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Alameda County Environmental Health

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REPORT
of
SOIL, GROUNDWATER, AND SOIL VAPOR ASSESSMENT
ASE JOB NO. 2808
at
Lim Property
250 8th Street
Oakland, California

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1.0 INTRODUCTION

This submittal presents Aqua Science Engineers, Inc. (ASE's) report for an additional soil, groundwater and soil vapor assessment at the Lim Family Property located at 250 8th Street in Oakland, California (Figures 1 and 2). This work was requested by the Alameda County Health Care Services Agency (ACHCSA) in their letters dated November 7, 2005 and May 12, 2006. The Remedial Action Plan (RAP) previously submitted on August 4, 2006 contained the other items requested in the letters.

2.0 BRIEF SITE HISTORY AND BACKGROUND INFORMATION

2.1 May 1992 Underground Storage Tank Removal

A gasoline service station previously occupied the site. In May 1992, ASE removed ten underground fuel storage tanks (USTs) from the site. The USTs consisted of one (1) 10,000-gallon gasoline tank, one (1) 5,000-gallon diesel tank, three (3) 2,000-gallon gasoline tanks, one (1) 2,000-gallon diesel tank, three (3) 500-gallon gasoline tanks and one (1) 250-gallon waste oil tank. Up to 10,000 parts per million (ppm) total petroleum hydrocarbons as gasoline (TPH-G) and 5,900 ppm total petroleum hydrocarbons as diesel (TPH-D) were detected in soil samples collected during the tank removal.

2.2 December 1992 through March 1993 Soil Overexcavation

Between December 1992 and March 1993, All Environmental of San Ramon, California overexcavated 1,762 cubic yards of soil from the site and off-hauled the soil to the BFI Landfill in Livermore, California for disposal (Figure 2). Analytical results show that all on-site soil with hydrocarbon concentrations greater than 10 ppm was removed from the site with the exception of soil along the 8th Street shoring. Up to 1,800 ppm TPH-G and 120 ppm TPH-D were detected in soil samples collected along the shoring indicating that contamination likely extends below 8th Street. This contamination left in place may still be a source for groundwater contamination.

2.3 January 1995 Monitoring Well Installation

In January 1995, ASE installed monitoring wells MW-1 and MW-2 at the site (Figure 2). High hydrocarbon concentrations were detected in monitoring well MW-2, downgradient of the site. Moderate hydrocarbon concentrations were detected in on-site monitoring well MW-1.

2.4 January 1996 Borings and Groundwater Sampling

In July 1996, ASE collected groundwater samples from each monitoring well and drilled borings BH-C and BH-D to further define the width of the hydrocarbon plume downgradient of the site. Relatively high hydrocarbon concentrations were detected in groundwater samples collected from monitoring well MW-2, downgradient of the site. Slightly lower but still very high



hydrocarbon concentrations were detected in groundwater samples collected from boring BH-D, west of monitoring well MW-2. Very low hydrocarbon concentrations were detected in groundwater samples collected from monitoring well MW-1, located on the site, and boring BH-C, east of monitoring well MW-2. Based on these findings, the plume appeared to be moving to the south of Excavation I.

2.5 Quarterly Groundwater Monitoring

In April 1995, ASE began a quarterly groundwater monitoring program for the site. Since that time, the site has been on either a quarterly or semi-annual sampling schedule. Depth to groundwater data and analytical results for all groundwater sampling periods are tabulated in Tables One through Three.

2.6 June 1997 Remedial Action Plan

On June 5, 1997, ASE prepared a remedial action plan (RAP) addressing the need for groundwater remediation at the site, describing the appropriateness of several remedial options and choosing an option. Low flow hydrogen peroxide injection was chosen as the groundwater remediation option of choice for the site in order to raise dissolved oxygen (DO) concentrations in the groundwater to stimulate in-situ bioremediation.

2.7 February 1999 Hydrogen Peroxide Remediation System Installation

On February 2 and 3, 1999, five (5) injection wells were installed at the site (Figure 2). On February 18, 1999, the injection system began operation. It delivered a water and hydrogen peroxide solution to each injection well on a constant basis. DO concentrations within the injection wells rose to above 20 ppm. Groundwater in downgradient monitoring well MW-2 never showed a measurable increase in DO.

2.8 June 1999 Discovery of Free-Floating Hydrocarbons

On June 22, 1999, while measuring the DO content within the injection wells, ASE discovered that the DO probe had a very strong gasoline odor when removed from injection well IW-5. A clear bailer was inserted into IW-5 to check for the presence of free-floating hydrocarbons. The bailer contained approximately 18-inches of what appeared to be aged gasoline. On June 24, 1999, ASE returned to the site with an interface probe to accurately measure the thickness of the free-floating hydrocarbons. On that day, 1.75-feet of free-floating hydrocarbons was measured on the water surface in IW-5. Injection well IW-4 (15-feet east of IW-5) was measured with the interface probe and did not contain a measurable thickness of floating hydrocarbons. On June 24, 1999, ASE bailed the free-floating hydrocarbons from IW-5 until only a sheen was present on the water surface. Approximately 3 gallons of product was removed from IW-5. ASE continued to measure and bail the floating product within well IW-5 on a bi-weekly basis.



2.9 January 2000 Monitoring Well Installation

In January 2000, ASE installed groundwater monitoring wells MW-3 and MW-4, east of injection well IW-5 and monitoring well MW-2 (Figure 2). High hydrocarbon concentrations were detected in groundwater samples collected from both of these wells, including up to 140,000 parts per billion (ppb) TPH-G, 13,000 ppb TPH-D and 22,000 ppb benzene.

2.10 April 2000 Groundwater Sampling

In April 2000, ASE collected groundwater samples from all four monitoring wells. Elevated hydrocarbon concentrations were detected in groundwater samples collected from monitoring wells MW-2, MW-3 and MW-4, including up to 240,000 ppb TPH-G, 700,000 ppb TPH-D and 35,000 ppb benzene. Monitoring well MW-3 contained free-floating hydrocarbons.

2.11 Hydrogen Peroxide System Discontinuation

On November 27, 2000, with the approval of the Alameda County Health Care Services Agency, ASE turned off the hydrogen peroxide injection system since there was no noticeable DO increase in downgradient monitoring wells MW-2 and MW-4 on the west side of 8th Street.

2.12 May 2002 Monitoring Well Installation

In May 2002, ASE installed groundwater monitoring wells MW-5 and MW-7 south of the site, across 8th Street, and MW-6 northwest of the site approximately 70 feet west of existing monitoring well MW-3 (Figure 2). Low concentrations of MTBE were identified in groundwater samples collected from wells MW-5 and MW-6. High concentrations of petroleum hydrocarbons were identified in well MW-7, including up to 38,000 ppb TPH-G and 890 ppb benzene.

2.13 October 2004 Duel-Phase Extraction Event

In October 2004, CalClean mobilized to the site with a truck-mounted Dual-Phase Extraction (DPE) system to perform both a DPE pilot test and a 14-day DPE interim remediation event at the site. At the completion of the DPE interim remediation event, a total of 94,470 gallons of free-product and groundwater were removed from three extraction wells. The average TPH-G concentration in the extracted groundwater was 13,900 ppb; the average benzene concentration of that extracted groundwater was 780 ppb. The extracted groundwater was treated on-site with activated carbon vessels, and then discharged, under permit, to the East Bay Municipal Utilities District (EBMUD) sanitary sewer system on-site.

A total of 2.3 million cubic feet of hydrocarbon-laden vapors were extracted from three extraction wells during the 15 day event. Based on field measurements and laboratory analytical data, over 7,000 pounds of petroleum hydrocarbons were extracted from three extraction wells



during the 15-day event. This equates to approximately 1,150 gallons of petroleum hydrocarbons. The extracted vapors were treated on-site by CalClean's thermal oxidizer. Based on the success of this DPE event, ASE recommended a second DPE event for the site prior to designing and installing a long-term remediation system.

2.14 Current Quarterly Groundwater Monitoring Program

The site is currently on a quarterly groundwater monitoring program. Depth to groundwater and analytical results for all historical groundwater sampling events are tabulated in Tables One through Three.

2.15 October 2006 Workplan for Additional Assessment, Sensitive Receptor Survey, Area Well Survey, Conduit and Potential Preferential Pathway Survey, and Conceptual Site Model

In October 2006, ASE prepared a workplan to conduct an additional soil and groundwater assessment at the site. Also included in this document were a sensitive receptor survey, an area well survey, a conduit and potential preferential pathway survey, and a conceptual site model.

ASE prepared a map showing property usage within approximately one block of the site, specifically to search for sensitive receptors such as schools, daycare facilities, hospitals, or medical facilities. A summer school (Chinese Presbyterian Church School) is located across 8th Street to the southwest of the site at 265 8th Street. This school has monitoring wells MW-4 and MW-7 just in front of the school, and it is possible that the hydrocarbon plume extends beneath the church and school. No other schools, daycares, or medical facilities were located. None of the buildings across 8th Street downgradient of the site appeared to have basements. The nearest surface water bodies are the Oakland Inner Harbor and Lake Merritt, both over 2,000-feet from the site. It is highly unlikely that the hydrocarbon plume has reached either of these surface water bodies.

A conduit and potential preferential pathway study was conducted by reviewing Underground Service Alert (USA) markings in the site vicinity, reviewing as-built drawings supplied by the city, and contacting individuals that would have knowledge of the individual utility lines. There were no underground utility lines beneath 8th Street directly downgradient of the site that could present a potential preferential pathway for the movement of groundwater. Storm and sanitary sewer lines beneath Alice Street, crossgradient of the site, and beneath 7th Street, a block (approximately 350-feet) downgradient could be potential conduits for the preferential movement of groundwater only during very rare periods of unusually high groundwater levels.

ASE conducted an area well survey to locate water wells within a 2,000-foot radius of the site. A total of 149 wells are located within the study area. Of these wells, 129 are listed as monitoring or test wells, 10 are listed as piezometers, one is listed as a cathodic protection well, two are listed as extraction wells (for remediation), one is an air sparging well, one is listed as a domestic



well, one is listed as an abandoned well, two are listed as destroyed wells, and two are of unknown usage. Although listed as a domestic well, the well labeled as domestic is owned by Western Union and has a listed depth of 33-feet. Based on this information, it is highly unlikely that this well is used for groundwater consumption. Based on all of the information known from these wells, (a) no water supply wells are located in the site vicinity, and (b) none of the other wells downgradient of the site appear to present a potential conduit for the downward movement of contamination.

2.16 January 2007 Soil Vapor Sampling Workplan

On January 18, 2007, ASE prepared a workplan to conduct a soil vapor sampling assessment at the site. This work was requested by the ACHCSA in their letter dated November 20, 2006. This soil vapor survey was to be conducted in conjunction with the work described in ASE's October 23, 2007 workplan. This workplan was subsequently approved by the ACHCSA with the addition of three additional soil vapor sample locations.

3.0 SCOPE OF WORK

The purpose of this assessment was to (a) further define the horizontal and vertical extent of soil and groundwater contamination related to the site, and (b) determine the risk related to potential vapor intrusion to indoor air for buildings on-site, adjacent to the site, and downgradient of the site. The scope of work for this project was to:

- 1) Obtain a drilling permit from the Alameda County Public Works Agency.
- 2) Obtain excavation permits from the City of Oakland to drill in 7th and 8th Streets.
- 3) Contract with a subsurface utility locating service to clear drilling locations of underground utility lines.
- 4) Drill six soil borings in both on-site and off-site locations using a Geoprobe and collect soil and groundwater samples for analysis.
- 5) Drill one soil boring to a depth of 60-feet bgs using a Geoprobe with a dual-wall sampler collecting soil samples continuously and collecting multi-depth groundwater samples from adjacent borings using a Hydropunch sampler.
- 6) Following collection of the soil and groundwater samples, backfill the borings described in tasks 4 and 5 with neat cement placed by tremie pipe.
- 7) Analyze soil and groundwater samples collected from each boring described in tasks 4 and 5 at a CAL-DHS certified analytical laboratory for TPH-D by EPA Method 8015 and TPH-G, BTEX, fuel oxygenates and lead scavengers by EPA Method 8260B.



- 8) Push seven vapor extraction points to 3-feet bgs in both on and off-site locations and collect soil vapor samples.
- 9) Analyze one soil vapor sample collected from each point at a CAL-DHS certified analytical laboratory for TPH-G and BTEX.
- 10) Backfill each boring described in task 8 with neat cement.
- 11) Prepare a report presenting results from this assessment. This report will present tabulated analytical results, an updated conceptual site model, conclusions, and recommendations for appropriate feasibility tests, as necessary.

4.0 DRILL SOIL BORINGS AND COLLECT SOIL AND GROUNDWATER SAMPLES

4.1 Permits

Prior to drilling, ASE obtained a drilling permit from the Alameda County Public Works Agency (ACPWA). ASE also obtained excavation permits from the City of Oakland to allow for drilling in city streets. Copies of the permits are presented in Appendix A. ASE also notified USA to have underground public utilities in the vicinity of the site marked prior to drilling. Drilling locations were also cleared of utility lines by Subtronic Corporation of Concord, California prior to drilling.

4.2 Drill Deeper Boring and Collect Soil Samples

On March 1, 2007, Vironex, Inc. of San Leandro, California drilled soil boring SB-1 using a Geoprobe direct-push hydraulic sampling rig equipped with a dual-walled sampler. The dual-walled sampler allows the boring to advance with an external conductor casing to minimize potential cross-contamination by sealing off potentially contaminated soil and groundwater outside the external casing from the internal boring opening and sampling equipment. The purpose of this boring was to determine the vertical extent of hydrocarbons at the site in one of the locations where very high hydrocarbon concentrations was expected. The boring location is shown on Figure 3. ASE geologist Mike Rauser directed the drilling. Soil samples were collected by driving a dual-walled sampler into the ground using hydraulic direct-push methods. The internal drive sampler was lined with acetate tubes and this internal sampler was removed and then replaced after each sampling run.

Undisturbed soil samples were collected continuously as drilling progressed for lithologic and hydrogeologic description and for possible chemical analysis. Selective soil samples were immediately cut, sealed with Teflon squares and plastic end caps, and labeled with the site



location, sample designation, date and time the sample was collected, and the initials of the person collecting the sample. The samples were placed into an ice chest containing wet ice for delivery under chain of custody to a CAL-DHS certified analytical laboratory under chain of custody documentation.

Soil from the remaining tubes was described by the site geologist using the Unified Soil Classification System (USCS) and was screened for volatile organic compounds (VOCs) using a photoionization detector (PID). The soil was screened by emptying soil from one of the sample tubes into a plastic bag. The bag was then sealed and placed in the sun for approximately 10 minutes. After the volatile compounds were allowed to volatilize, the PID measured the vapor in the bag through a small hole punched in the bag. PID readings are used as a screening tool only, since the procedures are not as rigorous as those used in the laboratory. The PID readings are shown on the boring logs presented in Appendix B.

4.3 Drill Shallow Soil Borings and Collect Soil Samples

On February 27 and 28, 2007, Vironex, Inc. drilled soil borings SB-2 through SB-7 in both on and off-site locations using a Geoprobe direct-push drill rig. The purpose of these borings was to define the extent of elevated hydrocarbon concentrations in soil and groundwater both upgradient to the north and downgradient to the south. The boring locations are shown on Figure 3. ASE geologist Mike Rauser directed the drilling. The soil samples were collected by driving a Macro-Core sampler lined with acetate tables into the ground using hydraulic direct-push.

Undisturbed soil samples were collected continuously as drilling progressed for lithologic and hydrogeologic description and for possible chemical analysis. Selective soil samples were immediately cut, sealed with Teflon squares and plastic end caps, and labeled with the site location, sample designation, date and time the sample was collected, and the initials of the person collecting the sample. The samples were placed into an ice chest containing wet ice for delivery under chain of custody to a CAL-DHS certified analytical laboratory under chain of custody documentation.

Soil from the remaining tubes was described by the site geologist using the USCS and was screened for VOCs using a PID. The soil was screened by emptying soil from one of the sample tubes into a plastic bag. The bag was then sealed and placed in the sun for approximately 10 minutes. After the volatile compounds were allowed to volatilize, the PID measured the vapor in the bag through a small hole punched in the bag. PID readings are used as a screening tool only, since the procedures are not as rigorous as those used in the laboratory. The PID readings are listed on the boring logs presented in Appendix B.

4.4 Collect Groundwater Samples

Once groundwater was encountered, a temporary PVC well casing was driven into place for the collection of groundwater samples. Groundwater samples were removed from the boring with a



pre-cleaned bailer. The groundwater samples were contained in 40-ml volatile organic analysis (VOA) vials, preserved with hydrochloric acid, and sealed without headspace. The samples were then labeled and stored in an ice chest with wet ice for transport to the analytical laboratory under chain of custody.

Groundwater samples from deeper water-bearing zones were collected using a Hydropunch. The Hydropunch was driven into the targeted zone in a boring drilled immediately adjacent to the boring drilled for soil samples and lithology. The rods were then checked to verify that there was no leakage of groundwater prior to opening. Once the rods were shown to be dry, the Hydropunch screen was then opened and groundwater was allowed to enter the rods. Groundwater samples were then collected from within the rods using a bailer. Groundwater samples were then decanted from the bailer into 40-ml VOA vials, preserved with hydrochloric acid and sealed without headspace. The samples were then labeled with the site location, sample designation, date and time the samples were collected, and the initials of the person collecting the samples. The samples were then sealed in plastic bags and cooled in an ice chest with wet ice for transport to a state-certified analytical laboratory under chain-of-custody.

Additional deeper water samples were obtained in the same boring by placing a closed Hydropunch back into the same boring and continuing into the next deeper targeted zone for sampling, and then repeating the sampling process.

4.5 Decontamination and Borehole Backfilling

Drilling equipment was cleaned with an Alconox solution between sampling intervals and between borings to prevent potential cross-contamination. Following collection of the soil and groundwater samples, each boring was backfilled with neat cement to the ground surface.

5.0 SOIL VAPOR SAMPLING

5.1 Collect Soil Vapor Samples

On March 5 through 8, 2006, Vironex, Inc. pushed vapor collection points SV-1 through SV-7 in the locations shown on Figure 3. Vapor points were pushed to 3-feet bgs using drilling rods driven with a Geoprobe. The bottom of the rod contained an expendable point. Once at depth, the drive rod was retracted separating the expendable point and the rods and creating the desired void for sample collection. A Geoprobe Point Run Tubing (PRT) system adapter and new, unused polyethylene tubing were then advanced through the inner drive rod and secured to the expendable point holder at the base of the rods. A hydrated bentonite seal was placed around the rods and ground surface to prevent ambient air intrusion into the borehole. The borehole was then allowed to equilibrate prior to purging and sampling. The tubing was then purged of five volumes to insure that all ambient air was removed from the tubing using the Geoprobe vacuum/volume system. The sample was collected in a 1-liter Summa canister with a rate between 100 to 200-ml per minute. The samples were labeled with the site location, sample



designation, date and time the sample was collected, and the initials of the person collecting the sample. The samples were then be delivered under chain of custody to a CAL-EPA certified analytical laboratory. ASE geologist Mike Rauser directed the sampling.

5.2 Decontamination and Borehole Backfilling

Drilling equipment was cleaned with an Alconox solution between borings to prevent potential cross-contamination. Following collection of the soil vapor samples, each boring was backfilled with neat cement to the ground surface.

6.0 LITHOLOGY AND HYDROGEOLOGY

Sediments encountered beneath the site generally consisted of silty sand from beneath the concrete or asphalt surface to approximately 33-feet bgs, silty clay from 33-feet bgs to approximately 42-feet bgs, silty sand from approximately 42-feet bgs, and silty clay from 49-feet to the total depth explored of 60-feet bgs. Groundwater was generally encountered between approximately 16 to 18-feet bgs. Boring logs are presented in Appendix B.

7.0 ANALYTICAL RESULTS FOR SOIL AND GROUNDWATER

7.1 Soil Sample Analysis

Soil samples collected from 5-foot intervals between 20 and 60-feet bgs in boring SB-1 were analyzed by Kiff Analytical, LLC of Davis, California (ELAP #2236) for TPH-G, BTEX and five oxygenates by EPA Method 8260B, and TPH-D by EPA Method 8015. Soil samples collected from 5 and 15-feet bgs in boring SB-2, and from 15-feet bgs in borings SB-3 through SB-7 were also analyzed for TPH-G, BTEX and five oxygenates by EPA Method 8260B, and TPH-D by EPA Method 8015. The analytical results are tabulated in Table Four, and certified analytical report and chain of custody are presented in Appendix C.

