	-

Table A2
Historical Groundwater Analytical Results (Organic Compounds)
Lehigh Hanson Sunol Facility Asphalt Plant
7999 Athenour Way, Sunol, California

Well	Sample Date	Notes	TPHd (ug/l)	TPHg (ug/l)	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Xylenes (ug/l)	MTBE (ug/l)	TAME (ug/l)	TBA (ug/l)
MW-9D	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<51	ND<0.5	ND<0.5	**1.2**	ND<1.0	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
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-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

Table A2
Historical Groundwater Analytical Results (Organic 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-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-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-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

Table A2
Historical Groundwater Analytical Results (Organic 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	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**	-	-
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**	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-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

Table A2
Historical Groundwater Analytical Results (Organic 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-11D	9/6/06		**210,000**	**33,000**	**25**	**30**	**28**	**97**	**31**	ND<2.0	ND<10
MW-11D	12/6/06		**190,000**	**2,100**	**15**	**23**	**29**	**101**	**19**	ND<2.0	ND<10
MW-11D	2/28/07		**13,000**	**7,400**	**8.4**	**16**	**17**	**54**	**18**	ND<2.0	ND<10
MW-11D	6/13/07		**6,700**	**11,000**	**6.2**	**7**	**13**	**39**	**15**	ND<2.0	ND<10
MW-11D	9/12/07		**21,000**	**3,000**	**3.6**	**4**	**7.9**	**22**	**8.5**	ND<2.0	ND<10
MW-11D	12/12/07		**48,000**	**7,700**	**3**	**3**	**11**	**30**	**7**	ND<2.0	ND<10
MW-11D	3/12/08		**63,000**	**37,000**	**2.2**	**0.82**	**7**	**20.4**	**8.9**	ND<2.0	**21**
MW-11D	6/10/08		**60,000**	**2,700**	**2.5**	**0.74**	**6.2**	**15.4**	**13**	ND<2.0	ND<10
MW-11D	9/8/08		**100,000**	**6,000**	**4.4**	**1.1**	**11**	**21.5**	**13**	ND<2.0	ND<10
MW-11D	12/9/08		**40,000**	**1,200**	**1.5**	ND<0.5	**4.5**	**9.2**	ND<1.0	ND<2.0	ND<10
MW-11D	3/10/09		**100,000**	**23,000**	**1.8**	ND<0.5	**5.7**	**9**	**15**	ND<2.0	ND<10
MW-11D	6/10/09		**50,000**	ND<50	**2.8**	ND<0.5	**4.2**	**5.81**	**10**	ND<2.0	ND<10
MW-11D	9/22/09		**6,800**	**500**	**1.3**	ND<0.5	**2.2**	**3.22**	**15**	ND<2.0	ND<10
MW-11D	3/5/10		**6,700**	**450**	**1.2**	ND<0.5	**1.3**	ND<1.0	**11**	-	-
MW-11LF	5/5/06		ND<50	**1,300**	ND<0.5	ND<0.5	ND<0.5	**3**	**250**	ND<2.0	ND<10
MW-11LF	6/14/06		**1,100**	**99**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**240**	ND<2.0	ND<10
MW-11LF	9/6/06		**5,300**	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**160**	ND<2.0	ND<10
MW-11LF	12/4/06		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**240**	ND<2.0	ND<10
MW-11LF	2/27/07		ND<500	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**110**	ND<2.0	ND<10
MW-11LF	6/11/07		ND<500	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**110**	ND<2.0	ND<10
MW-11LF	9/10/07		ND<500	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**190**	ND<2.0	**13**
MW-11LF	12/10/07		ND<500	**120**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**86**	ND<2.0	ND<10
MW-11LF	3/10/08		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**92**	ND<2.0	**30**
MW-11LF	6/9/08		ND<50	**120**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**150**	ND<2.0	ND<10
MW-11LF	9/8/08		ND<50	**95**	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**170**	ND<2.0	**100**
MW-11LF	12/8/08		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**260**	ND<2.0	ND<10
MW-11LF	3/10/09		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**200**	ND<2.0	ND<10
MW-11LF	6/9/09		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**160**	ND<2.0	ND<10
MW-11LF	9/22/09		ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**210**	ND<2.0	ND<10
MW-11LF	3/5/10		**150**	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	**110**	-	-
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

Table A2
Historical Groundwater Analytical Results (Organic 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	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
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-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	-	-

Table A2
Historical Groundwater Analytical Results (Organic 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-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**	-	-
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-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-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	-	-

Table A2
Historical Groundwater Analytical Results (Organic 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	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	-	-
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 = tertiary amyl methyl ether
TBA = tertiary butyl alcohol
ug/l = micrograms per liter
ND = not detected above given laboratory reporting limit
D = duplicate sample
NS = well not sampled
Dash indicates not analyzed for given compound, or no ESL available
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.

Table A3
Historical Groundwater Analytical Results
(Inorganic Compounds Monitored During AIS Operation)
Lehigh Hanson Sunol Facility Asphalt Plant
7999 Athenour Way, Sunol, California

Well	Sample Date	Notes	DO (mg/l)	ORP (mV)	Ferrous Iron $Fe2^{+}$ (mg/l)	pH (SU)	Conductivity (µS/cm°C)	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-2S	9/22/09		2.42	-156	-	6.60	-	*(Tait)*
MW-2S	3/3/10		0.25	-64.1	2.6	6.79	1,673	AUS
MW-2M	9/22/09		2.71	-182	-	6.63	-	*(Tait)*
MW-2M	3/3/10		0.10	-125.2	3.12	6.77	2,286	AUS
MW-2D	9/22/09		2.97	-162	-	6.82	-	*(Tait)*
MW-2D	3/3/10		0.12	-105.3	2.1	6.80	2,243	AUS
MW-3	9/22/09		2.40	-170	-	6.65	-	*(Tait)*
MW-3	3/5/10		0.10	-226.5	1.59	6.75	2,889	AUS
MW-4S	9/21/09		3.95	-71	-	7.14	-	*(Tait)*
MW-4S	3/3/10		1.30	-22.5	0.03	7.88	859	AUS
MW-4D	9/21/09		3.19	-90	-	7.16	-	*(Tait)*
MW-4D	3/3/10		0.13	-81.5	0.15	7.26	2,368	AUS
MW-5S	9/21/09		2.33	-134	-	6.90	-	*(Tait)*
MW-5S	3/4/10		1.20	-	1.27	-	-	AUS
MW-5D	9/21/09		2.90	-135	-	7.00	-	*(Tait)*
MW-5D	3/4/10		-	-	1.53	-	-	AUS
MW-6S	9/22/09		2.40	-182	-	6.81	-	*(Tait)*
MW-6S	3/5/10		0.11	-229.9	1.01	6.89	1,445	AUS
MW-6D	9/22/09		2.07	-164	-	6.85	-	*(Tait)*
MW-6D	3/3/10		0.29	-184.2	1.86	10.61	2,513	AUS
MW-7S	1/22/08	PT	0.43	-122.6	-	6.68	2,168	LFR
MW-7S	2/18/08	PT	0.50	-12.8	-	6.80	1,542	LFR
MW-7S	5/6/09		0.14	-99.1	-	6.46	2,005	LFR
MW-7S	6/8/09		3.07	-190	-	6.44	2,300	*(Tait)*
MW-7S	7/14/09		0.43	-221.1	-	6.69	2,156	LFR
MW-7S	9/22/09		4.52	-189	-	6.81	-	*(Tait)*
MW-7S	12/18/09		0.71	-81.4	1.62	6.59	1,939	AUS

Table A3
Historical Groundwater Analytical Results
(Inorganic Compounds Monitored During AIS Operation)
Lehigh Hanson Sunol Facility Asphalt Plant
7999 Athenour Way, Sunol, California

Well	Sample Date	Notes	DO (mg/l)	ORP (mV)	Ferrous Iron $Fe2^{+}$ (mg/l)	pH (SU)	Conductivity (µS/cmºC)	Field Parameters Measured by:
MW-7S	3/4/10		-	-	1.8	-	-	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-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-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-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-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)*

Table A3
Historical Groundwater Analytical Results
(Inorganic Compounds Monitored During AIS Operation)
Lehigh Hanson Sunol Facility Asphalt Plant
7999 Athenour Way, Sunol, California

Well	Sample Date	Notes	DO (mg/l)	ORP (mV)	Ferrous Iron $Fe2^{+}$ (mg/l)	pH (SU)	Conductivity (µS/cmºC)	Field Parameters Measured by:
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-10S	9/23/09		2.94	-112	-	7.01	-	*(Tait)*
MW-10S	3/3/10		0.22	-38.3	0.14	7.23	1,862	AUS
MW-10D	9/23/09		2.31	-220	-	6.70	-	*(Tait)*
MW-10D	3/3/10		0.09	-255.9	0	7.37	2,463	AUS
MW-10LF	9/23/09		2.80	-198	-	6.76	-	*(Tait)*
MW-10LF	3/3/10		0.31	-164.9	1.89	7.03	3,736	AUS
MW-11S	9/22/09		2.10	-155	-	7.08	-	*(Tait)*
MW-11S	3/5/10		0.17	-251.6	1.33	6.71	1,852	AUS
MW-11D	9/22/09		2.64	-214	-	6.83	-	*(Tait)*
MW-11D	3/5/10		0.10	-307.4	0.59	6.68	1,748	AUS
MW-11LF	9/22/09		2.37	-162	-	7.11	-	*(Tait)*
MW-11LF	3/5/10		0.15	-147.7	1.16	6.60	1,353	AUS
MW-12S	9/22/09		3.92	-19	-	7.00	-	*(Tait)*
MW-12S	3/5/10		0.17	-175.4	0.26	6.60	1,809	AUS
MW-12D	9/22/09		3.62	70	-	6.75	-	*(Tait)*
MW-12D	3/5/10		0.09	-267.9	0.11	6.65	1,526	AUS
MW-12LF	9/22/09		7.31	14	-	6.70	-	*(Tait)*
MW-12LF	3/5/10		0.22	-228.1	0	6.74	1,533	AUS
OXY-1S	1/25/08	PT	-	-	-	7.16	3,540	LFR
OXY-1S	2/20/08	PT	0.12	20.5	-	7.44	3,065	LFR
OXY-1S	5/6/09		7.56	12.5	-	8.23	2,240	LFR
OXY-1S	6/8/09		3.27	20	-	7.42	2,300	*Tait*
OXY-1S	6/8/09		9.24	143.9	-	7.84	2,129	LFR
OXY-1S	7/14/09		8.22	-143.1	-	7.72	2,159	LFR
OXY-1S	9/21/09		17.09	21	-	7.30	-	*(Tait)*
OXY-1S	12/17/09		6.52	63.7	0.1	7.48	2,307	AUS
OXY-1S	3/5/10		2.12	-169.9	0	7.28	2,417	AUS
OXY-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)*

Table A3
Historical Groundwater Analytical Results
(Inorganic Compounds Monitored During AIS Operation)
Lehigh Hanson Sunol Facility Asphalt Plant
7999 Athenour Way, Sunol, California

Well	Sample Date	Notes	DO (mg/l)	ORP (mV)	Ferrous Iron $Fe2^{+}$ (mg/l)	pH (SU)	Conductivity (µS/cmºC)	Field Parameters Measured by:
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-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

Notes:
AIS = Air injection system
DO = Dissolved Oxygen
ORP = Oxidation-Reduction Potential
SU = Standard Units
µS/cmºC = Microsiemens per centimeter adjusted for temperature
AUS = ARCADIS U.S., Inc.
LFR = LFR Inc.
Tait = Tait Environmental Management, Inc.
mV = MilliVolts
mg/l = Milligrams per liter
PT = Pilot Test; sample collected during the air injection pilot test
Dash indicates that no measurement was made or no sample was collected.

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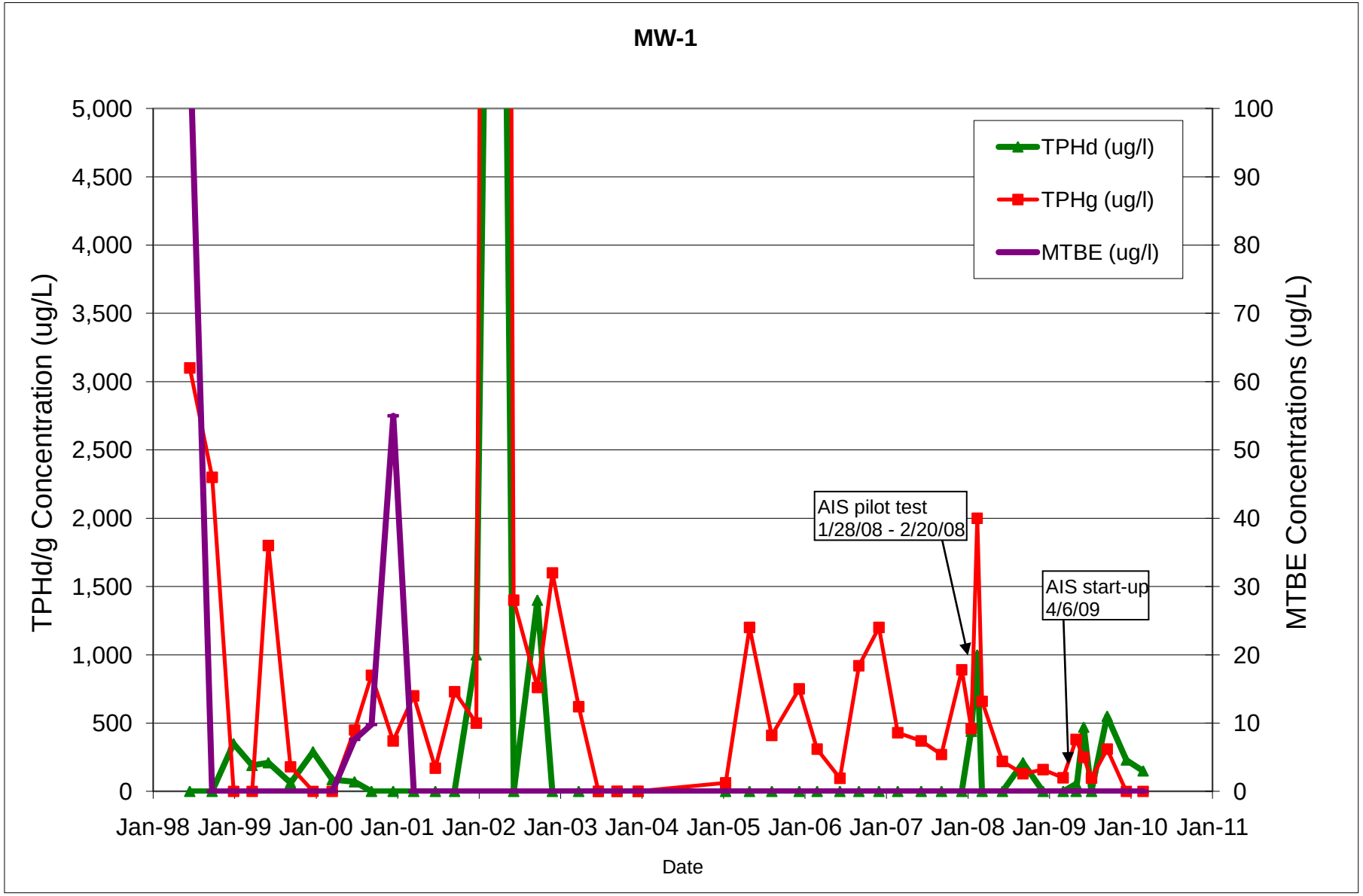
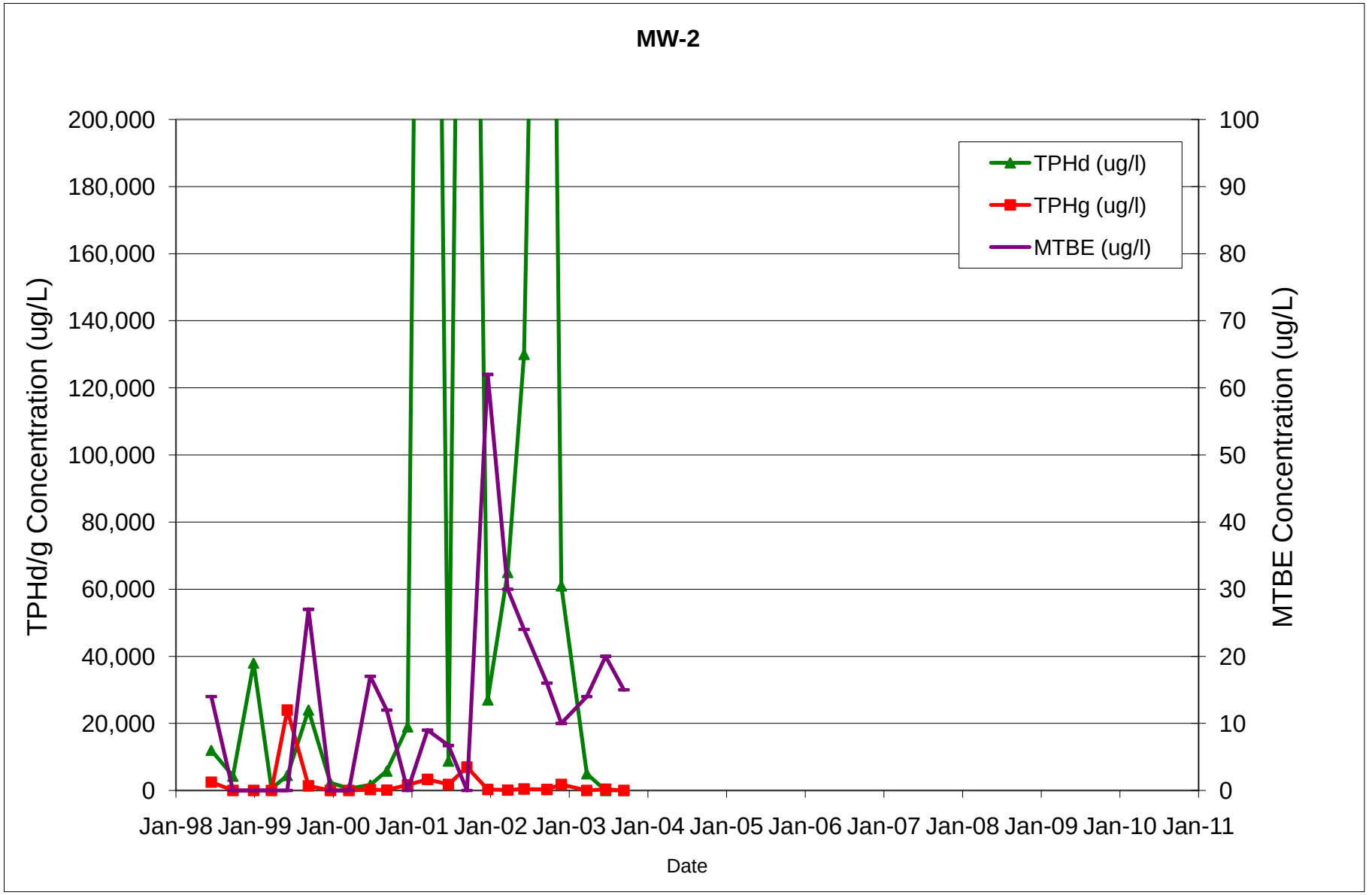
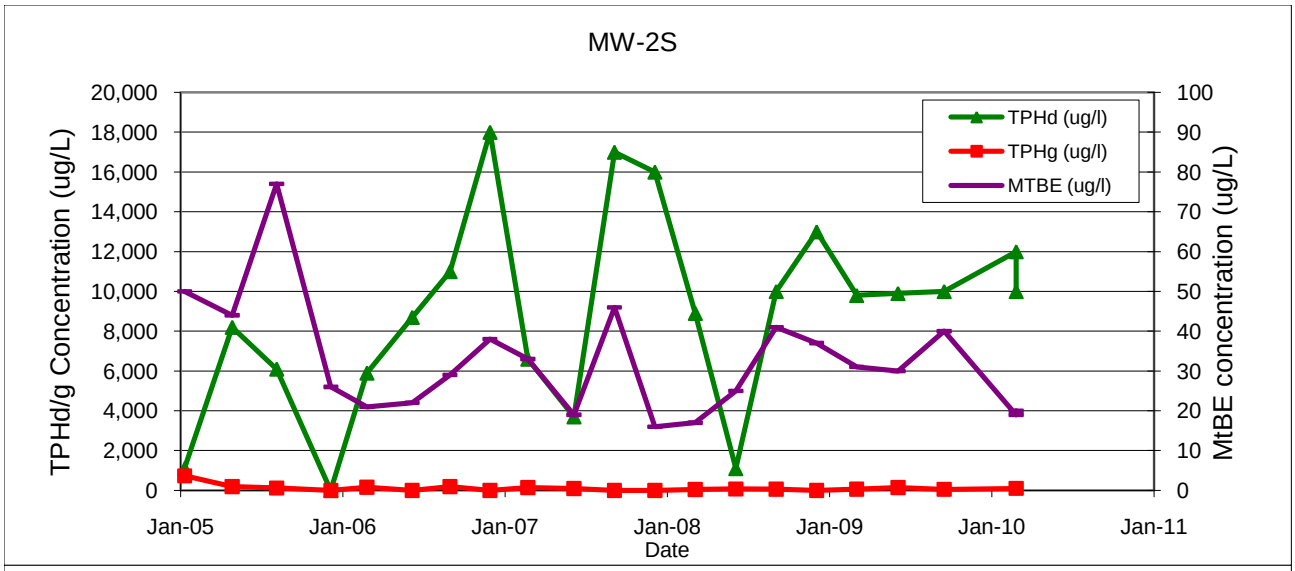
Appendix B

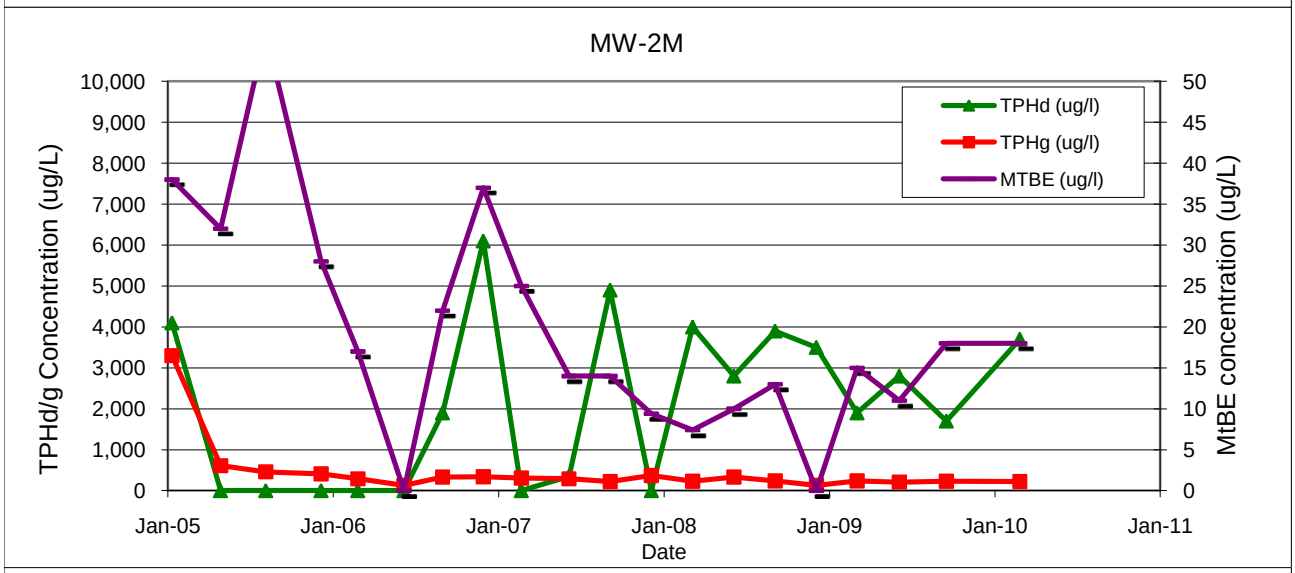
Historical Concentration Trend Graphs

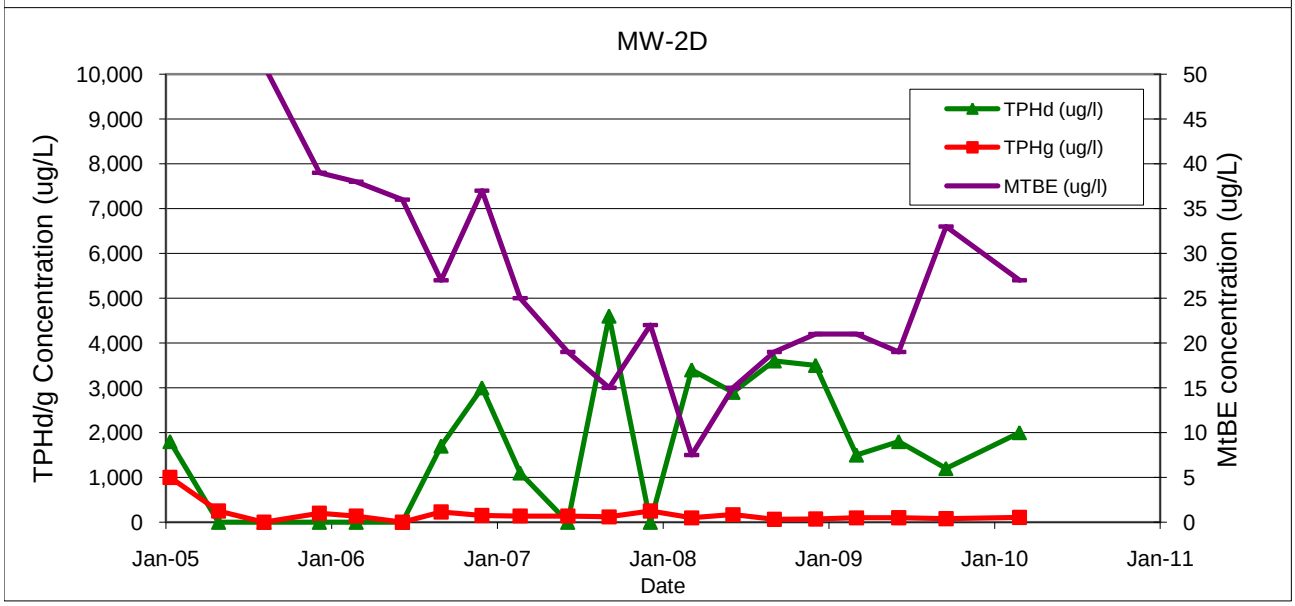


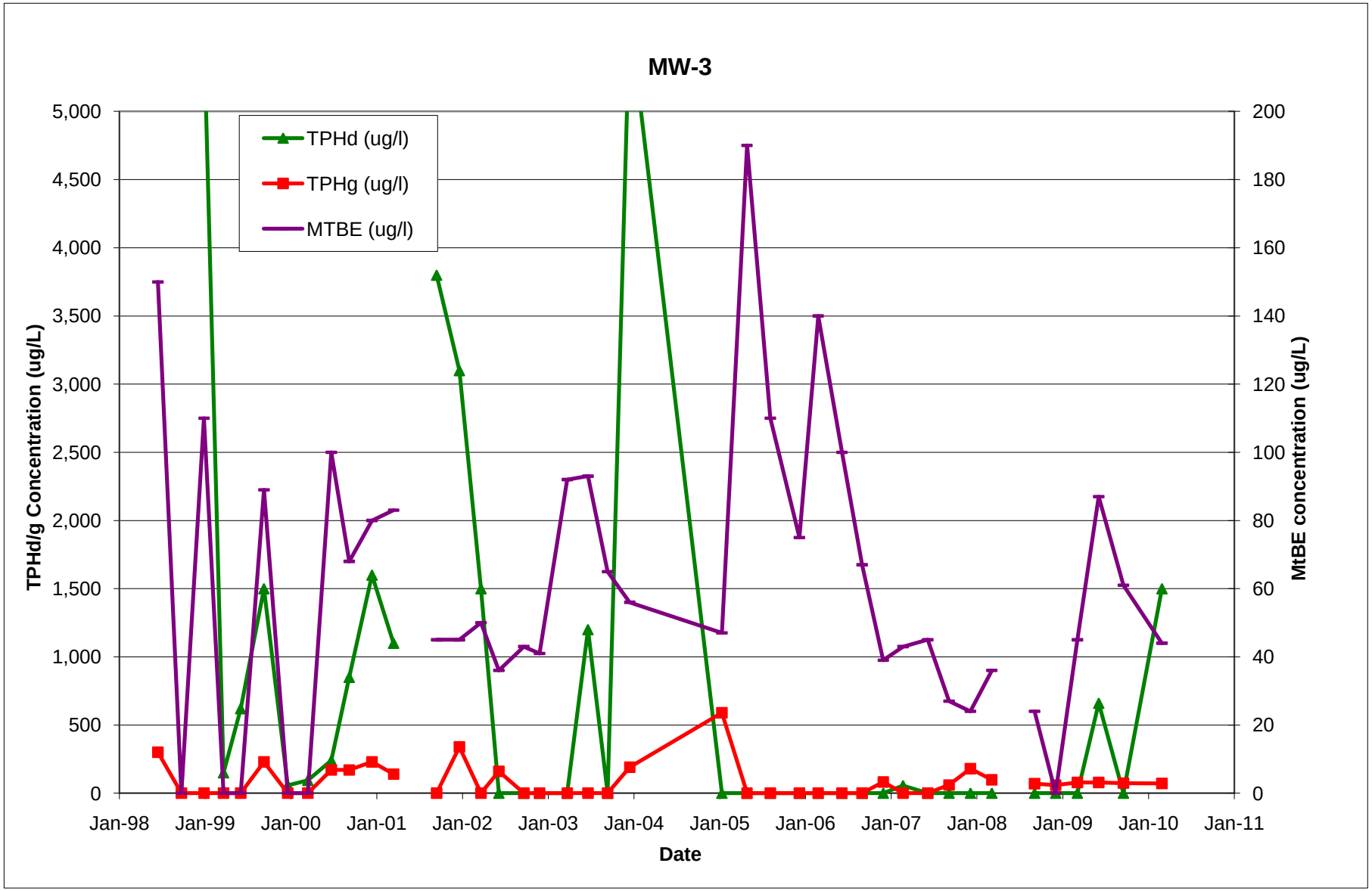
ARCADIS 5/13/2010


MW-2
TPHd/g Concentration (ug/L)
MTBE Concentration (ug/L)
200,000
180,000
160,000
140,000
120,000
100,000
80,000
60,000
40,000
20,000
0
100
90
80
70
60
50
40
30
20
10
0
TPHd (ug/l)
TPHg (ug/l)
MTBE (ug/l)
Jan-98 Jan-99 Jan-00 Jan-01 Jan-02 Jan-03 Jan-04 Jan-05 Jan-06 Jan-07 Jan-08 Jan-09 Jan-10 Jan-11
Date


MW-2S
TPHd/g Concentration (ug/L)
MtBE concentration (ug/L)
TPHd (ug/l)
TPHg (ug/l)
MTBE (ug/l)
20,000
18,000
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
100
90
80
70
60
50
40
30
20
10
0
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Date


MW-2M
TPHd/g Concentration (ug/L)
MtBE concentration (ug/L)
TPHd (ug/l)
TPHg (ug/l)
MTBE (ug/l)
10,000
9,000
8,000
7,000
6,000
5,000
4,000
3,000
2,000
1,000
0
50
45
40
35
30
25
20
15
10
5
0
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Date


MW-2D
TPHd/g Concentration (ug/L)
MtBE concentration (ug/L)
TPHd (ug/l)
TPHg (ug/l)
MTBE (ug/l)
10,000
9,000
8,000
7,000
6,000
5,000
4,000
3,000
2,000
1,000
0
50
45
40
35
30
25
20
15
10
5
0
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Date