Hydrocarbon concentrations from these soil samples were compared to California Regional Water Quality Control Board, San Francisco Bay Region (RWQCB) environmental screening levels (ESLs) for soil at residential sites where groundwater is not a current or potential source of drinking water. These ESLs are presented in the "Screening for Environmental Concerns at Sites With Contaminated Soil and Groundwater" document dated February 2005 (Volume 1; Table D).

The TPH-G, TPH-D and BTEX concentrations in the soil sample collected from 20-feet bgs in boring SB-1 exceeded the RWQCB ESL for residential soil where groundwater is not a current or potential source of drinking water. The TPH-G, TPH-D and benzene concentrations in the soil sample collected from 25-feet bgs in boring SB-1 also exceeded ESLs. None of the soil samples collected from boring SB-1 between 30-feet bgs and the total depth of 60-feet contained hydrocarbon concentrations exceeding ESLs.



7.2 Groundwater Sample Analysis

Groundwater samples collected from all borings were analyzed by Kiff Analytical for TPH-G, BTEX and five oxygenates by EPA Method 8260B, and TPH-D by EPA Method 8015. The analytical results are tabulated in Table Five, and certified analytical report and chain of custody are presented in Appendix C.

Groundwater samples collected from all three depths (20-23-feet bgs, 28-31-feet bgs and 51-53-feet bgs) in boring SB-1 contained concentrations of TPH-G, benzene, toluene and total xylenes exceeding ESLs. Ethyl benzene concentrations also exceeded ESLs in samples collected from the 20-23-foot and 28-31-foot depths in this boring. It should be noted that concentrations decreased by an order of magnitude with each successive sample depth. Boring SB-2 contained TPH-G and TPH-D concentrations exceeding ESLs, although none of the BTEX concentrations in this boring exceeded ESLs.

None of the samples from the remaining borings (SB-3 through SB-7) contained TPH-G or BTEX concentrations exceeding ESLs, although groundwater samples collected from SB-3 and SB-4 contained TPH-D at concentrations exceeding ESLs.

The only oxygenate detected was 9.8 ppb MTBE in the groundwater sample collected from boring SB-7. Given the fact that MTBE hasn't been detected in groundwater at the site at elevated concentrations and since there are several other gas stations within a block of the subject site, it is likely that this MTBE is not related to the subject site.

7.3 Vapor Sample Analysis

The vapor samples were analyzed by Air Toxics Ltd. of Folsom, California (ELAP #2110) for TPH-G and BTEX by Modified Method TO-3. The analytical results are tabulated in Table Six, and certified analytical reports are presented in Appendix D.

The vapor concentrations were compared to residential shallow soil gas screening levels for evaluation of potential vapor intrusion concerns as presented in the "Screening for Environmental Concerns at Sites With Contaminated Soil and Groundwater" document prepared by the RWQCB dated February 2005 (Volume 2; Table E-2). None of the vapor concentrations exceeded the lowest residential exposure screening level for potential vapor intrusion concerns.

8.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the data collected from this assessment, ASE concludes the following:

• The horizontal extent of hydrocarbons is now adequately defined in every direction. ASE does not recommend any further definition for the horizontal extent of hydrocarbons.



- The vertical extent of hydrocarbons in groundwater is not completely defined to below ESLs. However, there is a significant decrease in hydrocarbon concentrations with increased depth. In addition, although precautions were made to insure that hydrocarbons from shallower water-bearing zones were sealed off from the deeper water-bearing zone, it is possible given the very high concentrations in the shallower water-bearing zone that some of the hydrocarbons detected may be due to cross-contamination since drilling equipment had to pass through the highly contaminated shallow water-bearing zone to reach these deeper depths. It should be noted that no elevated hydrocarbon concentrations were detected in soil samples collected at or below 30-feet bgs. ASE recommends that a monitoring well be constructed to screen the water-bearing zone between 42 and 49-feet bgs. Since there are at least 11-feet of silty clay beneath the deepest water-bearing zone sampled, and since no hydrocarbons were detected in soil samples collected from this low permeability unit, it is unlikely that there has been any significant impacts to soil below 50-feet bgs.
- None of the soil vapor samples contained hydrocarbons concentrations exceeding the lowest residential exposure screening levels for potential vapor intrusion concerns. Based on this data, it does not appear that the elevated hydrocarbon concentrations detected in soil and groundwater at and downgradient of the site are a threat to human health at this time.
- ASE has previously recommended the installation of a dual-phase extraction remediation system for the site. The previous dual-phase extraction events have proven very effective in the removal of a large mass of hydrocarbons. Given the fact that free-floating hydrocarbons still exist beneath the site, as well as beneath 8th Street downgradient of the site, ASE recommends the installation of a permanent dual-phase extraction system for the site. ASE will prepare a remedial action plan for the installation of our proposed system during the next quarter.
- If a deeper groundwater monitoring well proves actual significant impacts to groundwater in a water-bearing zone between 42 and 49-feet bgs, then additional investigation may be needed to assess this water bearing zone.

9.0 UPDATED CONCEPTUAL SITE MODEL

The site has had a release of both gasoline and diesel fuel either from the former USTs, piping or dispensers. Due to the age of the release, little MTBE has been detected in soil and groundwater at the site. Significant overexcavation has taken place at the site, although the excavation apparently did not extend into groundwater and a significant mass of hydrocarbons remain in groundwater and in the capillary zone soils, including free-floating hydrocarbons.

The groundwater flow direction is consistently to the south-southwest, which is consistent with the groundwater flow direction at nearby sites. The extent of hydrocarbons is defined crossgradient (to the east and west) and downgradient to the south. Elevated TPH-G and



TPH-D concentrations exist in groundwater in the upgradient most borings, but no BTEX has been detected above ESLs in the upgradient most borings.

One boring (SB-1) has been drilled through one of the most contaminated portions of the site to define the vertical extent of contamination. This boring showed that the shallow silty sand water-bearing zone extends from the surface to 33-feet bgs. A silty clay aquitard separates the shallow water-bearing zone from a deeper silty sand water-bearing zone located between 42.5 and 49-feet bgs. A silty clay was located from beneath the silty sand water-bearing zone to the total depth explored of 60-feet. None of the soil samples collected at 30-feet or below contained hydrocarbon concentrations exceeding ESLs. However, groundwater samples collected from 50 to 53-feet bgs in the deeper water bearing-zone still contained hydrocarbon concentrations exceeding ESLs. Although precautions were made to minimize cross-contamination, ASE speculates that some of these concentrations may be related to cross-contamination since the sampling equipment had to pass through significant contamination to reach this depth.

Due to the depth of groundwater and the depth of the underground utility lines in 8th Street and Alice Street, it does not appear that there are any preferential pathways for the migration of groundwater contamination during normal water table conditions. During very rare periods of very high water levels, it may be possible that the sanitary and storm sewers beneath Alice Street could act as a conduit for the preferential movement of groundwater south of the site near 7th Street. However, Alice Street is generally crossgradient of the site's hydrocarbon plume and it does not seem likely that hydrocarbons related to the site have entered this conduit.

There are also no drinking water wells in the site vicinity. The only sensitive receptor is a small seasonal school southwest of the site across 8th Street. The primary risk related to groundwater contamination at the site appears to be vapor intrusion from soil and groundwater to indoor air in the buildings on and surrounding the site. However, the recent soil vapor survey did not show hydrocarbon concentrations in soil vapor from any of the sampling points exceeding the lowest residential exposure screening levels for potential vapor intrusion concerns. Based on this data, it does not appear that the elevated hydrocarbon concentrations detected in soil and groundwater at and downgradient of the site are a threat to human health at this time.

10.0 REPORT LIMITATIONS

The results presented in this report represent conditions at the time of the soil, groundwater and soil vapor sampling, at the specific locations where the samples were collected, and for the specific parameters analyzed by the laboratory.

It does not fully characterize the site for contamination resulting from unknown sources, or for parameters not analyzed by the laboratory. All of the laboratory work cited in this report was prepared under the direction of an independent CAL-DHS certified laboratory. The independent laboratory is solely responsible for the contents and conclusions of the chemical analysis data.



Should you have any questions or comments, please call us at (925) 820-9391.

Respectfully submitted,

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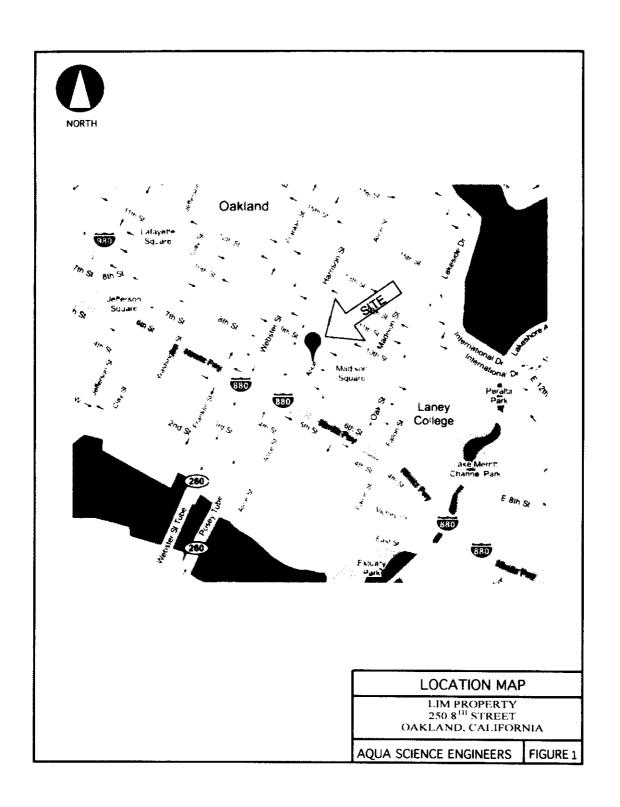
cc: Alice and May Lee Lim, c/o Russell Lim,

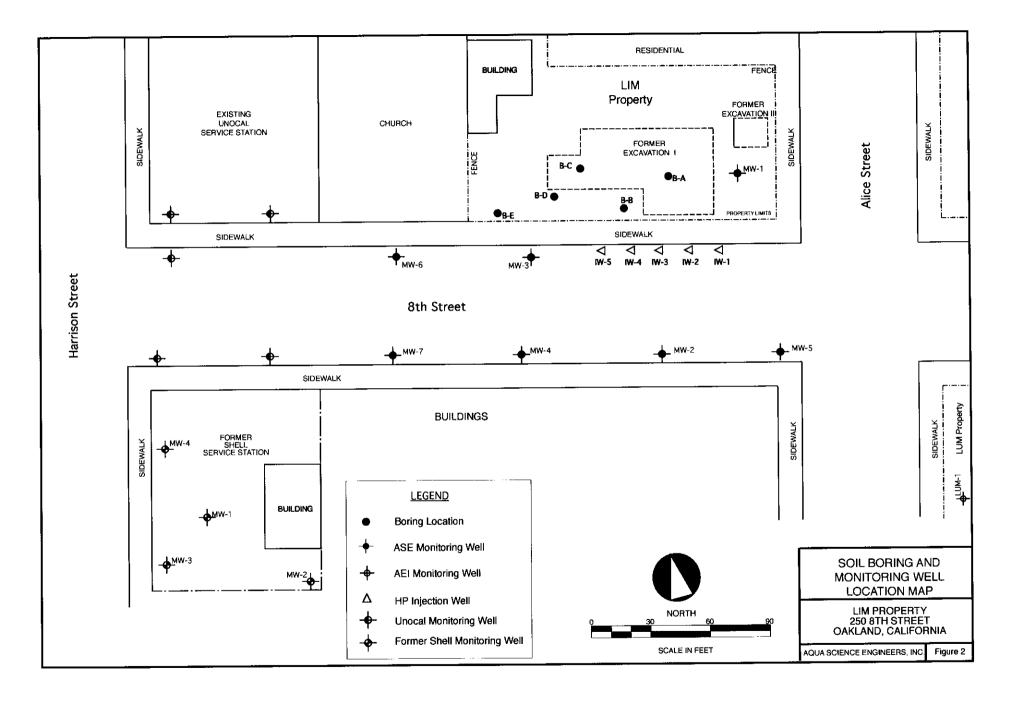
Mr. Jerry Wickham, Alameda County Health Care Services Agency (via upload to server)

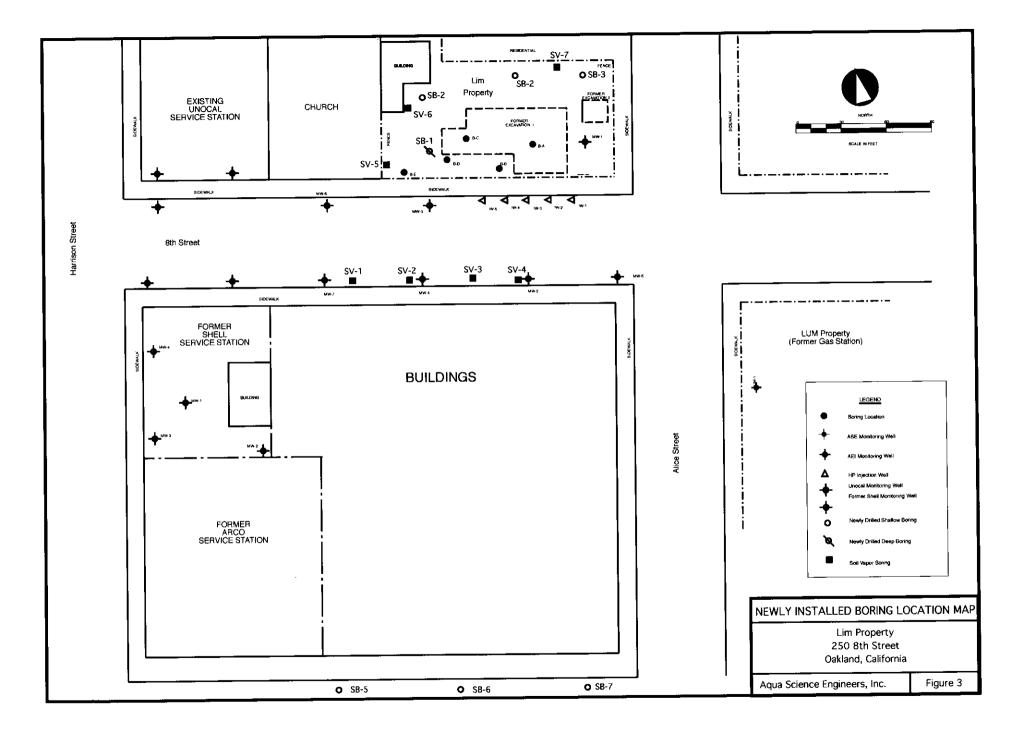
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FIGURES









TABLES

TABLE ONE

Groundwater Elevation Data Lim Family Property 250 8th Street Oakland, CA

			, -		
	Date	Top of	Depth to	Product	Groundwater
	of	Elevation	Water	Thickness	Elevation
Well I.D.	Measurement	(msl)	(feet)	(feet)	(msl)
MW-1	01/30/95	25.51	16.21		9.30
	04/12/95		15.71		9.80
	07/14/95		16.71		8.80
	10/17/95		17.72		7.79
	01/12/96		18.03		7.48
	07/25/96		16.82		8.69
	01/06/97		15.60		9.91
	07/08/97		17.31		8.20
	01/26/98		15.21		10.30
	07/23/98		15.38		10.13
	01/05/99		16.82		8.69
	07/13/99		15.89		9.62
	01/12/00		17.44		8.07
	04/24/00		16.37		9.14
	07/20/00		16.30		9.21
	10/24/00		17.25		8.26
	01/18/01		17.29		8.22
	04/05/01		15.88		9.63
	07/17/01		16.54		8.97
	10/25/01		16.89		8.62
	01/21/02		14.92		10.59
	04/11/02		14.02		11.49
	06/11/02	29.72	15.33		14.39
	09/17/02		15.96		13.76
	12/18/02		16.14		13.58
	03/25/03		16.16		13.56
	06/23/03		16.01		13.71
	09/26/03		16.57		13.15
	12/18/03		16.41		13.31
	03/12/04		14.64		15.08
	06/17/04	,	15.71		14.01
	09/17/04		16.35		13.37
	12/17/04		16.10		13.62
	04/28/05		14.10		15.62
	07/19/05		15.94		13.78
	10/03/05		16.34		13.38 13.51
	12/06/05		16.21		13.51
	03/15/06		16.21		
	06/28/06		14.92		14.80 14.12
	08/31/06		15.60		
	11/21/06		17.20		12.52
	02/12/07		16.12		13.60

TABLE ONE

Groundwater Elevation Data Lim Family Property 250 8th Street Oakland, CA

		• • • • • • • • • • • • • • • • • • • •	-, -		
	Date	Top of	Depth to	Product	Groundwater
	of	Elevation	Water	Thickness	Elevation
Well I.D.	Measurement	(msl)	(feet)	(feet)	(msl)
MW-2	01/30/95	23.99	15.02		8.97
	04/12/95		14.75		9.24
	07/14/95		16.02		7.97
	10/17/95		16.94		7.05
	01/12/96		17.05		6.94
	07/25/96		16.02		7.97
	01/06/97		14.34		9.65
	07/08/97		16.52		7.47
	01/26/98		14.10		9.89
	07/23/98		14.70		9.29
	01/05/99		16.01		7.98
	07/13/99		15.40		8.59
	01/12/00		16.76		7.23
	04/24/00		15.67		8.32
	07/20/00		15.70		8.29
	10/24/00		16.56		7.43
	01/18/01		16.47		7.52
	04/05/01		15.88		8.11
	07/17/01		15.35		8.64
	10/25/01		15.63		8.36 10.44
	01/21/02		13.55		10.44
	04/11/02	20.10	13.74		14.13
	06/11/02	28.19	14.06 14.67		13.52
	09/17/02		14.88		13.31
	12/18/02		15.11		13.08
	03/25/03 06/23/03		14.94		13.25
	09/26/03		15.49		12.70
	12/18/03		15.13		13.06
	03/12/04		13.50		14.69
	06/17/04		14.63		13.56
	09/17/04		15.19		13.00
	12/17/04		14.88		13.31
	04/28/05		13.39		14.80
	07/19/05		15.27		12.92
	10/03/05		15.57		12.62
	12/06/05		15.35		12.84
	03/15/06		12.65		15.54
	06/28/06		14.45		13.74
	08/31/06		15.37		12.82
	11/21/06		16.22		11.97
	02/12/07		16.12		12.07

TABLE ONE Groundwater Elevation Data Lim Family Property 250 8th Street Oakland, CA

	Date	Top of	Depth to	Product	Groundwater
	of	Elevation	Water	Thickness	Elevation
Well I.D.	Measurement	(msl)	(feet)	(feet)	(msl)
Weil I.D.	Measurement	(11,51)	(1000)	(1000)	(
MW-3	01/12/00	24.25	16.68	0.01	7.58*
	04/24/00		15.58	0.15	8.79*
	07/20/00		16.01	0.41	8.57*
	10/24/00		16.95	0.21	7.47*
•	01/18/01		16.63	0.21	7.79*
	04/05/01		15.16	0.23	9.27*
	07/17/01		15.92	0.39	8.64*
	10/25/01		16.26	0.38	8.29*
	01/21/02		14.08	0.16	10.30*
	04/11/02		14.59	0.54	10.09*
	06/11/02	28.58	15.16	0.90	14.14*
	09/17/02		16.04	1.24	13.53*
	10/01/02		16.14	1.23	13.42*
	10/25/02		15.80	0.60	13.26*
	11/12/02		15.87	0.47	13.09*
	12/18/02		15.42	0.47	13.54*
	03/25/03		16.11	1.14	13.38*
	06/23/03		16.58	1.86	13.49*
	09/26/03		16.11	0.66	13.00*
	12/18/03		15.83	0.59	13.22*
	03/12/04		14.51	1.21	15.04*
	06/17/04		15.25	0.68	13.87*
	09/17/04		16.14	0.96	13.21*
	12/17/04		15.05	0.25	13.73*
	01/13/05		13.40	0.45	15.54*
	04/28/05		15.31	2.43	15.21*
	07/19/05		16.29	1.67	13.63* 13.66*
	10/03/05		16.10	1.47	
	12/06/05		15.04	1.17 2.41	14.48* 15.49*
	03/15/06		12.65 13.55	2.41	16.16*
	06/28/06		14.85	2.20	15.49*
	08/31/06		16.05	1.10	13.41*
	11/21/06			0.35	12.90*
	02/12/07		15.96	0.55	12.30"

TABLE ONE Groundwater Elevation Data Lim Family Property 250 8th Street Oakland, CA

				,	
	Date	Top of	Depth to	Product	Groundwater
	of	Elevation	Water	Thickness	Elevation
Well I.D.	Measurement	(msl)	(feet)	(feet)	(msl)
					C 47
MW-4	01/12/00	23.71	17.24		6.47
	04/24/00		16.18		7.53
	07/20/00		16.18		7.53
	10/24/00		17.03		6.68
	01/18/01		16.87		6.84
	04/05/01		15.28		8.43
	07/17/01		15.92		7.79
	10/25/01		16.23		7.48
	01/21/01		14.14		9.57
	04/11/02		14.43		9.28
	06/11/02	28.61	14.72		13.89
	09/17/02		15.29		13.32
	12/18/02		15.20		13.41
	03/25/03		15.53		13.08
	06/23/03		15.35		13.26
	09/26/03		15.91		12.70
	12/18/03		15.63		12.98
	03/12/04		13.88		14.73
	06/17/04		15.03		13.58
	09/17/04		15.61		13.00
	12/17/04		15.32		13.29
	04/28/05		13.82		14.79
	07/19/05		15.44		13.17
	10/03/05		15.91		12.70
	12/06/05		15.71		12.90
	03/15/06		13.05		15.56
	06/28/06		14.49		14.12
	08/31/06		15.75		12.86
	11/21/06		16.70		11.91
	02/12/07		16.51		12.10

TABLE ONE

Groundwater Elevation Data Lim Family Property 250 8th Street Oakland, CA

	Date	Top of	Depth to	Product	Groundwater
	of	Elevation	Water	Thickness	Elevation
Well I.D.	Measurement	(msl)	(feet)	(feet)	(msl)
	-				
MW-5	06/11/02	28.40	14.23		14.17
	09/17/02		14.80		13.60
	12/18/02		15.08		13.32
	03/25/03		15.31		13.09
	06/23/03		15.16		13.24
	09/26/03		15.72		12.68
	12/18/03		15.47		12.93
	03/12/04		13.44		14.96
	06/17/04		14.90		13.50
	09/17/04		15.45		12.95
	12/17/04		15.12		13.28
	04/28/05		13.63		14.77
	07/19/05		15.67		12.73
	10/03/05		15.81		12.59
	12/06/05		15.60		12.80
	03/15/06		12.81		15.59
	06/28/06		15.21		13.19
	08/31/06		15.55		12.85
	11/21/06		17.09		11.31
	02/12/07		16.29		12.11
MW-6	06/11/02	29.20	14.95		14.25
	09/17/02		15.47		13.73
	12/18/02		15.43		13.77
	03/25/03		15.67		13.53
	06/23/03		15.48		13.72
	09/26/03	NOT ME	EASURED - S	OUNDER MA	LFUNCTION
	12/18/03		15.79		13.41
	03/12/04		14.04		15.16
	06/17/04		15.13		14.07
	09/17/04		15.74		13.46
	12/17/04		15.54		13.66
	04/28/05		13.91		15.29
	07/19/05		15.30		13.90
	10/03/05		15.35		13.85
	12/06/05		15.69		13.51
	03/15/06		13.14		16.06
	06/28/06		14.44		14.76
	08/31/06		16.25		12.95
	11/21/06		16.69		12.51
	02/12/07		16.63		12.57

TABLE ONE

Groundwater Elevation Data Lim Family Property 250 8th Street Oakland, CA

	Date	Top of	Depth to	Product	Groundwater
	of	Elevation	Water	Thickness	Elevation
Well I.D.	Measurement	(msl)	(feet)	(feet)	(msl)
<u> </u>					
MW-7	06/11/02	28.95	15.19		13.76
	09/17/02		15.73		13.22
	12/18/02	NOT ME.	ASURED - C	ar parked (OVER WELL
	03/25/03		15.96		12.99
	06/23/03		15.75		13.20
	09/26/03		16.29		12.66
	12/18/03		16.03		12.92
	03/12/04		14.28		14.67
	06/17/04		15.42		13.53
	09/17/04		16.02		12.93
	12/17/04		15.45		13.50
	04/28/05		14.15		14.80
	07/19/05		15.30		13.65
	10/03/05		16.25		12.70
	12/06/05		16.05		12.90
	03/15/06		13.36		15.59
	06/28/06		14.81		14.14
	08/31/06		16.13		12.82
	11/21/06		17.06		11.89
	02/12/07		16.97		11.98
	JE/ 1E/ J/				

Notes: \star = Adjusted for the presence of free-floating oil by the equation: Top of Casing Elevation -Depth to Water + (0.8 x Floating Hydrocarbon Thickness) = Groundwater Elevation (Adjusted).

Top of casing elevations resurveyed by Mid Coast Engineers on 6/27/02 and 7/11/02.

TABLE TWO
Summary of Chemical Analysis of Groundwater Samples
Petroleum Hydrocarbon Concentrations
All results are in parts per billion

Well/							
Date	TPH	TPH			Ethyl-	Total	
Sampled	Gasoline	Diesel	Benzene	Toluene	benzene	Xylenes	MTBE
<u>MW-1</u>							
01/30/95	740	200	3	5	1	4	
04/12/95	400	500	< 0.5	< 0.5	3	< 2	
07/14/95	520	400	1	< 0.5	2	3	
10/17/95	400	200	0.5	1	3	< 2	
01/12/96	120	890	< 0.5	< 0.5	< 0.5	< 1.0	< 2.0
07/08/96	320	300	0.52	2.7	1.2	2.3	< 5.0
01/06/97	110	75	< 0.5	0.68	< 0.5	< 0.5	< 5.0
07/08/97	380	290	< 0.5	1.5	1.4	1.9	< 5.0
01/26/98	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
07/23/98	190	< 50	0.54	2.8	2	1.8	< 5.0
01/05/99	200	< 50	1.8	1.6	3.3	< 0.5	< 5.0
07/13/99	340	<50	<0.5	< 0.5	2.6	<0.5	< 5.0
01/12/00	300	1,000	22	36	5.5	24	< 5.0
04/24/00	360	280*	< 0.5	< 0.5	< 0.5	2.1	< 5.0
07/20/00	290	150*	1.8	< 0.5	< 0.5	< 0.5	< 5.0
10/24/00	170**	280*	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
01/18/01	170**	150*	< 0.5	< 0.5	< 0.5	2.1	< 5.0
04/05/01	350**	190*	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
07/17/01	310	570	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
10/25/01	250	260	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
01/22/02	200	250	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
04/11/02	260	300	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
06/11/02	270	330	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
09/17/02	320	1,700	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
12/18/02	170	320	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
03/25/03	320	< 500	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
06/23/03	240	310	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
09/26/03	110	300	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
12/18/03	150	340	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
03/12/04	220	510	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
06/17/04	250	490	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
09/17/04	110		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
11/10/04***	180	400	0.68	< 0.5	1.7	< 0.5	< 5.0
12/17/04	77	130	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
04/28/05	250	190	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
07/19/05	340	na	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
10/03/05	170	< 100	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
12/06/05	140	67	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
03/15/06	170	< 80	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
06/28/06	230	130	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
08/31/06	310	< 200	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
11/21/06	220	160	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
02/23/07	140	120	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50

TABLE TWO
Summary of Chemical Analysis of Groundwater Samples
Petroleum Hydrocarbon Concentrations
All results are in parts per billion

Well/					
Date TPH 7	TPH .		Ethyl-	Total	
	iesel Benzene	Toluene	benzene		MTBE
Garagio Bi				4	
MW-2					
	300 19,000	18,000	2,400	10,000	
	90 21,000	28.000	2,800	14,000	
	000 20,000	25,000	3,200	15,000	
	000 15,000	26,000	4,900	23,000	
	600 10,000	8,000	1,100	4,800	< 2
	500 20,000	18,000	2,500	12,000	< 500
	,000 11,000	19,000	4,300	20,000	< 1,200
	5,000 16,000	20,000	2,700	13,000	< 1,000
	,000 12,000	12,000	1,600	6,700	< 250
		8,300	1,800	7,000	1,100
		,	•		1,300
	600# 12,000	12,000	2,300	9,600	
	,500 11,000	13,000	2,200	9,800	< 500
•	,000 10,000	12,000	1,800	7,800	< 500
• =	,000* 7,100	14,000	2,000	9,400	< 500
	300# 11,000 400* 11,000	14,000 9,400	2,300 1,500	11,000 7,300	< 1,000 < 500
	600* 6,900	5,600	1,200	5,300	< 500
	600* 7,100	9.800	1,600	7,600	< 500
	0,000 9,200	14,000	2,700	11.000	< 50
- · · · · · · · · · · · · · · · · · · ·	3,800 9,200	14,000	2,400	11,000	< 50
01/22/02 76,000 < 2	2,300 7,000	13,000	2,200	9,600	< 50
	1,500 7,800	11,000	2,900	12,000	< 50
	2,500 7,300	9,600	2,500	12,000	< 50
	3,000 5,000	5,400	2,100	9,100	< 20
•	5,000 2,900	3,000	1,800	7,600	22
•	8,000 7,900	9,300	2,900	12,000	< 50
•	3000 7,800	4,000	1,900	6,600	< 50
	3000 9,100	3,500	1,300	5,000	< 50
	4,000 13,000	3,500	1,600	5,600	< 20
	4,000 9,100	3,500	1,700	5,700	< 25
	3,000 7,100	4,000	1,700	7,300	< 25
09/17/04 33,000	9,800	1,200	1,300	4,000	< 20
	,600 13,000	4,400	1,600	6,000	< 1000
	3,000 7,900	2,200	1,700	3,900	< 15
	3,000 7,000	6,000	2,100	8,700	< 15
	na 7,900	4,400	1,900	7,000	< 15
		•	•		< 15
	800 7,800	810	1,000	2,800	< 15
	800 6,100	940	770	2,000	
	1,500 7,700	2,600	1,400	4,200	< 15
· · · _ · · · · · · · · · · · · · ·	4,000 10,000	14,000	2,900	12,000	< 15
	3,000 5,800	5,100	2,200	8,700	< 15
	1,500 6,800	3,400	1,700	6,200	< 15
02/23/07 38,000 <	1,500 7,800	2,000	1,500	4,600	< 15

TABLE TWO

Summary of Chemical Analysis of Groundwater Samples Petroleum Hydrocarbon Concentrations All results are in parts per billion

Well/							
Date	TPH	TPH			Ethyl-	Total	
Sampled	Gasoline	Diesel	Benzene	Toluene	benzene	Xylenes	MTBE
<u> </u>						-	
<u>MW-3</u>							
01/12/00	,	13,000*	•	•	•	•	
04/24/00	240,000	700,000*		•	•		< 5,000
			35,000	•	•	84,000	
07/20/00	-	SAMPLED		-	-		-
10/24/00		SAMPLED		-	-		–
01/18/01		SAMPLED					–
04/05/01	_	SAMPLED		-			–
07/17/01		SAMPLED					
10/25/01	NOT	SAMPLED	DUE TO F	REE-FLOA	TING HYD	ROCARBO	NS
01/22/02		SAMPLED					
04/11/02		SAMPLED					
06/11/02		SAMPLED					
09/17/02		SAMPLED					
12/18/02		SAMPLED		· · · · · · · · · · · · · · · · · · ·			
03/25/03		SAMPLED					
06/23/03	_	SAMPLED		_			–
09/26/03	_	SAMPLED					
12/18/03		SAMPLED					
03/12/04		SAMPLED					
06/17/04	-	SAMPLED					–
09/17/04		SAMPLED					
11/10/04		SAMPLED					
12/17/04	NOT	SAMPLED	DUE TO F	REE-FLOA	TING HYD	ROCARBO	DNS
04/28/05	NOT	SAMPLED	DUE TO F	REE-FLOA	TING HYD	ROCARBO	NS
07/19/05		SAMPLED					
10/03/05		SAMPLED					
12/06/05	NOT	SAMPLED	DUE TO F	REE-FLOA	TING HYD	ROCARBO	DNS
03/15/06	NOT	SAMPLED	DUE TO F	REE-FLOA	TING HYD	ROCARBO	NS
06/28/06	NOT	SAMPLED	DUE TO F	REE-FLOA	TING HYD	ROCARBO	NS
8/31/06	NOT	SAMPLED	DUE TO F	REE-FLOA	TING HYD	ROCARBO	ONS
11/21/06	NOT	SAMPLED	DUE TO F	REE-FLOA	TING HYD	ROCARBO)NS
02/23/07	NOT	SAMPLED	DUE TO F	REE-FLOA	TING HYD	ROCARBO	ONS

Summary of Chemical Analysis of Groundwater Samples
Petroleum Hydrocarbon Concentrations
All results are in parts per billion

TABLE TWO

Well/	TDU	TOU			Ethyd	Total	Ī
Date	TPH	TPH	Danmara	Toluone	Ethyl- benzene		мтве
Sampled	Gasoline	Diesel	Benzene	roluerie	penzene	Aylenes	MIDE
1.014.4							
<u>MW-4</u> 01/12/00	99,000	7.900*	16,000	20,000	2,100	12 000	< 2,500
04/24/00	54,000	44,000*	3,400/	13,000/	1,800/		< 1,300
04/24/00	37,000	77,000	4.500	20,000	2,800	14.000	1,000
07/20/00	8,000	3,500	9,200/	20,000	2,500	12,000/	< 1.000
07/20/00	0,000	3,300	11,000	22,000	3,400	13,000	` ',000
10/24/00	98,000	8,000*	21,000	29,000	2,700	•	< 1,000
01/18/01	91,000	12,000	17,000/		2,500/	13,000/	
01710701	\$1,000	12,000	15,000	21,000	2,800	11,000	<5,000
04/05/01	88,000	7,500*	6,900/	18,000/	2,500/	12,000/	,
047 057 01	00,000	,,,,,,	3,200	9,000	1,300	6.400	< 500
07/17/01	95.000	< 3,000	8,000	16,000	2,900	11,000	49
10/25/01	89,000	< 2,200	9,300	18,000	2,400	12,000	66
01/22/02	80.000	< 2,300	4,600	15,000	2,500	11,000	< 50
04/11/02	90,000	< 900	6,600	18,000	2,800	12,000	55
06/25/02	110,000	< 3,000	10,000	20,000	2,900	13,000	< 100
09/17/02	110,000	< 3,000	9,600	21,000	2,800	13,000	< 100
12/18/02	97,000	< 4,000	8,000	20,000	2,600	12,000	< 50
03/25/03	97,000	< 7,500	7,600	22,000	2,500	12,000	< 100
06/23/03	100,000	< 3,000	9,600	22,000	3,300	15,000	< 100
09/26/03	110,000	< 4,000	9,300	17,000	2,100	10,000	< 50
12/18/03	110,000	< 2,000	8,900	19,000	2,500	12,000	< 25
03/12/04	96,000	< 4,000	6,500	18,000	2,700	12,000	< 40
06/17/04	110,000	< 4,000	10,000	20,000	2,900	13,000	< 50
09/17/04	78,000		9,300	15,000	2,400	11,000	<50
11/10/04***	87,000	4,300	15,000	21,000	3,000	16,000	< 1300
12/17/04	88,000	< 3,000	8,500	16,000	2,800	12,000	< 25
04/28/05	110,000	< 3,000	7,800	14,000	2,200	10,000	< 25
07/19/05	90,000	na	10,000	13,000	2,300	10,000	< 40
10/03/05	68,000	< 800	9,400	4,000	1,800	8,700	23
12/06/05	81,000	< 1,500	8,900	7,200	2,200	9,500	< 20
03/15/06	68,000	< 3,000	7,300	14,000	2,500	10,000	< 20
06/28/06	61,000	< 3,000	8,500	4,100	2,600	11,000	< 20
08/31/06	68,000	< 2,000	9,500	9,600	2,500	12,000	< 20
11/21/06	68,000	< 1,500	9,000	5,000	2,000	9,300	< 20
02/23/07	90,000	< 2,000	11,000	11,000	2,800	12,000	< 20

TABLE TWO
Summary of Chemical Analysis of Groundwater Samples
Petroleum Hydrocarbon Concentrations
All results are in parts per billion

Well/							_
Date	TPH	TPH			Ethyl-	Total	
Sampled	Gasoline	Diesel	Benzene	Toluene	benzene	Xylenes	MTBE
MW-5							
06/11/02	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	28
09/17/02	< 50	110	< 0.5	< 0.5	< 0.5	< 0.5	4.8
12/18/02	< 50	140	< 0.5	< 0.5	< 0.5	< 0.5	1.8
03/25/03	< 50	130	< 0.5	< 0.5	< 0.5	< 0.5	7.4
06/23/03	< 50	390	< 0.5	< 0.5	< 0.5	< 0.5	17
09/26/03	< 50	700	< 0.5	< 0.5	< 0.5	< 0.5	21
12/18/03	< 50	550	< 0.5	< 0.5	< 0.5	< 0.5	16
03/12/04	< 50	490	< 0.5	< 0.5	< 0.5	< 0.5	9.1
06/17/04	< 50	510	< 0.5	< 0.5	< 0.5	< 0.5	9.8
09/17/04	< 50		< 0.5	< 0.5	< 0.5	< 0.5	5.5
11/10/04***	< 50	370	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
12/17/04	< 50	120	< 0.5	< 0.5	< 0.5	< 0.5	9.2
04/28/05	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	2.2
07/19/05	< 50	na	< 0.5	< 0.5	< 0.5	< 0.5	6.1
10/03/05	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	2.4
12/06/05	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
03/15/06	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	3.3
06/28/06	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	1.8
08/31/06	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	3.4
12/05/06	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	5.2
02/23/07	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	6.0

TABLE TWO
Summary of Chemical Analysis of Groundwater Samples
Petroleum Hydrocarbon Concentrations
All results are in parts per billion

Well/ Date	TPH	TPH			Ethyl-	Total	
1	Gasoline	Diesel	Benzene	Toluene	benzene		мтве
Sampled	Gasoline	DIESEI	Delizerie	rolucile	DCHZCHC	79101103	···· DL
MW-6							
06/11/02	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	1.2
09/17/02	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	1.0
12/18/02	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	0.90
03/25/03	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
06/23/03	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
09/26/03	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
12/18/03	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
03/12/04	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
06/17/04	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
09/17/04	< 50		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
11/10/04***	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
12/17/04	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
04/28/05	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
07/19/05	< 50	na	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
10/03/05	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
12/06/05	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
03/15/06	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
06/28/06	< 50	< 50	< 0.5	< 0.5	< 0.5	0.65	< 0.5
08/31/06	< 50	< 50	< 0.50	2.4	0.90	4.0	< 0.50
11/21/06	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
02/23/07	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50

TABLE TWO

Summary of Chemical Analysis of Groundwater Samples Petroleum Hydrocarbon Concentrations All results are in parts per billion

Well/		-					
Date	TPH	TPH			Ethyl-	Total	
Sampled	Gasoline	Diesel	Benzene	Toluene	benzene	Xylenes	MTBE
<u>MW-7</u>							
06/25/02	38,000	< 2,000	890	5,100	1,200	5,200	< 20
09/17/02	26,000	< 2,000	590	3,600	880	4,000	< 20
12/18/02		NOT SA	MPLED - (CAR PARK	ED OVER	WELL	
03/25/03	39,000	< 2,900	410	7,700	1,000	6,400	< 5.0
06/23/03	17,000	< 1,000	440	2,600	630	2,600	< 10
09/26/03	17,000	< 1,000	230	1,800	470	2,200	< 5.0
12/18/03	20,000	< 1,000	290	2,500	590	2,900	< 5.0
03/12/04	20,000	< 1,500	300	3,000	760	3,200	< 10
06/17/04	12,000	< 800	250	1,800	450	1,900	< 5.0
09/17/04	9,900		200	1,500	450	1,800	< 5.0
11/10/04***	20,000	1,900	550	4,200	920	4,000	< 500
12/17/04	14,000	< 800	220	1,700	530	2,000	< 3.0
04/28/05	13,000	< 300	84	1,000	660	2,200	< 2.5
07/19/05	16,000	na	170	1,800	540	2,200	< 2.5
10/03/05	7,400	< 200	140	710	350	1,100	< 0.50
12/06/05	22,000	< 600	240	2,300	800	3,400	< 5.0
03/15/06	3,800	< 200	4.6	160	120	620	< 0.50
06/28/06	6,400	< 500	19.0	340	490	940	< 0.90
08/31/06	20,000	< 600	160	2,200	1,300	3,500	< 2.5
11/21/06	21,000	< 1,000	240	2,500	880	3,400	< 5.0
02/23/07	10,000	< 200	150	1,300	580	2,400	< 2.5
ESL	500	640	46	130	290	T3	1,800

Notes:

Non-detectable concentrations noted by the less than sign (<) followed by the detection limit. Most recent data in bold.