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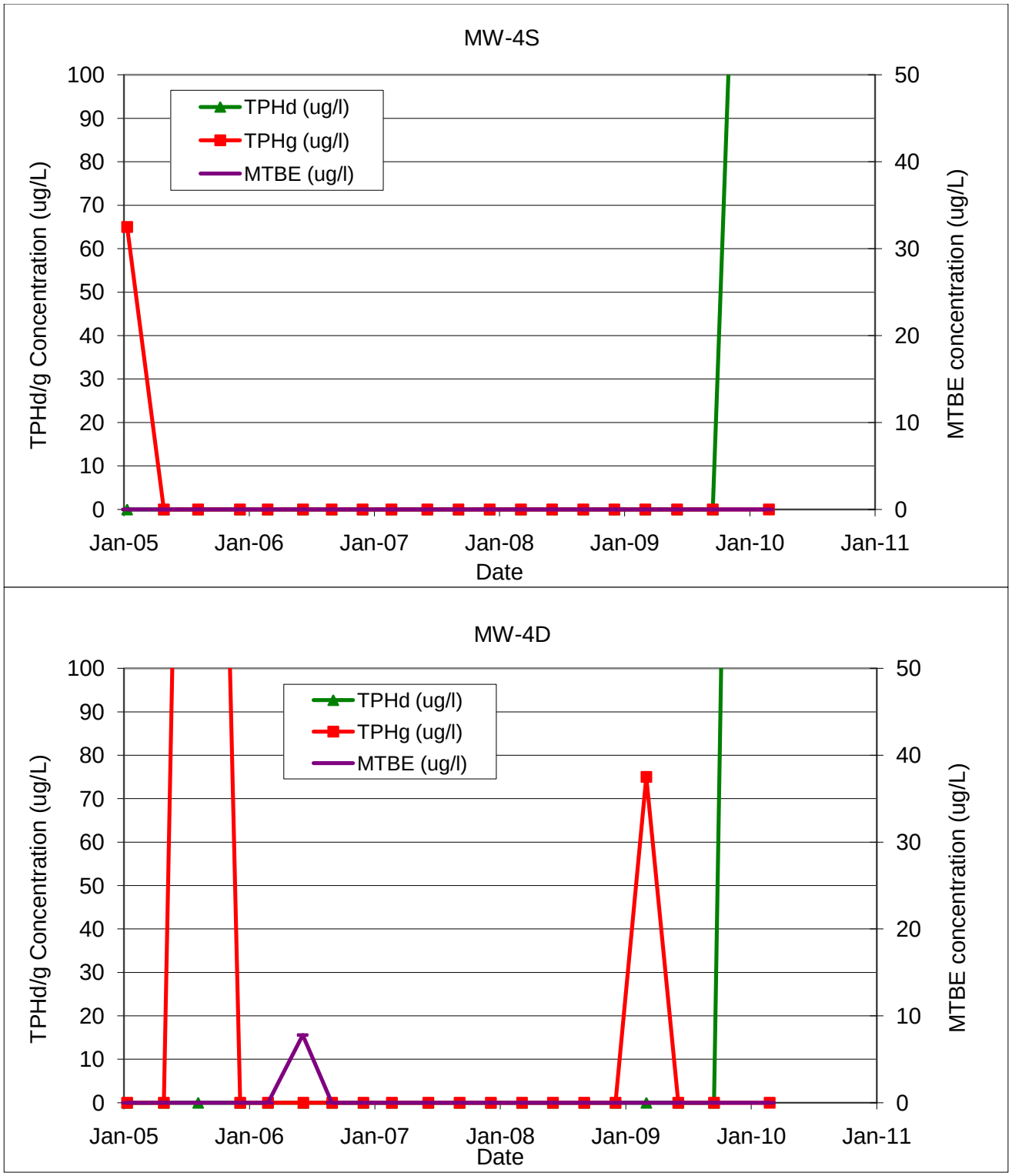
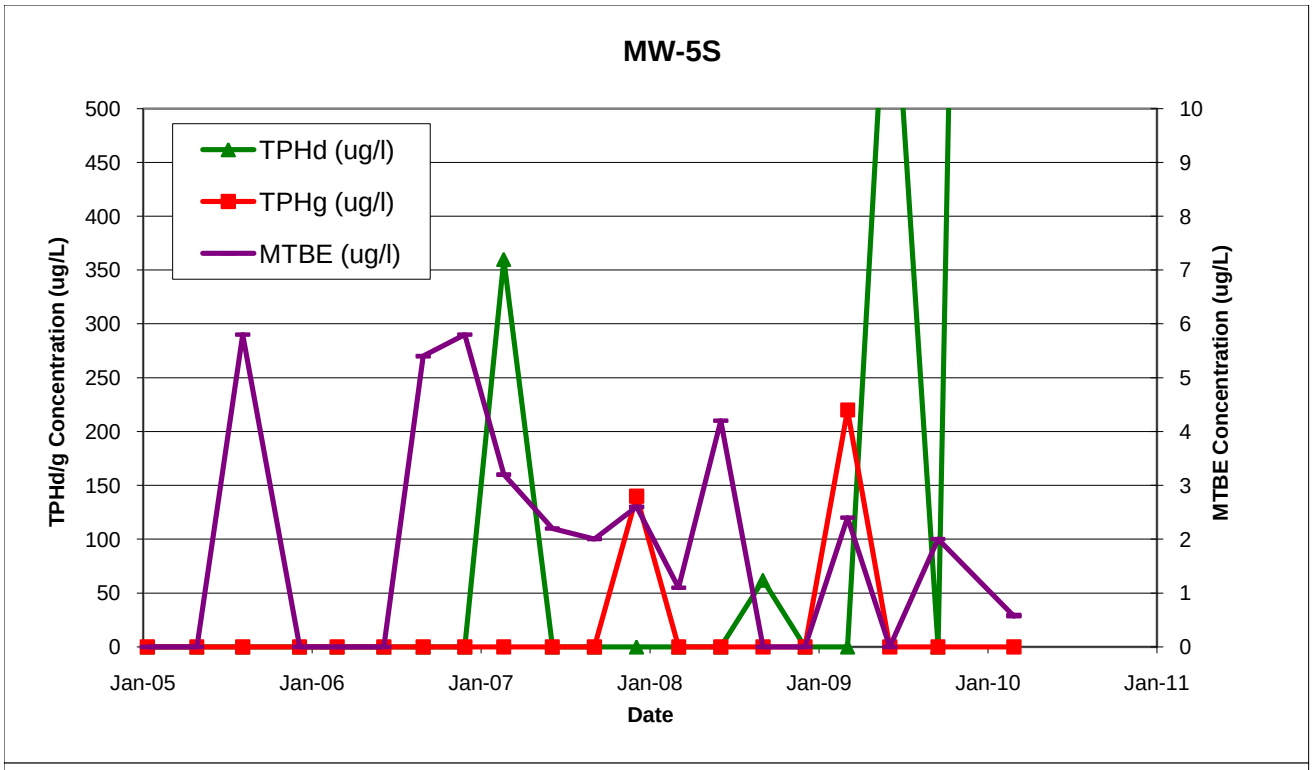
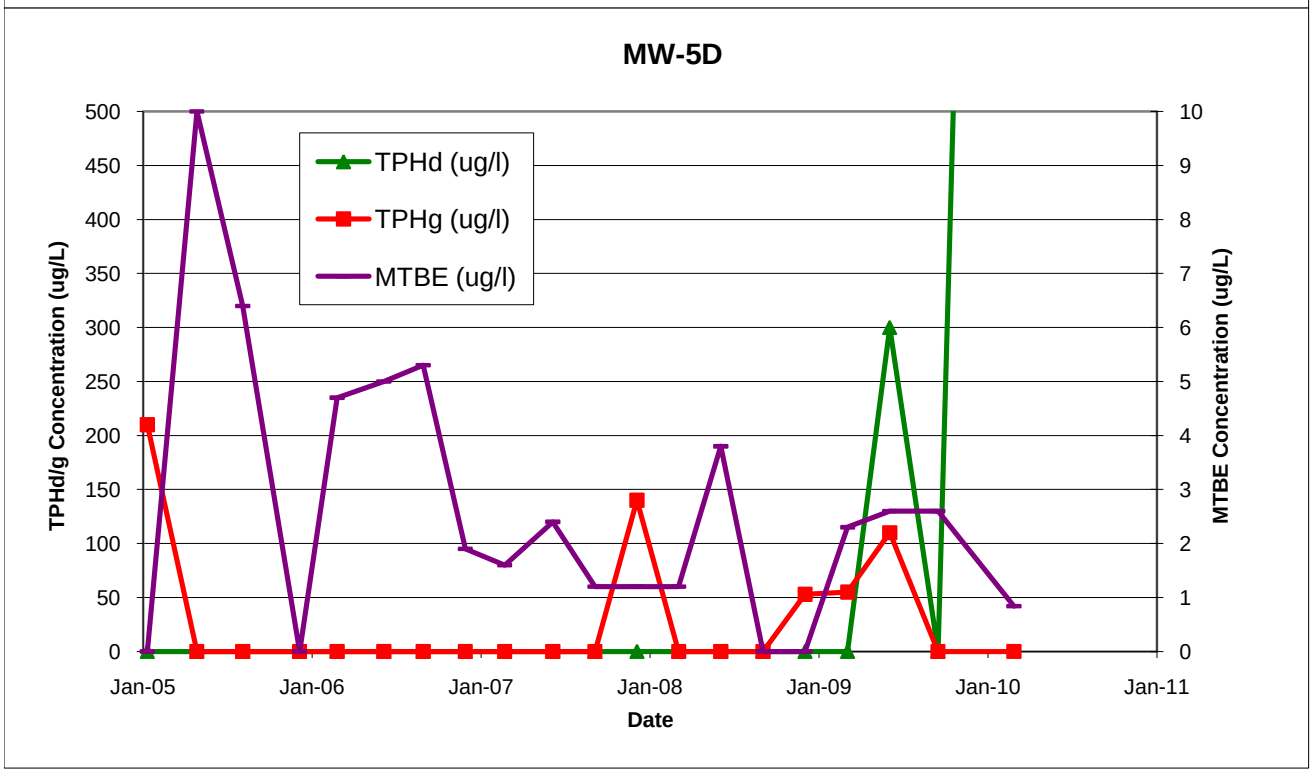
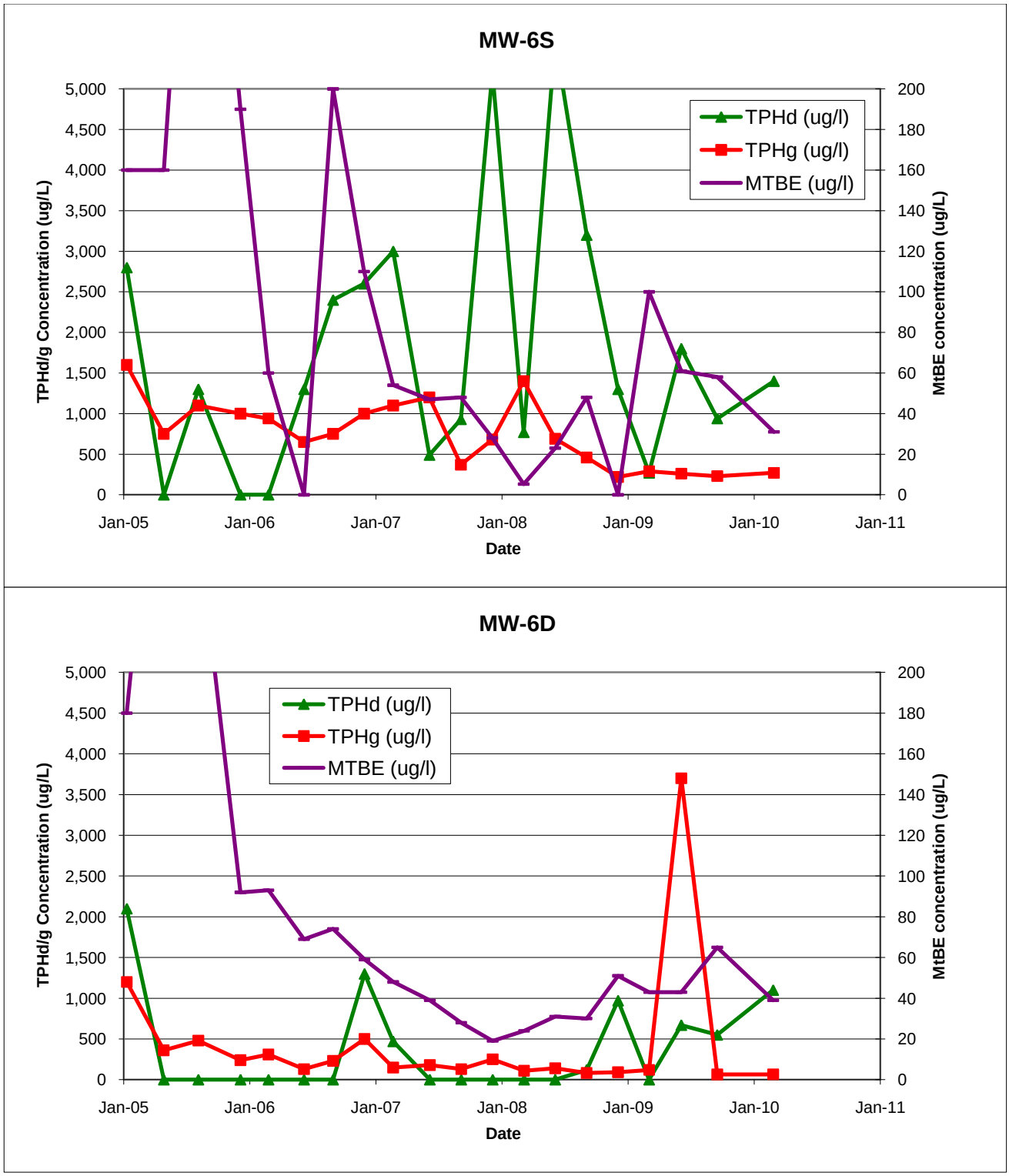
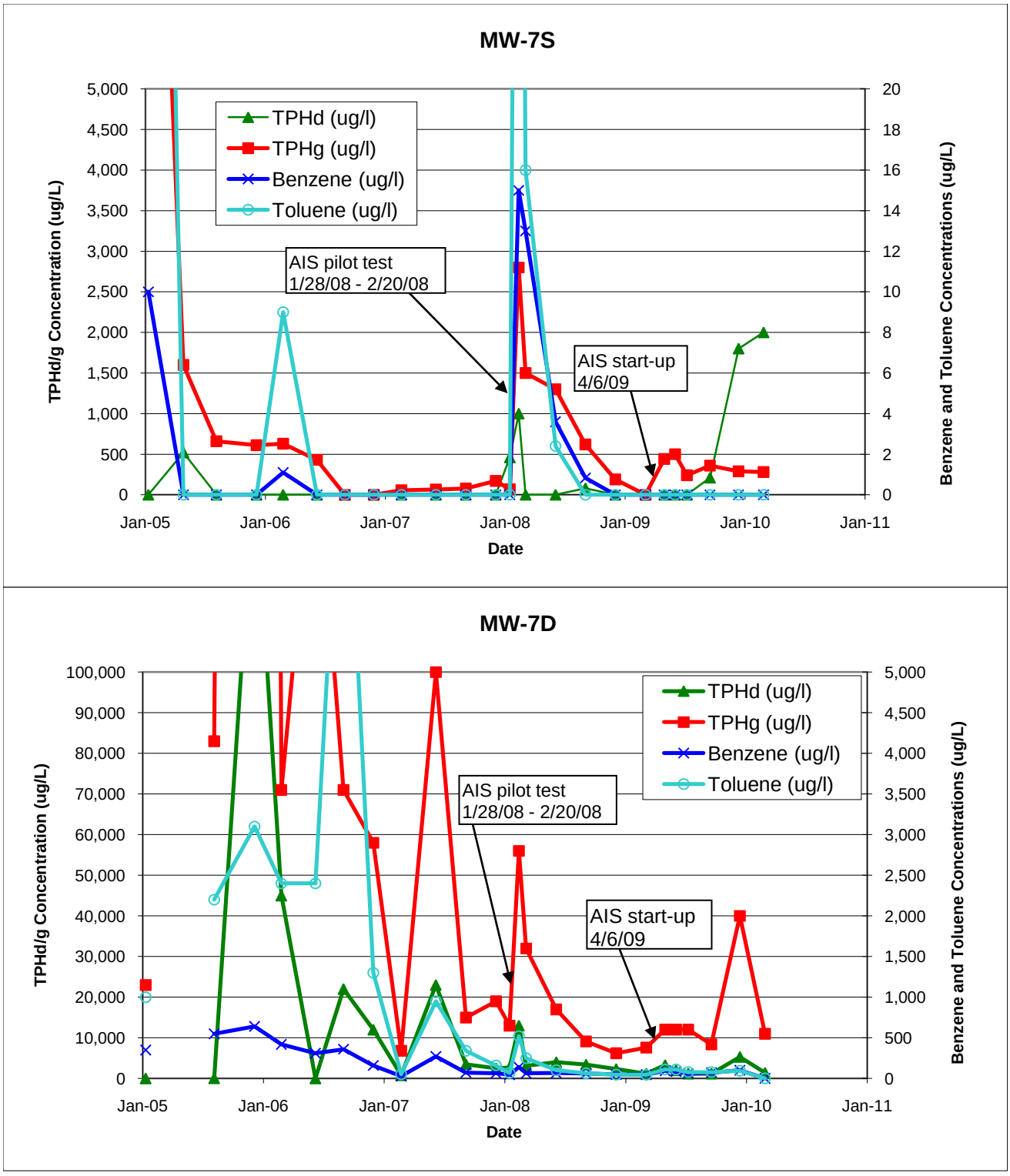
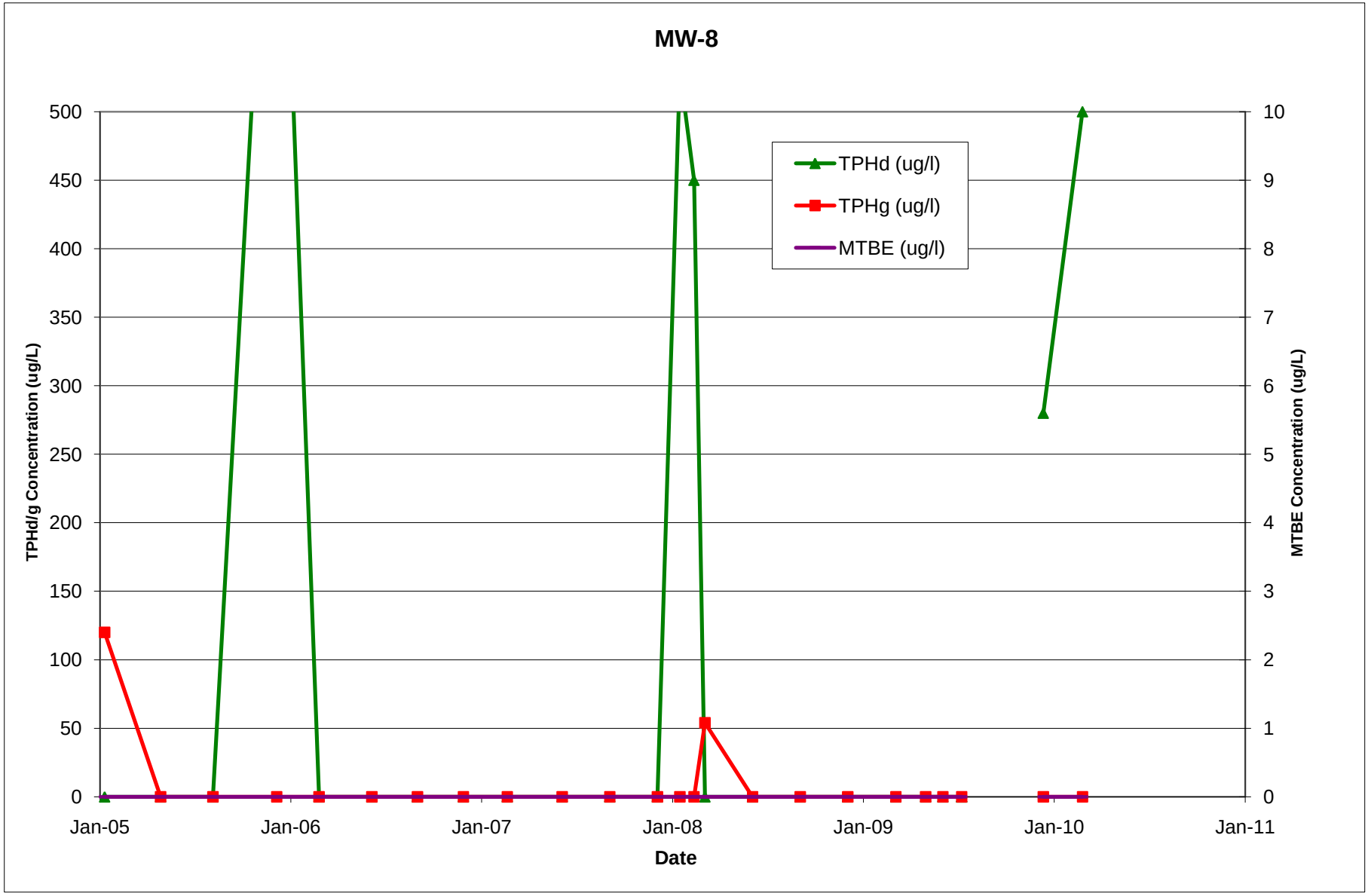

MW-4S
TPHd (ug/l)
TPHg (ug/l)
MTBE (ug/l)
TPHd/g Concentration (ug/L)
MTBE concentration (ug/L)
100
90
80
70
60
50
40
30
20
10
0
50
40
30
20
10
0
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Date
MW-4D
TPHd (ug/l)
TPHg (ug/l)
MTBE (ug/l)
TPHd/g Concentration (ug/L)
MTBE concentration (ug/L)
100
90
80
70
60
50
40
30
20
10
0
50
40
30
20
10
0
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Date


MW-5S
TPHd (ug/l)
TPHg (ug/l)
MTBE (ug/l)
TPHd/g Concentration (ug/L)
MTBE Concentration (ug/L)
500
450
400
350
300
250
200
150
100
50
0
10
9
8
7
6
5
4
3
2
1
0
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Date

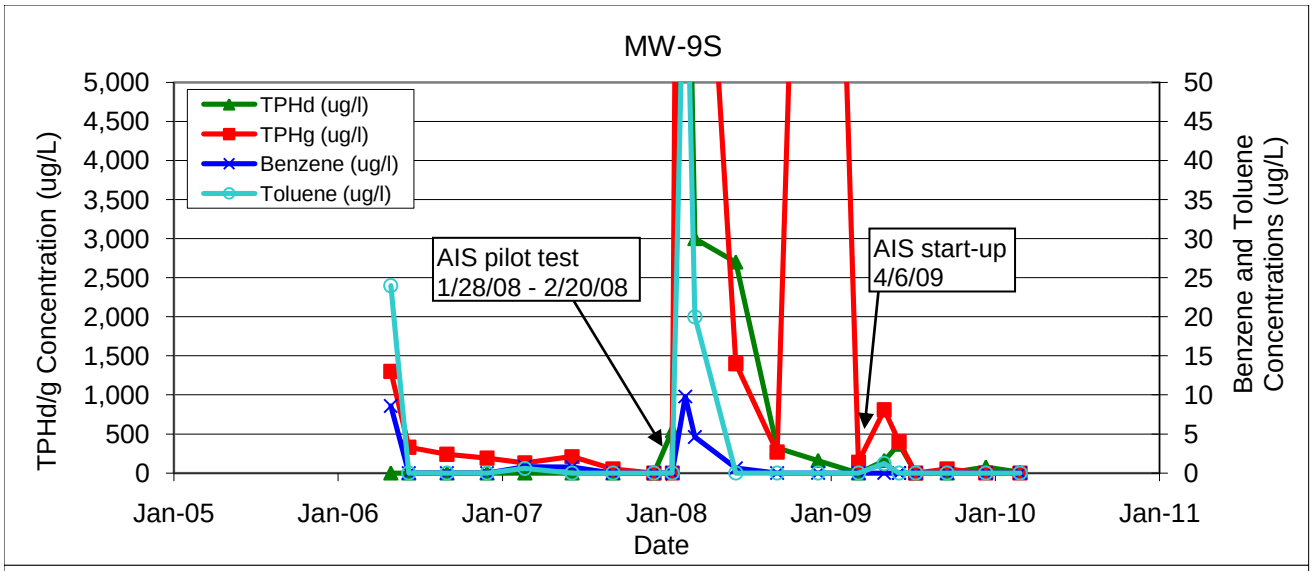

MW-5D
TPHd (ug/l)
TPHg (ug/l)
MTBE (ug/l)
TPHd/g Concentration (ug/L)
MTBE Concentration (ug/L)
500
450
400
350
300
250
200
150
100
50
0
10
9
8
7
6
5
4
3
2
1
0
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Date

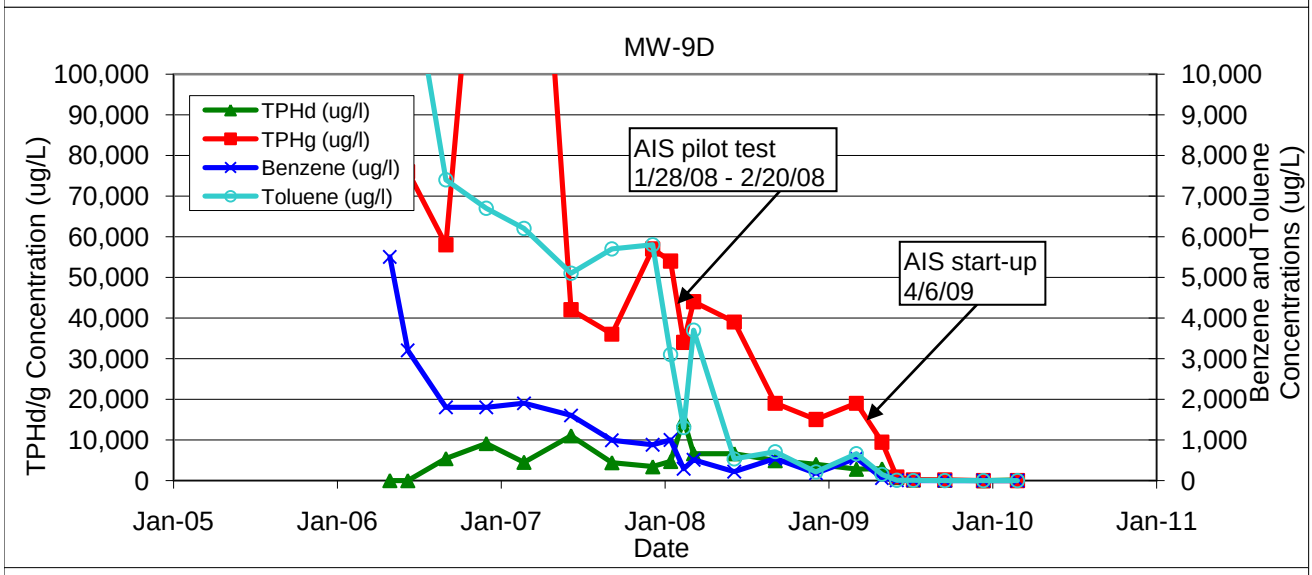

MW-6S
TPHd (ug/l)
TPHg (ug/l)
MTBE (ug/l)
TPHd/g Concentration (ug/L)
MtBE concentration (ug/L)
Date
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
MW-6D
TPHd (ug/l)
TPHg (ug/l)
MTBE (ug/l)
TPHd/g Concentration (ug/L)
MtBE concentration (ug/L)
Date

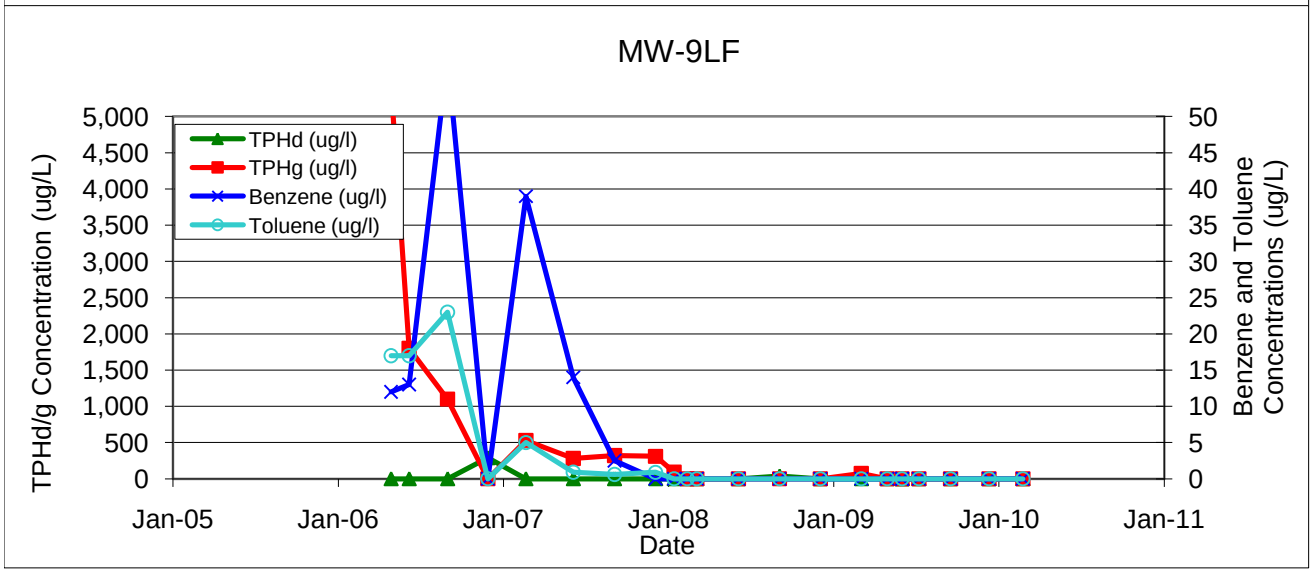

MW-7S
TPHd (ug/l)
TPHg (ug/l)
Benzene (ug/l)
Toluene (ug/l)
AIS pilot test
1/28/08 - 2/20/08
AIS start-up
4/6/09
TPHd/g Concentration (ug/L)
Benzene and Toluene Concentrations (ug/L)
Date
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
MW-7D
TPHd (ug/l)
TPHg (ug/l)
Benzene (ug/l)
Toluene (ug/l)
AIS pilot test
1/28/08 - 2/20/08
AIS start-up
4/6/09
TPHd/g Concentration (ug/L)
Benzene and Toluene Concentrations (ug/L)
Date
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11

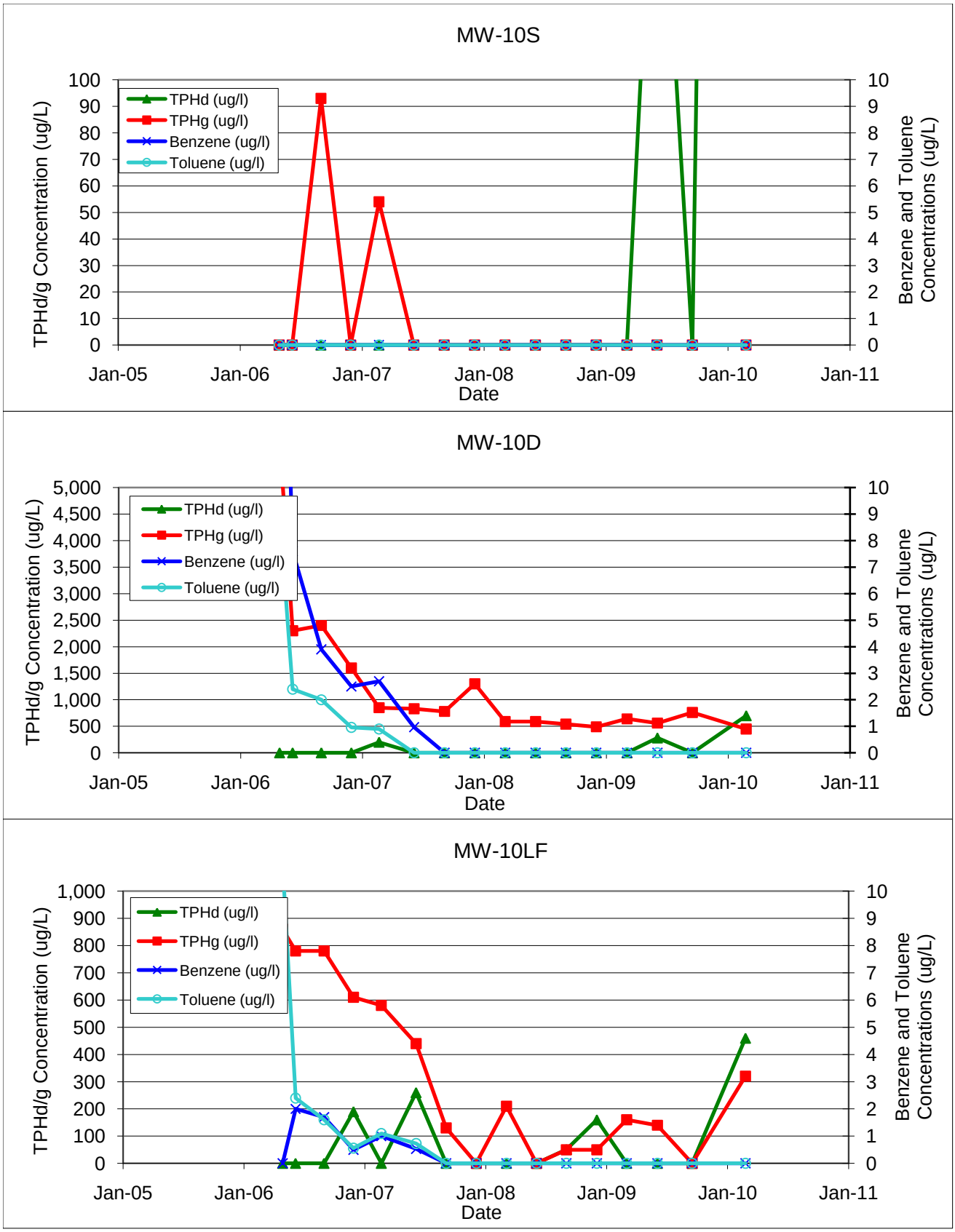


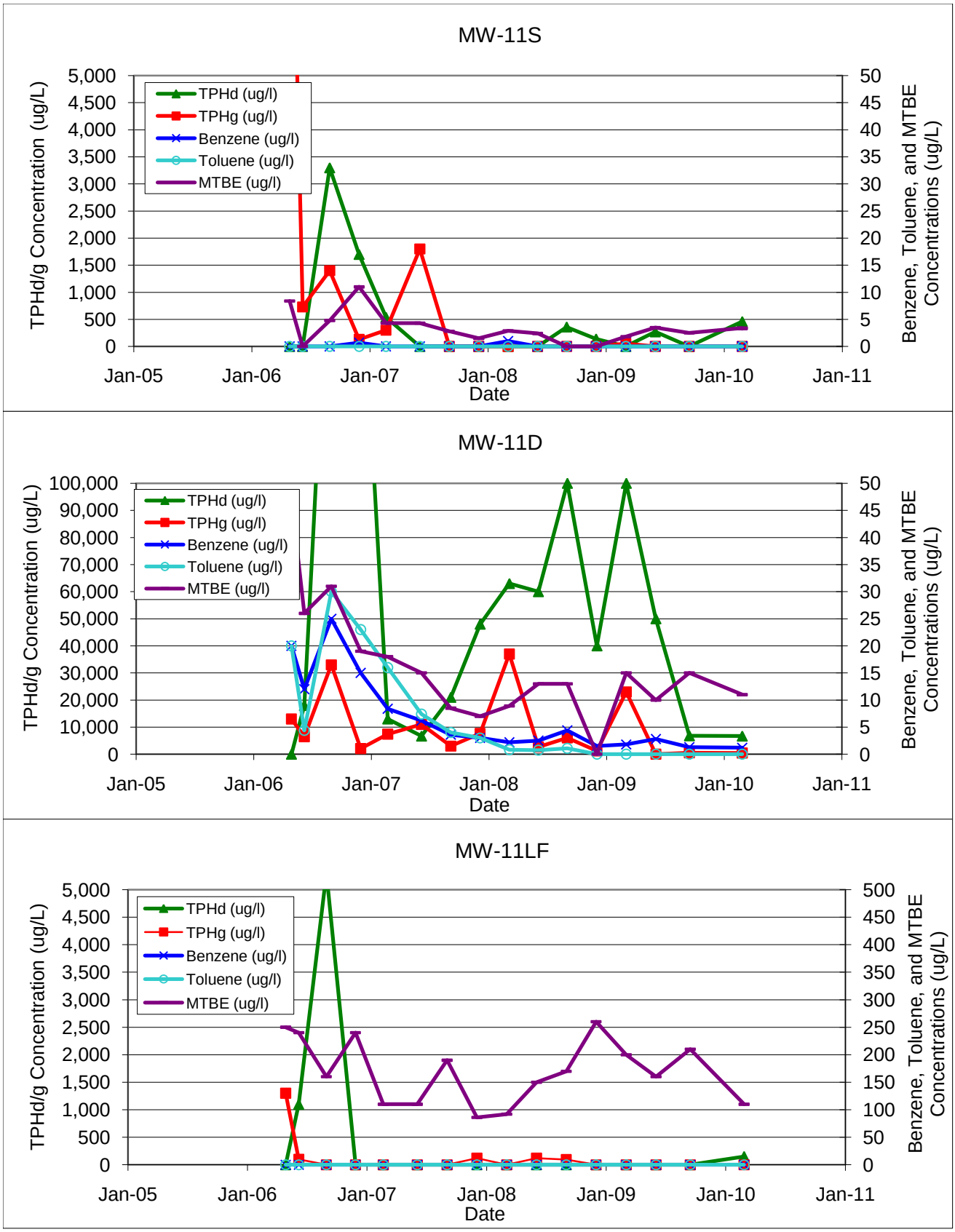
ARCADIS 5/13/2010

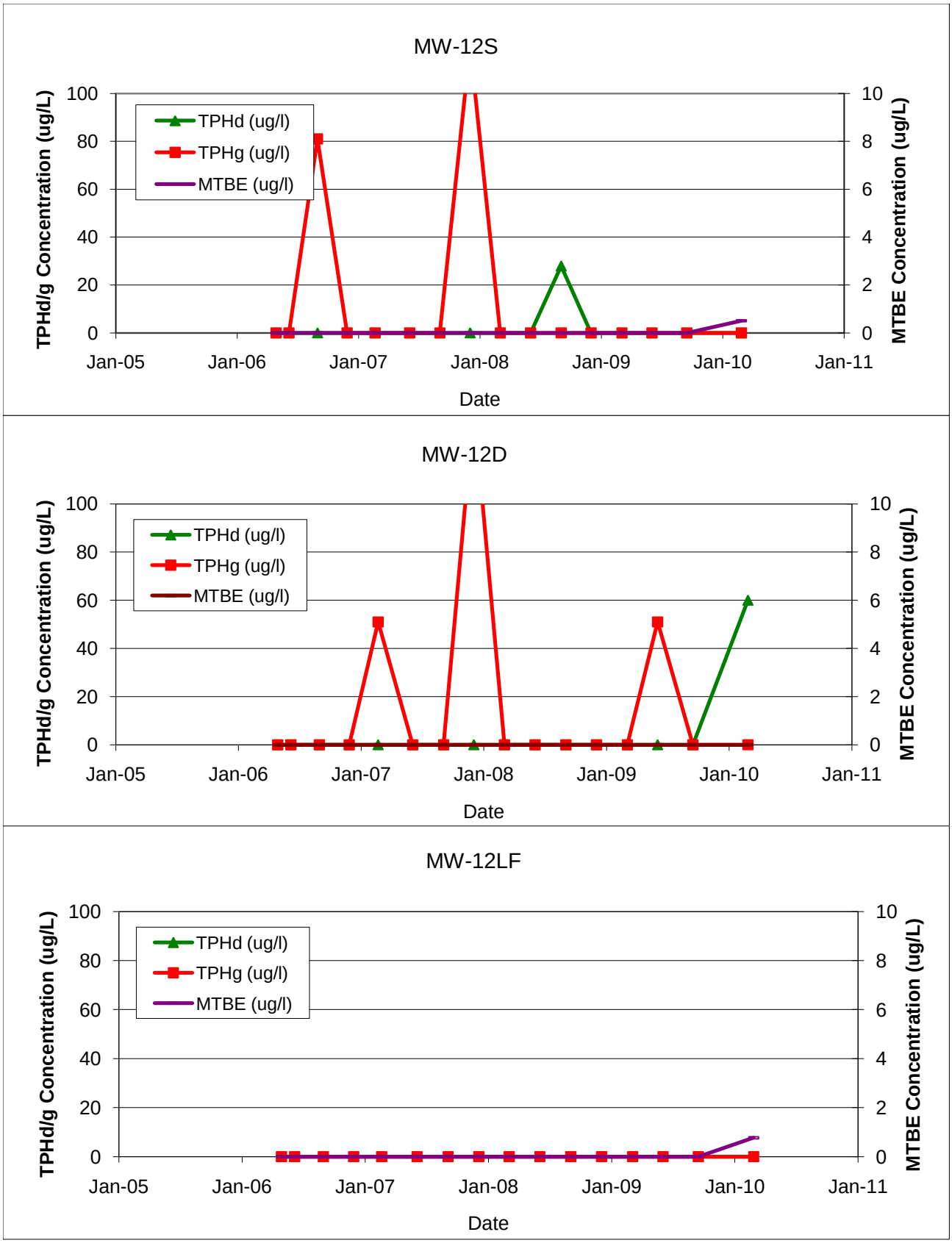

MW-9S
TPHd (ug/l)
TPHg (ug/l)
Benzene (ug/l)
Toluene (ug/l)
AIS pilot test
1/28/08 - 2/20/08
AIS start-up
4/6/09
TPHd/g Concentration (ug/L)
Benzene and Toluene Concentrations (ug/L)
5,000
4,500
4,000
3,500
3,000
2,500
2,000
1,500
1,000
500
0
50
45
40
35
30
25
20
15
10
5
0
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Date


MW-9D
TPHd (ug/l)
TPHg (ug/l)
Benzene (ug/l)
Toluene (ug/l)
AIS pilot test
1/28/08 - 2/20/08
AIS start-up
4/6/09
TPHd/g Concentration (ug/L)
Benzene and Toluene Concentrations (ug/L)
100,000
90,000
80,000
70,000
60,000
50,000
40,000
30,000
20,000
10,000
0
10,000
9,000
8,000
7,000
6,000
5,000
4,000
3,000
2,000
1,000
0
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Date


MW-9LF
TPHd (ug/l)
TPHg (ug/l)
Benzene (ug/l)
Toluene (ug/l)
TPHd/g Concentration (ug/L)
Benzene and Toluene Concentrations (ug/L)
5,000
4,500
4,000
3,500
3,000
2,500
2,000
1,500
1,000
500
0
50
45
40
35
30
25
20
15
10
5
0
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Date


MW-10S
TPHd (ug/l)
TPHg (ug/l)
Benzene (ug/l)
Toluene (ug/l)
TPHd/g Concentration (ug/L)
Benzene and Toluene Concentrations (ug/L)
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Date
MW-10D
TPHd (ug/l)
TPHg (ug/l)
Benzene (ug/l)
Toluene (ug/l)
TPHd/g Concentration (ug/L)
Benzene and Toluene Concentrations (ug/L)
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Date
MW-10LF
TPHd (ug/l)
TPHg (ug/l)
Benzene (ug/l)
Toluene (ug/l)
TPHd/g Concentration (ug/L)
Benzene and Toluene Concentrations (ug/L)
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Date


MW-11S
TPHd/g Concentration (ug/L)
Benzene, Toluene, and MTBE Concentrations (ug/L)
TPHd (ug/l)
TPHg (ug/l)
Benzene (ug/l)
Toluene (ug/l)
MTBE (ug/l)
5,000
4,500
4,000
3,500
3,000
2,500
2,000
1,500
1,000
500
0
50
45
40
35
30
25
20
15
10
5
0
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Date
MW-11D
TPHd/g Concentration (ug/L)
Benzene, Toluene, and MTBE Concentrations (ug/L)
TPHd (ug/l)
TPHg (ug/l)
Benzene (ug/l)
Toluene (ug/l)
MTBE (ug/l)
100,000
90,000
80,000
70,000
60,000
50,000
40,000
30,000
20,000
10,000
0
50
45
40
35
30
25
20
15
10
5
0
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Date
MW-11LF
TPHd/g Concentration (ug/L)
Benzene, Toluene, and MTBE Concentrations (ug/L)
TPHd (ug/l)
TPHg (ug/l)
Benzene (ug/l)
Toluene (ug/l)
MTBE (ug/l)
5,000
4,500
4,000
3,500
3,000
2,500
2,000
1,500
1,000
500
0
500
450
400
350
300
250
200
150
100
50
0
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Date


MW-12S
TPHd/g Concentration (ug/L)
MTBE Concentration (ug/L)
TPHd (ug/l)
TPHg (ug/l)
MTBE (ug/l)
100
80
60
40
20
0
10
8
6
4
2
0
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Date
MW-12D
TPHd/g Concentration (ug/L)
MTBE Concentration (ug/L)
TPHd (ug/l)
TPHg (ug/l)
MTBE (ug/l)
100
80
60
40
20
0
10
8
6
4
2
0
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Date
MW-12LF
TPHd/g Concentration (ug/L)
MTBE Concentration (ug/L)
TPHd (ug/l)
TPHg (ug/l)
MTBE (ug/l)
100
80
60
40
20
0
10
8
6
4
2
0
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Date

ARCADIS

Appendix C

Certified Laboratory Analytical Reports

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 720-26268-1

Job Description: Hanson Sunol,CA

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

Attention: Ms. Katrin Schliewen

Approved for release.
Afsaneh Salimpour
Project Manager I
3/9/2010 3:53 PM

Afsaneh Salimpour
Project Manager I
afsaneh.salimpour@testamericainc.com
03/09/2010

CA ELAP Certification # 2496
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A trip blank is required to be provided for volatile analyses. If trip blank results are not included in the report, either the trip blank was not submitted or requested to be analyzed.

TestAmerica Laboratories, Inc.
TestAmerica San Francisco 1220 Quarry Lane, Pleasanton, CA 94566
Tel (925) 484-1919 Fax (925) 600-3002 www.testamericainc.com

Comments
No additional comments.

Receipt
All samples were received in good condition within temperature requirements.

GC/MS VOA
No analytical or quality issues were noted.

GC Semi VOA
No analytical or quality issues were noted.

Organic Prep
No analytical or quality issues were noted.

EXECUTIVE SUMMARY - Detections

Client: ARCADIS U.S., Inc. Job Number: 720-26268-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
720-26268-1	**MW-8**				
Diesel Range Organics [C10-C28]		500	50	ug/L	8015B
720-26268-2	**MW-1**				
Diesel Range Organics [C10-C28]		150	51	ug/L	8015B
720-26268-3	**MW-9D**				
Ethylbenzene		1.2	0.50	ug/L	8260B/CA_LUFTMS

METHOD SUMMARY

Client: ARCADIS U.S., Inc. Job Number: 720-26268-1

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

Lab References:

TAL SF = TestAmerica San Francisco

Method References:

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

METHOD / ANALYST SUMMARY

Client: ARCADIS U.S., Inc. Job Number: 720-26268-1

Method	Analyst	Analyst ID
SW846 8260B/CA_LUFTMS	Ali, Badri	BA
SW846 8260B/CA_LUFTMS	Zhao, June	JZ
SW846 8015B	Hayashi, Derek	DH

SAMPLE SUMMARY

Client: ARCADIS U.S., Inc. Job Number: 720-26268-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
720-26268-1	MW-8	Water	03/02/2010 1420	03/02/2010 1656
720-26268-2	MW-1	Water	03/02/2010 1610	03/02/2010 1656
720-26268-3	MW-9D	Water	03/02/2010 1320	03/02/2010 1656
720-26268-4	MW-9LF	Water	03/02/2010 1505	03/02/2010 1656
720-26268-5	MW-9LF-D	Water	03/02/2010 1530	03/02/2010 1656

Client: ARCADIS U.S., Inc. Job Number: 720-26268-1

Client Sample ID: **MW-8**

Lab Sample ID: 720-26268-1 Date Sampled: 03/02/2010 1420
Client Matrix: Water Date Received: 03/02/2010 1656

8260B/CA_LUFTMS 8260B / CA LUFT MS

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-67005		Instrument ID:	SAT 3900C
Preparation:	5030B			Lab File ID:	26268-A-1 3-4-2010
Dilution:	1.0			Initial Weight/Volume:	10 mL
Date Analyzed:	03/04/2010 1859			Final Weight/Volume:	10 mL
Date Prepared:	03/04/2010 1859				

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

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	100		67 - 130
1,2-Dichloroethane-d4 (Surr)	112		67 - 130
Toluene-d8 (Surr)	101		70 - 130

Client: ARCADIS U.S., Inc. Job Number: 720-26268-1

Client Sample ID: **MW-1**

Lab Sample ID: 720-26268-2 Date Sampled: 03/02/2010 1610
Client Matrix: Water Date Received: 03/02/2010 1656

8260B/CA_LUFTMS 8260B / CA LUFT MS

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-67005		Instrument ID:	SAT 3900C
Preparation:	5030B			Lab File ID:	26268-A-2 3-4-2010
Dilution:	1.0			Initial Weight/Volume:	10 mL
Date Analyzed:	03/04/2010 1926			Final Weight/Volume:	10 mL
Date Prepared:	03/04/2010 1926				

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

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	94		67 - 130
1,2-Dichloroethane-d4 (Surr)	103		67 - 130
Toluene-d8 (Surr)	96		70 - 130

Client: ARCADIS U.S., Inc. Job Number: 720-26268-1

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

Lab Sample ID: 720-26268-3 Date Sampled: 03/02/2010 1320
Client Matrix: Water Date Received: 03/02/2010 1656

8260B/CA_LUFTMS 8260B / CA LUFT MS

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-67005		Instrument ID:	SAT 3900C
Preparation:	5030B			Lab File ID:	26268-A-3 3-4-2010
Dilution:	1.0			Initial Weight/Volume:	10 mL
Date Analyzed:	03/04/2010 1954			Final Weight/Volume:	10 mL
Date Prepared:	03/04/2010 1954				

Analyte	Result (ug/L)	Qualifier	RL
Methyl tert-butyl ether	ND		0.50
Benzene	ND		0.50
Ethylbenzene	1.2		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
Gasoline Range Organics (GRO)-C5-C12	ND		50

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	98		67 - 130
1,2-Dichloroethane-d4 (Surr)	105		67 - 130
Toluene-d8 (Surr)	94		70 - 130

Client: ARCADIS U.S., Inc. Job Number: 720-26268-1

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

Lab Sample ID: 720-26268-4 Date Sampled: 03/02/2010 1505
Client Matrix: Water Date Received: 03/02/2010 1656

8260B/CA_LUFTMS 8260B / CA LUFT MS

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-67005		Instrument ID:	SAT 3900C
Preparation:	5030B			Lab File ID:	26268-A-4 3-4-2010
Dilution:	1.0			Initial Weight/Volume:	10 mL
Date Analyzed:	03/04/2010 2022			Final Weight/Volume:	10 mL
Date Prepared:	03/04/2010 2022				

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

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	103		67 - 130
1,2-Dichloroethane-d4 (Surr)	106		67 - 130
Toluene-d8 (Surr)	94		70 - 130

Client: ARCADIS U.S., Inc. Job Number: 720-26268-1

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

Lab Sample ID: 720-26268-5 Date Sampled: 03/02/2010 1530
Client Matrix: Water Date Received: 03/02/2010 1656

8260B/CA_LUFTMS 8260B / CA LUFT MS

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-67138		Instrument ID:	HP12
Preparation:	5030B			Lab File ID:	03061010.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Date Analyzed:	03/06/2010 1449			Final Weight/Volume:	10 mL
Date Prepared:	03/06/2010 1449				

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

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	91		67 - 130
1,2-Dichloroethane-d4 (Surr)	108		67 - 130
Toluene-d8 (Surr)	96		70 - 130

Client: ARCADIS U.S., Inc. Job Number: 720-26268-1

Client Sample ID: **MW-8**

Lab Sample ID: 720-26268-1 Date Sampled: 03/02/2010 1420
Client Matrix: Water Date Received: 03/02/2010 1656

8015B Diesel Range Organics (DRO) (GC)

Method:	8015B	Analysis Batch: 720-67142		Instrument ID:	CHDRO6
Preparation:	3510C	Prep Batch: 720-66943		Initial Weight/Volume:	990 mL
Dilution:	1.0			Final Weight/Volume:	5 mL
Date Analyzed:	03/06/2010 1554			Injection Volume:	1 uL
Date Prepared:	03/03/2010 1647			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	500		50

Surrogate	%Rec	Qualifier	Acceptance Limits
p-Terphenyl	89		23 - 156

Client: ARCADIS U.S., Inc. Job Number: 720-26268-1

Client Sample ID: **MW-1**

Lab Sample ID: 720-26268-2 Date Sampled: 03/02/2010 1610
Client Matrix: Water Date Received: 03/02/2010 1656

8015B Diesel Range Organics (DRO) (GC)

Method:	8015B	Analysis Batch: 720-67142		Instrument ID:	CHDRO6
Preparation:	3510C	Prep Batch: 720-66943		Initial Weight/Volume:	980 mL
Dilution:	1.0			Final Weight/Volume:	5 mL
Date Analyzed:	03/06/2010 1616			Injection Volume:	1 uL
Date Prepared:	03/03/2010 1647			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	150		51

Surrogate	%Rec	Qualifier	Acceptance Limits
p-Terphenyl	87		23 - 156

Client: ARCADIS U.S., Inc. Job Number: 720-26268-1

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

Lab Sample ID: 720-26268-4 Date Sampled: 03/02/2010 1505
Client Matrix: Water Date Received: 03/02/2010 1656

8015B Diesel Range Organics (DRO) (GC)

Method:	8015B	Analysis Batch: 720-67142		Instrument ID:	CHDRO6
Preparation:	3510C	Prep Batch: 720-66943		Initial Weight/Volume:	980 mL
Dilution:	1.0			Final Weight/Volume:	5 mL
Date Analyzed:	03/06/2010 1637			Injection Volume:	1 uL
Date Prepared:	03/03/2010 1647			Result Type:	PRIMARY

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

Surrogate	%Rec	Qualifier	Acceptance Limits
p-Terphenyl	84		23 - 156

Client: ARCADIS U.S., Inc. Job Number: 720-26268-1

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

Lab Sample ID: 720-26268-5 Date Sampled: 03/02/2010 1530
Client Matrix: Water Date Received: 03/02/2010 1656

8015B Diesel Range Organics (DRO) (GC)

Method:	8015B	Analysis Batch: 720-67142		Instrument ID:	CHDRO6
Preparation:	3510C	Prep Batch: 720-66943		Initial Weight/Volume:	980 mL
Dilution:	1.0			Final Weight/Volume:	5 mL
Date Analyzed:	03/06/2010 1659			Injection Volume:	1 uL
Date Prepared:	03/03/2010 1647			Result Type:	PRIMARY

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

Surrogate	%Rec	Qualifier	Acceptance Limits
p-Terphenyl	87		23 - 156

DATA REPORTING QUALIFIERS

Lab Section	Qualifier	Description

Client: ARCADIS U.S., Inc. Job Number: 720-26268-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Analysis Batch:720-67005					
LCS 720-67005/10	Lab Control Sample	T	Water	8260B/CA_LUFT	
LCS 720-67005/12	Lab Control Sample	T	Water	8260B/CA_LUFT	
LCSD 720-67005/11	Lab Control Sample Duplicate	T	Water	8260B/CA_LUFT	
LCSD 720-67005/13	Lab Control Sample Duplicate	T	Water	8260B/CA_LUFT	
MB 720-67005/9	Method Blank	T	Water	8260B/CA_LUFT	
720-26268-1	MW-8	T	Water	8260B/CA_LUFT	
720-26268-2	MW-1	T	Water	8260B/CA_LUFT	
720-26268-3	MW-9D	T	Water	8260B/CA_LUFT	
720-26268-4	MW-9LF	T	Water	8260B/CA_LUFT	
720-26268-A-5 MSMS	Matrix Spike	T	Water	8260B/CA_LUFT	
720-26268-A-5 MSDMSD	Matrix Spike Duplicate	T	Water	8260B/CA_LUFT	
Analysis Batch:720-67138					
LCS 720-67138/5	Lab Control Sample	T	Water	8260B/CA_LUFT	
LCS 720-67138/7	Lab Control Sample	T	Water	8260B/CA_LUFT	
LCSD 720-67138/6	Lab Control Sample Duplicate	T	Water	8260B/CA_LUFT	
LCSD 720-67138/8	Lab Control Sample Duplicate	T	Water	8260B/CA_LUFT	
MB 720-67138/4	Method Blank	T	Water	8260B/CA_LUFT	
720-26268-5	MW-9LF-D	T	Water	8260B/CA_LUFT	
720-26268-5MS	Matrix Spike	T	Water	8260B/CA_LUFT	
720-26268-5MSD	Matrix Spike Duplicate	T	Water	8260B/CA_LUFT	

Report Basis
T = Total

Client: ARCADIS U.S., Inc. Job Number: 720-26268-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Prep Batch: 720-66943					
LCS 720-66943/2-A	Lab Control Sample	T	Water	3510C	
LCSD 720-66943/3-A	Lab Control Sample Duplicate	T	Water	3510C	
MB 720-66943/1-A	Method Blank	T	Water	3510C	
720-26268-1	MW-8	T	Water	3510C	
720-26268-2	MW-1	T	Water	3510C	
720-26268-4	MW-9LF	T	Water	3510C	
720-26268-5	MW-9LF-D	T	Water	3510C	
Analysis Batch:720-67142					
LCS 720-66943/2-A	Lab Control Sample	T	Water	8015B	720-66943
LCSD 720-66943/3-A	Lab Control Sample Duplicate	T	Water	8015B	720-66943
MB 720-66943/1-A	Method Blank	T	Water	8015B	720-66943
720-26268-1	MW-8	T	Water	8015B	720-66943
720-26268-2	MW-1	T	Water	8015B	720-66943
720-26268-4	MW-9LF	T	Water	8015B	720-66943
720-26268-5	MW-9LF-D	T	Water	8015B	720-66943

Report Basis

T = Total

Client: ARCADIS U.S., Inc. Job Number: 720-26268-1

Method Blank - Batch: 720-67005

Method: 8260B/CA_LUFTMS
Preparation: 5030B

Lab Sample ID: MB 720-67005/9
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 03/04/2010 1537
Date Prepared: 03/04/2010 1537

Analysis Batch: 720-67005
Prep Batch: N/A
Units: ug/L

Instrument ID: SAT 3900C
Lab File ID: MB 3-4-2010 3;37;08 PM.d
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

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

Surrogate	% Rec	Acceptance Limits
4-Bromofluorobenzene	95	67 - 130
1,2-Dichloroethane-d4 (Surr)	110	67 - 130
Toluene-d8 (Surr)	95	70 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: ARCADIS U.S., Inc. Job Number: 720-26268-1

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 720-67005

Method: 8260B/CA_LUFTMS
Preparation: 5030B

LCS Lab Sample ID:	LCS 720-67005/10	Analysis Batch:	720-67005	Instrument ID:	SAT 3900C
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	LCS 3-4-2010 4;04;41 PM.d
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	10 mL
Date Analyzed:	03/04/2010 1604			Final Weight/Volume:	10 mL
Date Prepared:	03/04/2010 1604				

LCSD Lab Sample ID:	LCSD 720-67005/11	Analysis Batch:	720-67005	Instrument ID:	SAT 3900C
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	LCSD 3-4-2010 4;35;20 PM.d
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	10 mL
Date Analyzed:	03/04/2010 1635			Final Weight/Volume:	10 mL
Date Prepared:	03/04/2010 1635				

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Methyl tert-butyl ether	110	98	81 - 125	11	20		
Benzene	89	84	82 - 127	5	20		
Ethylbenzene	91	97	86 - 135	7	20		
Toluene	106	91	83 - 129	15	20		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
4-Bromofluorobenzene	102	101	67 - 130
1,2-Dichloroethane-d4 (Surr)	122	112	67 - 130
Toluene-d8 (Surr)	99	97	70 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: ARCADIS U.S., Inc. Job Number: 720-26268-1

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 720-67005

Method: 8260B/CA_LUFTMS
Preparation: 5030B

LCS Lab Sample ID:	LCS 720-67005/12	Analysis Batch:	720-67005	Instrument ID:	SAT 3900C
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	LCS GAS 3-4-2010 5;02;55
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	10 mL
Date Analyzed:	03/04/2010 1702			Final Weight/Volume:	10 mL
Date Prepared:	03/04/2010 1702				

LCSD Lab Sample ID:	LCSD 720-67005/13	Analysis Batch:	720-67005	Instrument ID:	SAT 3900C
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	LCSD GAS 3-4-2010 5;30;25
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	10 mL
Date Analyzed:	03/04/2010 1730			Final Weight/Volume:	10 mL
Date Prepared:	03/04/2010 1730				

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Gasoline Range Organics (GRO)-C5-C12	82	86	70 - 130	5	20		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
4-Bromofluorobenzene	97	103	67 - 130
1,2-Dichloroethane-d4 (Surr)	111	112	67 - 130
Toluene-d8 (Surr)	96	96	70 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: ARCADIS U.S., Inc. Job Number: 720-26268-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 720-67005

Method: 8260B/CA_LUFTMS
Preparation: 5030B

MS Lab Sample ID:	720-26268-A-5 MS	Analysis Batch:	720-67005	Instrument ID:	SAT 3900C
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	26268-A-5MS 3-4-2010
Dilution:	5.0			Initial Weight/Volume:	10 mL
Date Analyzed:	03/04/2010 2116			Final Weight/Volume:	10 mL
Date Prepared:	03/04/2010 2116				

MSD Lab Sample ID:	720-26268-A-5 MSD	Analysis Batch:	720-67005	Instrument ID:	SAT 3900C
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	26268-A-5MSD 3-4-2010
Dilution:	5.0			Initial Weight/Volume:	10 mL
Date Analyzed:	03/04/2010 2144			Final Weight/Volume:	10 mL
Date Prepared:	03/04/2010 2144				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Methyl tert-butyl ether	107	96	60 - 138	10	20		
Benzene	98	88	60 - 140	11	20		
Ethylbenzene	96	93	60 - 140	4	20		
Toluene	96	88	60 - 140	9	20		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
4-Bromofluorobenzene	98	102	67 - 130
1,2-Dichloroethane-d4 (Surr)	115	114	67 - 130
Toluene-d8 (Surr)	101	98	70 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

Method Blank - Batch: 720-67138

Method: 8260B/CA_LUFTMS
Preparation: 5030B

Lab Sample ID: MB 720-67138/4
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 03/06/2010 1116
Date Prepared: 03/06/2010 1116

Analysis Batch: 720-67138
Prep Batch: N/A
Units: ug/L

Instrument ID: HP12
Lab File ID: 03061004.D
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

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

Surrogate	% Rec	Acceptance Limits
4-Bromofluorobenzene	91	67 - 130
1,2-Dichloroethane-d4 (Surr)	99	67 - 130
Toluene-d8 (Surr)	95	70 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: ARCADIS U.S., Inc. Job Number: 720-26268-1

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 720-67138

Method: 8260B/CA_LUFTMS
Preparation: 5030B

LCS Lab Sample ID:	LCS 720-67138/5	Analysis Batch:	720-67138	Instrument ID:	HP12
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	03061005.D
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	10 mL
Date Analyzed:	03/06/2010 1200			Final Weight/Volume:	10 mL
Date Prepared:	03/06/2010 1200				

LCSD Lab Sample ID:	LCSD 720-67138/6	Analysis Batch:	720-67138	Instrument ID:	HP12
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	03061006.D
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	10 mL
Date Analyzed:	03/06/2010 1231			Final Weight/Volume:	10 mL
Date Prepared:	03/06/2010 1231				

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Methyl tert-butyl ether	104	107	81 - 125	3	20		
Benzene	100	103	82 - 127	3	20		
Ethylbenzene	99	101	86 - 135	1	20		
Toluene	94	96	83 - 129	1	20		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
4-Bromofluorobenzene	93	93	67 - 130
1,2-Dichloroethane-d4 (Surr)	97	99	67 - 130
Toluene-d8 (Surr)	97	98	70 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: ARCADIS U.S., Inc. Job Number: 720-26268-1

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 720-67138

Method: 8260B/CA_LUFTMS
Preparation: 5030B

LCS Lab Sample ID:	LCS 720-67138/7	Analysis Batch:	720-67138	Instrument ID:	HP12
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	03061007.D
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	10 mL
Date Analyzed:	03/06/2010 1302			Final Weight/Volume:	10 mL
Date Prepared:	03/06/2010 1302				

LCSD Lab Sample ID:	LCSD 720-67138/8	Analysis Batch:	720-67138	Instrument ID:	HP12
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	03061008.D
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	10 mL
Date Analyzed:	03/06/2010 1332			Final Weight/Volume:	10 mL
Date Prepared:	03/06/2010 1332				

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Gasoline Range Organics (GRO)-C5-C12	92	93	70 - 130	1	20		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
4-Bromofluorobenzene	96	97	67 - 130
1,2-Dichloroethane-d4 (Surr)	101	100	67 - 130
Toluene-d8 (Surr)	98	98	70 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: ARCADIS U.S., Inc. Job Number: 720-26268-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 720-67138

Method: 8260B/CA_LUFTMS
Preparation: 5030B

MS Lab Sample ID:	720-26268-5	Analysis Batch:	720-67138	Instrument ID:	HP12
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	03061011.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Date Analyzed:	03/06/2010 1520			Final Weight/Volume:	10 mL
Date Prepared:	03/06/2010 1520				

MSD Lab Sample ID:	720-26268-5	Analysis Batch:	720-67138	Instrument ID:	HP12
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	03061012.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Date Analyzed:	03/06/2010 1551			Final Weight/Volume:	10 mL
Date Prepared:	03/06/2010 1551				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Methyl tert-butyl ether	108	112	60 - 138	3	20		
Benzene	98	101	60 - 140	3	20		
Ethylbenzene	95	95	60 - 140	0	20		
Toluene	90	90	60 - 140	0	20		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
4-Bromofluorobenzene	93	91	67 - 130
1,2-Dichloroethane-d4 (Surr)	102	102	67 - 130
Toluene-d8 (Surr)	99	99	70 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

Method Blank - Batch: 720-66943

Method: 8015B
Preparation: 3510C

Lab Sample ID: MB 720-66943/1-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 03/06/2010 1826
Date Prepared: 03/03/2010 1647

Analysis Batch: 720-67142
Prep Batch: 720-66943
Units: ug/L

Instrument ID: CHDRO6
Lab File ID: FID1000024.D
Initial Weight/Volume: 1000 mL
Final Weight/Volume: 5 mL
Injection Volume: 1 uL
Column ID: PRIMARY

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

Surrogate	% Rec	Acceptance Limits
p-Terphenyl	98	23 - 156

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 720-66943

Method: 8015B
Preparation: 3510C

LCS Lab Sample ID: LCS 720-66943/2-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 03/06/2010 1512
Date Prepared: 03/03/2010 1647

Analysis Batch: 720-67142
Prep Batch: 720-66943
Units: ug/L

Instrument ID: CHDRO6
Lab File ID: FID1000015.D
Initial Weight/Volume: 1000 mL
Final Weight/Volume: 5 mL
Injection Volume: 1 uL
Column ID: PRIMARY

LCSD Lab Sample ID: LCSD 720-66943/3-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 03/06/2010 1533
Date Prepared: 03/03/2010 1647

Analysis Batch: 720-67142
Prep Batch: 720-66943
Units: ug/L

Instrument ID: CHDRO6
Lab File ID: FID1000016.D
Initial Weight/Volume: 1000 mL
Final Weight/Volume: 5 mL
Injection Volume: 1 uL
Column ID: PRIMARY

		% Rec.					
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Diesel Range Organics [C10-C28]	72	73	40 - 150	2	35		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
p-Terphenyl	99	103	23 - 156

Calculations are performed before rounding to avoid round-off errors in calculated results.

720-26268

122678

ARCADIS
Infrastructure, environment, buildings

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name: Katrin Schliewen (ARCADIS)
Telephone: (510) 652-4500
Address: 1900 Powell Street
Fax:
City: Emeryville State: CA Zip: 94608
E-mail Address:
Project Name/Location (City, State): Hanson Sund / Sunol, CA
Project #: EM009480.0011
Sampler's Printed Name: Andrea Valdivia
Sampler's Signature:

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Preservative	Filtered (✓)	# of Containers	Container Information	TPH-d (8015B)	TPH-g/BTEX MTBE (8260)						REMARKS
						B	B	1	2	3	1						
MW-8	03/02	1420		X	W	X		X									
MW-1	03/02	1610		X	W	X		X									
MW-9D	03/02	1320		X	W	X		X									
MW-9LF	03/02	1505		X	W	X		X									
MW-9LF-D	03/02	1530		X	W	X		X									

PARAMETER ANALYSIS & METHOD

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

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

Matrix Key:
SO - Soil
SE - Sediment
NL - NAPL/Oil
W - Water
SL - Sludge
SW - Sample Wipe
T - Tissue
A - Air
Other: _____

Special Instructions/Comments:

☐ Special QA/QC Instructions(✓):

7-8 days

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Test America	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Andrea Valdivia	Printed Name:	Printed Name:	Printed Name: Mullen
☐ Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature: Joan Mullen
Specify Turnaround Requirements:	Sample Receipt:	Firm: ARCADIS	Firm/Courier:	Firm/Courier:	Firm: Test America
Shipping Tracking #:	Condition/Cooler Temp: _____	Date/Time: 03/02/10 / 1656	Date/Time:	Date/Time:	Date/Time: 3-2-10 1656

20730826 CofC AR Form 01.12.2007

Distribution: WHITE – Laboratory returns with results YELLOW – Lab copy PINK – Retained by ARCADIS

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03/09/2010

Login Sample Receipt Check List

Client: ARCADIS U.S., Inc.

Job Number: 720-26268-1

Login Number: 26268

List Source: TestAmerica San Francisco

Creator: Mullen, Joan

List Number: 1

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

ANALYTICAL REPORT

Job Number: 720-26323-1

Job Description: Hanson Sunol,CA

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

Attention: Ms. Katrin Schliewen

Approved for release.
Afsaneh Salimpour
Project Manager I
3/10/2010 5:23 PM

Afsaneh Salimpour
Project Manager I
afsaneh.salimpour@testamericainc.com
03/10/2010

CA ELAP Certification # 2496
The Chain(s) of Custody are included and are an integral part of this report.
The report shall not be reproduced except in full, without the written approval of the laboratory. The client, by accepting this report, also agrees not to alter any reports whether in the hard copy or electronic format and to use reasonable efforts to preserve the reports in the form and substance originally provided by TestAmerica.
A trip blank is required to be provided for volatile analyses. If trip blank results are not included in the report, either the trip blank was not submitted or requested to be analyzed.

TestAmerica Laboratories, Inc.
TestAmerica San Francisco 1220 Quarry Lane, Pleasanton, CA 94566
Tel (925) 484-1919 Fax (925) 600-3002 www.testamericainc.com

Comments
No additional comments.

Receipt
All samples were received in good condition within temperature requirements.

GC/MS VOA
No analytical or quality issues were noted.

GC Semi VOA
No analytical or quality issues were noted.

Organic Prep
No analytical or quality issues were noted.