ESL = Environmental screening levels presented in the "Screening For Environmental Concerns

^{* =} Hydrocarbons reported are in the early diesel range, and do not match the laboratory standard.

^{*** =} Hydrocarbons reported do not match the laboratory gasoline standard.

^{***=} Grab sample - Not purged

^{#=} Estimated concentration reported due to overlapping fuel patterns.

^{/ =} Results separated by a slash represent results from two different laboratory methods (8020/8260).

na = not analyzed

TABLE THREE Groundwater Analytical Results Oil & Grease and Volatile Organic Compounds All results are in parts per billion

Date Sampled &		. 41.44	1827.5	LEVAL 4	AANAZ =	ARRES O	LALA/LT
Compound Analyzed	MW-1	MW-2	MW-3	MW-4	MW-5	MW- <u>6</u>	MW-7
7.0.007							
7/8/97 Hydrocarbon Oil and Grease		< 1,000	-		-		
Tetrachloroethane (PCE)	0.9	< 0.5		-		-	-
Other VOCs	< 0.5 - < 3	< 0.5 - < 3	-	-	-	-	-
J							
1/26/98							
Hydrocarbon Oil and Grease	-	< 1,000	-	-	-	•	-
Trichloroethene	0.7	< 5.0	•	-	•	•	-
Tetrachloroethene	10	< 5.0	-	-	•	-	•
1,2-Dichloroethane	< 0.5	11	•	•	-	-	-
Other VOCs	< 0.5 - < 50	< 0.5 - < 50	-	•	•	•	-
7/23/98							
Hydrocarbon Oil and Grease	-	< 1,000	-	-	•	-	•
Tetrachioroethene	4	4.8	-	•	-	-	-
1,2-Dichloroethane	<2	9.9	-	-	•	-	•
Other VOCs	< 2 - < 10	< 0.5 - < 5.0	•	-	•	•	-
1/5/99							
Hydrocarbon Oil and Grease	•	< 1,000	-	•	-	•	-
Tetrachloroethene	5.1	< 50	•	-	-	-	-
Trichloroethene	0.52	< 50	-	-	-	-	•
1,1,2,2-Tetrachloroethane	0.58	< 50	•	-	-	-	-
Chloroform	8.2	< 50	-	-	-	-	
Other VOCs	< 0.5 - < 5	< 50 - < 500	•	-	-	-	-
7/13/99							
Hydrocarbon Oil and Grease	•	< 1,000	-	•	•	•	-
Tetrachloroethene	1.5	0.68	-	-	•	•	-
Chloroform	4.6	< 50	-	-	•	-	-
1,2-Dichloroethane	<0.50	7.7	-	-	-	-	-
Other VOCs	< 0.5 - < 5	< 0.5 - < 500	•	-	•	•	•
1/12/00							
Hydrocarbon Oil and Grease	-	< 1,000	< 1,000	< 1,000	•	-	•
Tetrachioroethene	0.8	< 1.0	< 100	< 50	-	•	-
Chloroform	3.2	< 1.0	< 100	< 50	•	-	•
1,2-Dichloroethane	<0.50	8.8	120	140	-	•	-
Acetone	-	-	25,000	6,400	•	-	-
Naphthalene	-	-	550	540	•	-	-
Isopropylbenzene	-	•	120	89	-	-	-
Other VOCs	< 0.5 - < 5.0	< 1.0 - < 4.0	< 100 - < 10,000	< 50 - < 5,000	•	•	-
4/24/00							
Hydrocarbon Oil and Grease	-	<1,000	4,100	< 1,000	-	•	-
1,2-Dichloroethane	< 0.5	5.9	< 1,000	< 250	-	-	-
Naphthalene	•	•	3,800	590	-	-	•
sopropylbenzene	-	-	1,200	< 250	-	-	-
Other VOCs	< 0.5 - < 5.0	< 5.0 - < 20	: 1,000 - < 100,00	< 250 - < 25,000	•	• .	•
7/20/00				4.000			
Hydrocarbon Oil and Grease	- 0.50	< 1,000	EDEE	< 1,000	-	-	•
Tetrachloroethene	0.59	< 5.0	FREE	< 200	-	-	•
Chloroform	2.1	< 5.0	PRODUCT	< 200	-	-	•
1,2-Dichloroethane	< 0.5	6.7	NOT	< 200	-	•	•
Acetone	•	-	NOT	< 20,000 730	-	-	-
Naphthalene	0.5		SAMPLED	730 < 250 - < 20,000	-	-	-
Other VOCs	< 0.5 - < 20	< 5.0 - < 20		< 200 * < 20,000	•	•	-
10/24/00			FREE				
	-	< 1,000	PRODUCT	< 1,000	-	•	-
Hydrocarbon Oil and Grease	< 0.5	< 5.0	NOT.	< 250	-	•	•
Tetrachloroethene		< 5.0	NOT	< 250 < 250 - < 25,000	•	•	•
Tetrachloroethene Chloroform	1.0		SAMPLED				
Tetrachloroethene	1.0 < 0.5 - < 20	< 5.0 - < 20	SAMPLED	~ 250°~ 25,000°		-	•
Tetrachloroethene Chloroform Other VOCs 1/18/01	< 0.5 - < 20	< 5.0 - < 20	FREE			•	•
Tetrachloroethene Chloroform Other VOCs 1/18/01 Hydrocarbon Oil and Grease	< 0.5 - < 20	< 5.0 - < 20 2,100	FREE PRODUCT	1,300			
Tetrachloroethene Chloroform Other VOCs 1/18/01 Hydrocarbon Oil and Grease Tetrachloroethene	< 0.5 - < 20 • 1.3	< 5.0 - < 20 2,100 < 5.0	FREE PRODUCT	1,300 < 250		:	:
Tetrachloroethene Chloroform Other VOCs 1/18/01 Hydrocarbon Oil and Grease	< 0.5 - < 20	< 5.0 - < 20 2,100	FREE PRODUCT	1,300	:	:	:

TABLE THREE Groundwater Analytical Results Oil & Grease and Volatile Organic Compounds All results are in parts per billion

Date Sampled &			10110	MW-4	MW-5	MW-6	MW-7
Compound Analyzed	MW-1	MW-2	MW-3	MVV~4	5444-5	(W) YY-O	MAX-7
4/5/01							
Hydrocarbon Oil and Grease	-	< 1.0	FREE	1,100.0	-	-	-
Tetrachioroethene	< 0.5	1.1	PRODUCT	< 50	-	-	-
1,2 dichloroethane	< 0.5	4.6		< 50	-	-	-
Trichioroethene	< 0.5	0.58	NOT	< 50	-	-	-
Naphthalene		-	***	320		-	-
Other VOCs	< 0.5 - < 2.0	< 5.0 · < 20	SAMPLED	< 50 - < 5,000	-	-	=
7/17/01							
Hydrocarbon Oil and Grease		< 500	FREE	< 500	-		•
Tetrachloroethene	-	-	PRODUCT	-	-	-	-
1,2 dichloroethane	< 0.5	< 50		69.0	-	-	•
Trichloroethene	-	-	NOT	-	-	-	-
Naphthalene	•	-		-		-	-
Other VOCs	•	-	SAMPLED	-	-	•	-
10/25/01							
Hydrocarbon Oil and Grease		< 5,000	FREE	< 5,000	-	•	-
1,2 dichloroethane	-	< 50	PRODUCT	72	-	-	•
1,2 dibromoethane		< 50	NOT	< 50	-	-	-
Other VOCs	-	•	SAMPLED		-	•	•
1/22/02							
Hydrocarbon Oil and Grease	-	< 5,000	FREE	< 5,000	-	-	-
1.2 dichloroethane	•	< 50	PRODUCT	< 50	-	-	•
1,2 dibromoethane	-	< 50	NOT	< 50	-	-	
Other VOCs	•	-	SAMPLED	•••	-	•	-
6/11/02							
Oil and Grease	-	1,100	FREE	-	< 1,000	< 1,000	-
1.2 dichloroethane	-	< 50	PRODUCT		< 0.5	< 0.5	-
1,2 dibromoethane	_	< 50	NOT		< 0.5	< 0.5	-
Other VOCs	-	•	SAMPLED	-		-	-
6/25/02							
Oil and Grease	-	-	FREE	1,400	-	•	< 1,000
1,2 dichloroethane	-	-	PRODUCT	< 100	-	-	< 20
1,2 dibromoethane	-	-	NOT	< 100	-	-	< 20
Other VOCs	•	-	SAMPLED	-	-	•	-
9/17/02							
Oil and Grease	-	< 1,000	FREE	< 1,000	< 1,000	< 1,000	< 1,000
1,2 dichloroethane	-	< 20	PRODUCT	< 100	< 0.50	< 0.50	< 20
1,2 dibromoethane	-	< 20	NOT	< 100	< 0.50	< 0.50	< 20
Other VOCs	•	-	SAMPLED	•	•		•
12/18/02							
Oil and Grease	-	1,200	FREE	< 1,000	< 1,000	< 1,000	CAR PARKED
1,2 dichloroethane	-	< 10	PRODUCT	< 50	< 0.50	< 0.50	OVER WELL
1,2 dibromoethane	-	< 10	NOT	< 50	< 0.50	< 0.50	NOT
Other VOCs	=	•	SAMPLED	•	•	•	SAMPLED
3/25/03						4.00-	
Oil and Grease	-	< 1,000	FREE	< 1,000	< 1,000	< 1,000	< 1,000
1,2 dichloroethane	-	< 50	PRODUCT	< 100	< 0.50	< 0.50	< 2.5
1,2 dibromoethane Other VOCs	•	< 50 -	NOT SAMPLED	< 100 -	< 0.50	< 0.50 -	< 2.5
6/23/03		4.000	CDCC		. 1.000	- 1 000	- 1.000
Oil and Grease		< 1,000	FREE	< 1,000	< 1.000	< 1,000	< 1,000
1,2 dichloroethane	< 0.5	< 50	PRODUCT	< 100	< 0.50	< 0.50	< 10
1,2 dibromoethane	< 0.5	< 50	NOT	< 100	< 0.50	< 0.50	< 10
Other VOCs	-		SAMPLED	-	•		•

TABLE THREE Groundwater Analytical Results Oil & Grease and Volatile Organic Compounds All results are in parts per billion

Date Sampled & Compound Analyzed	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7
/26/03						,	
il and Grease	- 0.5	< 1,000	FREE PRODUCT	< 1,000 87	< 1,000 < 0.50	< 1,000 < 0.50	< 1,000 < 5.0
,2 dichloroethane	< 0.5 < 0.5	< 50 < 50	NOT	< 50	< 0.50	< 0.50	< 5.0
,2 dibromoethane rther VOCs	< 0.5	< 50	SAMPLED		- 0.30	V 0.50	- 0.0
mer vocs	-	-	OAM LLD				
2/18/03	_		FREE		_	_	
XII and Grease ,2 dichloroethane	< 0.5	< 20	PRODUCT	46	< 0.50	< 0.50	< 5.0
,2 dibromoethane	< 0.5	< 20	NOT	< 25	< 0.50	< 0.50	< 5.0
Other VOCs	-		SAMPLED	-	-	•	-
/12/04							
Oil and Grease			FREE	•	•		-
,2 dichloroethane	< 0.5	< 25	PRODUCT	< 40	< 0.50	< 0.50	< 10
,2 dibromoethane	< 0.5	< 25	NOT	< 40	< 0.50	< 0.50	< 10
Wher VOCs	•	-	SAMPLED	*	•	•	•
<u>17/04</u>			CDEC		_	_	_
Oil and Grease		-	FREE PRODUCT	93	< 0.50	< 0.50	< 5.0
,2 dichloroethane	< 0.5	< 25	NOT	93 < 50	< 0.50	< 0.50	< 5.0
,2 dibromoethane Other VOCs	< 0.5	< 25	SAMPLED	< 50	< 0.50		< 5.0
/ <u>17/04</u> XII and Grease			FREE				-
,2 dichloroethane		-	PRODUCT			-	-
,2 dibromoethane	-	-	NOT	-	-	-	-
Other VOCs	•	•	SAMPLED	-	•	•	•
2/17/04							
Dil and Grease	-	-	FREE	•	-	-	•
1,2 dichloroethane	< 0.5	< 15	PRODUCT	53	< 0.50	< 0.50	< 3.0
,2 dibromoethane	< 0.5	< 15	NOT	< 25	< 0.50	< 0.50	< 3.0
Other VOCs	•	•	SAMPLED	•	-	•	
1/28/05							
il and Grease	-	-	FREE	-	-	•	•
2 dichloroethane	< 0.5	< 15	PRODUCT	46	< 0.50	< 0.50	< 2.5
,2 dibromoethane	< 0.5	< 15	NOT	< 25	< 0.50	< 0.50	< 2.5
)IPE	0.67	90	SAMPLED	< 25	< 0.50	< 0.50	< 2.5
Other VOCs	< 0.5	< 15		< 25	< 0.50	< 0.50	< 2.5
7/19/05			CDEE				
Oil and Grease	-		FREE	- 70	-0.50	- 0.50	-05
1,2 dichloroethane	< 0.5	< 15 < 15	PRODUCT NOT	73 < 40	< 0.50 < 0.50	< 0.50 < 0.50	< 2.5 < 2.5
,2 dibromoethane	< 0.5		SAMPLED	< 20	< 0.50 2.1	< 0.50	< 2.5
DIPE TBA	0.76 < 5.0	< 15 77	SAMPLED	< 20	< 5.0	< 5.0	< 5.0
Other VOCs	< 0.50	< 15	=	< 20	< 0.50	< 0.50	< 2.5
10/3/05							
Oil and Grease		-	-	•			
1,2 dichloroethane	< 0.5	< 15	FREE	62	< 0.50	< 0.50	< 0.50
,2 dibromoethane	< 0.5	< 15	PRODUCT	< 20	< 0.50	< 0.50	< 0.50
DIPE	< 0.5	< 15	NOT	23	1.7	< 0.50	< 0.50
rba	< 5.0	< 70	SAMPLED	< 5.0	< 5.0	< 5.0	< 5.0
Other VOCs	< 0.5	< 15		< 20	< 0.50	< 0.50	< 0.50
3/15/06							
Oil and Grease	-05	. 15	FREE	- 20	- 0 EO	- 0.50	-05
1,2 dichloroethane	< 0.5	< 15	PRODUCT	< 20	< 0.50	< 0.50 < 0.50	< 0.50 < 0.50
I,2 dibromoethane Other VOCs	< 0.5 < 0.5	< 15 < 15	NOT SAMPLED	< 20 < 20	< 0.50 < 0.50	< 0.50 < 0.50	< 0.54
3/26/06 Dil and Grease	•		-	•		-	-
1,2 dichloroethane	< 0.5	33	FREE	20	< 0.50	< 0.50	< 0.9
1,2 dibromoethane	< 0.5	< 15	PRODUCT	< 20	< 0.50	< 0.50	< 0.90
ГВА	< 5.0	< 5.0	NOT	< 5.0	< 5.0	< 5.0	< 5.0
Other VOCs	< 0.5	< 15	SAMPLED	< 20	< 0.50	< 0.50	< 0.56
3/31/06				_			
Dil and Grease 1,2 dichloroethane	< 0.50	- < 15	FREE	36	< 0.50	< 0.50	< 2.5
1,2 dicrioroethane 1,2 dibromoethane	< 0.50	< 15	PRODUCT	< 20	< 0.50	< 0.50	< 2.5
DIPE	< 0.50	< 15	NOT	< 20	< 0.50	< 0.50	1.4
ГВА	< 5.0	81	SAMPLED	< 5.0	< 5.0	< 5.0	< 15
Other VOCs	< 0.50	< 15		< 20	< 0.50	< 0.50	< 5.0
11/21/06							
Oil and Grease	-			-		-	-
1,2 dichloroethane	< 0.50	< 15	FREE	42	< 0.50	< 0.50	< 5.0
1,2 dibromoethane	< 0.50	< 15	PRODUCT	< 20	< 0.50	< 0.50	< 5.0
	< 0.ED	< 15	NOT	< 20	1.7	< 0.50	< 5.0
DIPE	< 0.50						
DIPE TBA	< 5.0	82	SAMPLED	230	5.4	< 5.0	< 25

TABLE THREE Groundwater Analytical Results Oil & Grease and Volatile Organic Compounds All results are in parts per billion

Date Sampled & Compound Analyzed	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7_
2/12 <u>/07</u>							
Oil and Grease			•	-	-	-	-
1.2 dichloroethane	< 0.50	< 15	FREE	36	< 0.50	< 0.50	< 2.5
1,2 dibromoethane	< 0.50	< 15	PRODUCT	< 20	< 0.50	< 0.50	< 2.5
•	1,2	< 15	NOT	< 20	1.4	< 0.50	< 2.5
DIPE				290	< 5.0	< 5.0	< 15
TBA	< 5.0	190	SAMPLED				
Other VOCs	< 0.50	< 15	-	< 20	< 0.50	< 0.50	< 2.5

TABLE FOUR

Summary of Chemical Analysis of SOIL Samples Petroleum Hydrocarbons

All results are in parts per million

Well ID	Depth (ft)	TPH Gasoline	TPH Diesel	Benzene	Toluene	Ethyl Benzene	Total Xylenes	мтве	DIPE	ETBE	TAME	TBA	EDC	EDB
SB - I	20'	3.600	1100*	19	170	99	420	< 0.25	< 0.25	< 0.25	< 0.25	< 1.5	< 0.25	< 0.25
SB - I	25'	270	820	1.1	0.27	0.96	2.4	< 0.025	< 0.025	< 0.025	< 0.025	0.21	< 0.025	< 0.025
SB - I	30'	< 1.0	2.9**	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
SB - 1	35'	< 1.0	< 1.0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
SB - I	40'	< 1.0	< 1.0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
SB - I	50'	< 1.0	3.9**	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
SB - I	55'	< 1.0	6.4**	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
SB - 1	60'	< 1.0	< 1.0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
\$B - 2	5'	< 1.0	< 1.0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
SB - 2	15'	< 1.0	2.6**	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
SB - 3	15'	< 1.0	16**	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
SB - 4	15'	< 1.0	4.2**	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
SB - 5	15'	< 1.0	< 1.0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
SB - 6	15'	< 1.0	1.2**	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
SB - 7	15'	< 1.0	< 1.0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
ESL.		400	500	0.18	9.3	32	11	2.0	NE	NE	NE	110	· NE	NE

Non-detectable concentrations are noted by the less than symbol (<) followed by the detection limit. Detectable concentrations are in **bold**.

ESL = Environmental screening level for residential soil where groundwater is not a current or potential source of drinking water as presented in the "Screening For Environmental Concerns at Sites With Contaminated Soil and Groundwater (February 2005)" document prepared by the California Regional Water Quality Control Board, San Francisco Bay Region.

NE = ESL not established.

^{* =} Hydrocarbons reported as TPH-D do not exhibit a typical chromatographic pattern. These hydrocarbons are lower boiling than typical diesel fuel.

^{** =} Hydrocarbons reported as TPH-D do not exhibit a typical chromatographic pattern. These hydrocarbons are higher boiling than typical diesel fuel.