EXECUTIVE SUMMARY - Detections

Client: ARCADIS U.S., Inc. Job Number: 720-26323-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
720-26323-1	**MW-2D**				
Methyl tert-butyl ether		27	0.50	ug/L	8260B/CA_LUFTMS
Gasoline Range Organics (GRO)-C5-C12		110	50	ug/L	8260B/CA_LUFTMS
Diesel Range Organics [C10-C28]		2000	50	ug/L	8015B
720-26323-2	**MW-10LF**				
Methyl tert-butyl ether		1.2	0.50	ug/L	8260B/CA_LUFTMS
Gasoline Range Organics (GRO)-C5-C12		320	50	ug/L	8260B/CA_LUFTMS
Diesel Range Organics [C10-C28]		460	51	ug/L	8015B
720-26323-3	**MW-10D**				
Ethylbenzene		0.85	0.50	ug/L	8260B/CA_LUFTMS
Gasoline Range Organics (GRO)-C5-C12		450	50	ug/L	8260B/CA_LUFTMS
Diesel Range Organics [C10-C28]		700	51	ug/L	8015B
720-26323-4	**MW-10S**				
Diesel Range Organics [C10-C28]		1300	50	ug/L	8015B
720-26323-5	**MW-2M**				
Methyl tert-butyl ether		18	0.50	ug/L	8260B/CA_LUFTMS
Gasoline Range Organics (GRO)-C5-C12		220	50	ug/L	8260B/CA_LUFTMS
Diesel Range Organics [C10-C28]		3700	50	ug/L	8015B
720-26323-6	**MW-4D**				
Diesel Range Organics [C10-C28]		780	50	ug/L	8015B
720-26323-7	**MW-2S-D**				
Methyl tert-butyl ether		20	0.50	ug/L	8260B/CA_LUFTMS
Gasoline Range Organics (GRO)-C5-C12		100	50	ug/L	8260B/CA_LUFTMS
Diesel Range Organics [C10-C28]		10000	51	ug/L	8015B
720-26323-8	**MW-4S**				
Diesel Range Organics [C10-C28]		360	51	ug/L	8015B

EXECUTIVE SUMMARY - Detections

Client: ARCADIS U.S., Inc. Job Number: 720-26323-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
720-26323-9	**MW-2S**				
Methyl tert-butyl ether		19	0.50	ug/L	8260B/CA_LUFTMS
Gasoline Range Organics (GRO)-C5-C12		100	50	ug/L	8260B/CA_LUFTMS
Diesel Range Organics [C10-C28]		12000	51	ug/L	8015B
720-26323-10	**MW-6D**				
Methyl tert-butyl ether		39	0.50	ug/L	8260B/CA_LUFTMS
Gasoline Range Organics (GRO)-C5-C12		66	50	ug/L	8260B/CA_LUFTMS
Diesel Range Organics [C10-C28]		1100	51	ug/L	8015B

METHOD SUMMARY

Client: ARCADIS U.S., Inc. Job Number: 720-26323-1

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

Lab References:

TAL SF = TestAmerica San Francisco

Method References:

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

METHOD / ANALYST SUMMARY

Client: ARCADIS U.S., Inc. Job Number: 720-26323-1

Method	Analyst	Analyst ID
SW846 8260B/CA_LUFTMS	Ali, Badri	BA
SW846 8260B/CA_LUFTMS	Zhao, June	JZ
SW846 8015B	Vincent, Richard	RV

SAMPLE SUMMARY

Client: ARCADIS U.S., Inc. Job Number: 720-26323-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
720-26323-1	MW-2D	Water	03/03/2010 0842	03/03/2010 1658
720-26323-2	MW-10LF	Water	03/03/2010 1320	03/03/2010 1658
720-26323-3	MW-10D	Water	03/03/2010 1235	03/03/2010 1658
720-26323-4	MW-10S	Water	03/03/2010 1130	03/03/2010 1658
720-26323-5	MW-2M	Water	03/03/2010 0925	03/03/2010 1658
720-26323-6	MW-4D	Water	03/03/2010 1403	03/03/2010 1658
720-26323-7	MW-2S-D	Water	03/03/2010 1304	03/03/2010 1658
720-26323-8	MW-4S	Water	03/03/2010 1500	03/03/2010 1658
720-26323-9	MW-2S	Water	03/03/2010 1035	03/03/2010 1658
720-26323-10	MW-6D	Water	03/03/2010 1600	03/03/2010 1658

Client: ARCADIS U.S., Inc. Job Number: 720-26323-1

Client Sample ID: **MW-2D**

Lab Sample ID: 720-26323-1 Date Sampled: 03/03/2010 0842
Client Matrix: Water Date Received: 03/03/2010 1658

8260B/CA_LUFTMS 8260B / CA LUFT MS

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-67005	Instrument ID:	SAT 3900C
Preparation:	5030B		Lab File ID:	26323-A-1 3-4-2010
Dilution:	1.0		Initial Weight/Volume:	10 mL
Date Analyzed:	03/04/2010 2212		Final Weight/Volume:	10 mL
Date Prepared:	03/04/2010 2212			

Analyte	Result (ug/L)	Qualifier	RL
Methyl tert-butyl ether	27		0.50
Benzene	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
Gasoline Range Organics (GRO)-C5-C12	110		50

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	94		67 - 130
1,2-Dichloroethane-d4 (Surr)	114		67 - 130
Toluene-d8 (Surr)	99		70 - 130

Client: ARCADIS U.S., Inc. Job Number: 720-26323-1

Client Sample ID: **MW-10LF**

Lab Sample ID: 720-26323-2 Date Sampled: 03/03/2010 1320
Client Matrix: Water Date Received: 03/03/2010 1658

8260B/CA_LUFTMS 8260B / CA LUFT MS

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-67005		Instrument ID:	SAT 3900C
Preparation:	5030B			Lab File ID:	26323-A-2 3-4-2010
Dilution:	1.0			Initial Weight/Volume:	10 mL
Date Analyzed:	03/04/2010 2239			Final Weight/Volume:	10 mL
Date Prepared:	03/04/2010 2239				

Analyte	Result (ug/L)	Qualifier	RL
Methyl tert-butyl ether	1.2		0.50
Benzene	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
Gasoline Range Organics (GRO)-C5-C12	320		50

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	101		67 - 130
1,2-Dichloroethane-d4 (Surr)	109		67 - 130
Toluene-d8 (Surr)	95		70 - 130

Client: ARCADIS U.S., Inc. Job Number: 720-26323-1

Client Sample ID: **MW-10D**

Lab Sample ID: 720-26323-3 Date Sampled: 03/03/2010 1235
Client Matrix: Water Date Received: 03/03/2010 1658

8260B/CA_LUFTMS 8260B / CA LUFT MS

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-67005	Instrument ID:	SAT 3900C
Preparation:	5030B		Lab File ID:	26323-A-3 3-4-2010
Dilution:	1.0		Initial Weight/Volume:	10 mL
Date Analyzed:	03/04/2010 2307		Final Weight/Volume:	10 mL
Date Prepared:	03/04/2010 2307			

Analyte	Result (ug/L)	Qualifier	RL
Methyl tert-butyl ether	ND		0.50
Benzene	ND		0.50
Ethylbenzene	0.85		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
Gasoline Range Organics (GRO)-C5-C12	450		50

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	98		67 - 130
1,2-Dichloroethane-d4 (Surr)	110		67 - 130
Toluene-d8 (Surr)	96		70 - 130

Client: ARCADIS U.S., Inc. Job Number: 720-26323-1

Client Sample ID: **MW-10S**

Lab Sample ID: 720-26323-4 Date Sampled: 03/03/2010 1130
Client Matrix: Water Date Received: 03/03/2010 1658

8260B/CA_LUFTMS 8260B / CA LUFT MS

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-67005	Instrument ID:	SAT 3900C
Preparation:	5030B		Lab File ID:	26323-A-4 3-4-2010
Dilution:	1.0		Initial Weight/Volume:	10 mL
Date Analyzed:	03/04/2010 2334		Final Weight/Volume:	10 mL
Date Prepared:	03/04/2010 2334			

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

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	100		67 - 130
1,2-Dichloroethane-d4 (Surr)	107		67 - 130
Toluene-d8 (Surr)	96		70 - 130

Client: ARCADIS U.S., Inc. Job Number: 720-26323-1

Client Sample ID: **MW-2M**

Lab Sample ID: 720-26323-5 Date Sampled: 03/03/2010 0925
Client Matrix: Water Date Received: 03/03/2010 1658

8260B/CA_LUFTMS 8260B / CA LUFT MS

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-67005	Instrument ID:	SAT 3900C
Preparation:	5030B		Lab File ID:	26323-A-5 3-5-2010
Dilution:	1.0		Initial Weight/Volume:	10 mL
Date Analyzed:	03/05/2010 0002		Final Weight/Volume:	10 mL
Date Prepared:	03/05/2010 0002			

Analyte	Result (ug/L)	Qualifier	RL
Methyl tert-butyl ether	18		0.50
Benzene	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
Gasoline Range Organics (GRO)-C5-C12	220		50

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	99		67 - 130
1,2-Dichloroethane-d4 (Surr)	109		67 - 130
Toluene-d8 (Surr)	99		70 - 130

Client: ARCADIS U.S., Inc. Job Number: 720-26323-1

Client Sample ID: **MW-4D**

Lab Sample ID: 720-26323-6 Date Sampled: 03/03/2010 1403
Client Matrix: Water Date Received: 03/03/2010 1658

8260B/CA_LUFTMS 8260B / CA LUFT MS

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-67005	Instrument ID:	SAT 3900C
Preparation:	5030B		Lab File ID:	26323-A-6 3-5-2010
Dilution:	1.0		Initial Weight/Volume:	10 mL
Date Analyzed:	03/05/2010 0029		Final Weight/Volume:	10 mL
Date Prepared:	03/05/2010 0029			

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

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	102		67 - 130
1,2-Dichloroethane-d4 (Surr)	112		67 - 130
Toluene-d8 (Surr)	97		70 - 130

Client: ARCADIS U.S., Inc. Job Number: 720-26323-1

Client Sample ID: **MW-2S-D**

Lab Sample ID: 720-26323-7 Date Sampled: 03/03/2010 1304
Client Matrix: Water Date Received: 03/03/2010 1658

8260B/CA_LUFTMS 8260B / CA LUFT MS

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-67005	Instrument ID:	SAT 3900C
Preparation:	5030B		Lab File ID:	26323-A-7 3-5-2010
Dilution:	1.0		Initial Weight/Volume:	10 mL
Date Analyzed:	03/05/2010 0057		Final Weight/Volume:	10 mL
Date Prepared:	03/05/2010 0057			

Analyte	Result (ug/L)	Qualifier	RL
Methyl tert-butyl ether	20		0.50
Benzene	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
Gasoline Range Organics (GRO)-C5-C12	100		50

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	92		67 - 130
1,2-Dichloroethane-d4 (Surr)	104		67 - 130
Toluene-d8 (Surr)	100		70 - 130

Client: ARCADIS U.S., Inc. Job Number: 720-26323-1

Client Sample ID: **MW-4S**

Lab Sample ID: 720-26323-8 Date Sampled: 03/03/2010 1500
Client Matrix: Water Date Received: 03/03/2010 1658

8260B/CA_LUFTMS 8260B / CA LUFT MS

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-67005	Instrument ID:	SAT 3900C
Preparation:	5030B		Lab File ID:	26323-A-8 3-5-2010
Dilution:	1.0		Initial Weight/Volume:	10 mL
Date Analyzed:	03/05/2010 0124		Final Weight/Volume:	10 mL
Date Prepared:	03/05/2010 0124			

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

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	89		67 - 130
1,2-Dichloroethane-d4 (Surr)	105		67 - 130
Toluene-d8 (Surr)	98		70 - 130

Client: ARCADIS U.S., Inc. Job Number: 720-26323-1

Client Sample ID: **MW-2S**

Lab Sample ID: 720-26323-9 Date Sampled: 03/03/2010 1035
Client Matrix: Water Date Received: 03/03/2010 1658

8260B/CA_LUFTMS 8260B / CA LUFT MS

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-67005		Instrument ID:	SAT 3900C
Preparation:	5030B			Lab File ID:	26323-A-9 3-5-2010
Dilution:	1.0			Initial Weight/Volume:	10 mL
Date Analyzed:	03/05/2010 0152			Final Weight/Volume:	10 mL
Date Prepared:	03/05/2010 0152				

Analyte	Result (ug/L)	Qualifier	RL
Methyl tert-butyl ether	19		0.50
Benzene	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
Gasoline Range Organics (GRO)-C5-C12	100		50

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	105		67 - 130
1,2-Dichloroethane-d4 (Surr)	102		67 - 130
Toluene-d8 (Surr)	91		70 - 130

Client: ARCADIS U.S., Inc. Job Number: 720-26323-1

Client Sample ID: **MW-6D**

Lab Sample ID: 720-26323-10 Date Sampled: 03/03/2010 1600
Client Matrix: Water Date Received: 03/03/2010 1658

8260B/CA_LUFTMS 8260B / CA LUFT MS

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-67138	Instrument ID:	HP12
Preparation:	5030B		Lab File ID:	03061013.D
Dilution:	1.0		Initial Weight/Volume:	10 mL
Date Analyzed:	03/06/2010 1621		Final Weight/Volume:	10 mL
Date Prepared:	03/06/2010 1621			

Analyte	Result (ug/L)	Qualifier	RL
Methyl tert-butyl ether	39		0.50
Benzene	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
Gasoline Range Organics (GRO)-C5-C12	66		50

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	94		67 - 130
1,2-Dichloroethane-d4 (Surr)	106		67 - 130
Toluene-d8 (Surr)	97		70 - 130

Client: ARCADIS U.S., Inc. Job Number: 720-26323-1

Client Sample ID: **MW-2D**

Lab Sample ID: 720-26323-1 Date Sampled: 03/03/2010 0842
Client Matrix: Water Date Received: 03/03/2010 1658

8015B Diesel Range Organics (DRO) (GC)

Method:	8015B	Analysis Batch: 720-66969		Instrument ID:	CHDRO6
Preparation:	3510C	Prep Batch: 720-66999		Initial Weight/Volume:	990 mL
Dilution:	1.0			Final Weight/Volume:	5 mL
Date Analyzed:	03/04/2010 2242			Injection Volume:	1 uL
Date Prepared:	03/04/2010 1405			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	2000		50

Surrogate	%Rec	Qualifier	Acceptance Limits
p-Terphenyl	100		23 - 156

Client: ARCADIS U.S., Inc. Job Number: 720-26323-1

Client Sample ID: **MW-10LF**

Lab Sample ID: 720-26323-2 Date Sampled: 03/03/2010 1320
Client Matrix: Water Date Received: 03/03/2010 1658

8015B Diesel Range Organics (DRO) (GC)

Method:	8015B	Analysis Batch: 720-66969		Instrument ID:	CHDRO6
Preparation:	3510C	Prep Batch: 720-66999		Initial Weight/Volume:	980 mL
Dilution:	1.0			Final Weight/Volume:	5 mL
Date Analyzed:	03/04/2010 2303			Injection Volume:	1 uL
Date Prepared:	03/04/2010 1405			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	460		51

Surrogate	%Rec	Qualifier	Acceptance Limits
p-Terphenyl	91		23 - 156

Client: ARCADIS U.S., Inc. Job Number: 720-26323-1

Client Sample ID: **MW-10D**

Lab Sample ID: 720-26323-3 Date Sampled: 03/03/2010 1235
Client Matrix: Water Date Received: 03/03/2010 1658

8015B Diesel Range Organics (DRO) (GC)

Method:	8015B	Analysis Batch: 720-66969		Instrument ID:	CHDRO6
Preparation:	3510C	Prep Batch: 720-66999		Initial Weight/Volume:	970 mL
Dilution:	1.0			Final Weight/Volume:	5 mL
Date Analyzed:	03/04/2010 2325			Injection Volume:	1 uL
Date Prepared:	03/04/2010 1405			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	700		51

Surrogate	%Rec	Qualifier	Acceptance Limits
p-Terphenyl	90		23 - 156

Client: ARCADIS U.S., Inc. Job Number: 720-26323-1

Client Sample ID: **MW-10S**

Lab Sample ID: 720-26323-4 Date Sampled: 03/03/2010 1130
Client Matrix: Water Date Received: 03/03/2010 1658

8015B Diesel Range Organics (DRO) (GC)

Method:	8015B	Analysis Batch: 720-66969		Instrument ID:	CHDRO6
Preparation:	3510C	Prep Batch: 720-66999		Initial Weight/Volume:	990 mL
Dilution:	1.0			Final Weight/Volume:	5 mL
Date Analyzed:	03/04/2010 2346			Injection Volume:	1 uL
Date Prepared:	03/04/2010 1405			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	1300		50

Surrogate	%Rec	Qualifier	Acceptance Limits
p-Terphenyl	95		23 - 156

Client: ARCADIS U.S., Inc. Job Number: 720-26323-1

Client Sample ID: **MW-2M**

Lab Sample ID: 720-26323-5 Date Sampled: 03/03/2010 0925
Client Matrix: Water Date Received: 03/03/2010 1658

8015B Diesel Range Organics (DRO) (GC)

Method:	8015B	Analysis Batch: 720-66969		Instrument ID:	CHDRO6
Preparation:	3510C	Prep Batch: 720-66999		Initial Weight/Volume:	990 mL
Dilution:	1.0			Final Weight/Volume:	5 mL
Date Analyzed:	03/05/2010 0007			Injection Volume:	1 uL
Date Prepared:	03/04/2010 1405			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	3700		50

Surrogate	%Rec	Qualifier	Acceptance Limits
p-Terphenyl	90		23 - 156

Client: ARCADIS U.S., Inc. Job Number: 720-26323-1

Client Sample ID: **MW-4D**

Lab Sample ID: 720-26323-6 Date Sampled: 03/03/2010 1403
Client Matrix: Water Date Received: 03/03/2010 1658

8015B Diesel Range Organics (DRO) (GC)

Method:	8015B	Analysis Batch: 720-66969		Instrument ID:	CHDRO6
Preparation:	3510C	Prep Batch: 720-66999		Initial Weight/Volume:	990 mL
Dilution:	1.0			Final Weight/Volume:	5 mL
Date Analyzed:	03/05/2010 0029			Injection Volume:	1 uL
Date Prepared:	03/04/2010 1405			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	780		50

Surrogate	%Rec	Qualifier	Acceptance Limits
p-Terphenyl	105		23 - 156

Client: ARCADIS U.S., Inc. Job Number: 720-26323-1

Client Sample ID: **MW-2S-D**

Lab Sample ID: 720-26323-7 Date Sampled: 03/03/2010 1304
Client Matrix: Water Date Received: 03/03/2010 1658

8015B Diesel Range Organics (DRO) (GC)

Method:	8015B	Analysis Batch: 720-66969	Instrument ID: CHDRO6
Preparation:	3510C	Prep Batch: 720-66999	Initial Weight/Volume: 980 mL
Dilution:	1.0		Final Weight/Volume: 5 mL
Date Analyzed:	03/05/2010 0050		Injection Volume: 1 uL
Date Prepared:	03/04/2010 1405		Result Type: PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	10000		51

Surrogate	%Rec	Qualifier	Acceptance Limits
p-Terphenyl	98		23 - 156

Client: ARCADIS U.S., Inc. Job Number: 720-26323-1

Client Sample ID: **MW-4S**

Lab Sample ID: 720-26323-8 Date Sampled: 03/03/2010 1500
Client Matrix: Water Date Received: 03/03/2010 1658

8015B Diesel Range Organics (DRO) (GC)

Method:	8015B	Analysis Batch: 720-66969		Instrument ID:	CHDRO6
Preparation:	3510C	Prep Batch: 720-66999		Initial Weight/Volume:	980 mL
Dilution:	1.0			Final Weight/Volume:	5 mL
Date Analyzed:	03/05/2010 0111			Injection Volume:	1 uL
Date Prepared:	03/04/2010 1405			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	360		51

Surrogate	%Rec	Qualifier	Acceptance Limits
p-Terphenyl	107		23 - 156

Client: ARCADIS U.S., Inc. Job Number: 720-26323-1

Client Sample ID: **MW-2S**

Lab Sample ID: 720-26323-9 Date Sampled: 03/03/2010 1035
Client Matrix: Water Date Received: 03/03/2010 1658

8015B Diesel Range Organics (DRO) (GC)

Method:	8015B	Analysis Batch: 720-66969		Instrument ID:	CHDRO6
Preparation:	3510C	Prep Batch: 720-66999		Initial Weight/Volume:	980 mL
Dilution:	1.0			Final Weight/Volume:	5 mL
Date Analyzed:	03/05/2010 0132			Injection Volume:	1 uL
Date Prepared:	03/04/2010 1405			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	12000		51

Surrogate	%Rec	Qualifier	Acceptance Limits
p-Terphenyl	122		23 - 156

Client: ARCADIS U.S., Inc. Job Number: 720-26323-1

Client Sample ID: **MW-6D**

Lab Sample ID: 720-26323-10 Date Sampled: 03/03/2010 1600
Client Matrix: Water Date Received: 03/03/2010 1658

8015B Diesel Range Organics (DRO) (GC)

Method:	8015B	Analysis Batch: 720-66969		Instrument ID:	CHDRO6
Preparation:	3510C	Prep Batch: 720-66999		Initial Weight/Volume:	980 mL
Dilution:	1.0			Final Weight/Volume:	5 mL
Date Analyzed:	03/05/2010 0154			Injection Volume:	1 uL
Date Prepared:	03/04/2010 1405			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	1100		51

Surrogate	%Rec	Qualifier	Acceptance Limits
p-Terphenyl	103		23 - 156

DATA REPORTING QUALIFIERS

Lab Section	Qualifier	Description

Client: ARCADIS U.S., Inc. Job Number: 720-26323-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Analysis Batch:720-67005					
LCS 720-67005/10	Lab Control Sample	T	Water	8260B/CA_LUFT	
LCS 720-67005/12	Lab Control Sample	T	Water	8260B/CA_LUFT	
LCSD 720-67005/11	Lab Control Sample Duplicate	T	Water	8260B/CA_LUFT	
LCSD 720-67005/13	Lab Control Sample Duplicate	T	Water	8260B/CA_LUFT	
MB 720-67005/9	Method Blank	T	Water	8260B/CA_LUFT	
720-26268-A-5 MS	Matrix Spike	T	Water	8260B/CA_LUFT	
720-26268-A-5 MSD	Matrix Spike Duplicate	T	Water	8260B/CA_LUFT	
720-26323-1	MW-2D	T	Water	8260B/CA_LUFT	
720-26323-2	MW-10LF	T	Water	8260B/CA_LUFT	
720-26323-3	MW-10D	T	Water	8260B/CA_LUFT	
720-26323-4	MW-10S	T	Water	8260B/CA_LUFT	
720-26323-5	MW-2M	T	Water	8260B/CA_LUFT	
720-26323-6	MW-4D	T	Water	8260B/CA_LUFT	
720-26323-7	MW-2S-D	T	Water	8260B/CA_LUFT	
720-26323-8	MW-4S	T	Water	8260B/CA_LUFT	
720-26323-9	MW-2S	T	Water	8260B/CA_LUFT	
Analysis Batch:720-67138					
LCS 720-67138/5	Lab Control Sample	T	Water	8260B/CA_LUFT	
LCS 720-67138/7	Lab Control Sample	T	Water	8260B/CA_LUFT	
LCSD 720-67138/6	Lab Control Sample Duplicate	T	Water	8260B/CA_LUFT	
LCSD 720-67138/8	Lab Control Sample Duplicate	T	Water	8260B/CA_LUFT	
MB 720-67138/4	Method Blank	T	Water	8260B/CA_LUFT	
720-26268-B-5 MS	Matrix Spike	T	Water	8260B/CA_LUFT	
720-26268-B-5 MSD	Matrix Spike Duplicate	T	Water	8260B/CA_LUFT	
720-26323-10	MW-6D	T	Water	8260B/CA_LUFT	

Report Basis
T = Total

Client: ARCADIS U.S., Inc. Job Number: 720-26323-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Analysis Batch:720-66968					
LCS 720-66999/2-A	Lab Control Sample	T	Water	8015B	720-66999
LCSD 720-66999/3-A	Lab Control Sample Duplicate	T	Water	8015B	720-66999
MB 720-66999/1-A	Method Blank	T	Water	8015B	720-66999
Analysis Batch:720-66969					
720-26323-1	MW-2D	T	Water	8015B	720-66999
720-26323-2	MW-10LF	T	Water	8015B	720-66999
720-26323-3	MW-10D	T	Water	8015B	720-66999
720-26323-4	MW-10S	T	Water	8015B	720-66999
720-26323-5	MW-2M	T	Water	8015B	720-66999
720-26323-6	MW-4D	T	Water	8015B	720-66999
720-26323-7	MW-2S-D	T	Water	8015B	720-66999
720-26323-8	MW-4S	T	Water	8015B	720-66999
720-26323-9	MW-2S	T	Water	8015B	720-66999
720-26323-10	MW-6D	T	Water	8015B	720-66999
Prep Batch: 720-66999					
LCS 720-66999/2-A	Lab Control Sample	T	Water	3510C	
LCSD 720-66999/3-A	Lab Control Sample Duplicate	T	Water	3510C	
MB 720-66999/1-A	Method Blank	T	Water	3510C	
720-26323-1	MW-2D	T	Water	3510C	
720-26323-2	MW-10LF	T	Water	3510C	
720-26323-3	MW-10D	T	Water	3510C	
720-26323-4	MW-10S	T	Water	3510C	
720-26323-5	MW-2M	T	Water	3510C	
720-26323-6	MW-4D	T	Water	3510C	
720-26323-7	MW-2S-D	T	Water	3510C	
720-26323-8	MW-4S	T	Water	3510C	
720-26323-9	MW-2S	T	Water	3510C	
720-26323-10	MW-6D	T	Water	3510C	

Report Basis
T = Total

Client: ARCADIS U.S., Inc. Job Number: 720-26323-1

Method Blank - Batch: 720-67005

Method: 8260B/CA_LUFTMS
Preparation: 5030B

Lab Sample ID: MB 720-67005/9
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 03/04/2010 1537
Date Prepared: 03/04/2010 1537

Analysis Batch: 720-67005
Prep Batch: N/A
Units: ug/L

Instrument ID: SAT 3900C
Lab File ID: MB 3-4-2010 3;37;08 PM.d
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

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

Surrogate	% Rec	Acceptance Limits
4-Bromofluorobenzene	95	67 - 130
1,2-Dichloroethane-d4 (Surr)	110	67 - 130
Toluene-d8 (Surr)	95	70 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: ARCADIS U.S., Inc. Job Number: 720-26323-1

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 720-67005

Method: 8260B/CA_LUFTMS
Preparation: 5030B

LCS Lab Sample ID:	LCS 720-67005/10	Analysis Batch:	720-67005	Instrument ID:	SAT 3900C
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	LCS 3-4-2010 4;04;41 PM.d
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	10 mL
Date Analyzed:	03/04/2010 1604			Final Weight/Volume:	10 mL
Date Prepared:	03/04/2010 1604				

LCSD Lab Sample ID:	LCSD 720-67005/11	Analysis Batch:	720-67005	Instrument ID:	SAT 3900C
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	LCSD 3-4-2010 4;35;20 PM.d
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	10 mL
Date Analyzed:	03/04/2010 1635			Final Weight/Volume:	10 mL
Date Prepared:	03/04/2010 1635				

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Methyl tert-butyl ether	110	98	81 - 125	11	20		
Benzene	89	84	82 - 127	5	20		
Ethylbenzene	91	97	86 - 135	7	20		
Toluene	106	91	83 - 129	15	20		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
4-Bromofluorobenzene	102	101	67 - 130
1,2-Dichloroethane-d4 (Surr)	122	112	67 - 130
Toluene-d8 (Surr)	99	97	70 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: ARCADIS U.S., Inc. Job Number: 720-26323-1

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 720-67005

Method: 8260B/CA_LUFTMS
Preparation: 5030B

LCS Lab Sample ID:	LCS 720-67005/12	Analysis Batch:	720-67005	Instrument ID:	SAT 3900C
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	LCS GAS 3-4-2010 5;02;55
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	10 mL
Date Analyzed:	03/04/2010 1702			Final Weight/Volume:	10 mL
Date Prepared:	03/04/2010 1702				

LCSD Lab Sample ID:	LCSD 720-67005/13	Analysis Batch:	720-67005	Instrument ID:	SAT 3900C
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	LCSD GAS 3-4-2010 5;30;25
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	10 mL
Date Analyzed:	03/04/2010 1730			Final Weight/Volume:	10 mL
Date Prepared:	03/04/2010 1730				

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Gasoline Range Organics (GRO)-C5-C12	82	86	70 - 130	5	20		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
4-Bromofluorobenzene	97	103	67 - 130
1,2-Dichloroethane-d4 (Surr)	111	112	67 - 130
Toluene-d8 (Surr)	96	96	70 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: ARCADIS U.S., Inc. Job Number: 720-26323-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 720-67005

Method: 8260B/CA_LUFTMS
Preparation: 5030B

MS Lab Sample ID:	720-26268-A-5 MS	Analysis Batch:	720-67005	Instrument ID:	SAT 3900C
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	26268-A-5MS 3-4-2010
Dilution:	5.0			Initial Weight/Volume:	10 mL
Date Analyzed:	03/04/2010 2116			Final Weight/Volume:	10 mL
Date Prepared:	03/04/2010 2116				

MSD Lab Sample ID:	720-26268-A-5 MSD	Analysis Batch:	720-67005	Instrument ID:	SAT 3900C
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	26268-A-5MSD 3-4-2010
Dilution:	5.0			Initial Weight/Volume:	10 mL
Date Analyzed:	03/04/2010 2144			Final Weight/Volume:	10 mL
Date Prepared:	03/04/2010 2144				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Methyl tert-butyl ether	107	96	60 - 138	10	20		
Benzene	98	88	60 - 140	11	20		
Ethylbenzene	96	93	60 - 140	4	20		
Toluene	96	88	60 - 140	9	20		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
4-Bromofluorobenzene	98	102	67 - 130
1,2-Dichloroethane-d4 (Surr)	115	114	67 - 130
Toluene-d8 (Surr)	101	98	70 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: ARCADIS U.S., Inc. Job Number: 720-26323-1

Method Blank - Batch: 720-67138

Method: 8260B/CA_LUFTMS
Preparation: 5030B

Lab Sample ID: MB 720-67138/4
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 03/06/2010 1116
Date Prepared: 03/06/2010 1116

Analysis Batch: 720-67138
Prep Batch: N/A
Units: ug/L

Instrument ID: HP12
Lab File ID: 03061004.D
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

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

Surrogate	% Rec	Acceptance Limits
4-Bromofluorobenzene	91	67 - 130
1,2-Dichloroethane-d4 (Surr)	99	67 - 130
Toluene-d8 (Surr)	95	70 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: ARCADIS U.S., Inc. Job Number: 720-26323-1

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 720-67138

Method: 8260B/CA_LUFTMS
Preparation: 5030B

LCS Lab Sample ID:	LCS 720-67138/5	Analysis Batch:	720-67138	Instrument ID:	HP12
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	03061005.D
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	10 mL
Date Analyzed:	03/06/2010 1200			Final Weight/Volume:	10 mL
Date Prepared:	03/06/2010 1200				

LCSD Lab Sample ID:	LCSD 720-67138/6	Analysis Batch:	720-67138	Instrument ID:	HP12
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	03061006.D
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	10 mL
Date Analyzed:	03/06/2010 1231			Final Weight/Volume:	10 mL
Date Prepared:	03/06/2010 1231				

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Methyl tert-butyl ether	104	107	81 - 125	3	20		
Benzene	100	103	82 - 127	3	20		
Ethylbenzene	99	101	86 - 135	1	20		
Toluene	94	96	83 - 129	1	20		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
4-Bromofluorobenzene	93	93	67 - 130
1,2-Dichloroethane-d4 (Surr)	97	99	67 - 130
Toluene-d8 (Surr)	97	98	70 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: ARCADIS U.S., Inc. Job Number: 720-26323-1

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 720-67138

Method: 8260B/CA_LUFTMS
Preparation: 5030B

LCS Lab Sample ID:	LCS 720-67138/7	Analysis Batch:	720-67138	Instrument ID:	HP12
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	03061007.D
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	10 mL
Date Analyzed:	03/06/2010 1302			Final Weight/Volume:	10 mL
Date Prepared:	03/06/2010 1302				

LCSD Lab Sample ID:	LCSD 720-67138/8	Analysis Batch:	720-67138	Instrument ID:	HP12
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	03061008.D
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	10 mL
Date Analyzed:	03/06/2010 1332			Final Weight/Volume:	10 mL
Date Prepared:	03/06/2010 1332				

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Gasoline Range Organics (GRO)-C5-C12	92	93	70 - 130	1	20		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
4-Bromofluorobenzene	96	97	67 - 130
1,2-Dichloroethane-d4 (Surr)	101	100	67 - 130
Toluene-d8 (Surr)	98	98	70 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: ARCADIS U.S., Inc. Job Number: 720-26323-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 720-67138

Method: 8260B/CA_LUFTMS
Preparation: 5030B

MS Lab Sample ID:	720-26268-B-5 MS	Analysis Batch:	720-67138	Instrument ID:	HP12
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	03061011.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Date Analyzed:	03/06/2010 1520			Final Weight/Volume:	10 mL
Date Prepared:	03/06/2010 1520				

MSD Lab Sample ID:	720-26268-B-5 MSD	Analysis Batch:	720-67138	Instrument ID:	HP12
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	03061012.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Date Analyzed:	03/06/2010 1551			Final Weight/Volume:	10 mL
Date Prepared:	03/06/2010 1551				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Methyl tert-butyl ether	108	112	60 - 138	3	20		
Benzene	98	101	60 - 140	3	20		
Ethylbenzene	95	95	60 - 140	0	20		
Toluene	90	90	60 - 140	0	20		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
4-Bromofluorobenzene	93	91	67 - 130
1,2-Dichloroethane-d4 (Surr)	102	102	67 - 130
Toluene-d8 (Surr)	99	99	70 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

Method Blank - Batch: 720-66999

Method: 8015B
Preparation: 3510C

Lab Sample ID: MB 720-66999/1-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 03/05/2010 0443
Date Prepared: 03/04/2010 1405

Analysis Batch: 720-66968
Prep Batch: 720-66999
Units: ug/L

Instrument ID: CHDRO6
Lab File ID: FID1000055.D
Initial Weight/Volume: 1000 mL
Final Weight/Volume: 5 mL
Injection Volume: 1 uL
Column ID: PRIMARY

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

Surrogate	% Rec	Acceptance Limits
p-Terphenyl	108	23 - 156

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 720-66999

Method: 8015B
Preparation: 3510C

LCS Lab Sample ID: LCS 720-66999/2-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 03/05/2010 0401
Date Prepared: 03/04/2010 1405

Analysis Batch: 720-66968
Prep Batch: 720-66999
Units: ug/L

Instrument ID: CHDRO6
Lab File ID: FID1000053.D
Initial Weight/Volume: 1000 mL
Final Weight/Volume: 5 mL
Injection Volume: 1 uL
Column ID: PRIMARY

LCSD Lab Sample ID: LCSD 720-66999/3-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 03/05/2010 0422
Date Prepared: 03/04/2010 1405

Analysis Batch: 720-66968
Prep Batch: 720-66999
Units: ug/L

Instrument ID: CHDRO6
Lab File ID: FID1000054.D
Initial Weight/Volume: 1000 mL
Final Weight/Volume: 5 mL
Injection Volume: 1 uL
Column ID: PRIMARY

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Diesel Range Organics [C10-C28]	87	87	40 - 150	0	35		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
p-Terphenyl	113	107	23 - 156

Calculations are performed before rounding to avoid round-off errors in calculated results.

720-26323

122731

ARCADIS
Infrastructure, environment, buildings

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #:

Send Results to:

Contact & Company Name: Katrin Schlicuven ARCADIS
Telephone: (510) 652-4500
Address: 1900 Powell St. Fl. 11
Fax:
City: Emeryville State: CA Zip: 94608
E-mail Address:
Project Name/Location (City, State): Hansen Sunol / Sunol, CA
Project #: EM009480.0011
Sampler's Printed Name: Andrea Valdivia
Sampler's Signature:

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Preservative	Filtered (✓)	# of Containers	Container Information	TPHd (8015B)	TPHg/BTEX/MTBE (8260)
1 MW-2D	03/03	0842		X	W	B		1	2	X	X
2 MW-10LF	↑	1320		↓	↑					↓	↓
3 MW-10D		1235									
4 MW-10S		1130									
5 MW-2M		0925									
6 MW-4D		1403									
7 MW-2S-D		1340									
8 MW-4S		1500									
9 MW-2S	↓	1035		↓	↓	↓				↓	↓
10 MW-6D	03/03	1600		X	W	B		3	1	X	X
11 Trip Blank	03/03	—									

PARAMETER ANALYSIS & METHOD

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

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

Matrix Key:
SO - Soil
W - Water
T - Tissue
SE - Sediment
SL - Sludge
A - Air
NL - NAPL/Oil
SW - Sample Wipe
Other: _____

REMARKS

Special Instructions/Comments:

☐ Special QA/QC Instructions(✓):

3.5°

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Test America	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Andrea Valdivia	Printed Name:	Printed Name:	Printed Name: Mulley
☑ Cooler packed with ice (✓)		Signature:	Signature:	Signature:	Signature:
Special Turnaround Requirements: 14 day hold	Sample Receipt:	Firm: ARCADIS	Firm/Courier:	Firm/Courier:	Firm: Test America
Shipping Tracking #:	Condition/Cooler Temp:	Date/Time: 03/03/10 / 1658	Date/Time:	Date/Time:	Date/Time: 3-3-10 1658

03/10/2010

Distribution: WHITE – Laboratory returns with results YELLOW – Lab copy PINK – Retained by ARCADIS

Login Sample Receipt Check List

Client: ARCADIS U.S., Inc.

Job Number: 720-26323-1

Login Number: 26323

List Source: TestAmerica San Francisco

Creator: Mullen, Joan

List Number: 1

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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 720-26356-1

Job Description: Hanson Sunol,CA

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

Attention: Ms. Katrin Schliewen

Approved for release.
Afsaneh Salimpour
Project Manager I
3/11/2010 11:31 AM

Afsaneh Salimpour
Project Manager I
afsaneh.salimpour@testamericainc.com
03/11/2010

CA ELAP Certification # 2496
The Chain(s) of Custody are included and are an integral part of this report.
The report shall not be reproduced except in full, without the written approval of the laboratory. The client, by accepting this report, also agrees not to alter any reports whether in the hard copy or electronic format and to use reasonable efforts to preserve the reports in the form and substance originally provided by TestAmerica.
A trip blank is required to be provided for volatile analyses. If trip blank results are not included in the report, either the trip blank was not submitted or requested to be analyzed.

TestAmerica Laboratories, Inc.
TestAmerica San Francisco 1220 Quarry Lane, Pleasanton, CA 94566
Tel (925) 484-1919 Fax (925) 600-3002 www.testamericainc.com

Comments
No additional comments.

Receipt
All samples were received in good condition within temperature requirements.

GC/MS VOA
No analytical or quality issues were noted.

GC Semi VOA
No analytical or quality issues were noted.

Organic Prep
No analytical or quality issues were noted.

EXECUTIVE SUMMARY - Detections

Client: ARCADIS U.S., Inc. Job Number: 720-26356-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
720-26356-1	**MW-9S**				
Diesel Range Organics [C10-C28]		11	5.0	ug/L	8015B
720-26356-2	**OXY-1D**				
Diesel Range Organics [C10-C28]		3800	51	ug/L	8015B
720-26356-3	**OXY-1LF**				
Diesel Range Organics [C10-C28]		130	51	ug/L	8015B
720-26356-4	**MW-9D**				
Diesel Range Organics [C10-C28]		160	51	ug/L	8015B
720-26356-5	**MW-5S**				
Methyl tert-butyl ether		0.57	0.50	ug/L	8260B/CA_LUFTMS
Diesel Range Organics [C10-C28]		3600	51	ug/L	8015B
720-26356-6	**MW-5D**				
Methyl tert-butyl ether		0.84	0.50	ug/L	8260B/CA_LUFTMS
Diesel Range Organics [C10-C28]		2500	53	ug/L	8015B
720-26356-7	**MW-5S-D**				
Methyl tert-butyl ether		0.59	0.50	ug/L	8260B/CA_LUFTMS
Diesel Range Organics [C10-C28]		3400	51	ug/L	8015B
720-26356-8	**MW-7D**				
Ethylbenzene		570	50	ug/L	8260B/CA_LUFTMS
Xylenes, Total		280	100	ug/L	8260B/CA_LUFTMS
Gasoline Range Organics (GRO)-C5-C12		11000	5000	ug/L	8260B/CA_LUFTMS
Diesel Range Organics [C10-C28]		1400	51	ug/L	8015B
720-26356-9	**MW-7S**				
Gasoline Range Organics (GRO)-C5-C12		280	50	ug/L	8260B/CA_LUFTMS
Diesel Range Organics [C10-C28]		2000	50	ug/L	8015B

METHOD SUMMARY

Client: ARCADIS U.S., Inc. Job Number: 720-26356-1

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

Lab References:

TAL SF = TestAmerica San Francisco

Method References:

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

METHOD / ANALYST SUMMARY

Client: ARCADIS U.S., Inc. Job Number: 720-26356-1

Method	Analyst	Analyst ID
SW846 8260B/CA_LUFTMS	Chen, Amy	AC
SW846 8260B/CA_LUFTMS	Le, Lien	LL
SW846 8260B/CA_LUFTMS	Nguyen, Thuy M	TMN
SW846 8015B	Hayashi, Derek	DH

SAMPLE SUMMARY

Client: ARCADIS U.S., Inc. Job Number: 720-26356-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
720-26356-1	MW-9S	Water	03/04/2010 0835	03/04/2010 1730
720-26356-2	OXY-1D	Water	03/04/2010 0935	03/04/2010 1730
720-26356-3	OXY-1LF	Water	03/04/2010 1150	03/04/2010 1730
720-26356-4	MW-9D	Water	03/04/2010 1310	03/04/2010 1730
720-26356-5	MW-5S	Water	03/04/2010 1408	03/04/2010 1730
720-26356-6	MW-5D	Water	03/04/2010 1450	03/04/2010 1730
720-26356-7	MW-5S-D	Water	03/04/2010 1530	03/04/2010 1730
720-26356-8	MW-7D	Water	03/04/2010 1550	03/04/2010 1730
720-26356-9	MW-7S	Water	03/04/2010 1642	03/04/2010 1730
720-26356-10	Trip Blank	Water	03/04/2010 0000	03/04/2010 1730

Client: ARCADIS U.S., Inc. Job Number: 720-26356-1

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

Lab Sample ID: 720-26356-1 Date Sampled: 03/04/2010 0835
Client Matrix: Water Date Received: 03/04/2010 1730

8260B/CA_LUFTMS 8260B / CA LUFT MS

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-67054		Instrument ID:	HP4
Preparation:	5030B			Lab File ID:	03051012.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Date Analyzed:	03/05/2010 1553			Final Weight/Volume:	10 mL
Date Prepared:	03/05/2010 1553				

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

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	106		67 - 130
1,2-Dichloroethane-d4 (Surr)	94		67 - 130
Toluene-d8 (Surr)	98		70 - 130

Client: ARCADIS U.S., Inc. Job Number: 720-26356-1

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

Lab Sample ID: 720-26356-2 Date Sampled: 03/04/2010 0935
Client Matrix: Water Date Received: 03/04/2010 1730

8260B/CA_LUFTMS 8260B / CA LUFT MS

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-67054		Instrument ID:	HP4
Preparation:	5030B			Lab File ID:	03051015.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Date Analyzed:	03/05/2010 1729			Final Weight/Volume:	10 mL
Date Prepared:	03/05/2010 1729				

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

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	101		67 - 130
1,2-Dichloroethane-d4 (Surr)	85		67 - 130
Toluene-d8 (Surr)	93		70 - 130

Client: ARCADIS U.S., Inc. Job Number: 720-26356-1

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

Lab Sample ID: 720-26356-3 Date Sampled: 03/04/2010 1150
Client Matrix: Water Date Received: 03/04/2010 1730

8260B/CA_LUFTMS 8260B / CA LUFT MS

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-67054		Instrument ID:	HP4
Preparation:	5030B			Lab File ID:	03051016.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Date Analyzed:	03/05/2010 1801			Final Weight/Volume:	10 mL
Date Prepared:	03/05/2010 1801				

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

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	106		67 - 130
1,2-Dichloroethane-d4 (Surr)	97		67 - 130
Toluene-d8 (Surr)	96		70 - 130

Client: ARCADIS U.S., Inc. Job Number: 720-26356-1

Client Sample ID: **MW-5S**

Lab Sample ID: 720-26356-5 Date Sampled: 03/04/2010 1408
Client Matrix: Water Date Received: 03/04/2010 1730

8260B/CA_LUFTMS 8260B / CA LUFT MS

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-67054	Instrument ID:	HP4
Preparation:	5030B		Lab File ID:	03051017.D
Dilution:	1.0		Initial Weight/Volume:	10 mL
Date Analyzed:	03/05/2010 1833		Final Weight/Volume:	10 mL
Date Prepared:	03/05/2010 1833			

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

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	95		67 - 130
1,2-Dichloroethane-d4 (Surr)	83		67 - 130
Toluene-d8 (Surr)	87		70 - 130

Client: ARCADIS U.S., Inc. Job Number: 720-26356-1

Client Sample ID: **MW-5S**

Lab Sample ID: 720-26356-5 Date Sampled: 03/04/2010 1408
Client Matrix: Water Date Received: 03/04/2010 1730

8260B/CA_LUFTMS 8260B / CA LUFT MS

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-67242	Instrument ID:	CHMSV2
Preparation:	5030B		Lab File ID:	03091012.D
Dilution:	1.0		Initial Weight/Volume:	10 mL
Date Analyzed:	03/09/2010 1556		Final Weight/Volume:	10 mL
Date Prepared:	03/09/2010 1556			

Analyte	Result (ug/L)	Qualifier	RL
Methyl tert-butyl ether	0.57		0.50

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	99		67 - 130
1,2-Dichloroethane-d4 (Surr)	94		67 - 130
Toluene-d8 (Surr)	95		70 - 130

Client: ARCADIS U.S., Inc. Job Number: 720-26356-1

Client Sample ID: **MW-5D**

Lab Sample ID: 720-26356-6 Date Sampled: 03/04/2010 1450
Client Matrix: Water Date Received: 03/04/2010 1730

8260B/CA_LUFTMS 8260B / CA LUFT MS

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-67054		Instrument ID:	HP4
Preparation:	5030B			Lab File ID:	03051018.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Date Analyzed:	03/05/2010 1905			Final Weight/Volume:	10 mL
Date Prepared:	03/05/2010 1905				

Analyte	Result (ug/L)	Qualifier	RL
Methyl tert-butyl ether	0.84		0.50
Benzene	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
Gasoline Range Organics (GRO)-C5-C12	ND		50

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	101		67 - 130
1,2-Dichloroethane-d4 (Surr)	92		67 - 130
Toluene-d8 (Surr)	93		70 - 130

Client: ARCADIS U.S., Inc. Job Number: 720-26356-1

Client Sample ID: **MW-5S-D**

Lab Sample ID: 720-26356-7 Date Sampled: 03/04/2010 1530
Client Matrix: Water Date Received: 03/04/2010 1730

8260B/CA_LUFTMS 8260B / CA LUFT MS

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-67054		Instrument ID:	HP4
Preparation:	5030B			Lab File ID:	03051019.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Date Analyzed:	03/05/2010 1937			Final Weight/Volume:	10 mL
Date Prepared:	03/05/2010 1937				

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

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	99		67 - 130
1,2-Dichloroethane-d4 (Surr)	91		67 - 130
Toluene-d8 (Surr)	90		70 - 130

Client: ARCADIS U.S., Inc. Job Number: 720-26356-1

Client Sample ID: **MW-5S-D**

Lab Sample ID: 720-26356-7 Date Sampled: 03/04/2010 1530
Client Matrix: Water Date Received: 03/04/2010 1730

8260B/CA_LUFTMS 8260B / CA LUFT MS

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-67242	Instrument ID:	CHMSV2
Preparation:	5030B		Lab File ID:	03091013.D
Dilution:	1.0		Initial Weight/Volume:	10 mL
Date Analyzed:	03/09/2010 1629		Final Weight/Volume:	10 mL
Date Prepared:	03/09/2010 1629			

Analyte	Result (ug/L)	Qualifier	RL
Methyl tert-butyl ether	0.59		0.50

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	98		67 - 130
1,2-Dichloroethane-d4 (Surr)	97		67 - 130
Toluene-d8 (Surr)	94		70 - 130

Client: ARCADIS U.S., Inc. Job Number: 720-26356-1

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

Lab Sample ID: 720-26356-8 Date Sampled: 03/04/2010 1550
Client Matrix: Water Date Received: 03/04/2010 1730

8260B/CA_LUFTMS 8260B / CA LUFT MS

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-67156	Instrument ID:	CHMSV2
Preparation:	5030B		Lab File ID:	03081016.D
Dilution:	100		Initial Weight/Volume:	10 mL
Date Analyzed:	03/08/2010 1737		Final Weight/Volume:	10 mL
Date Prepared:	03/08/2010 1737			

Analyte	Result (ug/L)	Qualifier	RL
Methyl tert-butyl ether	ND		50
Benzene	ND		50
Ethylbenzene	570		50
Toluene	ND		50
Xylenes, Total	280		100
Gasoline Range Organics (GRO)-C5-C12	11000		5000

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	97		67 - 130
1,2-Dichloroethane-d4 (Surr)	93		67 - 130
Toluene-d8 (Surr)	96		70 - 130

Client: ARCADIS U.S., Inc. Job Number: 720-26356-1

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

Lab Sample ID: 720-26356-9 Date Sampled: 03/04/2010 1642
Client Matrix: Water Date Received: 03/04/2010 1730

8260B/CA_LUFTMS 8260B / CA LUFT MS

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-67156		Instrument ID:	CHMSV2
Preparation:	5030B			Lab File ID:	03081017.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Date Analyzed:	03/08/2010 1810			Final Weight/Volume:	10 mL
Date Prepared:	03/08/2010 1810				

Analyte	Result (ug/L)	Qualifier	RL
Methyl tert-butyl ether	ND		0.50
Benzene	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
Gasoline Range Organics (GRO)-C5-C12	280		50

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	99		67 - 130
1,2-Dichloroethane-d4 (Surr)	92		67 - 130
Toluene-d8 (Surr)	96		70 - 130

Client: ARCADIS U.S., Inc. Job Number: 720-26356-1

Client Sample ID: **Trip Blank**

Lab Sample ID: 720-26356-10 Date Sampled: 03/04/2010 0000
Client Matrix: Water Date Received: 03/04/2010 1730

8260B/CA_LUFTMS 8260B / CA LUFT MS

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-67054		Instrument ID:	HP4
Preparation:	5030B			Lab File ID:	03051011.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Date Analyzed:	03/05/2010 1521			Final Weight/Volume:	10 mL
Date Prepared:	03/05/2010 1521				

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

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	99		67 - 130
1,2-Dichloroethane-d4 (Surr)	84		67 - 130
Toluene-d8 (Surr)	86		70 - 130

Client: ARCADIS U.S., Inc. Job Number: 720-26356-1

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

Lab Sample ID: 720-26356-1 Date Sampled: 03/04/2010 0835
Client Matrix: Water Date Received: 03/04/2010 1730

8015B Diesel Range Organics (DRO) (GC)

Method:	8015B	Analysis Batch: 720-67142		Instrument ID:	CHDRO6
Preparation:	3510C	Prep Batch: 720-67098		Initial Weight/Volume:	9870 mL
Dilution:	1.0			Final Weight/Volume:	5 mL
Date Analyzed:	03/07/2010 0318			Injection Volume:	1 uL
Date Prepared:	03/05/2010 1344			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	11		5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
p-Terphenyl	104		23 - 156

Client: ARCADIS U.S., Inc. Job Number: 720-26356-1

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

Lab Sample ID: 720-26356-2 Date Sampled: 03/04/2010 0935
Client Matrix: Water Date Received: 03/04/2010 1730

8015B Diesel Range Organics (DRO) (GC)

Method:	8015B	Analysis Batch: 720-67142		Instrument ID:	CHDRO6
Preparation:	3510C	Prep Batch: 720-67098		Initial Weight/Volume:	980 mL
Dilution:	1.0			Final Weight/Volume:	5 mL
Date Analyzed:	03/07/2010 0342			Injection Volume:	1 uL
Date Prepared:	03/05/2010 1344			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	3800		51

Surrogate	%Rec	Qualifier	Acceptance Limits
p-Terphenyl	99		23 - 156

Client: ARCADIS U.S., Inc. Job Number: 720-26356-1

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

Lab Sample ID: 720-26356-3 Date Sampled: 03/04/2010 1150
Client Matrix: Water Date Received: 03/04/2010 1730

8015B Diesel Range Organics (DRO) (GC)

Method:	8015B	Analysis Batch: 720-67142		Instrument ID:	CHDRO6
Preparation:	3510C	Prep Batch: 720-67098		Initial Weight/Volume:	970 mL
Dilution:	1.0			Final Weight/Volume:	5 mL
Date Analyzed:	03/07/2010 0404			Injection Volume:	1 uL
Date Prepared:	03/05/2010 1344			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	130		51

Surrogate	%Rec	Qualifier	Acceptance Limits
p-Terphenyl	110		23 - 156

Client: ARCADIS U.S., Inc. Job Number: 720-26356-1

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

Lab Sample ID: 720-26356-4 Date Sampled: 03/04/2010 1310
Client Matrix: Water Date Received: 03/04/2010 1730

8015B Diesel Range Organics (DRO) (GC)

Method:	8015B	Analysis Batch: 720-67142		Instrument ID:	CHDRO6
Preparation:	3510C	Prep Batch: 720-67098		Initial Weight/Volume:	980 mL
Dilution:	1.0			Final Weight/Volume:	5 mL
Date Analyzed:	03/07/2010 0425			Injection Volume:	1 uL
Date Prepared:	03/05/2010 1344			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	160		51

Surrogate	%Rec	Qualifier	Acceptance Limits
p-Terphenyl	105		23 - 156

Client: ARCADIS U.S., Inc. Job Number: 720-26356-1

Client Sample ID: **MW-5S**

Lab Sample ID: 720-26356-5 Date Sampled: 03/04/2010 1408
Client Matrix: Water Date Received: 03/04/2010 1730

8015B Diesel Range Organics (DRO) (GC)

Method:	8015B	Analysis Batch: 720-67142		Instrument ID:	CHDRO6
Preparation:	3510C	Prep Batch: 720-67098		Initial Weight/Volume:	980 mL
Dilution:	1.0			Final Weight/Volume:	5 mL
Date Analyzed:	03/07/2010 0443			Injection Volume:	1 uL
Date Prepared:	03/05/2010 1344			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	3600		51

Surrogate	%Rec	Qualifier	Acceptance Limits
p-Terphenyl	98		23 - 156

Client: ARCADIS U.S., Inc. Job Number: 720-26356-1

Client Sample ID: **MW-5D**

Lab Sample ID: 720-26356-6 Date Sampled: 03/04/2010 1450
Client Matrix: Water Date Received: 03/04/2010 1730

8015B Diesel Range Organics (DRO) (GC)

Method:	8015B	Analysis Batch: 720-67142		Instrument ID:	CHDRO6
Preparation:	3510C	Prep Batch: 720-67098		Initial Weight/Volume:	940 mL
Dilution:	1.0			Final Weight/Volume:	5 mL
Date Analyzed:	03/07/2010 0504			Injection Volume:	1 uL
Date Prepared:	03/05/2010 1344			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	2500		53

Surrogate	%Rec	Qualifier	Acceptance Limits
p-Terphenyl	83		23 - 156

Client: ARCADIS U.S., Inc. Job Number: 720-26356-1

Client Sample ID: **MW-5S-D**

Lab Sample ID: 720-26356-7 Date Sampled: 03/04/2010 1530
Client Matrix: Water Date Received: 03/04/2010 1730

8015B Diesel Range Organics (DRO) (GC)

Method:	8015B	Analysis Batch: 720-67142		Instrument ID:	CHDRO6
Preparation:	3510C	Prep Batch: 720-67098		Initial Weight/Volume:	980 mL
Dilution:	1.0			Final Weight/Volume:	5 mL
Date Analyzed:	03/07/2010 0525			Injection Volume:	1 uL
Date Prepared:	03/05/2010 1344			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	3400		51

Surrogate	%Rec	Qualifier	Acceptance Limits
p-Terphenyl	90		23 - 156

Client: ARCADIS U.S., Inc. Job Number: 720-26356-1

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

Lab Sample ID: 720-26356-8 Date Sampled: 03/04/2010 1550
Client Matrix: Water Date Received: 03/04/2010 1730

8015B Diesel Range Organics (DRO) (GC)

Method:	8015B	Analysis Batch: 720-67142		Instrument ID:	CHDRO6
Preparation:	3510C	Prep Batch: 720-67098		Initial Weight/Volume:	980 mL
Dilution:	1.0			Final Weight/Volume:	5 mL
Date Analyzed:	03/07/2010 0547			Injection Volume:	1 uL
Date Prepared:	03/05/2010 1344			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	1400		51

Surrogate	%Rec	Qualifier	Acceptance Limits
p-Terphenyl	94		23 - 156

Client: ARCADIS U.S., Inc. Job Number: 720-26356-1

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

Lab Sample ID: 720-26356-9 Date Sampled: 03/04/2010 1642
Client Matrix: Water Date Received: 03/04/2010 1730

8015B Diesel Range Organics (DRO) (GC)

Method:	8015B	Analysis Batch: 720-67142		Instrument ID:	CHDRO6
Preparation:	3510C	Prep Batch: 720-67098		Initial Weight/Volume:	990 mL
Dilution:	1.0			Final Weight/Volume:	5 mL
Date Analyzed:	03/07/2010 0611			Injection Volume:	1 uL
Date Prepared:	03/05/2010 1344			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	2000		50

Surrogate	%Rec	Qualifier	Acceptance Limits
p-Terphenyl	91		23 - 156

DATA REPORTING QUALIFIERS

Lab Section	Qualifier	Description

Client: ARCADIS U.S., Inc. Job Number: 720-26356-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Analysis Batch:720-67054					
LCS 720-67054/4	Lab Control Sample	T	Water	8260B/CA_LUFT	
LCS 720-67054/7	Lab Control Sample	T	Water	8260B/CA_LUFT	
LCSD 720-67054/5	Lab Control Sample Duplicate	T	Water	8260B/CA_LUFT	
LCSD 720-67054/8	Lab Control Sample Duplicate	T	Water	8260B/CA_LUFT	
MB 720-67054/3	Method Blank	T	Water	8260B/CA_LUFT	
720-26356-1	MW-9S	T	Water	8260B/CA_LUFT	
720-26356-1MS	Matrix Spike	T	Water	8260B/CA_LUFT	
720-26356-1MSD	Matrix Spike Duplicate	T	Water	8260B/CA_LUFT	
720-26356-2	OXY-1D	T	Water	8260B/CA_LUFT	
720-26356-3	OXY-1LF	T	Water	8260B/CA_LUFT	
720-26356-5	MW-5S	T	Water	8260B/CA_LUFT	
720-26356-6	MW-5D	T	Water	8260B/CA_LUFT	
720-26356-7	MW-5S-D	T	Water	8260B/CA_LUFT	
720-26356-10	Trip Blank	T	Water	8260B/CA_LUFT	
Analysis Batch:720-67156					
LCS 720-67156/5	Lab Control Sample	T	Water	8260B/CA_LUFT	
LCS 720-67156/7	Lab Control Sample	T	Water	8260B/CA_LUFT	
LCSD 720-67156/6	Lab Control Sample Duplicate	T	Water	8260B/CA_LUFT	
LCSD 720-67156/8	Lab Control Sample Duplicate	T	Water	8260B/CA_LUFT	
MB 720-67156/4	Method Blank	T	Water	8260B/CA_LUFT	
720-26356-8	MW-7D	T	Water	8260B/CA_LUFT	
720-26356-9	MW-7S	T	Water	8260B/CA_LUFT	
720-26362-B-4 MS	Matrix Spike	T	Water	8260B/CA_LUFT	
720-26362-B-4 MSD	Matrix Spike Duplicate	T	Water	8260B/CA_LUFT	
Analysis Batch:720-67242					
LCS 720-67242/5	Lab Control Sample	T	Water	8260B/CA_LUFT	
LCSD 720-67242/6	Lab Control Sample Duplicate	T	Water	8260B/CA_LUFT	
MB 720-67242/4	Method Blank	T	Water	8260B/CA_LUFT	
720-26356-5	MW-5S	T	Water	8260B/CA_LUFT	
720-26356-7	MW-5S-D	T	Water	8260B/CA_LUFT	
720-26428-A-3 MS	Matrix Spike	T	Water	8260B/CA_LUFT	
720-26428-A-3 MSD	Matrix Spike Duplicate	T	Water	8260B/CA_LUFT	

Report Basis

T = Total

Client: ARCADIS U.S., Inc. Job Number: 720-26356-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Prep Batch: 720-67098					
LCS 720-67098/2-A	Lab Control Sample	T	Water	3510C	
LCSD 720-67098/3-A	Lab Control Sample Duplicate	T	Water	3510C	
MB 720-67098/1-A	Method Blank	T	Water	3510C	
720-26356-1	MW-9S	T	Water	3510C	
720-26356-2	OXY-1D	T	Water	3510C	
720-26356-3	OXY-1LF	T	Water	3510C	
720-26356-4	MW-9D	T	Water	3510C	
720-26356-5	MW-5S	T	Water	3510C	
720-26356-6	MW-5D	T	Water	3510C	
720-26356-7	MW-5S-D	T	Water	3510C	
720-26356-8	MW-7D	T	Water	3510C	
720-26356-9	MW-7S	T	Water	3510C	
Analysis Batch:720-67142					
LCS 720-67098/2-A	Lab Control Sample	T	Water	8015B	720-67098
LCSD 720-67098/3-A	Lab Control Sample Duplicate	T	Water	8015B	720-67098
MB 720-67098/1-A	Method Blank	T	Water	8015B	720-67098
720-26356-1	MW-9S	T	Water	8015B	720-67098
720-26356-2	OXY-1D	T	Water	8015B	720-67098
720-26356-3	OXY-1LF	T	Water	8015B	720-67098
720-26356-4	MW-9D	T	Water	8015B	720-67098
720-26356-5	MW-5S	T	Water	8015B	720-67098
720-26356-6	MW-5D	T	Water	8015B	720-67098
720-26356-7	MW-5S-D	T	Water	8015B	720-67098
720-26356-8	MW-7D	T	Water	8015B	720-67098
720-26356-9	MW-7S	T	Water	8015B	720-67098

Report Basis
T = Total

Client: ARCADIS U.S., Inc.

Job Number: 720-26356-1

Method Blank - Batch: 720-67054

Method: 8260B/CA_LUFTMS
Preparation: 5030B

Lab Sample ID: MB 720-67054/3
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 03/05/2010 1054
Date Prepared: 03/05/2010 1054

Analysis Batch: 720-67054
Prep Batch: N/A
Units: ug/L

Instrument ID: HP4
Lab File ID: 03051004.D
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

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

Surrogate	% Rec	Acceptance Limits
4-Bromofluorobenzene	99	67 - 130
1,2-Dichloroethane-d4 (Surr)	92	67 - 130
Toluene-d8 (Surr)	92	70 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: ARCADIS U.S., Inc. Job Number: 720-26356-1

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 720-67054

Method: 8260B/CA_LUFTMS
Preparation: 5030B

LCS Lab Sample ID:	LCS 720-67054/4	Analysis Batch:	720-67054	Instrument ID:	HP4
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	03051005.D
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	10 mL
Date Analyzed:	03/05/2010 1146			Final Weight/Volume:	10 mL
Date Prepared:	03/05/2010 1146				

LCSD Lab Sample ID:	LCSD 720-67054/5	Analysis Batch:	720-67054	Instrument ID:	HP4
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	03051006.D
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	10 mL
Date Analyzed:	03/05/2010 1218			Final Weight/Volume:	10 mL
Date Prepared:	03/05/2010 1218				

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Methyl tert-butyl ether	103	103	81 - 125	0	20		
Benzene	93	95	82 - 127	2	20		
Ethylbenzene	102	104	86 - 135	2	20		
Toluene	97	97	83 - 129	0	20		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
4-Bromofluorobenzene	103	106	67 - 130
1,2-Dichloroethane-d4 (Surr)	85	87	67 - 130
Toluene-d8 (Surr)	91	93	70 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: ARCADIS U.S., Inc. Job Number: 720-26356-1

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 720-67054

Method: 8260B/CA_LUFTMS
Preparation: 5030B

LCS Lab Sample ID:	LCS 720-67054/7	Analysis Batch:	720-67054	Instrument ID:	HP4
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	03051007.D
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	10 mL
Date Analyzed:	03/05/2010 1250			Final Weight/Volume:	10 mL
Date Prepared:	03/05/2010 1250				

LCSD Lab Sample ID:	LCSD 720-67054/8	Analysis Batch:	720-67054	Instrument ID:	HP4
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	03051008.D
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	10 mL
Date Analyzed:	03/05/2010 1322			Final Weight/Volume:	10 mL
Date Prepared:	03/05/2010 1322				

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Gasoline Range Organics (GRO)-C5-C12	90	92	70 - 130	2	20		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
4-Bromofluorobenzene	109	109	67 - 130
1,2-Dichloroethane-d4 (Surr)	92	93	67 - 130
Toluene-d8 (Surr)	95	97	70 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: ARCADIS U.S., Inc. Job Number: 720-26356-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 720-67054

Method: 8260B/CA_LUFTMS
Preparation: 5030B

MS Lab Sample ID:	720-26356-1	Analysis Batch:	720-67054	Instrument ID:	HP4
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	03051013.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Date Analyzed:	03/05/2010 1625			Final Weight/Volume:	10 mL
Date Prepared:	03/05/2010 1625				

MSD Lab Sample ID:	720-26356-1	Analysis Batch:	720-67054	Instrument ID:	HP4
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	03051014.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Date Analyzed:	03/05/2010 1658			Final Weight/Volume:	10 mL
Date Prepared:	03/05/2010 1658				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Methyl tert-butyl ether	104	107	60 - 138	3	20		
Benzene	97	102	60 - 140	5	20		
Ethylbenzene	108	111	60 - 140	3	20		
Toluene	100	103	60 - 140	3	20		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
4-Bromofluorobenzene	106	108	67 - 130
1,2-Dichloroethane-d4 (Surr)	87	89	67 - 130
Toluene-d8 (Surr)	94	98	70 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: ARCADIS U.S., Inc. Job Number: 720-26356-1

Method Blank - Batch: 720-67156

Method: 8260B/CA_LUFTMS
Preparation: 5030B

Lab Sample ID: MB 720-67156/4
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 03/08/2010 1037
Date Prepared: 03/08/2010 1037

Analysis Batch: 720-67156
Prep Batch: N/A
Units: ug/L

Instrument ID: CHMSV2
Lab File ID: 03081004.D
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

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

Surrogate	% Rec	Acceptance Limits
4-Bromofluorobenzene	97	67 - 130
1,2-Dichloroethane-d4 (Surr)	96	67 - 130
Toluene-d8 (Surr)	94	70 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: ARCADIS U.S., Inc. Job Number: 720-26356-1

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 720-67156

Method: 8260B/CA_LUFTMS
Preparation: 5030B

LCS Lab Sample ID:	LCS 720-67156/5	Analysis Batch:	720-67156	Instrument ID:	CHMSV2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	03081005.D
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	10 mL
Date Analyzed:	03/08/2010 1130			Final Weight/Volume:	10 mL
Date Prepared:	03/08/2010 1130				

LCSD Lab Sample ID:	LCSD 720-67156/6	Analysis Batch:	720-67156	Instrument ID:	CHMSV2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	03081006.D
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	10 mL
Date Analyzed:	03/08/2010 1202			Final Weight/Volume:	10 mL
Date Prepared:	03/08/2010 1202				

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Methyl tert-butyl ether	115	97	81 - 125	17	20		
Benzene	105	103	82 - 127	2	20		
Ethylbenzene	111	106	86 - 135	4	20		
Toluene	121	107	83 - 129	12	20		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
4-Bromofluorobenzene	98	98	67 - 130
1,2-Dichloroethane-d4 (Surr)	94	89	67 - 130
Toluene-d8 (Surr)	95	94	70 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: ARCADIS U.S., Inc. Job Number: 720-26356-1

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 720-67156

Method: 8260B/CA_LUFTMS
Preparation: 5030B

LCS Lab Sample ID:	LCS 720-67156/7	Analysis Batch:	720-67156	Instrument ID:	CHMSV2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	03081007.D
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	10 mL
Date Analyzed:	03/08/2010 1235			Final Weight/Volume:	10 mL
Date Prepared:	03/08/2010 1235				

LCSD Lab Sample ID:	LCSD 720-67156/8	Analysis Batch:	720-67156	Instrument ID:	CHMSV2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	03081008.D
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	10 mL
Date Analyzed:	03/08/2010 1307			Final Weight/Volume:	10 mL
Date Prepared:	03/08/2010 1307				

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Gasoline Range Organics (GRO)-C5-C12	84	84	70 - 130	1	20		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
4-Bromofluorobenzene	99	98	67 - 130
1,2-Dichloroethane-d4 (Surr)	94	97	67 - 130
Toluene-d8 (Surr)	95	96	70 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: ARCADIS U.S., Inc. Job Number: 720-26356-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 720-67156

Method: 8260B/CA_LUFTMS
Preparation: 5030B

MS Lab Sample ID:	720-26362-B-4 MS	Analysis Batch:	720-67156	Instrument ID:	CHMSV2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	03081011.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Date Analyzed:	03/08/2010 1455			Final Weight/Volume:	10 mL
Date Prepared:	03/08/2010 1455				

MSD Lab Sample ID:	720-26362-B-4 MSD	Analysis Batch:	720-67156	Instrument ID:	CHMSV2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	03081012.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Date Analyzed:	03/08/2010 1528			Final Weight/Volume:	10 mL
Date Prepared:	03/08/2010 1528				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Methyl tert-butyl ether	101	105	60 - 138	5	20		
Benzene	101	101	60 - 140	1	20		
Ethylbenzene	103	101	60 - 140	2	20		
Toluene	101	100	60 - 140	1	20		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
4-Bromofluorobenzene	103	104	67 - 130
1,2-Dichloroethane-d4 (Surr)	94	95	67 - 130
Toluene-d8 (Surr)	97	97	70 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: ARCADIS U.S., Inc. Job Number: 720-26356-1

Method Blank - Batch: 720-67242

Method: 8260B/CA_LUFTMS
Preparation: 5030B

Lab Sample ID: MB 720-67242/4
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 03/09/2010 1050
Date Prepared: 03/09/2010 1050

Analysis Batch: 720-67242
Prep Batch: N/A
Units: ug/L

Instrument ID: CHMSV2
Lab File ID: 03091004.D
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

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

Surrogate	% Rec	Acceptance Limits
4-Bromofluorobenzene	97	67 - 130
1,2-Dichloroethane-d4 (Surr)	95	67 - 130
Toluene-d8 (Surr)	94	70 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: ARCADIS U.S., Inc. Job Number: 720-26356-1

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 720-67242

Method: 8260B/CA_LUFTMS
Preparation: 5030B

LCS Lab Sample ID:	LCS 720-67242/5	Analysis Batch:	720-67242	Instrument ID:	CHMSV2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	03091005.D
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	10 mL
Date Analyzed:	03/09/2010 1151			Final Weight/Volume:	10 mL
Date Prepared:	03/09/2010 1151				

LCSD Lab Sample ID:	LCSD 720-67242/6	Analysis Batch:	720-67242	Instrument ID:	CHMSV2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	03091006.D
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	10 mL
Date Analyzed:	03/09/2010 1224			Final Weight/Volume:	10 mL
Date Prepared:	03/09/2010 1224				

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Methyl tert-butyl ether	110	101	81 - 125	8	20		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
4-Bromofluorobenzene	99	98	67 - 130
1,2-Dichloroethane-d4 (Surr)	92	91	67 - 130
Toluene-d8 (Surr)	95	95	70 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: ARCADIS U.S., Inc. Job Number: 720-26356-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 720-67242

Method: 8260B/CA_LUFTMS
Preparation: 5030B

MS Lab Sample ID:	720-26428-A-3 MS	Analysis Batch:	720-67242	Instrument ID:	CHMSV2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	03091010.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Date Analyzed:	03/09/2010 1451			Final Weight/Volume:	10 mL
Date Prepared:	03/09/2010 1451				

MSD Lab Sample ID:	720-26428-A-3 MSD	Analysis Batch:	720-67242	Instrument ID:	CHMSV2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	03091011.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Date Analyzed:	03/09/2010 1524			Final Weight/Volume:	10 mL
Date Prepared:	03/09/2010 1524				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Methyl tert-butyl ether	104	100	60 - 138	4	20		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
4-Bromofluorobenzene	99	98	67 - 130
1,2-Dichloroethane-d4 (Surr)	94	90	67 - 130
Toluene-d8 (Surr)	95	95	70 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

Method Blank - Batch: 720-67098

Method: 8015B
Preparation: 3510C

Lab Sample ID: MB 720-67098/1-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 03/07/2010 0235
Date Prepared: 03/05/2010 1344

Analysis Batch: 720-67142
Prep Batch: 720-67098
Units: ug/L

Instrument ID: CHDRO6
Lab File ID: FID1000047.D
Initial Weight/Volume: 1000 mL
Final Weight/Volume: 5 mL
Injection Volume: 1 uL
Column ID: PRIMARY

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

Surrogate	% Rec	Acceptance Limits
p-Terphenyl	103	23 - 156

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 720-67098

Method: 8015B
Preparation: 3510C

LCS Lab Sample ID: LCS 720-67098/2-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 03/07/2010 0758
Date Prepared: 03/05/2010 1344

Analysis Batch: 720-67142
Prep Batch: 720-67098
Units: ug/L

Instrument ID: CHDRO6
Lab File ID: FID1000062.D
Initial Weight/Volume: 1000 mL
Final Weight/Volume: 5 mL
Injection Volume: 1 uL
Column ID: PRIMARY

LCSD Lab Sample ID: LCSD 720-67098/3-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 03/07/2010 0819
Date Prepared: 03/05/2010 1344

Analysis Batch: 720-67142
Prep Batch: 720-67098
Units: ug/L

Instrument ID: CHDRO6
Lab File ID: FID1000063.D
Initial Weight/Volume: 1000 mL
Final Weight/Volume: 5 mL
Injection Volume: 1 uL
Column ID: PRIMARY

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Diesel Range Organics [C10-C28]	89	86	40 - 150	4	35		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
p-Terphenyl	110	106	23 - 156

Calculations are performed before rounding to avoid round-off errors in calculated results.