TABLE FIVE
Summary of Chemical Analysis of WATER Samples
Petroleum Hydrocarbons
All results are in parts per billion

Well ID	Depth (ft)	TPH Gasoline	TPH Diesel	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE	DIPE	ETBE	TAME	ТВА	EDC	EDB
SB - I	20-23'	160,000	< 200,000	33,000	39,000	2.900	13,000	< 25	< 25	< 25	< 25	< 150	< 25	< 25
SB - I	28-31'	37.000	< 1,500	1,300	3,500	1,500	4,400	< 5.0	< 5.0	< 5.0	< 5.0	< 25	< 5.0	< 5.0
SB - I	51-53'	5,200	< 800	120	320	160	500	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50
SB - 2	20-25'	5,200	190,000	0.60	2.8	< 0.50	0.77	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50
SB - 3	20-25'	< 50	700	< 0.50	2.6	< 0.50	88.0	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50
SB - 4	20-25'	260	7,900	< 0.50	2.7	6.8	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50
SB - 5	20-25'	< 50	< 50	< 0.50	2.8	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50
SB - 6	20-25'	< 50	< 50	< 0.50	2.3	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50
SB - 7	20-25'	< 50	190**	0.72	1.6	< 0.50	< 0.50	9.8	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50
ESL.		500	640	46	130	290	100	1,800	NE	NE	NE	18,000	NE	NE

Non-detectable concentrations are noted by the less than symbol (<) followed by the detection limit. Detectable concentrations are in **bold**.

ESL = Environmental screening level for groundwater where groundwater is not a current or potential source of drinking water as presented in the "Screening For Environmental Concerns at Sites With Contaminated Soil and Groundwater (February 2005)" document prepared by the California Regional Water Quality Control Board, San Francisco Bay Region.

NE = ESL not established.

^{* =} Hydrocarbons reported as TPH-D do not exhibit a typical chromatographic pattern. These hydrocarbons are lower boiling than typical diesel fuel.

^{** =} Hydrocarbons reported as TPH-D do not exhibit a typical chromatographic pattern. These hydrocarbons are higher boiling than typical diesel fuel.

TABLE SIX Summary of Chemical Analysis of SOIL VAPOR Samples Petroleum Hydrocarbon Concentrations All results are in uG/L

Sample Location	TPH Gasoline	Benzene	Toluene	Ethyl- benzene	m,p- Xylene	o- Xylene
SV-1	0.21	0.0067	0.0079	0.0091	0.0091	0.0091
SV-2	0.25	0.0079	0.0093	0.011	0.011	0.011
SV-3	0.23	0.0072	0.0084	0.0097	0.0097	0.0097
SV-4	0.25	0.0079	0.0093	0.011	0.011	0.011
SV-5	0.24	0.0076	0.0090	0.010	0.010	0.010
SV-6	0.23	0.0072	0.0084	0.0097	0.0097	0.0097
SV-7	0.33	0.010	0.012	0.014	0.014	0.014
ESL	26	0.085	68	Val. 20 420	1394, 150 ,511	150

Notes:

ESL = Environmental screening levels (lowest residential exposure for indoor air) presented in the "Screening For Environmental Concerns at Sites With Contaminated Soil and Groundwater (February 2005)" document prepared by the California Regional Water Quality Control Board, San Francisco Bay Region (Volume 2; Table E-3).



Aqua Science Engineers, Inc. 55 Oak Court, Suite 220, Danville, CA 94526 (925) 820-9391 - Fax (925) 837-4853 - www.aquascienceengineers.com

APPENDIX A

Permits

Alameda County Public Works Agency - Water Resources Well Permit



Application Id:

Site Location:

Project Start Date:

Extension Count:

399 Elmhurst Street Hayward, CA 94544-1395 Telephone: (510)670-6633 Fax:(510)782-1939

Application Approved on: 02/21/2007 By jamesy

Permit Numbers: W2007-0189 Permits Valid from 02/27/2007 to 03/09/2007

City of Project Site:Oakland

Completion Date: 03/09/2007 Extension End Date: 03/09/2007

Extended By: vickyh1

Phone: --

Applicant: Aqua Science Engineers - Mike Rauser

1171589079031

250 8th street

02/27/2007

208 W. El Pintado, Suite C, Danville, CA 94526

Property Owner: Russell Lim

Extension Start Date: 02/27/2007

3111 Diablo View road, Lafayette, CA 94549

Client: ** same as Property Owner **

Contact: Mike Rauser

Phone: 925-820-9391

Phone: 925-413-8603 Cell: --

Total Due:

\$200.00

Receipt Number: WR2007-0091

Total Amount Paid:

\$200.00

Payer Name: Diane Schiell Paid By: VISA

PAID IN FULL

Works Requesting Permits:

Borehole(s) for Geo Probes-Sampling 24 to 72 hours only - 13 Boreholes

Driller: vironex - Lic #: 705927 - Method: DP Work Total: \$200.00

Specifications

Permit	Issued Dt	Expire Dt	#	Hole Dlam	Max Depth
Number	193466 61	Expiro 5.	 Boreholes		
W2007-	02/21/2007	05/29/2007	13	2.00 in.	30.00 ft
0189					

Specific Work Permit Conditions

- 1. Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings. All cuttings remaining or unused shall be containerized and hauled off site.
- 2. Boreholes shall not be left open for a period of more than 24 hours. All boreholes left open more than 24 hours will need approval from Alameda County Public Works Agency, Water Resources Section. All boreholes shall be backfilled according to permit destruction requirements and all concrete material and asphalt material shall be to Caltrans Spec or County/City Codes. No borehole(s) shall be left in a manner to act as a conduit at any time.
- 3. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.
- 4. Applicant shall contact Vicky Hamlin for an inspection time at 510-670-5443 at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.
- 5. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of \$500.00.
- 6. Permit is valid only for the purpose specified herein. No changes in construction procedures, as described on this

Alameda County Public Works Agency - Water Resources Well Permit

permit application.	Boreholes shall not be converted to monitoring wells, without a permit application process.



EXCAVATION PERMIT

CIVIL

ENGINEERING

TO EXCAVATE IN STREETS OR OTHER SPECIFIED WORK

PAGE 2 of 2

Permit valid for 90 days from date of issuance

PERMIT NUMBER X O 7 0 <u>0</u> <u>1</u> <u>8</u> <u>5</u>	SITE ADDRESS/LOCATION & Th Street, Oahland
APPROX. START DATE $7 - 20 - 07$ $4 - 20 - 07$	24-HOUR EMERGENCY PHONE NUMBER (Permit not valid without 24-Hour number)
CONTRACTOR'S LICENSE # AND CLASS 487000	CITY BUSINESS TAX # 240532
secured an inquiry identification number issued by USA. The U	Service Alert (USA) two working days before excavating. This permit is not valid unless applicant has USA telephone number is 1-800-642-2444. Underground Service Alert (USA) #
construct, alter, improve, demolish, or repair any structure, prior to its issuance provisions of the Contractor's License law Chapter 9 (commencing with Sec. 7 alleged exemption. Any violation of Section 7031.5 by any applicant for a per office of the property, or my employees with wages as their sole of Professions Code: The Contractor's License Law does not apply to an owner provided that such improvements are not intended or offered for sale. If hower burden of proving that he did not build or improve for the purpose of sale). I, as owner of the property, am exempt from the sale requirements of the at the performed prior to sale, (3) I have resided in the residence for the 12 month structures more than once during any three-year period. (Sec. 7044 Business and D. Les owners of the property, am exclusively contracting with licensed contra	compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business of property who builds or improves thereon, and who does such work himself or through his own employees, wer, the building or improvement is sold within one year of completion, the owner-builder will have the prove due to: (1) I am improving my principal place of residence or appurtenances thereto, (2) the work will as prior to completion of the work, and (4) I have not claimed exemption on this subdivision on more than two
Policy # <u>ENVO09322050</u> Company Name	, I shall not employ any person in any manner so as to become subject to the Worker's Compensation Laws
comply with such provisions or this permit shall be deemed revoked. This perrogramted upon the express condition that the permittee shall be responsible for all perform the obligations with respect to street maintenance. The permittee shall, and employees, from and against any and all suits, claims, or actions brought by	I should become subject to the Worker's Compensation provisions of the Labor Code, you must forthwith mit is issued pursuant to all provisions of Title 12 Chapter 12.12 of the Oakland Municipal Code. It is a claims and liabilities arising out of work performed under the permit or arising out of permittee's failure to and by acceptance of the permit agrees to defend, indemnify, save and hold harmless the City, its officers y any person for or on account of any bodily injuries, disease or illness or damage to persons and/or property or in consequence of permittee's failure to perform the obligations with respect to street maintenance. This by the Director of the Office of Planning and Building.
this permit and agree to its requirements, and that the above information is true Mulhar Laura Signature of Permittee De Agent for Contractor Owner	2-15-07 Date
DATE STREET LAST SPECIAL PAVING DETAIL RESURFACED REQUIRED? DYES DNO ISSUED BY	HOLIDAY RESTRICTION? LIMITED OPERATION AREA? (NOV 1 - JAN 1) DYES DNO DATE ISSUED

CITY OF OAKLAND . Community and Economic Development Agency

250 Frank H. Ogawa Plaza, 2nd Floor, Oakland, CA 94612 • Phone (510) 238-3443 • FAX (510) 238-2263

Job Site 250 8TH ST

Parcel# 001 -0185-011-00

Appl# X0700185

Descr soil boring on 7th St between Harrison & Alice St

Permit Issued 02/15/07

Work Type EXCAVATION-PRIVATE P

USA #

Util Co. Job #

Util Fund #:

Applent

Phone# Lic# --License Classes--

Owner LIM MAY L TR & ALICE TR

Contractor AQUA SCIENCE ENGINEERS, INC. X (925)820-9391 487000 A C57

Arch/Engr

Agent

Applic Addr 208 WEST EL PINTADO, DANVILLE, CA., 94526

\$414.25 TOTAL FEES PAID AT ISSUANCE

JOB SITE

\$61.00 Applic \$300.00 Permit \$.00 Process \$34.30 Rec Mgmt \$.00 Gen Plan \$.00 Invstg \$.00 Other \$18.95 Tech Enh

Application # 11 1171589079031



Aqua Science Engineers, Inc. 55 Oak Court, Suite 220, Danville, CA 94526 (925) 820-9391 - Fax (925) 837-4853 - www.aquascienceengineers.com

APPENDIX B

Boring Logs

_	SOIL BORING	LOG /	AND	MOI	NITO	RING	WELL C	OMPL	ETION DETA	ILS		BORING: SB-I	
Projec	ct Name: Lim				Р	rojec	t Locatio	n: 250	8th Street, (Dakland	l, CA		Page 1 of 2
Drille	r: Vironex Drillir	ng			Т	уре	of Rig: Ge	oprobe		Size o	f Dril	I: Macro Core San	npler
Logg	ed By: Michael	Rause	r		[Date (Orilled: M	March 1, 2007 Checked By: Robert E. Kitay, P.G.					. Kitay, P.G.
WATE	R AND WELL D	<u>ATA</u>						Total Depth of Well Completed: NA					·
Depth	of Water First	Encou	ntere	ed: 1	8'			Well S	Screen Type a	ınd Diar	nete	r: NA	
Static	Depth of Wate	r in W	ell: N	A				Well S	Screen Slot Si	ze: NA	١.		
Total	Total Depth of Boring: 60'							Туре	and Size of S	oil Sam	pler:	NA	
Feet	SOIL/ROCK SAMPLE DAT					LE DATA	Feet		DESC	CRIPT	ION OF LITHOLO	DGY	
Depth in F	BORING DETAIL	Description	Interval	Blow Counts	PID (ppmv)	Water Level	Graphic Log	Depth in F				on, texture, relation dor-staining, USCS	
8			IZ	Blov	윤	Wat		۵					
- 0								- 0	Asphalt Hand Auge	er to 5'			
- - 5 - - -								- 5 - 1	pea-grave	(GP); (dark	brown; loose; dam	np; slight odor
-10 - - - - - -15		Class "H" Portland Cement			203			- 10 - - - - - 15	wet; slight	odor a	t 18'		
_ 	→	Class "H"			430			20	Silty SAND silt; non-pla odor	(SM); g astic; hi	gray; igh es	medium dense; w stimated K; strong	et; 70% sand, 30% g hydrocarbon
												e; wet; 100% fine ng hydrocarbon o	sand; non-plastic; dor
- -25 -					450			25 -	brown; da	imp at i	26'		
F ₃₀			XX		610			30	gray; loos	e; wet a	at 30	₃ 1	
			•	-		-				AQUA	SCIE	NCE ENGINEERS, I	NC.

	SOIL BORING	G LOG	AND	MON	NITO	RING	WELL (OMPL	ETION DETAILS	BORING: SB-I	
Proje	ect Name: Lim		_					n: 250	8 th Street, Oakland, CA		Page 2 of 2
Feet	- · · ·	_ uc	SOII	$\overline{}$			E DATA	Feet	DESCRIPT	ION OF LITHOLO	OGY
Depth in	BORING DETAIL	Description	Interval	Blow Counts	PiD (ppmv)	Water Level	Graphic Log	Depth in	standard classification density, stiffness, or		
Dex		Des	lit	Blow	PID	Wate	<u>5</u>	å			
E								_	brown; stiff at 31'		
- - -35					1500			- - -35	Silty CLAY (CH); brown; silt; high plasticity; low light brown; hard at 34' wet at 36'	estimated K; no o	
- - -40		and Cement			340			- - -40	no recovery 40' - 45'		
- - - -45 -	+	Class "H" Portland Cement	XXXXX		322			- - - -45 -	Silty SAND (SP); brown; non-plastic; high estima		eand; 10% silt;
- - 50 -					75			- - 50 - -	Silty CLAY (CH); brown gravel; high plasticity; v trace sand at 51' -52'		
- - - 55 -					130			- - - 55 -	hard; damp at 53' trace gravel at 53' -55		
- - -60			XXXXXXXX		5			- - - - - - - -	Boring to	otal depth of 60'	
- - -65 - -								- - - - -			
	AQUA SCIENCE ENGINEERS, INC.										NC.

SOIL BORING LOG AND WELL COM	IPLETION DI	ETAILS	Soil Boring:	SB-2			
Project Name: Lim	Project Loc	ation: 250 8th Str	eet, Oakland, CA	Page 1 of 1			
Driller: Vironex Drilling	Type of Rig	: Geoprobe	Size of Drill: Macro	Core Sampler			
Logged By: Mike Rauser Da	te Drilled: Fe	: February 27, 2007 Checked By: Robert E. Kitay, P.G.					
WATER AND WELL DATA		Total Depth of We	ell Completed: NA				
Depth of Water First Encountered: 15'		Well Screen Type	and Diameter: NA				
Static Depth of Water in Well: Unknown		Well Screen Slot S	Size: NA				
Total Depth of Boring: 25'		Type and Size of S	Soil Sampler: Macro C	ore Sampler			
SOIL/ROCK SA	AMPLE DATA		DESCRIPTION OF				
Description Description Water Level PID	(ppmv) Graphic Log		classification, texture stiffness, odor-stainin				
0 77	77777						
		Hand Aug	er to 5'				
0			O (SM); brown; dense plastic; medium estima	; dry; 60% sand; 40% ated K; no odor			
- 10 - 20)	=1 0 80% sand	10 - 80% sand; 20% silt at 12' 				
-15 H Sel	1	- damp at 1		:la			
- SS S 14	o	wet; loose	se; 90% sand; 10% s e at 19'	nt, no odor at 17			
		dense; str	rong hydrocarbon odd	or at 23'			
	12	25 strong hy	drocarbon odor at 25	5'			
-		- 30					
-30 ASE Form 20A			CIENCE ENGINEERS, IN	NC.			

SOIL BORING LOG	AND	WELL	COMPL	ETION DE	Soil Boring: SB-3					
Project Name: Lim			Pi	roject Loc	ation:	250 8th Str	eet, C	Dakland, CA	Page 1 of 1	
Driller: Vironex Drilling			T	ype of Rig	: Geop	orobe	Size	of Drill: Macro Core Sa	mpler	
Logged By: Mike Rauser			Date	Drilled: Fe	t: February 27, 2007 Checked By: Robert E. Kitay, P.G.					
WATER AND WELL DATA					Total Depth of Well Completed: NA					
Depth of Water First Enco	ounter	ed: 18'			Well	Screen Type	and [Diameter: NA		
Static Depth of Water in	Well: L	Inknow	n		Well s	Screen Slot S	lize:	NA		
Total Depth of Boring: 25'						and Size of S	Soil S	ampler: Macro Core San	npler	
Depth in Feet TIVE SALISH STATE Description	COUL (DOCK CAMPLE DAT					standard density, s	class	SCRIPTION OF LITHOI ification, texture, relatives, odor-staining, USCS	/e moisture,	
-0 177	+-				O Depth in	Asphalt				
Portland Cement	XXXX		0		5 -) (SM rate p); brown; stiff; dry; 809 plasticity; medium estim		
- 15	XXXXXXXXX		2 427		-15 -20 -25 - -30	dense at 2 wet; loose 80% sand	20' e at 2 ; 20% End	6 silt at 18' 1' 6 silt; non-plastic at 22' of boring at 25'	•	

SOIL BORING LOG AND WELL C	OMPLETION DE	ETAILS	Soil	Boring: SB-4	
Project Name: Lim	Project Loc	ation: 250 8th Stre	d, CA	Page 1 of 1	
Driller: Vironex Drilling	Type of Rig	: Geoprobe	Size of Dri	ll: Macro Core Sam	pler
Logged By: Mike Rauser	Date Drilled: Fe	bruary 27, 2007	Ch	ecked By: Robert I	. Kitay, P.G.
WATER AND WELL DATA	-" -	Total Depth of We	II Complete	ed: NA	
Depth of Water First Encountered: 18'		Well Screen Type a	and Diamet	ter: NA	
Static Depth of Water in Well: Unknown		Well Screen Slot Si	ize: NA		
Total Depth of Boring: 25'		Type and Size of S	oil Sample	r: Macro Core Sam	oler
Fee	(ppmv) BAMPIE DATA Graphic Log	standard o	classification	PTION OF LITHOLION, texture, relative dor-staining, USCS	e moisture,
-0 27	77777	O Asphalt			
Class "H" Portland Cement	O O 45	silt; low plastic 90% sand; low plastic pale-brown 80% sand; 90% sand; gray-brown gray; very	(SM); red- asticity; high non-plasticity at 12' n; very stift; 20% silt at ; 10% silt; n; slight oc	f at 14' at 16' non-plastic; damp dor at 21'	odor
-30 ASE Form 20A		F 30 AOUA SC	CIENCE ENG	GINEERS, INC.	·
ASE Form 20A		AQUA 30	SIEI VOL LING	J., (CE1.O, 1140.	

SOIL BORING LOG AND WELL CON	APLETION DE	ETAILS		Soil Boring: SB-5	
Project Name: Lim	Project Loc	ation: 250 8th Stre	et, Oal	kland, CA	Page 1 of 1
Driller: Vironex Drilling	Type of Rig	g: Geoprobe	Size of	Drill: Macro Core Sam	pler
Logged By: Mike Rauser Da	ate Drilled: Fe	ebruary 28, 2007		Checked By: Robert B	E. Kitay, P.G.
WATER AND WELL DATA		Total Depth of We	II Comp	oleted: NA	
Depth of Water First Encountered: 16'		Well Screen Type	and Dia	meter: NA	
Static Depth of Water in Well: Unknown		Well Screen Slot S	ize: N	4	
Total Depth of Boring: 20'		-		npler: Macro Core Samp	
Depth in Feet Please Description Nater Level PID PID PID PID PID PID PID PI	(ppmv) Graphic Log	standard	classific	CRIPTION OF LITHOLO cation, texture, relative s, odor-staining, USCS	e moisture,
Class "H" Portland Cement		Hand Auge Silty SAND silt; low pla pale-grey; 10 60% sand wet at 16 hard at 17 brown; 80	yery st ; 40% s	red-brown; dense; dry; ; high estimated K; no	odor
		- 30 AQUA SI	CIENCE	ENGINEERS, INC.	<u> </u>

SOIL BORING LOG AND WELL COMPLETION DETAILS				Soil Boring: SB-6	
Project Name: Lim	Project Loc	ation: 250 8th Str	eet, Oa	akland, CA	Page 1 of 1
Driller: Vironex Drilling	Type of Rig	ı: Geoprobe	Size o	of Drill: Macro Core Sam	pler
Logged By: Mike Rauser Da	te Drilled: Fe	bruary 28, 2007		Checked By: Robert E	E. Kitay, P.G.
WATER AND WELL DATA		Total Depth of We	ell Com	pleted: NA	
Depth of Water First Encountered: 20'		Well Screen Type	and Di	iameter: NA	
Static Depth of Water in Well: Unknown		Well Screen Slot S	Size: N	IA	
Total Depth of Boring: 25'		Type and Size of S	Soil Sa	mpler: Macro Core Samp	bler
SOIL/ROCK SA	MPLE DATA			SCRIPTION OF LITHOL	
Depth in Feet Pload Suluder Sulude S	(ppinty) Graphic Log	standard density, s		ication, texture, relative ss, odor-staining, USCS	
Depth in Descript Water Water PID PID Observed Water Wate	(ppinty) Graphic Log	Depth in density, s		-	
-0 2	7/1/1/				
		Hand Aug	er to 5	; '	
- 🛭		 			
- ₅ 0	NAME OF TAXABLE	5 Ciles CANIC) (CD).	brown; dense; wet; 609	24 cand: 4004
				y; high estimated K; no	
		damp at 8	3'		
tland Cement		 -10			
L S T		}	l. 2004	silt at 12'	
		.F 70% sand	, 3070	SIL at 12	
		– grey-gree – 15	n at 1	4'	
Class "H" Pol		-J I	; 20%	silt; non-plastic at 16'	
		grey-brow	n at 1	8'	
L ₂₀		1			
		-20 soft; wet	at 20'		
		hard at 22	2'		
_25		25			
		 -	End of	f boring at 25'	
F	İ	F			
- -30		-30			
ASE Form 20A	<u> </u>		CIENCE	E ENGINEERS, INC.	