720-26356

122763

ARCADIS
Infrastructure, environment, buildings

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to: Stinsons plus

Contact & Company Name: Katrin Schliewen	Telephone: (510) 652-4500
Address: 1900 Powell St. Fl. 11	Fax:
City: Emeryville State: CA Zip: 94608	E-mail Address:
Project Name/Location (City, State): Hanson Sunol / Sunol, CA	Project #: EM009480.0011
Sampler's Printed Name: Miljan Draganic	Sampler's Signature:

Preservative	B	B												
Filtered (✓)														
# of Containers	1	3												
Container Information	2	1												

PARAMETER ANALYSIS & METHOD

	Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	TPHd (8015B)	TPHg/BTEX/MTBE (8260)						REMARKS
1	MW-9S	3/4/10	0835		X	W	X	X						
2	OXY-1D		0935					X						
3	OXY-1LF		1150					X						
4	MW-9D		1310											
5	MW-5S		1408					X						
6	MW-5D		1450					X						
7	MW-5S-D		1530					X						
8	MW-7D		1550					X						
9	MW-7S		1642		X	W	X	X						
10	Trip Blank		—		—	W		X						

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other:
G. Other:
H. Other:

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

Matrix Key:
SO - Soil
W - Water
T - Tissue
SE - Sediment
SL - Sludge
A - Air
NL - NAPL/Oil
SW - Sample Wipe
Other:

Special Instructions/Comments:

☐ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Test America	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Andrea Valdivia	Printed Name:	Printed Name:	Printed Name:
Ice: Cooler packed with ice (✓)		Signature: Andrea Valdivia	Signature:	Signature:	Signature:
Specify Turnaround Requirements: 14 day hold	Sample Receipt:	Firm: Arcadis	Firm/Courier: TASF	Firm/Courier:	Firm:
Shipping Tracking #:	Condition/Cooler Temp:	Date/Time: 03/09/10 / 1730	Date/Time: 3/4/10 - 1730	Date/Time:	Date/Time:

20730826 CofC AR Form 01.12.2007

Distribution: WHITE – Laboratory returns with results YELLOW – Lab copy PINK – Retained by ARCADIS

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03/11/2010

Login Sample Receipt Check List

Client: ARCADIS U.S., Inc.

Job Number: 720-26356-1

Login Number: 26356

List Source: TestAmerica San Francisco

Creator: Hoang, Julie

List Number: 1

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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 720-26383-1

Job Description: Hanson Sunol,CA

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

Attention: Ms. Katrin Schliewen

Approved for release.
Afsaneh Salimpour
Project Manager I
3/12/2010 11:45 AM

Afsaneh Salimpour
Project Manager I
afsaneh.salimpour@testamericainc.com
03/12/2010

CA ELAP Certification # 2496
The Chain(s) of Custody are included and are an integral part of this report.

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

TestAmerica Laboratories, Inc.
TestAmerica San Francisco 1220 Quarry Lane, Pleasanton, CA 94566
Tel (925) 484-1919 Fax (925) 600-3002 www.testamericainc.com

Job Narrative
720-26383-1

Comments
No additional comments.

Receipt
All samples were received in good condition within temperature requirements.

GC/MS VOA
Method(s) 8260B: The Gasoline Range Organics (GRO) concentration reported for the following sample(s) is due to the presence of discrete peaks: MW-3 (720-26383-3). <<MTBE>>

No other analytical or quality issues were noted.

GC Semi VOA
Method(s) 8015B: Surrogate recovery for the following sample(s) was outside of acceptance limits: MW-3 (720-26383-3). There was insufficient sample to perform a re-extraction; therefore, the data have been reported.

No other analytical or quality issues were noted.

Organic Prep
No analytical or quality issues were noted.

EXECUTIVE SUMMARY - Detections

Client: ARCADIS U.S., Inc. Job Number: 720-26383-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
720-26383-2	**OXY-1S**				
Diesel Range Organics [C10-C28]		140	51	ug/L	8015B
720-26383-3	**MW-3**				
Methyl tert-butyl ether		44	0.50	ug/L	8260B/CA_LUFTMS
Gasoline Range Organics (GRO)-C5-C12		72	50	ug/L	8260B/CA_LUFTMS
Diesel Range Organics [C10-C28]		1500	51	ug/L	8015B
720-26383-4	**MW-12S**				
Methyl tert-butyl ether		0.51	0.50	ug/L	8260B/CA_LUFTMS
720-26383-5	**MW-12D**				
Diesel Range Organics [C10-C28]		60	51	ug/L	8015B
720-26383-6	**MW-12LF**				
Methyl tert-butyl ether		0.77	0.50	ug/L	8260B/CA_LUFTMS
720-26383-7	**MW-11S-D**				
Methyl tert-butyl ether		3.3	0.50	ug/L	8260B/CA_LUFTMS
Diesel Range Organics [C10-C28]		440	51	ug/L	8015B
720-26383-8	**MW-11S**				
Methyl tert-butyl ether		3.4	0.50	ug/L	8260B/CA_LUFTMS
Diesel Range Organics [C10-C28]		460	50	ug/L	8015B
720-26383-9	**MW-11D**				
Methyl tert-butyl ether		11	0.50	ug/L	8260B/CA_LUFTMS
Benzene		1.2	0.50	ug/L	8260B/CA_LUFTMS
Ethylbenzene		1.3	0.50	ug/L	8260B/CA_LUFTMS
Gasoline Range Organics (GRO)-C5-C12		450	50	ug/L	8260B/CA_LUFTMS
Diesel Range Organics [C10-C28]		6700	51	ug/L	8015B
720-26383-10	**MW-11LF**				
Methyl tert-butyl ether		110	0.50	ug/L	8260B/CA_LUFTMS
Diesel Range Organics [C10-C28]		150	51	ug/L	8015B

EXECUTIVE SUMMARY - Detections

Client: ARCADIS U.S., Inc. Job Number: 720-26383-1

Lab Sample ID / Analyte	Client Sample ID / Result / Qualifier	Reporting Limit	Units	Method
720-26383-11	**MW-6S**			
Methyl tert-butyl ether	31	0.50	ug/L	8260B/CA_LUFTMS
Benzene	2.2	0.50	ug/L	8260B/CA_LUFTMS
Ethylbenzene	2.8	0.50	ug/L	8260B/CA_LUFTMS
Gasoline Range Organics (GRO)-C5-C12	270	50	ug/L	8260B/CA_LUFTMS
Diesel Range Organics [C10-C28]	1400	51	ug/L	8015B

METHOD SUMMARY

Client: ARCADIS U.S., Inc. Job Number: 720-26383-1

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

Lab References:

TAL SF = TestAmerica San Francisco

Method References:

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

METHOD / ANALYST SUMMARY

Client: ARCADIS U.S., Inc. Job Number: 720-26383-1

Method	Analyst	Analyst ID
SW846 8260B/CA_LUFTMS	Ali, Badri	BA
SW846 8015B	Vincent, Richard	RV

SAMPLE SUMMARY

Client: ARCADIS U.S., Inc. Job Number: 720-26383-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
720-26383-1TB	Trip Blank	Water	03/05/2010 0000	03/05/2010 1621
720-26383-2	OXY-1S	Water	03/05/2010 1525	03/05/2010 1621
720-26383-3	MW-3	Water	03/05/2010 1435	03/05/2010 1621
720-26383-4	MW-12S	Water	03/05/2010 1055	03/05/2010 1621
720-26383-5	MW-12D	Water	03/05/2010 1138	03/05/2010 1621
720-26383-6	MW-12LF	Water	03/05/2010 1210	03/05/2010 1621
720-26383-7	MW-11S-D	Water	03/05/2010 1225	03/05/2010 1621
720-26383-8	MW-11S	Water	03/05/2010 0910	03/05/2010 1621
720-26383-9	MW-11D	Water	03/05/2010 1000	03/05/2010 1621
720-26383-10	MW-11LF	Water	03/05/2010 0825	03/05/2010 1621
720-26383-11	MW-6S	Water	03/05/2010 1353	03/05/2010 1621

Client: ARCADIS U.S., Inc. Job Number: 720-26383-1

Client Sample ID: **Trip Blank**

Lab Sample ID: 720-26383-1TB Date Sampled: 03/05/2010 0000
Client Matrix: Water Date Received: 03/05/2010 1621

8260B/CA_LUFTMS 8260B / CA LUFT MS

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-67193	Instrument ID:	SAT 3900A
Preparation:	5030B		Lab File ID:	SA-WA-26383-A-1
Dilution:	1.0		Initial Weight/Volume:	10 mL
Date Analyzed:	03/08/2010 1912		Final Weight/Volume:	10 mL
Date Prepared:	03/08/2010 1912			

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

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	105		67 - 130
1,2-Dichloroethane-d4 (Surr)	105		67 - 130
Toluene-d8 (Surr)	98		70 - 130

Client: ARCADIS U.S., Inc. Job Number: 720-26383-1

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

Lab Sample ID: 720-26383-2 Date Sampled: 03/05/2010 1525
Client Matrix: Water Date Received: 03/05/2010 1621

8260B/CA_LUFTMS 8260B / CA LUFT MS

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-67193	Instrument ID:	SAT 3900A
Preparation:	5030B		Lab File ID:	SA-WA-26383-A-2
Dilution:	1.0		Initial Weight/Volume:	10 mL
Date Analyzed:	03/08/2010 1937		Final Weight/Volume:	10 mL
Date Prepared:	03/08/2010 1937			

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

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	106		67 - 130
1,2-Dichloroethane-d4 (Surr)	107		67 - 130
Toluene-d8 (Surr)	98		70 - 130

Client: ARCADIS U.S., Inc. Job Number: 720-26383-1

Client Sample ID: **MW-3**

Lab Sample ID: 720-26383-3 Date Sampled: 03/05/2010 1435
Client Matrix: Water Date Received: 03/05/2010 1621

8260B/CA_LUFTMS 8260B / CA LUFT MS

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-67193	Instrument ID:	SAT 3900A
Preparation:	5030B		Lab File ID:	SA-WA-26383-A-3
Dilution:	1.0		Initial Weight/Volume:	10 mL
Date Analyzed:	03/08/2010 2053		Final Weight/Volume:	10 mL
Date Prepared:	03/08/2010 2053			

Analyte	Result (ug/L)	Qualifier	RL
Methyl tert-butyl ether	44		0.50
Benzene	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
Gasoline Range Organics (GRO)-C5-C12	72		50

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	106		67 - 130
1,2-Dichloroethane-d4 (Surr)	108		67 - 130
Toluene-d8 (Surr)	101		70 - 130

Client: ARCADIS U.S., Inc. Job Number: 720-26383-1

Client Sample ID: **MW-12S**

Lab Sample ID: 720-26383-4 Date Sampled: 03/05/2010 1055
Client Matrix: Water Date Received: 03/05/2010 1621

8260B/CA_LUFTMS 8260B / CA LUFT MS

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-67193	Instrument ID:	SAT 3900A
Preparation:	5030B		Lab File ID:	SA-WA-26383-A-4
Dilution:	1.0		Initial Weight/Volume:	10 mL
Date Analyzed:	03/08/2010 2118		Final Weight/Volume:	10 mL
Date Prepared:	03/08/2010 2118			

Analyte	Result (ug/L)	Qualifier	RL
Methyl tert-butyl ether	0.51		0.50
Benzene	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
Gasoline Range Organics (GRO)-C5-C12	ND		50

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	103		67 - 130
1,2-Dichloroethane-d4 (Surr)	107		67 - 130
Toluene-d8 (Surr)	102		70 - 130

Client: ARCADIS U.S., Inc. Job Number: 720-26383-1

Client Sample ID: **MW-12D**

Lab Sample ID: 720-26383-5 Date Sampled: 03/05/2010 1138
Client Matrix: Water Date Received: 03/05/2010 1621

8260B/CA_LUFTMS 8260B / CA LUFT MS

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-67193	Instrument ID:	SAT 3900A
Preparation:	5030B		Lab File ID:	SA-WA-26383-A-5
Dilution:	1.0		Initial Weight/Volume:	10 mL
Date Analyzed:	03/08/2010 2144		Final Weight/Volume:	10 mL
Date Prepared:	03/08/2010 2144			

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

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	111		67 - 130
1,2-Dichloroethane-d4 (Surr)	109		67 - 130
Toluene-d8 (Surr)	101		70 - 130

Client: ARCADIS U.S., Inc. Job Number: 720-26383-1

Client Sample ID: **MW-12LF**

Lab Sample ID: 720-26383-6 Date Sampled: 03/05/2010 1210
Client Matrix: Water Date Received: 03/05/2010 1621

8260B/CA_LUFTMS 8260B / CA LUFT MS

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-67193	Instrument ID:	SAT 3900A
Preparation:	5030B		Lab File ID:	SA-WA-26383-A-6
Dilution:	1.0		Initial Weight/Volume:	10 mL
Date Analyzed:	03/08/2010 2209		Final Weight/Volume:	10 mL
Date Prepared:	03/08/2010 2209			

Analyte	Result (ug/L)	Qualifier	RL
Methyl tert-butyl ether	0.77		0.50
Benzene	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
Gasoline Range Organics (GRO)-C5-C12	ND		50

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	105		67 - 130
1,2-Dichloroethane-d4 (Surr)	115		67 - 130
Toluene-d8 (Surr)	103		70 - 130

Client: ARCADIS U.S., Inc. Job Number: 720-26383-1

Client Sample ID: **MW-11S-D**

Lab Sample ID: 720-26383-7 Date Sampled: 03/05/2010 1225
Client Matrix: Water Date Received: 03/05/2010 1621

8260B/CA_LUFTMS 8260B / CA LUFT MS

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-67193	Instrument ID:	SAT 3900A
Preparation:	5030B		Lab File ID:	SA-WA-26383-A-7
Dilution:	1.0		Initial Weight/Volume:	10 mL
Date Analyzed:	03/08/2010 2234		Final Weight/Volume:	10 mL
Date Prepared:	03/08/2010 2234			

Analyte	Result (ug/L)	Qualifier	RL
Methyl tert-butyl ether	3.3		0.50
Benzene	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
Gasoline Range Organics (GRO)-C5-C12	ND		50

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	109		67 - 130
1,2-Dichloroethane-d4 (Surr)	108		67 - 130
Toluene-d8 (Surr)	101		70 - 130

Client: ARCADIS U.S., Inc. Job Number: 720-26383-1

Client Sample ID: **MW-11S**

Lab Sample ID: 720-26383-8 Date Sampled: 03/05/2010 0910
Client Matrix: Water Date Received: 03/05/2010 1621

8260B/CA_LUFTMS 8260B / CA LUFT MS

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-67193	Instrument ID:	SAT 3900A
Preparation:	5030B		Lab File ID:	SA-WA-26383-A-8
Dilution:	1.0		Initial Weight/Volume:	10 mL
Date Analyzed:	03/08/2010 2300		Final Weight/Volume:	10 mL
Date Prepared:	03/08/2010 2300			

Analyte	Result (ug/L)	Qualifier	RL
Methyl tert-butyl ether	3.4		0.50
Benzene	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
Gasoline Range Organics (GRO)-C5-C12	ND		50

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	104		67 - 130
1,2-Dichloroethane-d4 (Surr)	111		67 - 130
Toluene-d8 (Surr)	98		70 - 130

Client: ARCADIS U.S., Inc. Job Number: 720-26383-1

Client Sample ID: **MW-11D**

Lab Sample ID: 720-26383-9 Date Sampled: 03/05/2010 1000
Client Matrix: Water Date Received: 03/05/2010 1621

8260B/CA_LUFTMS 8260B / CA LUFT MS

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-67307	Instrument ID:	SAT 3900C
Preparation:	5030B		Lab File ID:	26383-B-9 3-10-2010
Dilution:	1.0		Initial Weight/Volume:	10 mL
Date Analyzed:	03/10/2010 0246		Final Weight/Volume:	10 mL
Date Prepared:	03/10/2010 0246			

Analyte	Result (ug/L)	Qualifier	RL
Methyl tert-butyl ether	11		0.50
Benzene	1.2		0.50
Ethylbenzene	1.3		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
Gasoline Range Organics (GRO)-C5-C12	450		50

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	102		67 - 130
1,2-Dichloroethane-d4 (Surr)	112		67 - 130
Toluene-d8 (Surr)	101		70 - 130

Client: ARCADIS U.S., Inc. Job Number: 720-26383-1

Client Sample ID: **MW-11LF**

Lab Sample ID: 720-26383-10 Date Sampled: 03/05/2010 0825
Client Matrix: Water Date Received: 03/05/2010 1621

8260B/CA_LUFTMS 8260B / CA LUFT MS

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-67193	Instrument ID:	SAT 3900A
Preparation:	5030B		Lab File ID:	SA-WA-26383-A-10
Dilution:	1.0		Initial Weight/Volume:	10 mL
Date Analyzed:	03/08/2010 2350		Final Weight/Volume:	10 mL
Date Prepared:	03/08/2010 2350			

Analyte	Result (ug/L)	Qualifier	RL
Methyl tert-butyl ether	110		0.50
Benzene	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
Gasoline Range Organics (GRO)-C5-C12	ND		50

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	107		67 - 130
1,2-Dichloroethane-d4 (Surr)	109		67 - 130
Toluene-d8 (Surr)	101		70 - 130

Client: ARCADIS U.S., Inc. Job Number: 720-26383-1

Client Sample ID: **MW-6S**

Lab Sample ID: 720-26383-11 Date Sampled: 03/05/2010 1353
Client Matrix: Water Date Received: 03/05/2010 1621

8260B/CA_LUFTMS 8260B / CA LUFT MS

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-67193	Instrument ID:	SAT 3900A
Preparation:	5030B		Lab File ID:	SA-WA-26383-A-11
Dilution:	1.0		Initial Weight/Volume:	10 mL
Date Analyzed:	03/09/2010 0015		Final Weight/Volume:	10 mL
Date Prepared:	03/09/2010 0015			

Analyte	Result (ug/L)	Qualifier	RL
Methyl tert-butyl ether	31		0.50
Benzene	2.2		0.50
Ethylbenzene	2.8		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
Gasoline Range Organics (GRO)-C5-C12	270		50

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	101		67 - 130
1,2-Dichloroethane-d4 (Surr)	106		67 - 130
Toluene-d8 (Surr)	97		70 - 130

Client: ARCADIS U.S., Inc. Job Number: 720-26383-1

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

Lab Sample ID: 720-26383-2 Date Sampled: 03/05/2010 1525
Client Matrix: Water Date Received: 03/05/2010 1621

8015B Diesel Range Organics (DRO) (GC)

Method:	8015B	Analysis Batch: 720-67238		Instrument ID:	CHDRO6
Preparation:	3510C	Prep Batch: 720-67188		Initial Weight/Volume:	970 mL
Dilution:	1.0			Final Weight/Volume:	5 mL
Date Analyzed:	03/09/2010 1502			Injection Volume:	1 uL
Date Prepared:	03/08/2010 1335			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	140		51

Surrogate	%Rec	Qualifier	Acceptance Limits
p-Terphenyl	98		23 - 156

Client: ARCADIS U.S., Inc. Job Number: 720-26383-1

Client Sample ID: **MW-3**

Lab Sample ID: 720-26383-3 Date Sampled: 03/05/2010 1435
Client Matrix: Water Date Received: 03/05/2010 1621

8015B Diesel Range Organics (DRO) (GC)

Method:	8015B	Analysis Batch: 720-67239		Instrument ID:	CHDRO6
Preparation:	3510C	Prep Batch: 720-67188		Initial Weight/Volume:	980 mL
Dilution:	1.0			Final Weight/Volume:	5 mL
Date Analyzed:	03/09/2010 1131			Injection Volume:	1 uL
Date Prepared:	03/08/2010 1335			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	1500		51

Surrogate	%Rec	Qualifier	Acceptance Limits
p-Terphenyl	158	X	23 - 156

Client: ARCADIS U.S., Inc. Job Number: 720-26383-1

Client Sample ID: **MW-12S**

Lab Sample ID: 720-26383-4 Date Sampled: 03/05/2010 1055
Client Matrix: Water Date Received: 03/05/2010 1621

8015B Diesel Range Organics (DRO) (GC)

Method:	8015B	Analysis Batch: 720-67238		Instrument ID:	CHDRO6
Preparation:	3510C	Prep Batch: 720-67188		Initial Weight/Volume:	980 mL
Dilution:	1.0			Final Weight/Volume:	5 mL
Date Analyzed:	03/09/2010 1524			Injection Volume:	1 uL
Date Prepared:	03/08/2010 1335			Result Type:	PRIMARY

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

Surrogate	%Rec	Qualifier	Acceptance Limits
p-Terphenyl	93		23 - 156

Client: ARCADIS U.S., Inc. Job Number: 720-26383-1

Client Sample ID: **MW-12D**

Lab Sample ID: 720-26383-5 Date Sampled: 03/05/2010 1138
Client Matrix: Water Date Received: 03/05/2010 1621

8015B Diesel Range Organics (DRO) (GC)

Method:	8015B	Analysis Batch: 720-67238		Instrument ID:	CHDRO6
Preparation:	3510C	Prep Batch: 720-67188		Initial Weight/Volume:	980 mL
Dilution:	1.0			Final Weight/Volume:	5 mL
Date Analyzed:	03/09/2010 1545			Injection Volume:	1 uL
Date Prepared:	03/08/2010 1335			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	60		51

Surrogate	%Rec	Qualifier	Acceptance Limits
p-Terphenyl	93		23 - 156

Client: ARCADIS U.S., Inc. Job Number: 720-26383-1

Client Sample ID: **MW-12LF**

Lab Sample ID: 720-26383-6 Date Sampled: 03/05/2010 1210
Client Matrix: Water Date Received: 03/05/2010 1621

8015B Diesel Range Organics (DRO) (GC)

Method:	8015B	Analysis Batch: 720-67238		Instrument ID:	CHDRO6
Preparation:	3510C	Prep Batch: 720-67188		Initial Weight/Volume:	980 mL
Dilution:	1.0			Final Weight/Volume:	5 mL
Date Analyzed:	03/09/2010 1606			Injection Volume:	1 uL
Date Prepared:	03/08/2010 1335			Result Type:	PRIMARY

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

Surrogate	%Rec	Qualifier	Acceptance Limits
p-Terphenyl	92		23 - 156

Client: ARCADIS U.S., Inc. Job Number: 720-26383-1

Client Sample ID: **MW-11S-D**

Lab Sample ID: 720-26383-7 Date Sampled: 03/05/2010 1225
Client Matrix: Water Date Received: 03/05/2010 1621

8015B Diesel Range Organics (DRO) (GC)

Method:	8015B	Analysis Batch: 720-67239		Instrument ID:	CHDRO6
Preparation:	3510C	Prep Batch: 720-67188		Initial Weight/Volume:	970 mL
Dilution:	1.0			Final Weight/Volume:	5 mL
Date Analyzed:	03/09/2010 1256			Injection Volume:	1 uL
Date Prepared:	03/08/2010 1335			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	440		51

Surrogate	%Rec	Qualifier	Acceptance Limits
p-Terphenyl	101		23 - 156

Client: ARCADIS U.S., Inc. Job Number: 720-26383-1

Client Sample ID: **MW-11S**

Lab Sample ID: 720-26383-8 Date Sampled: 03/05/2010 0910
Client Matrix: Water Date Received: 03/05/2010 1621

8015B Diesel Range Organics (DRO) (GC)

Method:	8015B	Analysis Batch: 720-67239		Instrument ID:	CHDRO6
Preparation:	3510C	Prep Batch: 720-67188		Initial Weight/Volume:	990 mL
Dilution:	1.0			Final Weight/Volume:	5 mL
Date Analyzed:	03/09/2010 1317			Injection Volume:	1 uL
Date Prepared:	03/08/2010 1335			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	460		50

Surrogate	%Rec	Qualifier	Acceptance Limits
p-Terphenyl	103		23 - 156

Client: ARCADIS U.S., Inc. Job Number: 720-26383-1

Client Sample ID: **MW-11D**

Lab Sample ID: 720-26383-9 Date Sampled: 03/05/2010 1000
Client Matrix: Water Date Received: 03/05/2010 1621

8015B Diesel Range Organics (DRO) (GC)

Method:	8015B	Analysis Batch: 720-67238		Instrument ID:	CHDRO6
Preparation:	3510C	Prep Batch: 720-67188		Initial Weight/Volume:	980 mL
Dilution:	1.0			Final Weight/Volume:	5 mL
Date Analyzed:	03/09/2010 1213			Injection Volume:	1 uL
Date Prepared:	03/08/2010 1335			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	6700		51

Surrogate	%Rec	Qualifier	Acceptance Limits
p-Terphenyl	105		23 - 156

Client: ARCADIS U.S., Inc. Job Number: 720-26383-1

Client Sample ID: **MW-11LF**

Lab Sample ID: 720-26383-10 Date Sampled: 03/05/2010 0825
Client Matrix: Water Date Received: 03/05/2010 1621

8015B Diesel Range Organics (DRO) (GC)

Method:	8015B	Analysis Batch: 720-67238		Instrument ID:	CHDRO6
Preparation:	3510C	Prep Batch: 720-67188		Initial Weight/Volume:	980 mL
Dilution:	1.0			Final Weight/Volume:	5 mL
Date Analyzed:	03/09/2010 1235			Injection Volume:	1 uL
Date Prepared:	03/08/2010 1335			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	150		51

Surrogate	%Rec	Qualifier	Acceptance Limits
p-Terphenyl	103		23 - 156

Client: ARCADIS U.S., Inc. Job Number: 720-26383-1

Client Sample ID: **MW-6S**

Lab Sample ID: 720-26383-11 Date Sampled: 03/05/2010 1353
Client Matrix: Water Date Received: 03/05/2010 1621

8015B Diesel Range Organics (DRO) (GC)

Method:	8015B	Analysis Batch: 720-67238		Instrument ID:	CHDRO6
Preparation:	3510C	Prep Batch: 720-67188		Initial Weight/Volume:	980 mL
Dilution:	1.0			Final Weight/Volume:	5 mL
Date Analyzed:	03/09/2010 1256			Injection Volume:	1 uL
Date Prepared:	03/08/2010 1335			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	1400		51

Surrogate	%Rec	Qualifier	Acceptance Limits
p-Terphenyl	109		23 - 156

DATA REPORTING QUALIFIERS

Client: ARCADIS U.S., Inc. Job Number: 720-26383-1

Lab Section	Qualifier	Description
GC Semi VOA		
	X	Surrogate exceeds the control limits

Client: ARCADIS U.S., Inc. Job Number: 720-26383-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Analysis Batch:720-67193					
LCS 720-67193/6	Lab Control Sample	T	Water	8260B/CA_LUFT	
LCS 720-67193/8	Lab Control Sample	T	Water	8260B/CA_LUFT	
LCSD 720-67193/7	Lab Control Sample Duplicate	T	Water	8260B/CA_LUFT	
LCSD 720-67193/9	Lab Control Sample Duplicate	T	Water	8260B/CA_LUFT	
MB 720-67193/5	Method Blank	T	Water	8260B/CA_LUFT	
720-26383-1TB	Trip Blank	T	Water	8260B/CA_LUFT	
720-26383-2	OXY-1S	T	Water	8260B/CA_LUFT	
720-26383-2MS	Matrix Spike	T	Water	8260B/CA_LUFT	
720-26383-2MSD	Matrix Spike Duplicate	T	Water	8260B/CA_LUFT	
720-26383-3	MW-3	T	Water	8260B/CA_LUFT	
720-26383-4	MW-12S	T	Water	8260B/CA_LUFT	
720-26383-5	MW-12D	T	Water	8260B/CA_LUFT	
720-26383-6	MW-12LF	T	Water	8260B/CA_LUFT	
720-26383-7	MW-11S-D	T	Water	8260B/CA_LUFT	
720-26383-8	MW-11S	T	Water	8260B/CA_LUFT	
720-26383-10	MW-11LF	T	Water	8260B/CA_LUFT	
720-26383-11	MW-6S	T	Water	8260B/CA_LUFT	
Analysis Batch:720-67307					
LCS 720-67307/5	Lab Control Sample	T	Water	8260B/CA_LUFT	
LCS 720-67307/7	Lab Control Sample	T	Water	8260B/CA_LUFT	
LCSD 720-67307/6	Lab Control Sample Duplicate	T	Water	8260B/CA_LUFT	
LCSD 720-67307/8	Lab Control Sample Duplicate	T	Water	8260B/CA_LUFT	
MB 720-67307/4	Method Blank	T	Water	8260B/CA_LUFT	
720-26383-9	MW-11D	T	Water	8260B/CA_LUFT	
720-26433-A-6 MS	Matrix Spike	T	Water	8260B/CA_LUFT	
720-26433-A-6 MSD	Matrix Spike Duplicate	T	Water	8260B/CA_LUFT	

Report Basis

T = Total

Client: ARCADIS U.S., Inc. Job Number: 720-26383-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Analysis Batch:720-67154					
LCS 720-67188/2-A	Lab Control Sample	T	Water	8015B	720-67188
LCSD 720-67188/3-A	Lab Control Sample Duplicate	T	Water	8015B	720-67188
MB 720-67188/1-A	Method Blank	T	Water	8015B	720-67188
Prep Batch: 720-67188					
LCS 720-67188/2-A	Lab Control Sample	T	Water	3510C	
LCSD 720-67188/3-A	Lab Control Sample Duplicate	T	Water	3510C	
MB 720-67188/1-A	Method Blank	T	Water	3510C	
720-26383-2	OXY-1S	T	Water	3510C	
720-26383-3	MW-3	T	Water	3510C	
720-26383-4	MW-12S	T	Water	3510C	
720-26383-5	MW-12D	T	Water	3510C	
720-26383-6	MW-12LF	T	Water	3510C	
720-26383-7	MW-11S-D	T	Water	3510C	
720-26383-8	MW-11S	T	Water	3510C	
720-26383-9	MW-11D	T	Water	3510C	
720-26383-10	MW-11LF	T	Water	3510C	
720-26383-11	MW-6S	T	Water	3510C	
Analysis Batch:720-67238					
720-26383-2	OXY-1S	T	Water	8015B	720-67188
720-26383-4	MW-12S	T	Water	8015B	720-67188
720-26383-5	MW-12D	T	Water	8015B	720-67188
720-26383-6	MW-12LF	T	Water	8015B	720-67188
720-26383-9	MW-11D	T	Water	8015B	720-67188
720-26383-10	MW-11LF	T	Water	8015B	720-67188
720-26383-11	MW-6S	T	Water	8015B	720-67188
Analysis Batch:720-67239					
720-26383-3	MW-3	T	Water	8015B	720-67188
720-26383-7	MW-11S-D	T	Water	8015B	720-67188
720-26383-8	MW-11S	T	Water	8015B	720-67188

Report Basis
T = Total

Client: ARCADIS U.S., Inc.

Job Number: 720-26383-1

Method Blank - Batch: 720-67193

Method: 8260B/CA_LUFTMS
Preparation: 5030B

Lab Sample ID: MB 720-67193/5
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 03/08/2010 1655
Date Prepared: 03/08/2010 1655

Analysis Batch: 720-67193
Prep Batch: N/A
Units: ug/L

Instrument ID: SAT 3900A
Lab File ID: MB 3-8-2010 4;55;32 PM.d
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

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

Surrogate	% Rec	Acceptance Limits
4-Bromofluorobenzene	101	67 - 130
1,2-Dichloroethane-d4 (Surr)	108	67 - 130
Toluene-d8 (Surr)	96	70 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: ARCADIS U.S., Inc. Job Number: 720-26383-1

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 720-67193

Method: 8260B/CA_LUFTMS
Preparation: 5030B

LCS Lab Sample ID:	LCS 720-67193/6	Analysis Batch:	720-67193	Instrument ID:	SAT 3900A
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	LCS 3-8-2010 5;20;50 PM.d
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	10 mL
Date Analyzed:	03/08/2010 1720			Final Weight/Volume:	10 mL
Date Prepared:	03/08/2010 1720				

LCSD Lab Sample ID:	LCSD 720-67193/7	Analysis Batch:	720-67193	Instrument ID:	SAT 3900A
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	LCSD 3-8-2010 5;46;10 PM.d
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	10 mL
Date Analyzed:	03/08/2010 1746			Final Weight/Volume:	10 mL
Date Prepared:	03/08/2010 1746				

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Methyl tert-butyl ether	90	89	81 - 125	1	20		
Benzene	91	91	82 - 127	0	20		
Ethylbenzene	98	93	86 - 135	6	20		
Toluene	93	87	83 - 129	6	20		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
4-Bromofluorobenzene	97	97	67 - 130
1,2-Dichloroethane-d4 (Surr)	102	108	67 - 130
Toluene-d8 (Surr)	100	98	70 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: ARCADIS U.S., Inc. Job Number: 720-26383-1

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 720-67193

Method: 8260B/CA_LUFTMS
Preparation: 5030B

LCS Lab Sample ID:	LCS 720-67193/8	Analysis Batch:	720-67193	Instrument ID:	SAT 3900A
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	LCS G 3-8-2010 6;11;27 PM.d
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	10 mL
Date Analyzed:	03/08/2010 1811			Final Weight/Volume:	10 mL
Date Prepared:	03/08/2010 1811				

LCSD Lab Sample ID:	LCSD 720-67193/9	Analysis Batch:	720-67193	Instrument ID:	SAT 3900A
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	LCSD G 3-8-2010 6;36;44 PM.d
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	10 mL
Date Analyzed:	03/08/2010 1836			Final Weight/Volume:	10 mL
Date Prepared:	03/08/2010 1836				

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Gasoline Range Organics (GRO)-C5-C12	91	97	70 - 130	7	20		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
4-Bromofluorobenzene	99	99	67 - 130
1,2-Dichloroethane-d4 (Surr)	108	106	67 - 130
Toluene-d8 (Surr)	98	99	70 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: ARCADIS U.S., Inc. Job Number: 720-26383-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 720-67193

Method: 8260B/CA_LUFTMS
Preparation: 5030B

MS Lab Sample ID:	720-26383-2	Analysis Batch:	720-67193	Instrument ID:	SAT 3900A
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	SA-WA-26383-A-2MS
Dilution:	1.0			Initial Weight/Volume:	10 mL
Date Analyzed:	03/08/2010 2003			Final Weight/Volume:	10 mL
Date Prepared:	03/08/2010 2003				

MSD Lab Sample ID:	720-26383-2	Analysis Batch:	720-67193	Instrument ID:	SAT 3900A
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	SA-WA-26383-A-2MSD
Dilution:	1.0			Initial Weight/Volume:	10 mL
Date Analyzed:	03/08/2010 2028			Final Weight/Volume:	10 mL
Date Prepared:	03/08/2010 2028				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Methyl tert-butyl ether	95	100	60 - 138	6	20		
Benzene	95	106	60 - 140	11	20		
Ethylbenzene	99	95	60 - 140	4	20		
Toluene	93	92	60 - 140	1	20		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
4-Bromofluorobenzene	106	99	67 - 130
1,2-Dichloroethane-d4 (Surr)	114	114	67 - 130
Toluene-d8 (Surr)	104	104	70 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: ARCADIS U.S., Inc.

Job Number: 720-26383-1

Method Blank - Batch: 720-67307

Method: 8260B/CA_LUFTMS
Preparation: 5030B

Lab Sample ID: MB 720-67307/4
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 03/09/2010 1724
Date Prepared: 03/09/2010 1724

Analysis Batch: 720-67307
Prep Batch: N/A
Units: ug/L

Instrument ID: SAT 3900C
Lab File ID: MB 3-9-2010 5;24;06 PM.d
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

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

Surrogate	% Rec	Acceptance Limits
4-Bromofluorobenzene	103	67 - 130
1,2-Dichloroethane-d4 (Surr)	106	67 - 130
Toluene-d8 (Surr)	97	70 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 720-67307

Method: 8260B/CA_LUFTMS
Preparation: 5030B

LCS Lab Sample ID:	LCS 720-67307/5	Analysis Batch:	720-67307	Instrument ID:	SAT 3900C
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	LCS 3-9-2010 5;51;38 PM.d
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	10 mL
Date Analyzed:	03/09/2010 1751			Final Weight/Volume:	10 mL
Date Prepared:	03/09/2010 1751				

LCSD Lab Sample ID:	LCSD 720-67307/6	Analysis Batch:	720-67307	Instrument ID:	SAT 3900C
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	LCSD 3-9-2010 6;19;14 PM.d
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	10 mL
Date Analyzed:	03/09/2010 1819			Final Weight/Volume:	10 mL
Date Prepared:	03/09/2010 1819				

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Methyl tert-butyl ether	111	101	81 - 125	10	20		
Benzene	87	87	82 - 127	0	20		
Ethylbenzene	93	92	86 - 135	1	20		
Toluene	104	90	83 - 129	14	20		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
4-Bromofluorobenzene	96	95	67 - 130
1,2-Dichloroethane-d4 (Surr)	108	110	67 - 130
Toluene-d8 (Surr)	95	95	70 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: ARCADIS U.S., Inc. Job Number: 720-26383-1

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 720-67307

Method: 8260B/CA_LUFTMS
Preparation: 5030B

LCS Lab Sample ID:	LCS 720-67307/7	Analysis Batch:	720-67307	Instrument ID:	SAT 3900C
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	LCS GAS 3-9-2010 6;46;52
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	10 mL
Date Analyzed:	03/09/2010 1846			Final Weight/Volume:	10 mL
Date Prepared:	03/09/2010 1846				

LCSD Lab Sample ID:	LCSD 720-67307/8	Analysis Batch:	720-67307	Instrument ID:	SAT 3900C
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	LCSD GAS 3-9-2010 7;14;27
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	10 mL
Date Analyzed:	03/09/2010 1914			Final Weight/Volume:	10 mL
Date Prepared:	03/09/2010 1914				

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Gasoline Range Organics (GRO)-C5-C12	76	84	70 - 130	9	20		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
4-Bromofluorobenzene	110	107	67 - 130
1,2-Dichloroethane-d4 (Surr)	113	113	67 - 130
Toluene-d8 (Surr)	100	108	70 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: ARCADIS U.S., Inc. Job Number: 720-26383-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 720-67307

Method: 8260B/CA_LUFTMS
Preparation: 5030B

MS Lab Sample ID:	720-26433-A-6 MS	Analysis Batch:	720-67307	Instrument ID:	SAT 3900C
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	26433-A-6MS 3-9-2010
Dilution:	1.0			Initial Weight/Volume:	10 mL
Date Analyzed:	03/09/2010 2334			Final Weight/Volume:	10 mL
Date Prepared:	03/09/2010 2334				

MSD Lab Sample ID:	720-26433-A-6 MSD	Analysis Batch:	720-67307	Instrument ID:	SAT 3900C
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	26433-A-6MSD 3-10-2010
Dilution:	1.0			Initial Weight/Volume:	10 mL
Date Analyzed:	03/10/2010 0001			Final Weight/Volume:	10 mL
Date Prepared:	03/10/2010 0001				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Methyl tert-butyl ether	97	99	60 - 138	2	20		
Benzene	91	90	60 - 140	1	20		
Ethylbenzene	96	99	60 - 140	3	20		
Toluene	92	90	60 - 140	2	20		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
4-Bromofluorobenzene	101	104	67 - 130
1,2-Dichloroethane-d4 (Surr)	97	106	67 - 130
Toluene-d8 (Surr)	96	96	70 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

Method Blank - Batch: 720-67188

Method: 8015B
Preparation: 3510C

Lab Sample ID: MB 720-67188/1-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 03/08/2010 2045
Date Prepared: 03/08/2010 1335

Analysis Batch: 720-67154
Prep Batch: 720-67188
Units: ug/L

Instrument ID: CHDRO6
Lab File ID: FID1000021.D
Initial Weight/Volume: 1000 mL
Final Weight/Volume: 5 mL
Injection Volume: 1 uL
Column ID: PRIMARY

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

Surrogate	% Rec	Acceptance Limits
p-Terphenyl	92	23 - 156

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 720-67188

Method: 8015B
Preparation: 3510C

LCS Lab Sample ID: LCS 720-67188/2-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 03/08/2010 2002
Date Prepared: 03/08/2010 1335

Analysis Batch: 720-67154
Prep Batch: 720-67188
Units: ug/L

Instrument ID: CHDRO6
Lab File ID: FID1000019.D
Initial Weight/Volume: 1000 mL
Final Weight/Volume: 5 mL
Injection Volume: 1 uL
Column ID: PRIMARY

LCSD Lab Sample ID: LCSD 720-67188/3-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 03/08/2010 2023
Date Prepared: 03/08/2010 1335

Analysis Batch: 720-67154
Prep Batch: 720-67188
Units: ug/L

Instrument ID: CHDRO6
Lab File ID: FID1000020.D
Initial Weight/Volume: 1000 mL
Final Weight/Volume: 5 mL
Injection Volume: 1 uL
Column ID: PRIMARY

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Diesel Range Organics [C10-C28]	92	91	40 - 150	0	35		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
p-Terphenyl	94	100	23 - 156

Calculations are performed before rounding to avoid round-off errors in calculated results.

720-26383

CHAIN OF CUSTODY / ANALYSES REQUEST FORM

122791

SAMPLE COLLECTOR:
LFR
1900 Powell Street, 12th Floor
Emeryville, California 94608
(510) 652-4500 Fax: (510) 652-2246

PROJECT NO.: EMO0946.0011 | SECTION NO.: | DATE: 03/05/10 | SAMPLER'S INITIALS: AAV
PROJECT NAME: Hanson Sunol | SAMPLER (Signature): Andrea Valdivia
SERIAL Nº 5390

SAMPLE ID.	DATE	TIME	Lab Sample No.	No. of Containers	TYPE: Soil	TYPE: Water	TPHd (EPA 8015M)	TPHmo (EPA 8015M)	TPHg (EPA 8015M)	BTEX (EPA 8021/602)	VOCs (EPA 8260/624)	Metals (EPA 6010/7000)	MTBE (8260)	BTEX (8260)	TPHg (8260)	TAT: Standard	TAT: RUSH:	TAT: HOLD	REMARKS
Trip Blank	03/05	—	2		X						X		X	X	X			X	
OXY-1S		1525	4			X					X		X	X	X				
MW-3		1435																	
MW-12S		1055																	
MW-12D		1138																	
MW-12LF		1210																	
MW-11S-D		1225																	
MW-11S		0910 RV																	
MW-1D		1000																	
MW-11LF		0825																	
MW-6S	03/05	1353	4		X		X				X		X	X	X			X	

*VOCs: ☐ 8260 List ☐ 8240 List ☐ 8010 List ☐ 624 List
**Metals: ☐ CAM17 ☐ RCRA ☐ LUFT

SAMPLE RECEIPT: Cooler Temp: | Cooler No:
☐ Intact ☐ Cold ☐ On Ice ☐ Ambient
Preservative Correct? ☐ Yes ☐ No ☐ N/A

ANALYTICAL LABORATORY: Test America 4.1°C

METHOD OF SHIPMENT:
LAB REPORT NO.:
FAX COC CONFIRMATION TO:
FAX RESULTS TO:
SEND HARDCOPY TO:
SEND EDD TO: EMV.LABEDDS.COM

	1	2	3
RELINQUISHED BY:	Andrea Valdivia 03/05/10		
(SIGNATURE) (DATE)			
(PRINTED NAME) (TIME)	Andrea Valdivia 1621		
(COMPANY)	ARCADIS		
RECEIVED BY:	3/5/10		
(SIGNATURE) (DATE)	1621		
(PRINTED NAME) (TIME)	TJSF		
(COMPANY)			

Shipping Copy (White) File Copy (Yellow) Field Copy (Pink)

CHAIN of CUSTODY - ANALYSES FORM.CDR 5/2003

1 2 3 4 5 6 7 Page 42 of 42

03/12/2010

Login Sample Receipt Check List

Client: ARCADIS U.S., Inc.

Job Number: 720-26383-1

Login Number: 26383

List Source: TestAmerica San Francisco

Creator: Hoang, Julie

List Number: 1

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

ARCADIS

Appendix D

Field Sheets

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WATER-LEVEL MEASUREMENTS LOG

Project No. EM009480.0010 Date: March 02, 2010 Page 1 of 1

Project Name: Hanson Sunol Day: ☐ Sun ☐ Mon ☑ Tues ☐ Weds ☐ Thurs ☐ Fri ☐ Sat

Field Personnel: Andrea Valdivia / Miljan Draganic

General Observations *Cannot remove white caps from wells: MW-9S, MW-7D, MW-4D *Removed 03/03

WELL NO.	WELL ELEVATION	DEPTH TO WATER 1	DEPTH TO WATER 2	WATER ELEVATION	WELL SECURE? Y	WELL SECURE? N	Time	REMARKS (UNITS = FEET)
MW-9D		2.83	2.83		X		1122	Water is ~~transparent~~ translucent
MW-9LF		2.74	2.74		X		1124	Water is milky/cloudy
MW-8		1.19	1.19		X		1129	Water is very clear
MW-7S		1.95	1.95		X		1130	Water is clear and has gas-like odor •
MW-1		1.83	1.83		X		1132	Water is clear
MW-6D		3.13	3.13		X		1134	Water is ~~murky~~ clear and has gas-like odor •
MW-6S		2.10	2.10		X		1135	Water is murky
MW-10S		4.21	4.21		X		1144	Water is clear
MW-10D		4.35	4.35		X		1145	Water is clear and has gas-like odor •
MW-10LF		4.94	4.94		X		1147	Water is clear and has gas-like odor •
MW-4S		3.14	3.14		X		1148	Slight gas-like odor, water is clear •
MW-11D		2.88	2.88		X		1152	Water is clear
MW-11LF		2.82	2.82		X		1153	Water is somewhat murky/gray
MW-11S		2.54	2.54		X		1154	Water is clear
MW-12S		4.20	4.20		X		1156	Water is clear
MW-12D		3.75	3.75		X		1157	Water is clear
MW-12LF		3.89	3.89		X		1158	Water is clear
MW-2D		2.60	2.60		X		1203	Water is clear
MW-2S		2.13	2.13		X		1204	Water is silty/murky
MW-2M		2.40	2.40		X		1205	Water is clear
MW-3		3.24	3.24		X		1207	
MW-5D		2.79	2.79		X		1209	
MW-5S		2.50	2.50		X		1210	
★ MW-4D		3.41	3.41		X		1337	03/03 Water is clear and has gas-like odor •
★ MW-9S		0.50	0.50		X		0805	03/04 Water is clear
★ MW-7D		1.23	1.23		X		1500	03/04 Water is clear and has strong gas-like odor •
OXY-1S		—	—		X			Water is clear
OXY-1D		—	—		X			Water is murky
OXY-1LF		—	—		X			Water is cloudy/silty

• = has odor

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WATER-QUALITY SAMPLING LOG

Project No. 001-09480-10 Date: March 05, 2010 Page 1 of 1

Project Name: Hanson Sunol Sampling Location:

Sampler's Name: Andrea Valdivia / Miljan Draganic Sample No.: OXY-15 ☐ FB

Sampling Plan By: Katrin Schliewen Dated: ☐ DUP

Purge Method: ☐ Centrifugal Pump ☐ Disposable Bailer ☐ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☑ Other peri-pump

Purge Water Storage Container Type: 55 gallon drum Storage Location: on-site near wells

Date Purge Water Disposed: Where Disposed:

Analyses Requested	No. and Type of Bottles Used
TPHd	1-1L amber w/HCl
TPHg/BTEX/MTBE	3-40mL VOAs w/HCl

Lab Name: ☑ Test America ☐

Delivery By: ☐ Courier

* Not measured due to diameter of well opening

Flow Rate ≈ 150 mL/min

Well No. OXY-15 Depth of Water NM*

Well Diameter: 2" Well Depth 17.00

☒ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height

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

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	DO (mg / L)	Temp (C°)	pH (SU)	Elec Cond (uS / cm C)	ORP (mV)	Turb (NTU)	Color / Remarks
1449	Start	NM*								Start Purge
1459		—	0.7	5.99	16.10	7.76	2013	-140.8	15.7	Water is clear
1502		—	0.8	6.44	16.03	7.74	2201	-89.9	10.0	
1505		—	0.9	3.03	16.29	7.40	2321	-127.7	9.93	
1508		—	1.0	2.22	16.36	7.34	2391	-147.4	9.44	
1511		—	1.1	2.12	16.41	7.32	2396	-151.7	7.68	
1514		—	1.2	2.04	16.43	7.29	2405	-160.1	8.02	
1517		—	1.3	2.03	16.43	7.29	2410	-161.7	9.83	
1520		—	1.5	2.12	16.37	7.28	2417	-169.9	10.1	
1525	End									Sample Collected
										$[Fe^{2+}] = 0.00$ mg/L

Continue remarks on reverse, if needed.

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WATER-QUALITY SAMPLING LOG

Project No. 001-09480-10 Date: March , 2010 Page 1 of 1

Project Name: Hanson Sunol Sampling Location:

Sampler's Name: Andrea Valdivia / Miljan Draganic Sample No.: OXY-1D ☐ FB

Sampling Plan By: Katrin Schliewen Dated: ☐ DUP

Purge Method: ☐ Centrifugal Pump ☐ Disposable Bailer ☐ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☑ Other peri-pump

Purge Water Storage Container Type: 55 gallon drum Storage Location: on-site near wells

Date Purge Water Disposed: Where Disposed:

Analyses Requested	No. and Type of Bottles Used
TPHd	1-1L amber w/HCl
TPHg/BTEX/MTBE	

Lab Name: ☑ Test America ☐

Delivery By: ☐ Courier

* Not measured due to well accessibility (A.K.A. diameter of opening)

Well No. OXY-1D Depth of Water NM*

Well Diameter: 2" Well Depth

☒ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height

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

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	DO (mg / L)	Temp (C°)	pH (SU)	Elec Cond (uS / cm C)	ORP (mV)	Turb (NTU)	Color / Remarks
0847	Start	NM*	—	—	—	—	—	—	—	Start Purge
0857		—	0.75	7.02	15.40	9.90	1724	-231.6	46.7	Water is murky
0900		—	1.0	6.59	15.89	9.28	1699	-210.8	41.7	
0903		—	1.25	6.18	15.88	9.27	1696	-209.1	38.2	
0906		—	1.5	6.59	16.09	9.22	1689	-211.1	35.0	
0909		—	1.75	6.45	15.85	9.17	1684	-219.4	33.1	
0912		—	2.0	6.43	15.88	9.14	1684	-218.6	37.6	
0915		—	2.25	5.83	15.89	9.25	1685	-228.0	33.9	
0918		—	2.5	[illegible]	15.91	9.47	1685	-245.2	31.7	
0921		—	2.75	6.01	16.08	9.49	1686	-248.8	24.1	
0924		—	2.9	5.50	16.04	9.25	1686	-233.2	30.0	
0927		—	3.1	5.48	15.92	9.24	1688	-236	39.0	
0930		—	3.3	5.42	15.87	9.23	1689	-231.5	35.7	
0933	End	→								Sample Collected

Continue remarks on reverse, if needed.

$[Fe^{2+}] = 0.19$ mg/L

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WATER-QUALITY SAMPLING LOG

Project No. 001-09480-10 Date: March 04, 2010 Page 1 of _____

Project Name: Hanson Sunol Sampling Location: _____

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

Sampling Plan By: Katrin Schliewen Dated: _____ ☐ DUP _____

Purge Method: ☐ Centrifugal Pump ☐ Disposable Bailer ☐ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☑ Other peri-pump

Purge Water Storage Container Type: 55 gallon drum Storage Location: on-site near wells

Date Purge Water Disposed: _____ Where Disposed: _____

Analyses Requested	No. and Type of Bottles Used
TPHd	1-1L amber w/HCl
TPHg/BTEX/MTBE	3-40mL VOAs w/HCl

Lab Name: ☑ Test America ☐ _____

Delivery By: ☐ Courier

*Not measured, due to small opening of well.

Well No. OXY-1LF Depth of Water NM*

Well Diameter: 2" Well Depth _____

☒ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height _____

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

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	DO (mg / L)	Temp (C°)	pH (SU)	Elec Cond (uS / cm C)	ORP (mV)	Turb (NTU)	Color / Remarks
0950	Starts	NM*								Starts purge
1001 (A)		—	1.5	6.27	17.02	8.14	234	-80.6	>1,000	Water is cloudy/
1010		—	1.75	6.22	17.01	8.05	238	-179.4	>1,000	silty.
1013		—	2.0	6.20	17.13	7.91	249	-169.8	>1,000	
1016		—	2.25	5.19	17.14	8.17	262	-191.6	>1,000	
1019		—	2.5	5.29	17.10	8.13	273	-190.6	>1,000	
1022		—	2.7	4.95	17.16	8.44	278	-209.7	>1,000	
1030		—	3.2	4.99	16.80	8.20	324	-197.0	>1,000	
1033		—	3.4	4.65	16.83	8.01	329	-181.7	>1,000	
1036		—	3.6	4.44	16.63	7.98	392	-177.2	>1,000	
1039		—	3.8	4.61	16.58	7.66	367	-188.2	>1,000	
									→	Cleaned flowcell
1047		—	4.0	6.32	16.73	6.51	395	-75.1	>1,000	of silts to attempt
										stable readings

Continue remarks on reverse, if needed.

Comments									
Time	DTW	Vol. Purged (gal)	DO (mg/L)	Temp (°C)	pH (SU)	Elec Cond (µS/cm)	ORP (mV)	Turb (NTU)	
1050	—	4.2	5.51	16.70	8.04	385	-140.8	>1,000	
1053	—	4.4	5.58	16.94	7.70	867	-111.6	845	
1056	—	4.6	5.07	16.99	7.60	1070	-105.3	878	
1059	—	4.7	4.86	17.14	7.57	1232	-160.2	452	
1105	—	4.9	6.90	16.47	7.62	284	-145.0	>1,000	
1108	—	5.0	6.88	16.69	7.67	257	-140.9	>1,000	
1115	—	5.6	5.36	16.60	7.41	859	-117.0	71,000	
1125	—	~7.0	4.90	17.44	7.14	1153	-117.0	258	
1128	—	~8.3	4.29	17.42	7.53	1271	-139.0	168	
1131	—	~7.6	4.10	17.43	7.43	1286	-131.5	145	
1134	—	~8.0	4.02	17.30	7.07	1311	-124.9	—	
1137	—	~8.3	3.94	17.06	7.30	1324	-141.7	—	
1140	—	~8.6	3.77	17.07	7.12	1325	-132.2	—	
1143	—	~9.0	3.84	17.06	7.12	1320	-125.4	—	
1146	—	~9.3	3.84	17.12	7.11	1320	-126.4	137	
1150	End	→ Sample Collected							

$[Fe^{2+}] = 0.00 mg/L$

*$[DO] = 7.2 mg/L$

*DO done by titration at end of purge.

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WATER-QUALITY SAMPLING LOG

Project No. 001-09480-10 Date: March 02, 2010 Page 1 of 1

Project Name: Hanson Sunol Sampling Location:

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

Sampling Plan By: Katrin Schliewen Dated: ☐ DUP

Purge Method: ☐ Centrifugal Pump ☐ Disposable Bailer ☐ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☑ Other peri-pump

Purge Water Storage Container Type: 55 gallon drum Storage Location: on-site near wells

Date Purge Water Disposed: Where Disposed:

Analyses Requested	No. and Type of Bottles Used
TPHd	1 - 1L amber w/ HCl
TPHg, BTEX, MTBE	3-40mL ~~amb~~ VOAs w/HCl

Lab Name: ☑ Test America ☐

Delivery By: ☐ Courier

Well No. MW-1 Depth of Water 1.97'

Well Diameter: 2" Well Depth

☒ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height

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

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	DO (mg / L)	Temp (C°)	pH (SU)	Elec Cond (uS / cm C)	ORP (mV)	Turb (NTU)	Color / Remarks
1537	Start	1.97'								Start
1550		2.62'	1.0	1.84	15.72	6.74	2505	114.6	17.4	water is clear
1553		2.81'		1.69	15.61	6.74	2508	114.1	17.8	
1556		2.82'		1.77	15.61	6.73	2504	114.2	13.6	
1559		2.82'		1.77	15.61	6.73	2501	113.5	12.1	
1602		2.83'	2.0	1.80	15.59	6.75	2495	113.0	13.5	
1610	End									Sample Collected
										$[Fe^{2+}]$=0.04 mg/L

Continue remarks on reverse, if needed.

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WATER-QUALITY SAMPLING LOG

Project No. 001-09480-10 Date: March 26, 2010 Page 1 of 2

Project Name: Hanson Sunol Sampling Location:

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

Sampling Plan By: Katrin Schliewen Dated: ☒ DUP MW-2S-D

Purge Method: ☐ Centrifugal Pump ☐ Disposable Bailer ☐ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☑ Other peri-pump

Purge Water Storage Container Type: 55 gallon drum Storage Location: on-site near wells

Date Purge Water Disposed: Where Disposed:

Analyses Requested	No. and Type of Bottles Used
TPHd	1-1L amber w/HCl
TPHg/BTEX/MTBE	3-40mL VOAs w/HCl

Lab Name: ☑ Test America ☐

Delivery By: ☐ Courier

Well No. MW-2S Depth of Water 2.01'

Well Diameter: 2" Well Depth

☒ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height

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

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	DO (mg / L)	Temp (C°)	pH (SU)	Elec Cond (uS / cm C)	ORP (mV)	Turb (NTU)	Color / Remarks
0939	Start	2.01'								Start
0949		3.51'	1.0	2.33	14.39	7.00	642	-33.1	>1,000	Water is ~~brown~~ silty/
0952		3.50'	1.25	1.95 ~~2.33~~	14.49	6.92	668	-28.5	>1,000	murky
0955		3.50'	1.5	1.67	14.58	6.89	890	-25.6	980	
0958		3.58'	1.75	1.82	14.69	6.87	969	-23.7	686	
1001		3.60'	2.0	1.12	14.76	6.86	1131	-21.0	540	Water is clearing
1004		3.63'	2.25	0.90	14.82	6.85	1199	-29.8	392	
1007		3.57'	2.5	0.85	14.85	6.83	1290	-29.6	325	
1013		3.56'	3.0	1.09	14.79	6.82	1459	-29.8	193	
1016		3.53'	3.25	1.19	14.79	6.81	1527	-35.8	90.3	
1019		3.53'	3.5	1.12	14.81	6.80	1586	-45.6	67.4	
1022		3.54'	3.75	0.28	14.98	6.80	1609	-56.3	63.0	
1025		3.54'	4.0	0.23	15.03	6.80	1643	-60.4	72.8	

Continued on back →

Continue remarks on reverse, if needed.

Comments

Time	DTW	Vol Purged (gal)	DO (mg/L)	Temp (°C)	pH (SU)	Elec Cond (µS/cm C)	ORP (mV)	Turbidity (NTU)
1028	3.56'	4.25	0.24	15.08	6.80	1663	-62.9	77.2
1031	3.56'	4.5	0.25	15.11	6.79	1673	-64.1	80.1
1035	End →						Sample Collected	
1040	(marked as 1340) →						Duplicate	

$[Fe^{2+}] = 2.60$ mg/L

* [DO] ≤ 0.8 mg/L (AV)

* DO done by titration at end of purge

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WATER-QUALITY SAMPLING LOG

Project No. 001-09480-10 Date: March 03, 2010 Page 1 of 1

Project Name: Hanson Sunol Sampling Location:

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

Sampling Plan By: Katrin Schliewen Dated: ☐ DUP

Purge Method: ☐ Centrifugal Pump ☐ Disposable Bailer ☐ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☑ Other peri-pump

Purge Water Storage Container Type: 55 gallon drum Storage Location: on-site near wells

Date Purge Water Disposed: Where Disposed:

Analyses Requested	No. and Type of Bottles Used
TPHd	1-1L amber w/HCl
TPHg/BTEX/MTBE	3-40mL VOAs w/HCl

Lab Name: ☑ Test America ☐

Delivery By: ☐ Courier

Well No. MW-2M Depth of Water 2.22'

Well Diameter: 2" Well Depth

☒ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height

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

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	DO (mg / L)	Temp (C°)	pH (SU)	Elec Cond (uS / cm C)	ORP (mV)	Turb (NTU)	Color / Remarks
0900	Start	2.22'								Start
0910		2.86'	1.0	0.13	15.86	6.78	2286	-113.8	10.7	Water is clear
0913		2.89'		0.10	16.02	6.78	2290	-118.4	5.63	
0916		2.85'	1.5	0.08	16.20	6.78	2286	-119.3	6.99	
0919		2.85'		0.10	16.16	6.77	2286	-125.2	9.56	
0925	End									Sample Collected
										[Fe^{2+}] = 3.12 mg/L

Continue remarks on reverse, if needed.

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WATER-QUALITY SAMPLING LOG

Project No. 001-09480-10 Date: March 03, 2010 Page 1 of 1

Project Name: Hanson Sunol Sampling Location:

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

Sampling Plan By: Katrin Schliewen Dated: ☐ DUP

Purge Method: ☐ Centrifugal Pump ☐ Disposable Bailer ☐ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☑ Other peri-pump

Purge Water Storage Container Type: 55 gallon drum Storage Location: on-site near wells

Date Purge Water Disposed: Where Disposed:

Analyses Requested	No. and Type of Bottles Used
TPHd	1-1L amber w/ HCl
TPHg/BTEX/MTBE	3-40mL VOAs w/HCl

Lab Name: ☑ Test America ☐

Delivery By: ☐ Courier

Well No. MW-2D Depth of Water 2.59'

Well Diameter: 2" Well Depth

☒ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height

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

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	DO (mg / L)	Temp (C°)	pH (SU)	Elec Cond (uS / cm C)	ORP (mV)	Turb (NTU)	Color / Remarks
0815	Start	2.59'								Start
0828		2.61'	1.0	0.29	16.34	6.80	2248	-94.5	8.47	Water is clear
0832		2.68'	1.25	0.16	16.28	6.80	2248	-98.8	2.91	
0835		2.68'	1.5	0.13	16.30	6.80	2245	-102.9	1.72	
0838		2.68'	1.75	0.12	16.40	6.80	2243	-105.3	1.46	
0842	End									Sample Collected
										[Fe^{2+}] = 2.10 mg/L
										*[DO] = 0.8 mg/L

*DO done by titration @ end of purge

Continue remarks on reverse, if needed.

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WATER-QUALITY SAMPLING LOG

Project No. 001-09480-10 Date: March 05, 2010 Page 1 of 1

Project Name: Hanson Sunol Sampling Location:

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

Sampling Plan By: Katrin Schliewen Dated: ☐ DUP

Purge Method: ☐ Centrifugal Pump ☐ Disposable Bailer ☐ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☑ Other peri-pump

Purge Water Storage Container Type: 55 gallon drum Storage Location: on-site near wells

Date Purge Water Disposed: Where Disposed:

Analyses Requested	No. and Type of Bottles Used
TPHd	1-1L amber w/ HCl
TPHg/BTEX/MTBE	3-40mL VOAs w/HCl

Lab Name: ☑ Test America ☐

Delivery By: ☐ Courier

Well No. MW-3 Depth of Water 2.90'

Well Diameter: 2" Well Depth 14.70'

☒ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height 11.80'

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume 1.89 gal

Flow Rate ≈ 125mL/min

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	DO (mg / L)	Temp (C°)	pH (SU)	Elec Cond (uS / cm C)	ORP (mV)	Turb (NTU)	Color / Remarks
1403	start	2.90'								start purge
1415		3.02		0.26	17.18	6.81	2879	-209.6	30.3	
1418		3.03		0.18	17.15	6.79	2884	-184.0	19.2	
1421		3.01		0.13	17.17	6.77	2884	-192.9	16.7	
1424		3.01		0.18	17.01	6.72	2887	-224.0	22.4	
1427		3.01		0.11	16.93	6.77	2888	-225.1	16.8	
1430		3.01		0.10	16.90	6.75	2889	-226.5	15.7	
1435										Sampling
										[Fe2+] ≈ 1.59 mg/L
										* [DO] ≤ 0.8 mg/L

* DO done by titration at end of purge

Continue remarks on reverse, if needed.

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WATER-QUALITY SAMPLING LOG

Project No. 001-09480-10 Date: March 03, 2010 Page 1 of 2

Project Name: Hanson Sunol Sampling Location:

Sampler's Name: Andrea Valdivia / Miljan Draganic Sample No.: MW-4S ☐ FB

Sampling Plan By: Katrin Schliewen Dated: ☐ DUP

Purge Method: ☐ Centrifugal Pump ☐ Disposable Bailer ☐ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☑ Other peri-pump

Purge Water Storage Container Type: 55 gallon drum Storage Location: on-site near wells

Date Purge Water Disposed: Where Disposed:

Analyses Requested	No. and Type of Bottles Used
TPHd	1-1L amber w/HCl
TPHg/BTEX/MTBE	3-40mL VOAs w/HCl

Lab Name: ☑ Test America ☐

Delivery By: ☐ Courier

Well No. MW-4S Depth of Water 2.95'

Well Diameter: 2" Well Depth

☒ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height

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

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	DO (mg / L)	Temp (C°)	pH (SU)	Elec Cond (uS / cm C)	ORP (mV)	Turb (NTU)	Color / Remarks
1411	Start	2.95'								Start Purge
1421		3.22'	1.0	1.50	12.74	7.63	1347	-41.5	103	Water is brans-
1424		3.22'	1.25	1.22	12.60	7.62	1313	-39.4	77.5	parent w/
1427		3.22'	1.5	1.21	12.52	7.65	1275	-37.4	63.2	slight gas-like
1430		3.22'	1.75	1.27	12.52	7.69	1218	-35.4	51.6	odor
1433		3.22'	2.0	1.40	12.43	7.74	1150	-33.6	47.4	
1436		3.20'	2.25	1.42	12.42	7.75	1122	-31.4	47.8	
1439		3.20'	2.5	1.50	12.42	7.76	1121	-31.2	47.8	
1442		3.20'	2.75	1.52	12.38	7.79	1038	-29.2	56.4	
1445		3.20'	3.0	1.48	12.33	7.82	[illegible]	-27.3	62.5	
1448		3.20'	3.25	1.54	12.30	7.84	932	-26.8	71.3	
1451		[illegible]	3.5	1.40	12.26	7.86	887	-24.9	78.6	
1454		3.20'	3.75	1.32	12.24	7.87	867	-24.0	80.7	

Continued on back →

Continue remarks on reverse, if needed.

Comments

Time	DTW	Vol. Purged (gal)	DO (mg/L)	Temp (°C)	pH (SU)	ElecCond. (µS/cmC)	ORP (mV)	Turbidity (NTU)
1457	3.20'	4.0	1.30	12.18	7.88	859	-22.5	92.5
1500	End	→ Sample Collected						

$[Fe^{2+}] = 0.03 mg/L$

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WATER-QUALITY SAMPLING LOG

Project No. 001-09480-10 Date: March 03, 2010 Page 1 of 1

Project Name: Hanson Sunol Sampling Location:

Sampler's Name: Andrea Valdivia / Miljan Draganic Sample No.: MW-4D ☐ FB

Sampling Plan By: Katrin Schliewen Dated: ☐ DUP

Purge Method: ☐ Centrifugal Pump ☐ Disposable Bailer ☐ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☑ Other peri-pump

Purge Water Storage Container Type: 55 gallon drum Storage Location: on-site near wells

Date Purge Water Disposed: Where Disposed:

Analyses Requested	No. and Type of Bottles Used
TPHd	1-1L amber w/HCl
TPHg/BTEX/MTBE	3-40mL ~~amber~~ VOAs w/ HCl
Lab Name: ☑ Test America	☐
Delivery By: ☐ Courier	

Well No. MW-4D Depth of Water 3.41'

Well Diameter: 2" Well Depth

☒ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height

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

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	DO (mg / L)	Temp (C°)	pH (SU)	Elec Cond (uS / cm C)	ORP (mV)	Turb (NTU)	Color / Remarks
1337	Start	3.41'								Start to Purge
1347		3.53'	1.0	0.53	16.15	7.32	2434	-100.0		Water is clear
1350		3.52'	1.25	0.22	16.26	7.31	2413	-94.7	27.2	and has slight
1353		3.52'	1.5	0.14	16.30	7.29	2396	-86.7	23.3	gas-like odor
1356		3.51'	1.75	0.15	16.34	7.27	2381	-83.4	19.8	
1359		3.50'	2.0	0.13	16.39	7.26	2368	-81.5	14.1	
1403	End									Sample Collected
										$[Fe^{2+}] = 0.15$ mg/L
										* $[DO] \leq 0.8$ mg/L

*DO done by titration at end of purge

Continue remarks on reverse, if needed.

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WATER-QUALITY SAMPLING LOG

Project No. 001-09480-10 Date: March 4, 2010 Page 1 of 1

Project Name: Hanson Sunol Sampling Location: MW-55, Hanson Sunol

Sampler's Name: Andrea Valdivia / Miljan Draganic Sample No.: MW-55 ☐ FB

Sampling Plan By: Katrin Schliewen Dated: ☒ DUP MW-55-D

Purge Method: ☐ Centrifugal Pump ☐ Disposable Bailer ☐ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☑ Other peri-pump

Purge Water Storage Container Type: 55 gallon drum Storage Location: on-site near wells

Date Purge Water Disposed: Where Disposed:

Analyses Requested	No. and Type of Bottles Used
See COC.	

Lab Name: ☑ Test America ☐

Delivery By: ☐ Courier

Well No. MW-55 Depth of Water 2.19'

Well Diameter: 2" Well Depth

☒ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height

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

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	DO (mg / L)	Temp (C°)	pH (SU)	Elec Cond (uS / cm C)	ORP (mV)	Turb (NTU)	Color / Remarks
1352		2.19								Start purging.
1356		2.34								
1400		2.35								
1404		2.35								
1408		2.35	~1.5						126	Sampling.
1410 →		Sampling time of the Duplicate Sample "1530" on label and COC.								* No field paremeters were recorded (except turbidity after sampling) due to faulty equipment.
										[Fe^{2+}] = 1.27 mg/L
										* [DO] = 1.2 mg/L

* DO done by titration at end of purge

Continue remarks on reverse, if needed.