SOIL BORING LOG AND WELL COM	IPLETION DI	ETAILS		Soil Boring: SB-7	
Project Name: Lim	Project Loc	cation: 250 8th S	treet, Oa	akland, CA	Page 1 of 1
Driller: Vironex Drilling	Type of Rig	g: Geoprobe	Size o	of Drill: Macro Core San	npler
Logged By: Mike Rauser Da	ite Drilled: Fe	ebruary 28, 2007		Checked By: Robert	E. Kitay, P.G.
WATER AND WELL DATA		Total Depth of \	Vell Com	pleted: NA	
Depth of Water First Encountered: 20'		Well Screen Typ	e and Di	ameter: NA	
Static Depth of Water in Well: Unknown		Well Screen Slo	Size: N	<u> </u>	
Total Depth of Boring: 25'		<u> </u>		mpler: Macro Core Sam	
Depth in Feet Description Mater Water PID Water Description Water Water Mater (ppmv) Graphic Log	standar	d classifi	CCRIPTION OF LITHOL scation, texture, relative ss, odor-staining, USCS	e moisture,	
-0 [7]	11111	0 Asphalt			
0		5 Silty SA		brown; dense; damp; 9 high estimated K; no o	
Class "H" Portland Cement		- -10 - - - - - - - - - - - - - - - - -	nd; 20%	silt; low plasticity at 1	2'
		70% sa	nd; 30%	silt; hard at 17'	
		grey-br	own at 1	8'	
-20 ▼ 0		20 brown,	80% san	d; 20% silt; wet at 20'	
-30 ASE Form 20A		- - - - 30		f boring at 25' E ENGINEERS, INC.	



Aqua Science Engineers, Inc. 55 Oak Court, Suite 220, Danville, CA 94526 (925) 820-9391 - Fax (925) 837-4853 - www.aquascienceengineers.com

APPENDIX C

Analytical Reports
And Chain of Custody Records
For Soil and Groundwater Samples



Report Number: 55109

Date: 3/12/2007

Mike Rauser Aqua Science Engineers, Inc. 208 West El Pintado Rd. Danville, CA 94526

Subject: 15 Soil Samples and 9 Water Samples

Project Name: Lim Project Number: 2808

Dear Mr. Rauser,

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

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

Sincerely,



Report Number: 55109

Date: 3/12/2007

Subject: 15 Soil Samples and 9 Water Samples

Project Name: Lim Project Number: 2808

Case Narrative

The Method Reporting Limit for TPH as Diesel is increased due to interference from Gasoline-Range Hydrocarbons for samples SB-1-20-23', SB-1-28-31' and SB-1-51-53'.

Hydrocarbons reported as TPH as Diesel do not exhibit a typical Diesel chromatographic pattern for sample SB-1-20. These hydrocarbons are lower boiling than typical diesel fuel.

Hydrocarbons reported as TPH as Diesel do not exhibit a typical Diesel chromatographic pattern for samples SB-1-30', SB-1-50', SB-1-55', SB-2-15', SB-3-15', SB-4-15', SB-6-15' and SB-7. These hydrocarbons are higher boiling than typical diesel fuel.

Surrogate Recovery for sample SB-3 for test method Mod. EPA 8015 was outside of control limits. This may indicate a bias in the analysis due to the sample's matrix or an interference from compounds present in the sample.

Approved By

Jde Kiff



Matrix: Soil

Lab Number: 55109-03

Report Number: 55109

Date: 3/12/2007

Sample Date :3/1/2007

Sample: **SB-1-20'**

Sample Date :3/1/2007		Method			
Parameter	Measured Value	Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	19	0.25	mg/Kg	EPA 8260B	3/3/2007
Toluene	170	0.25	mg/Kg	EPA 8260B	3/3/2007
Ethylbenzene	99	0.25	mg/Kg	EPA 8260B	3/3/2007
Total Xylenes	420	0.50	mg/Kg	EPA 8260B	3/3/2007
Methyl-t-butyl ether (MTBE)	< 0.25	0.25	mg/Kg	EPA 8260B	3/3/2007
Diisopropyl ether (DIPE)	< 0.25	0.25	mg/Kg	EPA 8260B	3/3/2007
Ethyl-t-butyl ether (ETBE)	< 0.25	0.25	mg/Kg	EPA 8260B	3/3/2007
Tert-amyl methyl ether (TAME)	< 0.25	0.25	mg/Kg	EPA 8260B	3/3/2007
Tert-Butanol	< 1.5	1.5	mg/Kg	EPA 8260B	3/3/2007
TPH as Gasoline	3600	50	mg/Kg	EPA 8260B	3/3/2007
1,2-Dichloroethane	< 0.25	0.25	mg/Kg	EPA 8260B	3/3/2007
1,2-Dibromoethane	< 0.25	0.25	mg/Kg	EPA 8260B	3/3/2007
Toluene - d8 (Surr)	97.2		% Recovery	EPA 8260B	3/3/2007
4-Bromofluorobenzene (Surr)	94.9		% Recovery	EPA 8260B	3/3/2007
1,2-Dichloroethane-d4 (Surr)	95.8		% Recovery	EPA 8260B	3/3/2007
TPH as Diesel (Silica Gel)	1100	1.0	mg/Kg	M EPA 8015	3/3/2007
1-Chlorooctadecane (Silica Gel Surr)	90.5		% Recovery	M EPA 8015	3/3/2007

Approved By:



Matrix : Soil

Lab Number: 55109-04

Report Number: 55109

Date: 3/12/2007

Sample Date :3/1/2007

Sample: SB-1-25'

Sample Date:3/1/2007	N	Method		Anchreig	Date
Parameter	Measured Value	Reporting Limit	Units	Analysis Method	Analyzed
Benzene	1.1	0.025	mg/Kg	EPA 8260B	3/5/2007
Toluene	0.27	0.025	mg/Kg	EPA 8260B	3/5/2007
Ethylbenzene	0.96	0.025	mg/Kg	EPA 8260B	3/5/2007
Total Xylenes	2.4	0.025	mg/Kg	EPA 8260B	3/5/2007
Methyl-t-butyl ether (MTBE)	< 0.025	0.025	mg/Kg	EPA 8260B	3/5/2007
Diisopropyl ether (DIPE)	< 0.025	0.025	mg/Kg	EPA 8260B	3/5/2007
Ethyl-t-butyl ether (ETBE)	< 0.025	0.025	mg/Kg	EPA 8260B	3/5/2007
Tert-amyl methyl ether (TAME)	< 0.025	0.025	mg/Kg	EPA 8260B	3/5/2007
Tert-Butanol	0.21	0.15	mg/Kg	EPA 8260B	3/5/2007
TPH as Gasoline	270	25	mg/Kg	EPA 8260B	3/3/2007
1,2-Dichloroethane	< 0.025	0.025	mg/Kg	EPA 8260B	3/5/2007
1,2-Dibromoethane	< 0.025	0.025	mg/Kg	EPA 8260B	3/5/2007
Toluene - d8 (Surr)	95.5		% Recovery	EPA 8260B	3/5/2007
4-Bromofluorobenzene (Surr)	107		% Recovery	EPA 8260B	3/5/2007
1,2-Dichloroethane-d4 (Surr)	91.8		% Recovery	EPA 8260B	3/5/2007
TPH as Diesel (Silica Gel)	820	1.0	mg/Kg	M EPA 8015	3/3/2007
1-Chlorooctadecane (Silica Gel Surr)	87.0		% Recovery	M EPA 8015	3/3/2007

Approved By:

Joel Kiff



Report Number: 55109

Date: 3/12/2007

Sample: SB-1-30' Matrix: Soil Lab Number: 55109-05

Sample Date :3/1/2007

Sample Date :3/1/2007		Method			
Parameter	Measured Value	Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/6/2007
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/6/2007
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/6/2007
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/6/2007
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/6/2007
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/6/2007
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/6/2007
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/6/2007
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/6/2007
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	3/6/2007
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/6/2007
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/6/2007
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	3/6/2007
4-Bromofluorobenzene (Surr)	95.8		% Recovery	EPA 8260B	3/6/2007
1,2-Dichloroethane-d4 (Surr)	104		% Recovery	EPA 8260B	3/6/2007
TPH as Diesel (Silica Gel)	2.9	1.0	mg/Kg	M EPA 8015	3/3/2007
1-Chlorooctadecane (Silica Gel Surr)	92.8		% Recovery	M EPA 8015	3/3/2007

Approved By:

Joel Kiff



Report Number: 55109

Date: 3/12/2007

Sample: SB-1-35' Matrix: Soil Lab Number: 55109-06

Sample Date :3/1/2007

Sample Date :3/1/2007		Method			
Parameter	Measured Value	Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/6/2007
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/6/2007
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/6/2007
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/6/2007
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/6/2007
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/6/2007
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/6/2007
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/6/2007
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/6/2007
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	3/6/2007
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/6/2007
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/6/2007
Toluene - d8 (Surr)	102		% Recovery	EPA 8260B	3/6/2007
4-Bromofluorobenzene (Surr)	103		% Recovery	EPA 8260B	3/6/2007
1,2-Dichloroethane-d4 (Surr)	103		% Recovery	EPA 8260B	3/6/2007
TPH as Diesel (Silica Gel)	< 1.0	1.0	mg/Kg	M EPA 8015	3/7/2007
1-Chlorooctadecane (Silica Gel Surr)	94.7		% Recovery	M EPA 8015	3/7/2007

Approved By:

Joel Kiff



Matrix : Soil

Lab Number: 55109-07

Report Number: 55109

Date: 3/12/2007

Sample Date :3/1/2007

Sample: SB-1-40'

Sample Date :3/1/2007		Method			
Parameter	Measured Value	Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	3/3/2007
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Toluene - d8 (Surr)	108		% Recovery	EPA 8260B	3/3/2007
4-Bromofluorobenzene (Surr)	110		% Recovery	EPA 8260B	3/3/2007
1,2-Dichloroethane-d4 (Surr)	98.9		% Recovery	EPA 8260B	3/3/2007
TPH as Diesel (Silica Gel)	< 1.0	1.0	mg/Kg	M EPA 8015	3/3/2007
1-Chlorooctadecane (Silica Gel Surr)	97.7		% Recovery	M EPA 8015	3/3/2007

Approved By:

Joel Kiff



Matrix: Soil

Lab Number: 55109-08

Report Number: 55109

Date: 3/12/2007

Sample Date :3/1/2007

Sample: SB-1-50'

Sample Date :3/1/2007		Method			
Parameter	Measured Value	Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	3/3/2007
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Toluene - d8 (Surr)	108		% Recovery	EPA 8260B	3/3/2007
4-Bromofluorobenzene (Surr)	110		% Recovery	EPA 8260B	3/3/2007
1,2-Dichloroethane-d4 (Surr)	102		% Recovery	EPA 8260B	3/3/2007
TPH as Diesel (Silica Gel)	3.9	1.0	mg/Kg	M EPA 8015	3/3/2007
1-Chlorooctadecane (Silica Gel Surr)	84.5		% Recovery	M EPA 8015	3/3/2007

Approved By:



Matrix : Soil Lab Number : 55109-09

Report Number: 55109

Date: 3/12/2007

Sample Date :3/1/2007

Sample: **SB-1-55'**

Sample Date :3/1/2007	Measured	Method Reporting		Analysis	Date
Parameter	Value	Limit	Units	Method	Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	3/3/2007
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Toluene - d8 (Surr)	108		% Recovery	EPA 8260B	3/3/2007
4-Bromofluorobenzene (Surr)	110		% Recovery	EPA 8260B	3/3/2007
1,2-Dichloroethane-d4 (Surr)	103		% Recovery	EPA 8260B	3/3/2007
TPH as Diesel (Silica Gel)	6.4	1.0	mg/Kg	M EPA 8015	3/3/2007
1-Chlorooctadecane (Silica Gel Surr)	87.1		% Recovery	M EPA 8015	3/3/2007

Approved By:

Joel Kiff



Matrix : Soil

Lab Number : 55109-10

Report Number: 55109

Date: 3/12/2007

Sample Date :3/1/2007

Sample: **SB-1-60'**

Sample Date :3/1/2007		Method			
Parameter	Measured Value	Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	3/3/2007
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Toluene - d8 (Surr)	108		% Recovery	EPA 8260B	3/3/2007
4-Bromofluorobenzene (Surr)	111		% Recovery	EPA 8260B	3/3/2007
1,2-Dichloroethane-d4 (Surr)	106		% Recovery	EPA 8260B	3/3/2007
TPH as Diesel (Silica Gel)	< 1.0	1.0	mg/Kg	M EPA 8015	3/7/2007
1-Chlorooctadecane (Silica Gel Surr)	96.7		% Recovery	M EPA 8015	3/7/2007

Approved By:

Joel Kiff



Matrix : Soil

Lab Number : 55109-11

Report Number: 55109

Date: 3/12/2007

Sample Date :2/27/2007

Sample: SB-2-5'

Sample Date :2/27/2007		Method			
Parameter	Measured Value	Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/6/2007
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/6/2007
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/6/2007
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/6/2007
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/6/2007
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/6/2007
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/6/2007
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/6/2007
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/6/2007
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	3/6/2007
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/6/2007
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/6/2007
Toluene - d8 (Surr)	103		% Recovery	EPA 8260B	3/6/2007
4-Bromofluorobenzene (Surr)	103		% Recovery	EPA 8260B	3/6/2007
1,2-Dichloroethane-d4 (Surr)	103		% Recovery	EPA 8260B	3/6/2007
TPH as Diesel (Silica Gel)	< 1.0	1.0	mg/Kg	M EPA 8015	3/7/2007
1-Chlorooctadecane (Silica Gel Surr)	92.5		% Recovery	M EPA 8015	3/7/2007

Approved By:

Joel Kiff



Matrix : Soil

Lab Number : 55109-13

Report Number: 55109

Date: 3/12/2007

Sample Date :2/27/2007

Sample : **SB-2-15'**

Sample Date :2/27/2007		Method			
Parameter	Measured Value	Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	3/3/2007
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Toluene - d8 (Surr)	106		% Recovery	EPA 8260B	3/3/2007
4-Bromofluorobenzene (Surr)	109		% Recovery	EPA 8260B	3/3/2007
1,2-Dichloroethane-d4 (Surr)	103		% Recovery	EPA 8260B	3/3/2007
TPH as Diesel (Silica Gel)	2.6	1.0	mg/Kg	M EPA 8015	3/8/2007
1-Chlorooctadecane (Silica Gel Surr)	109		% Recovery	M EPA 8015	3/8/2007

Approved By:

Joel Kiff



Matrix : Soil

Lab Number: 55109-17

Report Number: 55109

Date: 3/12/2007

Sample Date :2/27/2007

Sample: **SB-3-15'**

Sample Date :2/27/2007		Method			
Parameter	Measured Value	Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	3/3/2007
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Toluene - d8 (Surr)	103		% Recovery	EPA 8260B	3/3/2007
4-Bromofluorobenzene (Surr)	104		% Recovery	EPA 8260B	3/3/2007
1,2-Dichloroethane-d4 (Surr)	106		% Recovery	EPA 8260B	3/3/2007
TPH as Diesel (Silica Gel)	16	1.0	mg/Kg	M EPA 8015	3/3/2007
1-Chlorooctadecane (Silica Gel Surr)	73.2		% Recovery	M EPA 8015	3/3/2007

Approved By:

Joel Kiff



Report Number: 55109

Date: 3/12/2007

Matrix : Soil Lab Number: 55109-22 Sample: **SB-4-15**'

Sample Date :2/27/2007

Sample Date :2/27/2007		Method			
Parameter	Measured Value	Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	3/3/2007
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Toluene - d8 (Surr)	103		% Recovery	EPA 8260B	3/3/2007
4-Bromofluorobenzene (Surr)	103		% Recovery	EPA 8260B	3/3/2007
1,2-Dichloroethane-d4 (Surr)	101		% Recovery	EPA 8260B	3/3/2007
TPH as Diesel (Silica Gel)	4.2	1.0	mg/Kg	M EPA 8015	3/3/2007
1-Chlorooctadecane (Silica Gel Surr)	97.3		% Recovery	M EPA 8015	3/3/2007

Approved By:



Date: 3/12/2007

Report Number: 55109

Sample: SB-5-15' Matrix: Soil Lab Number: 55109-26

Sample Date :2/28/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	3/3/2007
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Toluene - d8 (Surr)	104		% Recovery	EPA 8260B	3/3/2007
4-Bromofluorobenzene (Surr)	104		% Recovery	EPA 8260B	3/3/2007
1,2-Dichloroethane-d4 (Surr)	100		% Recovery	EPA 8260B	3/3/2007
TPH as Diesel (Silica Gel)	< 1.0	1.0	mg/Kg	M EPA 8015	3/3/2007
1-Chlorooctadecane (Silica Gel Surr)	77.9		% Recovery	M EPA 8015	3/3/2007

Approved By:

Joel Kiff



Matrix : Soil

Lab Number : 55109-29

Report Number: 55109

Date: 3/12/2007

Sample Date :2/28/2007

Sample : **SB-6-15'**

Sample Date :2/28/2007		Method			
Parameter	Measured Value	Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	3/3/2007
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	3/3/2007
4-Bromofluorobenzene (Surr)	99.3		% Recovery	EPA 8260B	3/3/2007
1,2-Dichloroethane-d4 (Surr)	104		% Recovery	EPA 8260B	3/3/2007
TPH as Diesel (Silica Gel)	1.2	1.0	mg/Kg	M EPA 8015	3/3/2007
1-Chlorooctadecane (Silica Gel Surr)	78.4		% Recovery	M EPA 8015	3/3/2007

Approved By:

Joel Kiff



Matrix : Soil

Lab Number : 55109-33

Report Number: 55109

Date: 3/12/2007

Sample Date :2/28/2007

Sample: **SB-7-15**'

Parameter Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	3/3/2007
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Toluene - d8 (Surr)	104		% Recovery	EPA 8260B	3/3/2007
4-Bromofluorobenzene (Surr)	105		% Recovery	EPA 8260B	3/3/2007
1,2-Dichloroethane-d4 (Surr)	103		% Recovery	EPA 8260B	3/3/2007
TPH as Diesel (Silica Gel)	< 1.0	1.0	mg/Kg	M EPA 8015	3/3/2007
1-Chlorooctadecane (Silica Gel Surr)	74.2		% Recovery	M EPA 8015	3/3/2007

Approved By:

Joel Kiff

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



Matrix : Water

Lab Number : 55109-36

Report Number: 55109

Date: 3/12/2007

Sample: **SB-1-20-23'** Sample Date: 3/1/2007

Sample Date :3/1/2007		Method				
Parameter	Measured Value	Reporting Limit	Units	Analysis Method	Date Analyzed	
Benzene	33000	100	ug/L	EPA 8260B	3/7/2007	
Toluene	39000	100	ug/L	EPA 8260B	3/7/2007	
Ethylbenzene	2900	25	ug/L	EPA 8260B	3/6/2007	
Total Xylenes	13000	25	ug/L	EPA 8260B	3/6/2007	
Methyl-t-butyl ether (MTBE)	< 25	25	ug/L	EPA 8260B	3/6/2007	
Diisopropyl ether (DIPE)	< 25	25	ug/L	EPA 8260B	3/6/2007	
Ethyl-t-butyl ether (ETBE)	< 25	25	ug/L	EPA 8260B	3/6/2007	
Tert-amyl methyl ether (TAME)	< 25	25	ug/L	EPA 8260B	3/6/2007	
Tert-Butanol	< 150	150	ug/L	EPA 8260B	3/6/2007	
TPH as Gasoline	160000	2500	ug/L	EPA 8260B	3/6/2007	
1,2-Dichloroethane	< 25	25	ug/Ĺ	EPA 8260B	3/6/2007	
1,2-Dibromoethane	< 25	25	ug/L	EPA 8260B	3/6/2007	
Toluene - d8 (Surr)	94.3		% Recovery	EPA 8260B	3/6/2007	
4-Bromofluorobenzene (Surr)	96.6		% Recovery	EPA 8260B	3/6/2007	
1,2-Dichloroethane-d4 (Surr)	98.9		% Recovery	EPA 8260B	3/6/2007	
TPH as Diesel (Silica Gel)	< 200000	200000	ug/L	M EPA 8015	3/6/2007	
Octacosane (Diesel Silica Gel Surr)	Diluted Out		% Recovery	M EPA 8015	3/6/2007	

Approved By:

Joel Kiff

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Matrix: Water

Lab Number : 55109-37

Report Number: 55109

Date: 3/12/2007

Sample: **SB-1-28-31'**Sample Date:3/1/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed	
Benzene	1300	5.0	ug/L	EPA 8260B	3/6/2007	
Toluene	3500	5.0	ug/L	EPA 8260B	3/6/2007	
Ethylbenzene	1500	5.0	ug/L	EPA 8260B	3/6/2007	
Total Xylenes	4400	5.0	ug/L	EPA 8260B	3/6/2007	
Methyl-t-butyl ether (MTBE)	< 5.0	5.0	ug/L	EPA 8260B	3/6/2007	
Diisopropyl ether (DIPE)	< 5.0	5.0	ug/L	EPA 8260B	3/6/2007	
Ethyl-t-butyl ether (ETBE)	< 5.0	5.0	ug/L	EPA 8260B	3/6/2007	
Tert-amyl methyl ether (TAME)	< 5.0	5.0	ug/L	EPA 8260B	3/6/2007	
Tert-Butanol	< 25	25	ug/L	EPA 8260B	3/6/2007	
TPH as Gasoline	37000	500	ug/L	EPA 8260B	3/6/2007	
1,2-Dichloroethane	< 5.0	5.0	ug/L	EPA 8260B	3/6/2007	
1,2-Dibromoethane	< 5.0	5.0	ug/L	EPA 8260B	3/6/2007	
Toluene - d8 (Surr)	95.3		% Recovery	EPA 8260B	3/6/2007	
4-Bromofluorobenzene (Surr)	96.6		% Recovery	EPA 8260B	3/6/2007	
1,2-Dichloroethane-d4 (Surr)	97.6		% Recovery	EPA 8260B	3/6/2007	
TPH as Diesel (Silica Gel)	< 1500	1500	ug/L	M EPA 8015	3/5/2007	
Octacosane (Diesel Silica Gel Surr)	114		% Recovery	M EPA 8015	3/5/2007	

Approved By:



Matrix : Water

Lab Number : 55109-38

Report Number: 55109

Date: 3/12/2007

Sample: **SB-1-51-53'** Sample Date: 3/1/2007

Sample Date :3/1/2007	B.4	Method		Analysis	Date
Parameter	Measured Value	Reporting Limit	Units	Analysis Method	Analyzed
Benzene	120	0.50	u g/L	EPA 8260B	3/6/2007
Toluene	320	0.50	ug/L	EPA 8260B	3/6/2007
Ethylbenzene	160	0.50	ug/L	EPA 8260B	3/6/2007
Total Xylenes	500	0.50	ug/L	EPA 8260B	3/6/2007
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	3/6/2007
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	3/6/2007
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	3/6/2007
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	3/6/2007
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	3/6/2007
TPH as Gasoline	5200	200	ug/L	EPA 8260B	3/6/2007
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	3/6/2007
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	3/6/2007
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	3/6/2007
4-Bromofluorobenzene (Surr)	107		% Recovery	EPA 8260B	3/6/2007
1,2-Dichloroethane-d4 (Surr)	99.9		% Recovery	EPA 8260B	3/6/2007
TPH as Diesel (Silica Gel)	< 800	800	ug/L	M EPA 8015	3/5/2007
Octacosane (Diesel Silica Gel Surr)	102		% Recovery	M EPA 8015	3/5/2007

Approved By:

Joel Kiff

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Sample: SB-2 Matrix: Water Lab Number: 55109-39

Sample Date :2/27/2007

Cample Bate .E/27/2007	<u>M</u> ethod			A I ! -	D-1-	
Parameter	Measured Value	Reporting Limit	Units	Analysis Method	Date Analyzed	
Benzene	0.60	0.50	ug/L	EPA 8260B	3/5/2007	
Toluene	2.8	0.50	ug/L	EPA 8260B	3/5/2007	
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	3/5/2007	
Total Xylenes	0.77	0.50	ug/L	EPA 8260B	3/5/2007	
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	3/5/2007	
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	3/5/2007	
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	3/5/2007	
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	3/5/2007	
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	3/5/2007	
TPH as Gasoline	5200	200	ug/L	EPA 8260B	3/6/2007	
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	3/5/2007	
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	3/5/2007	
Toluene - d8 (Surr)	90.7		% Recovery	EPA 8260B	3/5/2007	
4-Bromofluorobenzene (Surr)	89.6		% Recovery	EPA 8260B	3/5/2007	
1,2-Dichloroethane-d4 (Surr)	106		% Recovery	EPA 8260B	3/5/2007	
TPH as Diesel (Silica Gel)	190000	500	ug/L	M EPA 8015	3/9/2007	
Octacosane (Diesel Silica Gel Surr)	Diluted Out		% Recovery	M EPA 8015	3/9/2007	

Approved By:

Joel Kiff

Report Number: 55109

Date: 3/12/2007

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



Matrix : Water Lab Number : 55109-40

Report Number: 55109

Date: 3/12/2007

Sample Date :2/27/2007

Sample: SB-3

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed	
Benzene	< 0.50	0.50	ug/L	EPA 8260B	3/6/2007	
Toluene	2.6	0.50	ug/L	EPA 8260B	3/6/2007	
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	3/6/2007	
Total Xylenes	0.88	0.50	ug/L	EPA 8260B	3/6/2007	
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	3/6/2007	
Diisopropyl ether (DIPE)	< 0.50	0.50	u g /L	EPA 8260B	3/6/2007	
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	3/6/2007	
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	3/6/2007	
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	3/6/2007	
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	3/6/2007	
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	3/6/2007	
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	3/6/2007	
Toluene - d8 (Surr)	97.2		% Recovery	EPA 8260B	3/6/2007	
4-Bromofluorobenzene (Surr)	105		% Recovery	EPA 8260B	3/6/2007	
1,2-Dichloroethane-d4 (Surr)	101		% Recovery	EPA 8260B	3/6/2007	
TPH as Diesel (Silica Gel)	700	50	ug/L	M EPA 8015	3/9/2007	
Octacosane (Diesel Silica Gel Surr)	132		% Recovery	M EPA 8015	3/9/2007	

Approved By:



Date: 3/12/2007

Report Number: 55109

Sample: SB-4 Matrix: Water Lab Number: 55109-41

Sample Date :2/27/2007

Sample Date :2/27/2007					
Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	3/5/2007
Toluene	2.7	0.50	ug/L	EPA 8260B	3/5/2007
Ethylbenzene	6.8	0.50	ug/L	EPA 8260B	3/5/2007
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	3/5/2007
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	3/5/2007
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	3/5/2007
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	3/5/2007
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	3/5/2007
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	3/5/2007
TPH as Gasoline	260	50	ug/L	EPA 8260B	3/5/2007
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	3/5/2007
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	3/5/2007
Toluene - d8 (Surr)	96.0		% Recovery	EPA 8260B	3/5/2007
4-Bromofluorobenzene (Surr)	95.7		% Recovery	EPA 8260B	3/5/2007
1,2-Dichloroethane-d4 (Surr)	101		% Recovery	EPA 8260B	3/5/2007
TPH as Diesel (Silica Gel)	7900	50	ug/L	M EPA 8015	3/3/2007
Octacosane (Diesel Silica Gel Surr)	102		% Recovery	M EPA 8015	3/3/2007

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Report Number: 55109

Date: 3/12/2007

Sample: **SB-5** Matrix: Water Lab Number: 55109-42

Sample Date :2/28/2007

Campie Bate :E/20/2007	Measured	Method Reporting		Analysis	Date
Parameter	Value	Limit	Units	Method	Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	3/5/2007
Toluene	2.8	0.50	ug/L	EPA 8260B	3/5/2007
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	3/5/2007
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	3/5/2007
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	3/5/2007
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	3/5/2007
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	3/5/2007
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	3/5/2007
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	3/5/2007
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	3/5/2007
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	3/5/2007
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	3/5/2007
Toluene - d8 (Surr)	102		% Recovery	EPA 8260B	3/5/2007
4-Bromofluorobenzene (Surr)	99.3		% Recovery	EPA 8260B	3/5/2007
1,2-Dichloroethane-d4 (Surr)	102		% Recovery	EPA 8260B	3/5/2007
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	3/6/2007
Octacosane (Diesel Silica Gel Surr)	127		% Recovery	M EPA 8015	3/6/2007

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Report Number: 55109

Date: 3/12/2007

Matrix: Water Lab Number: 55109-43 Sample: SB-6

Sample Date :2/28/2007		Method			
Parameter	Measured Value	Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	3/5/2007
Toluene	2.3	0.50	ug/L	EPA 8260B	3/5/2007
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	3/5/2007
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	3/5/2007
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	3/5/2007
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	3/5/2007
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	3/5/2007
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	3/5/2007
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	3/5/2007
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	3/5/2007
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	3/5/2007
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	3/5/2007
Toluene - d8 (Surr)	95.7		% Recovery	EPA 8260B	3/5/2007
4-Bromofluorobenzene (Surr)	96.3		% Recovery	EPA 8260B	3/5/2007
1,2-Dichloroethane-d4 (Surr)	100		% Recovery	EPA 8260B	3/5/2007
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	3/9/2007
Octacosane (Diesel Silica Gel Surr)	99.2		% Recovery	M EPA 8015	3/9/2007

Approved By:



Date: 3/12/2007

Report Number: 55109

Matrix: Water Lab Number: 55109-44 Sample: SB-7

Method

·	
Parameter	

Sample Date :2/28/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis M ethod	Date Analyzed
Benzene	0.72	0.50	ug/L	EPA 8260B	3/5/2007
Toluene	1.6	0.50	ug/L	EPA 8260B	3/5/2007
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	3/5/2007
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	3/5/2007
Methyl-t-butyl ether (MTBE)	9.8	0.50	ug/L	EPA 8260B	3/5/2007
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	3/5/2007
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	3/5/2007
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	3/5/2007
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	3/5/2007
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	3/5/2007
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	3/5/2007
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	3/5/2007
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	3/5/2007
4-Bromofluorobenzene (Surr)	101		% Recovery	EPA 8260B	3/5/2007
1,2-Dichloroethane-d4 (Surr)	102		% Recovery	EPA 8260B	3/5/2007
TPH as Diesel (Silica Gel)	190	50	ug/L	M EPA 8015	3/6/2007
Octacosane (Diesel Silica Gel Surr)	107		% Recovery	M EPA 8015	3/6/2007

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Date: 3/12/2007

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Parameter	Measured Value	Method Reportin Limit	ig Units	Analysis Method	Date Analyzed	Parameter	Measured Value	Method Reportir Limit	ng Units	Analysis <u>Method</u>	Date Analyzed
TPH as Diesel (Silica Gel)	< 1.0	1.0	mg/Kg	M EPA 8015	3/3/2007	_				ED4 0000B	0/0/0007
1-Chlorooctadecane (Silica Gel Surr)	90.3		%	M EPA 8015	3/3/2007	Benzene	< 0.0050 < 0.0050	0.0050 0.0050	mg/Kg mg/Kg	EPA 8260B EPA 8260B	3/3/2007 3/3/2007
· · · · · · · · · · · · · · · · · · ·						Toluene Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	3/3/2007	Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
Octacosane (Diesel Silica Gel Surr)	93.2		%	M EPA 8015	3/3/2007	Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
,						Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
TPH as Dieset (Silica Gel)	< 1.0	1.0	mg/Kg	M EPA 8015	3/6/2007	Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
1-Chlorooctadecane (Silica Gel Surr)	75.4		%	M EPA 8015	3/6/2007	Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
						Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
TPH as Diesel (Silica Get)	< 50	50	ug/L	M EPA 8015	3/6/2007	TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	3/3/2007
Octacosane (Diesel Silica Gel Surr)	94.8		%	M EPA 8015	3/6/2007	1.2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
						1.2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/3/2007
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	3/7/2007	Toluene - d8 (Surr)	101		%	EPA 8260B	3/3/2007
Octacosane (Diesel Silica Gel Surr)	93.8		%	M EPA 8015	3/7/2007	4-Bromofluorobenzene (Surr)	97.4		%	EPA 8260B	3/3/2007
						1,2-Dichloroethane-d4 (Surr)	103		%	EPA 8260B	3/3/2007
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	3/9/2007	,					
Octacosane (Diesel Silica Gel Surr)	93.5		%	M EPA 8015	3/9/2007	Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/6/2007
						Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/6/2007
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/2/2007	Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/6/2007
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/2/2007	Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/6/2007
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/2/2007	Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/6/2007
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/2/2007	Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/6/2007
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/2/2007	Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/6/2007
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/2/2007 3/2/2007	Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/6/2007
Ethyl-t-butyl ether (ETBE)	< 0.0050 < 0.0050	0.0050 0.0050	mg/Kg mg/Kg	EPA 8260B EPA 8260B	3/2/2007	Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/6/2007
Tert-amyl methyl ether (TAME) Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/2/2007	TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	3/6/2007
				EPA 8260B		1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/6/2007
TPH as Gasoline	< 1.0	1.0	mg/Kg		3/2/2007	1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/6/2007
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/2/2007	Toluene - d8 (Surr)	99.3		%	EPA 8260B	3/6/2007
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	3/2/2007	4-Bromofluorobenzene (Surr)	96.9		%	EPA 8260B	3/6/2007
Toluene - d8 (Surr)	97.9		%	EPA 8260B	3/2/2007	1,2-Dichloroethane-d4 (Surr)	106		%	EPA 8260B	3/6/2007
4-Bromofluorobenzene (Surr)	97.1		%	EPA 8260B	3/2/2007						
1,2-Dichloroethane-d4 (Surr)	105		%	EPA 8260B	3/2/2007						

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Date: 3/12/2007

QC Report : Method Blank Data

Project Name : Lim

Project Number: 2808

Parameter Measured Value Reporting Measured Value Report Medical Method Analysis Analysis Method Analysis Analysis Analysis Method Analysis Analysis Analysis Analysis Analysis Analysis Analysis Analysis Analysis Analysis Analysis Analysis Analysis Analysis Analysis Analysis Analysis Analysis Analysis Analysis Analysis Analysis Analysis Analysis Analysis Analysis Analysis Analysis Analysis Analysis Analysis Analysis Analysis Analysis <t< th=""><th></th><th>Manageral</th><th>Method</th><th>_</th><th>Amakaia</th><th>Data</th><th></th><th>Measured</th><th>Method</th><th>20</th><th>Analysis</th><th>Date</th></t<>		Manageral	Method	_	Amakaia	Data		Measured	Method	20	Analysis	Date
Benzene	Parameter						Parameter					
Benzane	TPH as Gasoline	< 50	50	ug/L	EPA 8260B	3/6/2007	Benzene	< 0.50	0.50	ug/L	EPA 8260B	3/6/2007
Total Angle Control				•			Toluene	< 0.50	0.50	ug/L	EPA 8260B	3/6/2007
Ellybenzene	Benzene	< 0.50	0.50	ug/L	EPA 8260B	3/5/2007	Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	3/6/2007
Total Xylenes	Toluene	< 0.50	0.50	ug/L	EPA 8260B	3/5/2007	Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	3/6/2007
Methyl-l-butyl ether (MTBE)	Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	3/5/2007	Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	3/6/2007
Part	Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	3/5/2007	Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	3/6/2007
EPA 8260B 39/2007 Tert-Butanol C	Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	3/5/2007	Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	3/6/2007
Tert-amyl methyl ether (TAME)	Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	3/5/2007	Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	3/6/2007
Tert-Butanol	Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	3/5/2007	Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	3/6/2007
TPH as Gasoline	Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	3/5/2007	TPH as Gasoline	< 50	50	ug/L	EPA 8260B	3/6/2007
TPH as Gasoline	Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	3/5/2007	1.2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	3/6/2007
1,2-Dibromoethane	TPH as Gasoline	< 50	50	ug/L	EPA 8260B	3/5/2007	· ·	< 0.50	0.50	-	EPA 8260B	3/6/2007
Toluene - d8 (Surr) 95.5	1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	3/5/2007	Toluene - d8 (Surr)	103		%	EPA 8260B	3/6/2007
## Bromofluorobenzene (Surr) 94.7	1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	3/5/2007	4-Bromofluorobenzene (Surr)	100		%	EPA 8260B	3/6/2007
1.2-Dichloroethane-d4 (Surr) 102 % EPA 8260B 3/5/2007 Benzene < 0.50 0.50 ug/L EPA 8260B 3/5/2007 Toluene < 0.50 0.50 ug/L EPA 8260B 3/5/2007 Ethylbenzene < 0.50 0.50 ug/L EPA 8260B 3/5/2007 Ethylbenzene < 0.50 0.50 ug/L EPA 8260B 3/5/2007 Toluene < 0.50 0.50 ug/L EPA 8260B 3/5/2007 Tola Xylenes < 0.50 0.50 ug/L EPA 8260B 3/5/2007 Tola Xylenes < 0.50 0.50 ug/L EPA 8260B 3/5/2007 Tola Xylenes < 0.50 0.50 ug/L EPA 8260B 3/5/2007 Tola Xylenes < 0.50 0.50 ug/L EPA 8260B 3/5/2007 Tola Xylenes < 0.50 0.50 ug/L EPA 8260B 3/5/2007 Tola Xylenes < 0.50 0.50 ug/L EPA 8260B 3/5/2007 Tola Xylenes < 0.50 0.50 ug/L EPA 8260B 3/5/2007 Tola Xylenes < 0.50 0.50 ug/L EPA 8260B 3/5/2007 Tola Xylenes < 0.50 0.50 ug/L EPA 8260B 3/5/2007 Tola Xylenes < 0.50 0.50 ug/L EPA 8260B 3/5/2007 Tola Xylenes Color (DIPE) < 0.50 0.50 ug/L EPA 8260B 3/5/2007 Tola Xylenes < 0.50 0.50 ug/L EPA 8260B 3/5/2007 Tola Xylenes Color (DIPE) < 0.50 0.50 ug/L EPA 8260B 3/5/2007 Tola Xylenes Color (DIPE) < 0.50 0.50 ug/L EPA 8260B 3/5/2007 Tola Xylenes Color (DIPE) < 0.50 0.50 ug/L EPA 8260B 3/5/2007 Tola Xylenes Color (DIPE) < 0.50 0.50 ug/L EPA 8260B 3/5/2007 Tola Xylenes Color (DIPE) < 0.50 0.50 ug/L EPA 8260B 3/5/2007 Tola Xylenes Color (DIPE) < 0.50 0.50 ug/L EPA 8260B 3/5/2007 Tola Xylenes Color (DIPE) < 0.50 0.50 ug/L EPA 8260B 3/5/2007 Tola Xylenes Color (DIPE) < 0.50 0.50 ug/L EPA 8260B 3/5/2007 Tola Xylenes Color (DIPE) < 0.50 0.50 ug/L EPA 8260B 3/5/2007 Tola Xylenes Color (DIPE) < 0.50 0.50 ug/L EPA 8260B 3/5/2007 Tola Xylenes Color (DIPE) < 0.50 0.50 ug/L EPA 8260B 3/5/2007 Tola Xylenes Color (DIPE) < 0.50 0.50 ug/L EPA 8260B 3/5/2007 Tola Xylenes Color (DIPE) < 0.50 0.50 ug/L EPA 8260B 3/5/2007 Tola Xylenes Colo	Toluene - d8 (Surr)	95.5		%	EPA 8260B	3/5/2007	1,2-Dichloroethane-d4 (Surr)	103		%	EPA 8260B	3/6/2007
Figure F	4-Bromofluorobenzene (Surr)	94.7		%	EPA 8260B	3/5/2007						
Benzene < 0.50 0.50 ug/L EPA 8260B 3/6/2007 Ethylbenzene < 0.50 0.50 ug/L EPA 8260B 3/6/2007 Toluene < 0.50	1,2-Dichloroethane-d4 (Surr)	102		%	EPA 8260B	3/5/2007	Benzene	< 0.50	0.50	ug/L	EPA 8260B	
Toluene							Toluene	< 0.50	0.50	ug/L	EPA 8260B	
Ethylbenzene	Benzene	< 0.50	0.50	ug/L	EPA 8260B	3/6/2007	Ethylbenzene	< 0.50		_		
Total Xylenes	Toluene	< 0.50	0.50	ug/L	EPA 8260B	3/6/2007	Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	3/5/2007
Methyl-t-butyl ether (MTBE) < 0.50 0.50 ug/L EPA 8260B 3/6/2007 Ethyl-t-butyl ether (ETBE) < 0.50 0.50 ug/L EPA 8260B 3/5/2007 Diisopropyl ether (DIPE) < 0.50	Ethylbenzene			ug/L			Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	3/5/2007
Diisopropyl ether (DIPE) < 0.50	Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	3/6/2007	Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	
Ethyl-t-butyl ether (ETBE) < 0.50	Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	3/6/2007	Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L		
Tert-amyl methyl ether (TAME) < 0.50	Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	3/6/2007	Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L		
Tert-Butanol < 5.0 5.0 ug/L EPA 8260B 3/6/2007 1,2-Dibromoethane < 0.50 0.50 ug/L EPA 8260B 3/5/2007 1,2-Dibrloroethane < 0.50	Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	3/6/2007	Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	3/5/2007
1,2-Dichloroethane < 0.50	Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B		1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	3/5/2007
1,2-Dibromoethane < 0.50	Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	3/6/2007	1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	3/5/2007
Toluene - d8 (Surr) 102 % EPA 8260B 3/6/2007 1,2-Dichloroethane-d4 (Surr) 106 % EPA 8260B 3/5/2007 4-Bromofluorobenzene (Surr) 108 % EPA 8260B 3/6/2007	1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	3/6/2007	Toluene - d8 (Surr)	89.7		%	EPA 8260B	3/5/2007
4-Bromofluorobenzene (Surr) 108 % EPA 8260B 3/6/2007	1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	3/6/2007	4-Bromofluorobenzene (Surr)	97.4		%	EPA 8260B	3/5/2007
4-Bromofluorobenzene (Surr) 108 % EPA 8260B 3/6/2007	Toluene - d8 (Surr)	102		%	EPA 8260B	3/6/2007	1,2-Dichloroethane-d4 (Surr)	106		%	EPA 8260B	3/5/2007
1,2-Dichloroethane-d4 (Surr) 104 % EPA 8260B 3/6/2007	, ,	108		%	EPA 8260B	3/6/2007						
	1,2-Dichloroethane-d4 (Surr)	104		%	EPA 8260B	3/6/2007						