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WATER-QUALITY SAMPLING LOG

Project No. 001-09480-10 Date: March 4, 2010 Page 1 of 1

Project Name: Hanson Sunol Sampling Location: Hanson Sunol

Sampler's Name: Andrea Valdivia / Miljan Draganic Sample No.: MW-5D ☐ FB

Sampling Plan By: Katrin Schliewen Dated: ☐ DUP

Purge Method: ☐ Centrifugal Pump ☐ Disposable Bailer ☐ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☑ Other peri-pump

Purge Water Storage Container Type: 55 gallon drum Storage Location: on-site near wells

Date Purge Water Disposed: Where Disposed:

Analyses Requested	No. and Type of Bottles Used
See COC	

Lab Name: ☑ Test America ☐

Delivery By: ☐ Courier

Well No. MW-5D Depth of Water 2~~3~~.50

Well Diameter: 2" Well Depth

~~☑~~ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height

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

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	DO (mg / L)	Temp (C°)	pH (SU)	Elec Cond (uS / cm C)	ORP (mV)	Turb (NTU)	Color / Remarks
1427		2~~3~~.50								Start purging.
1431		2.66								
1435		2.60								
1439		2.60								
1443		2.61								
1447		2.61	~1.2						470	
1450										Sampling
										* No field parameters (except for turbidity) were taken due to broken equipment.
										$[Fe^{2+}] = 1.53$ mg/L

Continue remarks on reverse, if needed.

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WATER-QUALITY SAMPLING LOG

Project No. 001-09480-10 Date: March 05, 2010 Page 1 of 2

Project Name: Hanson Sunol Sampling Location:

Sampler's Name: Andrea Valdivia / Miljan Draganic Sample No.: MW-6S ☐ FB

Sampling Plan By: Katrin Schliewen Dated: ☐ DUP

Purge Method: ☐ Centrifugal Pump ☐ Disposable Bailer ☐ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☑ Other peri-pump

Purge Water Storage Container Type: 55 gallon drum Storage Location: on-site near wells

Date Purge Water Disposed: Where Disposed:

Analyses Requested	No. and Type of Bottles Used
TPHd	1-1L amber w/HCl
TPHg/BTEX/MTBE	3-40mL VOAs w/HCl

Lab Name: ☑ Test America ☐

Delivery By: ☐ Courier

Well No. MW-6S Depth of Water 1.66'

Well Diameter: 2" Well Depth 15.00'

☒ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height 13.34'

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume 2.13 gal

Flow Rate ≈ 200mL/min

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	DO (mg / L)	Temp (C°)	pH (SU)	Elec Cond (uS / cm C)	ORP (mV)	Turb (NTU)	Color / Remarks
1254	Start	1.66'	—	—	—	—	—	—	—	Start Purge
1304		1.96'	0.6	0.19	16.82	7.16	725	-183.8	828	Water is murky
1307		1.96'	0.7	0.14	16.74	7.06	846	-196.9	636	
1310		1.97'	0.8	0.13	16.73	7.04	889	-200.2	563	
1313		1.97'	0.9	0.12	16.76	7.01	992	-202.0	487	
1316		1.99'	1.0	0.14	16.76	7.00	1025	-202.5	423	
1319		1.99'	1.2	0.12	16.75	6.99	1095	-202.6	351	
1322		2.00	1.3	0.12	16.76	6.97	1159	-202.6	270	
1325		1.95'	1.4	0.10	16.67	6.95	1205	-216.9	239	
1328		1.95'	1.5	0.13	16.70	6.94	1244	-218.4	206	
1331		1.95'	1.6	0.10	16.72	6.93	1266	-220.5	188	
1334		1.93'	1.8	0.10	16.62	6.91	1319	-228.7	211	
1337		1.93'	1.9	0.11	16.70	6.92	1330	-231.3	194	

Continued on back →

Continue remarks on reverse, if needed.

Comments

Time	DTW	Vol Purged (gal)	DO (mg/L)	Temp (°C)	pH (SU)	Elec Cond (µS/cm)	ORP (mV)	Turb (NTU)
1340	1.93'	2.1	0.10	16.74	6.90	1360	-224.9	178
1343	1.93'	2.3	0.11	16.68	6.88	1417	-229.9	212
1346	1.93'	2.4	0.11	16.69	6.89	1428	-233.1	185
1349	1.94'	2.5	0.11	16.72	6.89	1445	-229.9	172.
1353	End	→					Sample Collected	

$[Fe^{2+}] = 1.01$ mg/L

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WATER-QUALITY SAMPLING LOG

Project No. 001-09480-10 Date: March 03, 2010 Page 1 of 1

Project Name: Hanson Sunol Sampling Location:

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

Sampling Plan By: Katrin Schliewen Dated: ☐ DUP

Purge Method: ☐ Centrifugal Pump ☐ Disposable Bailer ☐ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☑ Other peri-pump

Purge Water Storage Container Type: 55 gallon drum Storage Location: on-site near wells

Date Purge Water Disposed: Where Disposed:

Analyses Requested	No. and Type of Bottles Used
TPHd	1-1L amber w/ HCl
TPHg / BTEX / MTBE	3-40mL VOAs w/ HCl

Lab Name: ☑ Test America ☐

Delivery By: ☐ Courier

Well No. MW-6D Depth of Water 2.80'

Well Diameter: 2" Well Depth

~~☑~~ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height

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

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	DO (mg / L)	Temp (C°)	pH (SU)	Elec Cond (uS / cm C)	ORP (mV)	Turb (NTU)	Color / Remarks
1538	Start	2.80'								Start Purge
1549		3.18'	1.0	0.49	16.69	10.15	2582	-158.6	1.50	Water is clear
1552		3.15'	1.25	0.29	16.79	10.61	2570	-188.6	4.38	and has slight
1555		3.17'	1.5	0.27	16.89	10.59	2576	-192.6	5.80	gas-like odor
1558		3.18'	1.75	0.29	17.06	10.61	2513	-184.2	4.61	
1600	End									Sample Collected
										[Fe^{2+}] = 1.8 mg/L

Continue remarks on reverse, if needed.

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WATER-QUALITY SAMPLING LOG

Project No. 001-09480-10 Date: March 04, 2010 Page 1 of 1

Project Name: Hanson Sunol Sampling Location:

Sampler's Name: Andrea Valdivia / Miljan Draganic Sample No.: MW-7S ☐ FB

Sampling Plan By: Katrin Schliewen Dated: ☐ DUP

Purge Method: ☐ Centrifugal Pump ☐ Disposable Bailer ☐ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☑ Other peri-pump

Purge Water Storage Container Type: 55 gallon drum Storage Location: on-site near wells

Date Purge Water Disposed: Where Disposed:

Analyses Requested	No. and Type of Bottles Used
TPHd	1-1L amber w/HCl
TPHg/BTEX/MTBE	3-40mL VOAs w/HCl

Lab Name: ☑ Test America ☐

Delivery By: ☐ Courier

Most parameters not taken due to broken equipment.

Flow Rate ≈ 200mL/min

Well No. MW-7S Depth of Water 1.01'

Well Diameter: 2" Well Depth

☒ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height

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

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	DO (mg / L)	Temp (C°)	pH (SU)	Elec Cond (uS / cm C)	ORP (mV)	Turb (NTU)	Color / Remarks
1607	Start	1.01'	—							Start Purge
1617		2.05'	0.5						30.2	Water is clear
1620		2.34'	0.7						22.3	and has a gas-
1623		2.20'	0.9						19.2	like odor
1626		2.15'	1.1						17.8	
1631		2.11'	1.5						12.7	
1635		2.11'	1.8						10.3	
1639		2.11'	2.0						11.5	
1642	End	—	—						→	Sample Collected
										$[Fe^{2+}]$ = 1.80 mg/L

Continue remarks on reverse, if needed.

LFR LEVINE•FRICKE

WATER-QUALITY SAMPLING LOG

Project No. 001-09480-10 Date: March 04, 2010 Page 1 of 1

Project Name: Hanson Sunol Sampling Location:

Sampler's Name: Andrea Valdivia / Miljan Draganic Sample No.: MW-7D ☐ FB

Sampling Plan By: Katrin Schliewen Dated: ☐ DUP

Purge Method: ☐ Centrifugal Pump ☐ Disposable Bailer ☐ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☑ Other peri-pump

Purge Water Storage Container Type: 55 gallon drum Storage Location: on-site near wells

Date Purge Water Disposed: Where Disposed:

Analyses Requested	No. and Type of Bottles Used
TPHd	1-1L amber w/ HCl
TPHg/BTEX/MTBE	3-40mL VOAs w/HCl

Lab Name: ☑ Test America ☐

Delivery By: ☐ Courier

Parameters not taken due to broken equipments

Flow Rate ≈ 175mL/min

Well No. MW-7D Depth of Water 1.23'

Well Diameter: 2" Well Depth

☒ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height

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

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	DO (mg / L)	Temp (C°)	pH (SU)	Elec Cond (uS / cm C)	ORP (mV)	Turb (NTU)	Color / Remarks
1500	Start	1.23'								Start Purge
1511		—	0.8						26.7	Water is clear
1515		2.50'	1.0						20.8	and has gas-like
1519		2.50'	1.2						11.5	oder (very strong)
1523		2.50'	1.6						13.4	
1529		2.50'	2.0						15.0	
1534		2.61'	2.3						16.9	
1537		2.60'	2.5						17.4	
1540		2.60'	2.7						18.9	
1543		2.62'	2.8						21.6	
1547		2.63'	2.9						21.2	
1550	End								→	Sample Collected
										$[Fe^{2+}]$ = 1.70 mg/L

*DO done by titration at end of purge *[DO] ≤ 0.8 mg/L

Continue remarks on reverse, if needed.

LFR LEVINE•FRICKE

WATER-QUALITY SAMPLING LOG

Project No. 001-09480-10 Date: March 02, 2010 Page 1 of 1

Project Name: Hanson Sunol Sampling Location:

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

Sampling Plan By: Katrin Schliewen Dated: ☐ DUP

Purge Method: ☐ Centrifugal Pump ☐ Disposable Bailer ☐ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☑ Other peri-pump

Purge Water Storage Container Type: 55 gallon drum Storage Location: on-site near wells

Date Purge Water Disposed: Where Disposed:

Analyses Requested	No. and Type of Bottles Used
TPHd	1-1L amber w/HCl
TPHg, BTEX, MTBE	3-40mL VOAs w/HCl

Lab Name: ☑ Test America ☐

Delivery By: ☐ Courier

Well No. MW-8 Depth of Water 1.12'

Well Diameter: 2" Well Depth

☒ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height

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

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	DO (mg / L)	Temp (C°)	pH (SU)	Elec Cond (uS / cm C)	ORP (mV)	Turb (NTU)	Color / Remarks
1349	Start	1.12'								Start
1402		1.18'	1.0	1.02	15.31	6.96	1627	122.7	5.47	Water is very clear
1405		1.19'		0.38	15.30	6.96	1635	123.1	2.45	
1408		1.19'	1.5	0.30	15.24	6.95	1642	120.0	2.38	
1411		1.19'		0.40	15.22	6.93	1646	118.3	2.27	
1414		1.19'	2.0	0.35	15.20	6.94	1658	115.7	2.27	
1420	End									Sample Collected
										$[Fe^{2+}]$=0.00mg/L

Continue remarks on reverse, if needed.

LFR LEVINE • FRICKE

WATER-QUALITY SAMPLING LOG

Project No. 001-09480-10 Date: March 04, 2010 Page 1 of _____

Project Name: Hanson Sunol Sampling Location: _____

Sampler's Name: Andrea Valdivia / Miljan Draganic Sample No.: MW-9S ☐ FB _____

Sampling Plan By: Katrin Schliewen Dated: _____ ☐ DUP _____

Purge Method: ☐ Centrifugal Pump ☐ Disposable Bailer ☐ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☑ Other peri-pump

Purge Water Storage Container Type: 55 gallon drum Storage Location: on-site near wells

Date Purge Water Disposed: _____ Where Disposed: _____

Analyses Requested	No. and Type of Bottles Used
TPHd	1-1L amber w/HCl
TPHg/BTEX/MTBE	3-40mL VOAs w/HCl
Lab Name: ☑ Test America	☐ _____
Delivery By: ☐ Courier	

* Estimated off water level meter - very shallow water

Well No. MW-9S Depth of Water 0.50'*

Well Diameter: 2" Well Depth _____

☒ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height _____

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

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	DO (mg / L)	Temp (C°)	pH (SU)	Elec Cond (uS / cm C)	ORP (mV)	Turb (NTU)	Color / Remarks
0805	Start	0.50'								Start Purge
0816		0.91'	1.0	6.01	15.15	9.96	2652	-206.8	59.9	Water is clear
0819		0.92'	1.25	5.41	15.18	9.97	2670	-208.4	55.7	
0822		0.93'	1.5	5.32	15.21	9.92	2671	-223.5	48.6	
0825		0.96'	1.75	5.45	15.40	9.98	2669	-227.2	42.6	
0829		0.94'	2.0	5.42	15.48	9.95	2677	-231.5	39.9	
0835	End								→	Sample Collected
										[Fe^{2+}] = 0.06mg/L
									*	[DO] = 7.4mg/L

* DO done by titration at end of purge.

Continue remarks on reverse, if needed.

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WATER-QUALITY SAMPLING LOG

Project No. 001-09480-10 Date: March 02, 2010 Page 1 of 1

Project Name: Hanson Sunol Sampling Location:

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

Sampling Plan By: Katrin Schliewen Dated: ☐ DUP

Purge Method: ☐ Centrifugal Pump ☐ Disposable Bailer ☐ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☑ Other peri-pump

Purge Water Storage Container Type: 55 gallon drum Storage Location: on-site near wells

Date Purge Water Disposed: Where Disposed:

Analyses Requested	No. and Type of Bottles Used
TPHd	1-1L amber w/HCl
TPHg, BTEX, MTBE	3-40mL VOAs w/HCl

Lab Name: ☑ Test America ☐

Delivery By: ☐ Courier

Well No. MW-9D Depth of Water 2.68'

Well Diameter: 2" Well Depth

☒ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height

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

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	DO (mg / L)	Temp (C°)	pH (SU)	Elec Cond (uS / cm C)	ORP (mV)	Turb (NTU)	Color / Remarks
1235	Start	2.68'								Start
1248		3.48'	1.0	8.49	(AV) 18.13 (AV) 17.84	7.51	1878	167.1	173	Water is ~~transpa~~
1252		3.52'	1.25	7.99		7.47	1883	149.9	148	~~tan~~ translucent
1256		3.49'	1.50	6.18	18.3	7.44	1883	143.5	124	
1259		3.52'	1.75	5.94	18.14	7.38	1880	143.2	95.3	
1303		3.56'	2.0	5.20	18.06	7.36	1883	139.4	78.5	
1306		3.53'	2.25	5.21	18.17	7.33	1880	136.3	60.4	
1310		3.51'	2.5	5.21	18.07	7.32	1877	133.8	54.3	
1313		3.51'	2.75	5.22	17.89	7.31	1878	133.9	59.4	
1320	End									Sample Collected
										$[Fe^{2+}]$ = 0.00 mg/L
										* [DO] = 6.8 mg/L

* DO done by titration at end of purge

Continue remarks on reverse, if needed.

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WATER-QUALITY SAMPLING LOG

Project No. 001-09480-10 Date: March 04, 2010 Page 1 of 2

Project Name: Hanson Sunol Sampling Location:

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

Sampling Plan By: Katrin Schliewen Dated: ☐ DUP

Purge Method: ☐ Centrifugal Pump ☐ Disposable Bailer ☐ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☑ Other peri-pump

Purge Water Storage Container Type: 55 gallon drum Storage Location: on-site near wells

Date Purge Water Disposed: Where Disposed:

Analyses Requested	No. and Type of Bottles Used
TPHd	1-1L amber w/HCl
TPHg/BTEX/MTBE	~~3-40mL VOAs w/HCl~~
	just resampling for TPHd due to destroyed bottle on 03/02
Lab Name: ☑ Test America	☐
Delivery By: ☐ Courier	

Well No. MW-9D Depth of Water 2.02'

Well Diameter: 2" Well Depth

☒ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height

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

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	DO (mg / L)	Temp (C°)	pH (SU)	Elec Cond (uS / cm C)	ORP (mV)	Turb (NTU)	Color / Remarks
1200	Starts	2.02'								Starts Purge
1214		2.71'	~1.0	5.22	18.05	8.65	1936	-163.1	43.9	
1217		2.60		4.75	17.87	7.97	1945	-147.1	—	
1220		2.54		4.50	17.86	6.34	1947	-82.0	28.4	
1223		2.49		4.39	17.81	5.75	1949	-57	19.5	
1226		2.41'		4.35	17.73	5.28	1951	-29.2	16.0	
1229		2.48'		4.48	17.69	4.85	1953	-9.0	17.0	
1232		2.49'		4.14	17.63	6.17	1954	-76.0	22.9	
1235		2.49'		4.11	17.56	6.39	1956	-108.9	20.0	
1238		2.49'		3.99	17.53	6.58	1955	-131.0	13.3	
1241		2.49'		3.86	17.67	6.56	1953	-131.4	13.4	
1245		2.46'		4.45	17.49	5.97	1960	-106.5	14.0	
1249		—		3.99	17.52	5.19	1960	-51.8	14.9	

Continue remarks on reverse, if needed.

Comments

Time	DTW	Vol. Purged (gal)	DO (mg/L)	pH (SU)	Elec Cond (µS/cm C)	ORP (mV)	Turb (NTU)
1253	2.46'		3.85	5.01	1958	-34.6	17.7
1256	2.46'	Temp(°C) 17.46	3.91	5.09	1963	-14.6	11.9
1259		17.53	3.64	4.88	1961	67.7	
1310	→ Amber Sampled only						

$[Fe^{2+}] = 0.00$ mg/L

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WATER-QUALITY SAMPLING LOG

Project No. 001-09480-10 Date: March 02, 2010 Page 1 of 1

Project Name: Hanson Sunol Sampling Location:

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

Sampling Plan By: Katrin Schliewen Dated: ☒ DUP MW-9LF-D

Purge Method: ☐ Centrifugal Pump ☐ Disposable Bailer ☐ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☑ Other peri-pump

Purge Water Storage Container Type: 55 gallon drum Storage Location: on-site near wells

Date Purge Water Disposed: Where Disposed:

Analyses Requested	No. and Type of Bottles Used
TPHd	1-1L amber w/HCl
TPHg, BTEX, MTBE	3-40mL VOAs w/HCl

Lab Name: ☑ Test America ☐

Delivery By: ☐ Courier

Well No. MW-9LF Depth of Water 2.63'

Well Diameter: Well Depth

☐ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height

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

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	DO (mg / L)	Temp (C°)	pH (SU)	Elec Cond (uS / cm C)	ORP (mV)	Turb (NTU)	Color / Remarks
1435	Start	2.63'								Start
1447		2.64'	1.0	9.32	17.27	7.65	1607	103.6	>1,000	Water is milky/cloudy
1452		2.63'		8.20	17.27	7.64	1607	103.9	>1,000	
1455		2.63'		8.10	17.16	7.62	1605	104.7	>1,000	
1459		2.65'		8.01	17.18	7.62	1604	105.0	>1,000	
1502		2.64'	2.0	8.05	17.18	7.61	1603	104.7	>1,000	
1505	End									Sample Collected
1530										Duplicate
										$[Fe^{2+}]$=0.15mg/L
										*[DO]=8.8mg/L

* DO done by titration at end of purge

Continue remarks on reverse, if needed.

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WATER-QUALITY SAMPLING LOG

Project No. 001-09480-10 Date: March 03, 2010 Page 1 of 1

Project Name: Hanson Sunol Sampling Location:

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

Sampling Plan By: Katrin Schliewen Dated: ☐ DUP

Purge Method: ☐ Centrifugal Pump ☐ Disposable Bailer ☐ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☑ Other peri-pump

Purge Water Storage Container Type: 55 gallon drum Storage Location: on-site near wells

Date Purge Water Disposed: Where Disposed:

Analyses Requested	No. and Type of Bottles Used
TPHd	1-1L amber w/ HCl
TPHg/BTEX/MTBE	3-40mL VOAs w/HCl

Lab Name: ☑ Test America ☐

Delivery By: ☐ Courier

Well No. MW-10S Depth of Water 3.96'

Well Diameter: 2" Well Depth

☒ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height

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

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	DO (mg / L)	Temp (C°)	pH (SU)	Elec Cond (uS / cm C)	ORP (mV)	Turb (NTU)	Color / Remarks
1102	Start	3.96'								Starts Purge
1112		3.96'	0.75	0.64	15.06	7.27	1866	-49.4	22.2	Water is clear
1115		3.96'	1.0	0.67	15.01	7.27	1861	-46.9	11.0	
1118		3.96'	1.25	0.60	15.06	7.25	1860	-44.9	10.2	
1121		3.96'	1.5	0.23	15.05	7.25	1859	-43.1	8.58	
1124		3.96'	1.75	0.16	15.15	7.24	1860	-41.3	6.35	
1127		3.96'	2.0	0.22	15.15	7.23	1862	-38.3	4.97	
1138	End									Sample Collected
										$[Fe^{2+}] = 0.14$ mg/L

Continue remarks on reverse, if needed.

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WATER-QUALITY SAMPLING LOG

Project No. 001-09480-10 Date: March 03, 2010 Page 1 of 1

Project Name: Hanson Sunol Sampling Location:

Sampler's Name: Andrea Valdivia / Miljan Draganic Sample No.: MW-10D ☐ FB

Sampling Plan By: Katrin Schliewen Dated: ☐ DUP

Purge Method: ☐ Centrifugal Pump ☐ Disposable Bailer ☐ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☑ Other peri-pump

Purge Water Storage Container Type: 55 gallon drum Storage Location: on-site near wells

Date Purge Water Disposed: Where Disposed:

Analyses Requested	No. and Type of Bottles Used
TPHd	1-1L amber w/HCl
TPHg/BTEX/MTBE	3-40mL VOAs w/HCl

Lab Name: ☑ Test America ☐

Delivery By: ☐ Courier

Well No. MW-10D Depth of Water 4.13'

Well Diameter: 2" Well Depth

☒ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height

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

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	DO (mg / L)	Temp (C°)	pH (SU)	Elec Cond (uS / cm C)	ORP (mV)	Turb (NTU)	Color / Remarks
1150	Starts	4.13'								Start Purge
1203		5.06'	1.0	0.63	16.78	7.52	2218	-168.5	39.9	Water is clear,
1208		4.90'	1.4	0.26	17.00	7.53	2266	-208.0	25.3	yet odorous;
1211		4.85'	1.7	0.22	16.94	7.53	2281	-217.6	17.9	gas-like odor
1214		4.85'	2.0	0.21	17.04	7.50	2309	-234.6	11.7	
1217		4.85'	2.25	0.15	17.08	7.46	2339	-244.7	9.49	
1220		4.85'	2.5	0.12	17.02	7.45	2362	-241.9	7.18	
1223		4.85'	2.75	0.10	16.98	7.44	2400	-229.0	5.76	
1226		4.90'	3.0	0.11	16.93	7.42	2419	-252.3	4.67	
1229		4.90'	3.25	0.10	16.94	7.40	2432	-254.6	4.34	
1232		4.90'	3.5	0.09	17.06	7.37	2463	-255.9	3.44	
1235	End									Sample Collected
										$[Fe^{2+}] = 0.00 mg/L$

*DO done by titration at end of purge *$[DO] \approx 1.2 mg/L$ •

Continue remarks on reverse, if needed.

• difficult to read

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WATER-QUALITY SAMPLING LOG

Project No. 001-09480-10 Date: March 03, 2010 Page 1 of 1

Project Name: Hanson Sunol Sampling Location:

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

Sampling Plan By: Katrin Schliewen Dated: ☐ DUP

Purge Method: ☐ Centrifugal Pump ☐ Disposable Bailer ☐ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☑ Other peri-pump

Purge Water Storage Container Type: 55 gallon drum Storage Location: on-site near wells

Date Purge Water Disposed: Where Disposed:

Analyses Requested	No. and Type of Bottles Used
TPHd	1-1L amber w/ HCl
TPHg/BTEX/MTBE	3-40mL VOAs w/HCl

Lab Name: ☑ Test America ☐

Delivery By: ☐ Courier

Well No. MW-10LF Depth of Water 4.80'

Well Diameter: 2" Well Depth

☒ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height

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

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	DO (mg / L)	Temp (C°)	pH (SU)	Elec Cond (uS / cm C)	ORP (mV)	Turb (NTU)	Color / Remarks
1251	Start	4.80'								Start Purge
1301		4.88'	0.5	0.57	17.02	7.02	3280	-159.0	11.7	Water is clear
1304		4.90'		0.42	17.10	7.01	3560	-157.2	7.09	and has a gas-
1307		4.90'		0.41	17.11	7.01	3647	-158.3	4.37	like odor
1310		4.91'	1.0	0.31	17.32	7.01	3710	-159.5	3.38	
1313		4.91'		0.32	17.35	7.04	3723	-162.3	2.99	
1316		4.90'	1.5	0.31	17.26	7.03	3736	-164.9	2.60	
1320	End									Sample Collected
										$[Fe^{2+}] = 1.89$ mg/L

Continue remarks on reverse, if needed.

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WATER-QUALITY SAMPLING LOG

Project No. 001-09480-10 Date: March 05, 2010 Page 1 of 1

Project Name: Hanson Sunol Sampling Location:

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

Sampling Plan By: Katrin Schliewen Dated: ☒ DUP MW-11S-D

Purge Method: ☐ Centrifugal Pump ☐ Disposable Bailer ☐ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☑ Other peri-pump

Purge Water Storage Container Type: 55 gallon drum Storage Location: on-site near wells

Date Purge Water Disposed: Where Disposed:

Analyses Requested	No. and Type of Bottles Used
TPHd	1-1L amber w/HCl
TPHg/BTEX/MTBE	3-40mL VOAs w/HCl

Lab Name: ☑ Test America ☐

Delivery By: ☐ Courier

Well No. MW-11S Depth of Water 2.24'

Well Diameter: 2" Well Depth 9.43'

☒ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height 7.19'

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume 1.15 gal

Flow Rate ~ 225mL/min

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	DO (mg / L)	Temp (C°)	pH (SU)	Elec Cond (uS / cm C)	ORP (mV)	Turb (NTU)	Color / Remarks
0835	Start	2.24'								Start Purge
0845		2.43'	0.8	0.35	15.09	6.66	1855	-180.3	19.0	Water is clear
0848		2.44'	0.9	0.23	15.14	6.64	1855	-189.2	11.1	
0851		2.45'		0.16	15.17	6.65	1855	-171.0	6.22	
0854		2.47'		0.18	15.18	6.66	1855	-208.4	6.75	
0858		2.45'		0.11	15.26	6.69	1853	-217.9	8.06	
0901		2.46'		0.12	15.26	6.70	1854	-242.7	9.23	
0904		2.46'		0.12	15.28	6.71	1854	-244.9	4.24	
0907		2.47'		0.17	15.34	6.71	1852	-251.6	5.47	
0910	End								→	Sample Collected
0920									→	Duplicate (Time written as 1225 on labels & COC)
										[Fe2+] = 1.33mg/L
										* [DO] ≤ 0.8mg/L

* DO done by titration at end of purge

Continue remarks on reverse, if needed.

LFR LEVINE•FRICKE

WATER-QUALITY SAMPLING LOG

Project No. 001-09480-10 Date: March 05, 2010 Page 1 of 1

Project Name: Hanson Sunol Sampling Location:

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

Sampling Plan By: Katrin Schliewen Dated: ☐ DUP

Purge Method: ☐ Centrifugal Pump ☐ Disposable Bailer ☐ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☑ Other peri-pump

Purge Water Storage Container Type: 55 gallon drum Storage Location: on-site near wells

Date Purge Water Disposed: Where Disposed:

Analyses Requested	No. and Type of Bottles Used
TPHd	1-1L amber w/HCl
TPHg/BTEX/MTBE	3-40mL VOAs w/HCl

Lab Name: ☑ Test America ☐

Delivery By: ☐ Courier

Well No. MW-11D Depth of Water 2.62'

Well Diameter: 2" Well Depth 20.50'

☒ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height 17.88'

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume 2.86 gal

★ silts began to come up - old tubing was too long - was replaced

Flow Rate ≈ 200mL/min

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	DO (mg / L)	Temp (C°)	pH (SU)	Elec Cond (uS / cm C)	ORP (mV)	Turb (NTU)	Color / Remarks
0924	Start	2.62'	—	—	—	—	—	—	—	Start Purge
★ 0943		2.90'	1.0	0.19	16.28	6.68	1735	-279.8	26.2	Water is clear
0946		3.33'	1.2	0.23	16.39	6.67	1742	-281.3	17.9	
0949		3.40'	1.4	0.16	16.29	6.67	1746	-297.7	15.8	
0952		3.43'	1.5	0.10	16.51	6.68	1748	-303.6	15.9	
0955		3.43'	1.7	0.10	16.56	6.68	1748	-307.4	13.5	
1000	End	—	—	—	—	—	—	—	→	Sample Collected
										$[Fe^{2+}] = 0.59$ mg/L

Continue remarks on reverse, if needed.

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WATER-QUALITY SAMPLING LOG

Project No. 001-09480-10 Date: March 05, 2010 Page 1 of 1

Project Name: Hanson Sunol Sampling Location:

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

Sampling Plan By: Katrin Schliewen Dated: ☐ DUP

Purge Method: ☐ Centrifugal Pump ☐ Disposable Bailer ☐ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☑ Other peri-pump

Purge Water Storage Container Type: 55 gallon drum Storage Location: on-site near wells

Date Purge Water Disposed: Where Disposed:

Analyses Requested	No. and Type of Bottles Used
TPHd	1-1L amber w/HCl
TPHg/BTEX/MTBE	3-40mL VOAs w/HCl
Lab Name: ☑ Test America	☐
Delivery By: ☐ Courier	

Well No. MW-11LF Depth of Water 2.45'

Well Diameter: 2" Well Depth 39.41'

☒ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height 36.96'

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume 5.91 gal

Flow Rate ≈ 125mL/min

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	DO (mg / L)	Temp (C°)	pH (SU)	Elec Cond (uS / cm C)	ORP (mV)	Turb (NTU)	Color / Remarks
0747	Start	2.45'								Start Purge
0805 (AV)		2.69'	0.7	0.50	16.09	6.44	1342	-124.3	384	Water is somewhat
0808		2.69'	0.8	0.36	16.03	6.46	1344	-135.2	213	murky/gray
0811		2.69'	1.0	0.16	16.06	6.50	1347	-135.6	147	
0814		2.69'	1.2	0.15	16.08	6.52	1350	-142.9	97.0	
0817		2.69'	1.4	0.13	16.18	6.55	1350 -148.2 (AV)		63.6	
0820		2.69'	1.6	0.15	16.27	6.60	1353	-147.7	37.3	
0825	End									Sample Collected
										$[Fe^{2+}]$ = 1.16mg/L

Continue remarks on reverse, if needed.

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WATER-QUALITY SAMPLING LOG

Project No. 001-09480-10 Date: March 05, 2010 Page 1 of 1

Project Name: Hanson Sunol Sampling Location:

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

Sampling Plan By: Katrin Schliewen Dated: ☐ DUP

Purge Method: ☐ Centrifugal Pump ☐ Disposable Bailer ☐ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☑ Other peri-pump

Purge Water Storage Container Type: 55 gallon drum Storage Location: on-site near wells

Date Purge Water Disposed: Where Disposed:

Analyses Requested	No. and Type of Bottles Used
TPHd	1-1L amber w/HCl
TPHg/BTEX/MTBE	3-40mL VOAs w/HCl
Lab Name: ☑ Test America	☐
Delivery By: ☐ Courier √Arcadis	

Well No. MW-12S Depth of Water 3.97'

Well Diameter: 2" Well Depth

☒ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height

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

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	DO (mg / L)	Temp (C°)	pH (SU)	Elec Cond (uS / cm C)	ORP (mV)	Turb (NTU)	Color / Remarks
1032	Start	3.97'								Start to Purge
1042		4.11'	0.5	0.39	15.58	6.65	1816	-170.9	17.5	Water is clear
1045		4.11'	0.6	0.21	15.47	6.64	1811	-180.4	11.2	
1048		4.11'	0.7	0.17	15.42	6.61	1809	-171.9	10.2	
1051		4.13'	0.9	0.18*	15.33	6.60	1809	-175.4	8.86	
1055	End									Sample Collected
										$[Fe^{2+}]$ = 0.26 mg/L
										*[DO] = 0.8 mg/L

*DO done by titration at end of purge

Continue remarks on reverse, if needed.

LFR LEVINE•FRICKE

WATER-QUALITY SAMPLING LOG

Project No. 001-09480-10 Date: March 05, 2010 Page 1 of 1

Project Name: Hanson Sunol Sampling Location:

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

Sampling Plan By: Katrin Schliewen Dated: ☐ DUP

Purge Method: ☐ Centrifugal Pump ☐ Disposable Bailer ☐ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☑ Other peri-pump

Purge Water Storage Container Type: 55 gallon drum Storage Location: on-site near wells

Date Purge Water Disposed: Where Disposed:

Analyses Requested	No. and Type of Bottles Used
TPHd	1-1L amber w/HCl
TPHg/BTEX/MTBE	3-40mL VOAs w/HCl
Lab Name: ☑ Test America	☐
Delivery By: ☐ Courier ✓Arcadis	

Well No. MW-12D Depth of Water 3.27'

Well Diameter: 2" Well Depth

☒ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height

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

Flow Rate ≈ 200mL/min

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	DO (mg / L)	Temp (C°)	pH (SU)	Elec Cond (uS / cm C)	ORP (mV)	Turb (NTU)	Color / Remarks
1105	Start	3.27'								Start Purge
1115		3.35'	0.7	0.31	16.73	6.75	1542	-178.8	41.1	Water is clear
1118		3.35'	0.8	0.20	16.66	6.72	1539	-210.7	30.2	
1121		3.35'	0.9	0.18	16.66	6.70	1536	-234.6	26.1	
1124		3.37'	1.0	0.15	16.63	6.69	1532	-242.8	21.9	
1127		3.36'	1.1	0.11	16.67	6.68	1529	-258.7	22.0	
1130		3.36'	1.1	0.09	16.65	6.66	1527	-264.2	21.1	
1133		3.37'	1.2	0.09	16.62	6.65	1526	-267.9	17.4	
1138	End									Sample Collected
										$[Fe^{2+}] = 0.11 mg/L$

Continue remarks on reverse, if needed.

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WATER-QUALITY SAMPLING LOG

Project No. 001-09480-10 Date: March 05, 2010 Page 1 of 1

Project Name: Hanson Sunol Sampling Location:

Sampler's Name: Andrea Valdivia / Miljan Draganic Sample No.: MW-12LF ☐ FB

Sampling Plan By: Katrin Schliewen Dated: ☐ DUP

Purge Method: ☐ Centrifugal Pump ☐ Disposable Bailer ☐ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☑ Other peri-pump

Purge Water Storage Container Type: 55 gallon drum Storage Location: on-site near wells

Date Purge Water Disposed: Where Disposed:

Analyses Requested	No. and Type of Bottles Used
TPHd	1-1L amber w/HCl
TPHg/BTEX/MTBE	3-40mL VOAs w/HCl

Lab Name: ☑ Test America ☐

Delivery By: ☐ Courier

Well No. MW-12LF Depth of Water 3.40'

Well Diameter: 2" Well Depth

☒ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height

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

Flow Rate ≈ 200mL/min

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	DO (mg / L)	Temp (C°)	pH (SU)	Elec Cond (uS / cm C)	ORP (mV)	Turb (NTU)	Color / Remarks
1146	Start	3.40'								Start Purge
1156		3.61'	0.8	0.45	17.14	6.76	1538	-228.9	6.12	Water is clear
1159		3.52'	1.0	0.30	16.90	6.76	1542	-232.5	4.15	
1202		3.51'	1.2	0.25	16.51	6.76	1537	[redacted]	3.75	
1205		3.51	1.4	0.21	16.66	6.74	1534	-231.2	9.35	
1208		3.51'	1.6	0.22	16.71	6.74	1533	-228.1	7.04	
1210	End									Sample Collected
										[Fe2+]=0.00mg/L
										* [DO]=0.8mg/L

* DO done by titration at end of purge

Continue remarks on reverse, if needed.