Approved By:

Date: 3/12/2007

QC Report : Method Blank Data

Project Name: Lim

Project Number: 2808

		Method			_
	Measured	Reportir	ng	Analysis	Date
Parameter	<u>Value</u>	Limit	Unit <u>s</u>	Method	Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	3/6/2007
Toluene	< 0.50	0.50	ug/L	EPA 8260B	3/6/2007
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	3/6/2007
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	3/6/2007
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	3/6/2007
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	3/6/2007
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	3/6/2007
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	3/6/2007
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	3/6/2007
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	3/6/2007
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	3/6/2007
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	3/6/2007
Toluene - d8 (Surr)	96.9		%	EPA 8260B	3/6/2007
4-Bromofluorobenzene (Surr)	105		%	EPA 8260B	3/6/2007
1,2-Dichloroethane-d4 (Surr)	102		%	EPA 8260B	3/6/2007
Benzene	< 0.50	0.50	ug/L	EPA 8260B	3/6/2007
Toluene	< 0.50	0.50	ug/L	EPA 8260B	3/6/2007

Method
Measured Reporting Analysis Date
Parameter Value Limit Units Method Analyzed

Approved By:

Date: 3/12/2007

Project Name : **Lim**Project Number : **2808**

QC Report : Matrix Spike/ Matrix Spike Duplicate

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	e Units	Analysis Method	Date Analyzed		Duplicat Spiked Sample Percent Recov.	Relative	Spiked Sample Percent Recov Limit	Relative Percent Diff. Limit
TPH as Diesel	Blank	<50	1000	1000	882	945	ug/L	M EPA 8015	3/3/07	88.2	94.5	6.91	70-130	25
TPH as Diesel	Blank	<50	1000	1000	850	857	ug/L	M EPA 8015	3/6/07	85.0	85.7	0.852	70-130	25
TPH as Diesel	Blank	<50	1000	1000	843	903	ug/L	M EPA 8015	3/7/07	84.3	90.3	6.86	70-130	25
Benzene Toluene Tert-Butanol	55062-04 55062-04 55062-04	<0.0050 <0.0050 <0.0050	0.200	0.0393 0.0393 0.196	0.0413 0.0414 0.203	0.0398 0.0394 0.192	mg/Kg mg/Kg mg/Kg	EPA 8260B EPA 8260B	3/2/07 3/2/07 3/2/07	103 103 102	101 100 97.6	1.88 2.94 4.07	70-130 70-130 70-130	25 25 25
Methyl-t-Butyl Ethe	r 55062-04	<0.0050	0.0400	0.0393	0.0402	0.0389	mg/Kg	EPA 8260B	3/2/07	100	99.0	1.43	70-130	25
Benzene Toluene Tert-Butanol Methyl-t-Butyl Ethe	55109-29 55109-29 55109-29 r 55109-29	<0.0050 <0.0050 <0.0050 <0.0050	0.0395 0.0395 0.198 0.0395	0.0394 0.0394 0.197 0.0394	0.0408 0.0403 0.186 0.0398	0.0414 0.0404 0.185 0.0407	mg/Kg mg/Kg mg/Kg mg/Kg	EPA 8260B EPA 8260B	3/3/07 3/3/07 3/3/07 3/3/07	103 102 94.0 101	105 103 94.1 103	1.82 0.794 0.0538 2.65	70-130 70-130 70-130 70-130	25 25 25 25
Benzene Toluene Tert-Butanol Methyl-t-Butyl Ethe	55109-05 55109-05 55109-05 r 55109-05	<0.0050 <0.0050 <0.0050 <0.0050	0.0394 0.0394 0.197 0.0394	0.0398 0.0398 0.199 0.0398	0.0382 0.0372 0.164 0.0374	0.0373 0.0362 0.169 0.0370	mg/Kg mg/Kg mg/Kg mg/Kg	EPA 8260B EPA 8260B	3/6/07 3/6/07 3/6/07 3/6/07	96.8 94.4 83.1 94.9	93.8 90.9 85.0 92.9	3.11 3.74 2.22 2.12	70-130 70-130 70-130 70-130	25 25 25 25
Benzene	55151-08	<0.50	40.0	39.8	41.0	42.0	ug/L	EPA 8260B	3/6/07	102	106	3.06	70-130	25

Approved By:

Date: 3/12/2007

Project Name : Lim
Project Number : 2808

QC Report : Matrix Spike/ Matrix Spike Duplicate

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	e Units	Analysis Method	Date Analyzed	Percent	Duplicat Spiked Sample Percent Recov.	Relative	Limit	Relative Percent Diff. Limit
Toluene	55151-08	<0.50	40.0	39.8	40.6	40.4	ug/L	EPA 8260B	3/6/07	102	102	0.0552	70-130	25
Tert-Butanol	55151-08	11	200	199	200	203	ug/L	EPA 8260B	3/6/07	94.8	96.7	2.01	70-130	25
Methyl-t-Butyl Ethe	er 55151-08	1.9	40.0	39.8	41.0	43.3	ug/L	EPA 8260B	3/6/07	97.8	104	6.23	70-130	25
Benzene	55151-01	<0.50	40.0	40.0	39.1	38.3	ug/L	EPA 8260B	3/5/07	97.8	95.8	2.16	70-130	25
Toluene	55151-01	<0.50	40.0	40.0	37.2	36.3	ug/L	EPA 8260B	3/5/07	93.0	90.8	2.30	70-130	25
Tert-Butanol	55151-01	<5.0	200	200	196	193	ug/L	EPA 8260B	3/5/07	98.2	96.7	1.59	70-130	25
Methyl-t-Butyl Ethe	er 55151-01	<0.50	40.0	40.0	39.6	39.8	ug/L	EPA 8260B	3/5/07	98.9	99.6	0.698	70-130	25
Benzene	55108-03	<0.50	40.0	40.0	37.9	36.7	ug/L	EPA 8260B	3/6/07	94.9	91.8	3.26	70-130	25
Toluene	55108-03	<0.50	40.0	40.0	39.0	37.1	ug/L	EPA 8260B	3/6/07	97.6	92.8	5.08	70-130	25
Tert-Butanol	55108-03	<5.0	200	200	211	203	ug/L	EPA 8260B	3/6/07	105	102	3.63	70-130	25
Methyl-t-Butyl Ethe	er 55108-03	<0.50	40.0	40.0	38.8	39.6	ug/L	EPA 8260B	3/6/07	97.1	98.9	1.81	70-130	25
Benzene	55151-03	<0.50	40.0	40.0	42.5	41.6	ug/L	EPA 8260B	3/5/07	106	104	2.05	70-130	25
Toluene	55151-03	<0.50	40.0	40.0	41.7	41.0	ug/L	EPA 8260B	3/5/07	104	102	1.87	70-130	25
Tert-Butanol	55151-03	240	200	200	439	430	ug/L	EPA 8260B	3/5/07	101	97.2	4.24	70-130	25
Methyl-t-Butyl Ethe	er 55151-03	1.9	40.0	40.0	42.9	42.7	ug/L	EPA 8260B	3/5/07	102	102	0.433	70-130	25
Benzene	55151-02	6.0	40.0	40.0	45.3	43.7	ug/L	EPA 8260B	3/5/07	98.3	94.3	4.16	70-130	25
Toluene	55151-02	2.6	40.0	40.0	39.2	38.5	ug/L	EPA 8260B	3/5/07	91.6	89.8	1.96	70-130	25
Tert-Butanol	55151-02	<5.0	200	200	201	215	ug/L	EPA 8260B	3/5/07	101	107	6.61	70-130	25
Methyl-t-Butyl Ethe	er 55151-02	<0.50	40.0	40.0	39.7	39.8	ug/L	EPA 8260B	3/5/07	99.2	99.5	0.329	70-130	25

Approved By:

ed By: Joe Kiff

Date: 3/12/2007

Project Name : Lim
Project Number : 2808

QC Report : Matrix Spike/ Matrix Spike Duplicate

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	e Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.		Relative	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
T di di liotoi														
Benzene	55108-02	<0.50	40.0	40.0	39.0	37.6	ug/L	EPA 8260B	3/6/07	97.5	93.9	3.77	70-130	25
Toluene	55108-02	<0.50	40.0	40.0	37.2	35.8	ug/L	EPA 8260B	3/6/07	93.1	89.5	3.94	70-130	25
Tert-Butanol	55108-02	<5.0	200	200	190	193	ug/L	EPA 8260B	3/6/07	94.9	96.4	1.54	70-130	25
Methyl-t-Butyl Ethe	er 55108-02	<0.50	40.0	40.0	37.9	37.2	ug/L	EPA 8260B	3/6/07	94.7	93.0	1.78	70-130	25
Benzene	55171-09	<0.50	40.0	40.0	40.4	38.7	ug/L	EPA 8260B	3/6/07	101	96.9	4.22	70-130	25
Toluene	55171-09	<0.50	40.0	40.0	41.8	40.3	ug/L	EPA 8260B	3/6/07	105	101	3.82	70-130	25
Tert-Butanol	55171-09	<5.0	200	200	202	206	ug/L	EPA 8260B	3/6/07	101	103	1.82	70-130	25
Methyl-t-Butyl Ethe		<0.50	40.0	40.0	44.9	45.0	ug/L	EPA 8260B	3/6/07	112	112	0.372	70-130	25
TPH as Diesel	55109-09	6.4	20.0	20.0	18.0	18.1	mg/Kg	M EPA 8015	3/3/07	68.0	68.4	0.643	60-140	25
TPH as Diesel	55068-02	1.5	20.0	20.0	19.2	19.6	mg/Kg	M EPA 8015	3/7/07	89.4	91.1	1.91	60-140	25
TPH as Diesel	Blank	<50	1000	1000	838	883	ug/L	M EPA 8015	3/9/07	83.8	88.3	5.16	70-130	25

Approved By:

Date: 3/12/2007

Project Name : Lim
Project Number : 2808

QC Report : Laboratory Control Sample (LCS)

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	0.0399	mg/Kg	EPA 8260B	3/2/07	104	70-130
Toluene	0.0399	mg/Kg	EPA 8260B	3/2/07	101	70-130
Tert-Butanol	0.200	mg/Kg	EPA 8260B	3/2/07	95.6	70-130
Methyl-t-Butyl Ether	0.0399	mg/Kg	EPA 8260B	3/2/07	99.3	70-130
, ,						
Benzene	0.0398	mg/Kg	EPA 8260B	3/3/07	108	70-130
Toluene	0.0398	mg/Kg	EPA 8260B	3/3/07	105	70-130
Tert-Butanol	0.199	mg/Kg	EPA 8260B	3/3/07	98.8	70-130
Methyl-t-Butyl Ether	0.0398	mg/Kg	EPA 8260B	3/3/07	110	70-130
, ,						
Benzene	0.0396	mg/Kg	EPA 8260B	3/6/07	101	70-130
Toluene	0.0396	mg/Kg	EPA 8260B	3/6/07	97.6	70-130
Tert-Butanol	0.198	mg/Kg	EPA 8260B	3/6/07	98.5	70-130
Methyl-t-Butyl Ether	0.0396	mg/Kg	EPA 8260B	3/6/07	104	70-130
, ,						
Benzene	40.0	ug/L	EPA 8260B	3/6/07	104	70-130
Toluene	40.0	ug/L	EPA 8260B	3/6/07	100	70-130
Tert-Butanol	200	ug/L	EPA 8260B	3/6/07	99.1	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	3/6/07	104	70-130
	-	J				
Benzene	40.0	ug/L	EPA 8260B	3/5/07	96.0	70-130

Approved By

By: Joe Kiff

Date: 3/12/2007

Project Name : Lim
Project Number : 2808

QC Report : Laboratory Control Sample (LCS)

	Spike		Analysis	Date	LCS Percent	LCS Percent Recov.	
Parameter	Level	Units	Method	Analyzed	Recov.	Limit	
Toluene	40.0	ug/L	EPA 8260B	3/5/07	93.8	70-130	
Tert-Butanol	200	ug/L	EPA 8260B	3/5/07	97.1	70-130	
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	3/5/07	96.9	70-130	
Benzene	40.0	ug/L	EPA 8260B	3/6/07	92.5	70-130	
Toluene	40.0	ug/L	EPA 8260B	3/6/07	97.8	70-130	
Tert-Butanol	200	ug/L	EPA 8260B	3/6/07	105	70-130	
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	3/6/07	94.0	70-130	
, ,		•					
Benzene	40.0	ug/L	EPA 8260B	3/5/07	104	70-130	
Toluene	40.0	ug/L	EPA 8260B	3/5/07	105	70-130	
Tert-Butanol	200	ug/L	EPA 8260B	3/5/07	103	70-130	
Methyl-t-Butyl Ether	40.0	ug/∟ ug/L	EPA 8260B	3/5/07	106	70-130	
Methyl-t-butyl Ether	40.0	ugru	LI / 0200B	0,0,0,	100	10 100	
_			ED 1 00005	0/5/07	00.0	70.420	
Benzene	40.0	ug/L	EPA 8260B	3/5/07	99.8	70-130	
Toluene	40.0	ug/L	EPA 8260B	3/5/07	93.6	70-130	
Tert-Butanol	200	ug/L	EPA 8260B	3/5/07	101	70-130	
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	3/5/07	102	70-130	
Benzene	40.0	ug/L	EPA 8260B	3/6/07	98.6	70-130	
Toluene	40.0	ug/L	EPA 8260B	3/6/07	96.8	70-130	
Tert-Butanol	200	ug/L	EPA 8260B	3/6/07	97.2	70-130	

Approved By:

pe Kiff

Date: 3/12/2007

Project Name : Lim
Project Number : 2808

QC Report : Laboratory Control Sample (LCS)

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit		
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	3/6/07	96.7	70-130		
Benzene	40.0	ug/L	EPA 8260B	3/6/07	96.2	70-130		
Toluene	40.0	ug/L	EPA 8260B	3/6/07	99.3	70-130		
Tert-Butanol	200	ug/L	EPA 8260B	3/6/07	100	70-130		
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	3/6/07	104	70-130		
TPH as Diesel	20.0	mg/Kg	M EPA 8015	3/3/07	88.3	70-130		
TDU es Diesel	20.0	malka	M EDA 9015	216107	06.0	70-130		
TPH as Diesel	20.0	mg/Kg	M EPA 8015	3/0/07	86.2	10-130		

Approved By:

oe Kiff

Aqua Science Engineers, Inc. 208 W. El Pintado Road Danville, CA 94526 (925) 820-9391 FAX (925) 837-4853

Chain of Custody

GALIPIER (CIGHE																		,	,	_
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SPECIAL INSTRUCTIONS: SAMPLE ID.	DATE	TiviE	MATRIX	TPH-GAS / MTBE & BTEX (EPA 5030/8015-8020)	TPH-DIESEL J/Silica GJ (EPA 3510/8015) 4.mm	TPH-DIESEL & MOTOR OIL (EPA 3510/8015)	VOLATILE ORGANICS (EPA 624/8240/8260)	SEMI-VOLATILE ORGANICS (EPA 625/8270)	OIL & GREASE (EPA 5520)	LUFT METALS (5) (EPA 6010+7000)			US 40		Pb (TOTAL or DISSOLVED) (EPA 6010)	PUKGEABLE HALOCARBONS (EPA 601/2010)	MULTI-RANGE HYDROCARBONS	SHICA-GEL CLEANIJP	194-4/BTBX1 5 0xys/	HOLD EDF
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Aqua Science Engineers, Inc
208 W. El Pintado Road
Danville, CA 94526
(925) 820-9391
FAX (925) 837-4853

Chain of Custody

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SAMPLER (SIGNATURE) M. M.		eri i de Distri	0 721 a	NAME	<u></u>	·							PΑ(
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Aqua Science Engineers, Inc. 208 W. El Pintado Road Danville, CA 94526 (925) 820-9391 FAX (925) 837-4853 SAMPLER (SIGNATURE)

Chain of Custody

M. Funa Lim PROJECT NAME JÓB NO. Street, Oakland APERESS 250 **ANALYSIS REQUEST** SPECIAL INSTRUCTIONIS. SE (TOTAL or DISSOLVED) SAMPLE ID. HOLD #1777 \$178 \$188 \$188 2-27-01 1225 X 227-17 12 30 2-28-7 911) × 3 X X 1130 7 33 RELINQUISHED BY: RECEIVED BY: LECQUISHED BY: COMMENTS: RECEIVED BY LABORATORY: 134 miles 1154 HU-VUA (signature) (signature) (time) supporture) (time) Ron MGEE 030207 TURN AROUND TIME (printed name) (printed name) (date) ri ninted frame). (date) STANDARD 24Hr 48Hr 72Hr Company-ASE, INC. OTHER: **⊘**onipanyrightaffy i

Aqua Science Engineers, Inc. 208 W. El Pintado Road Danville, CA 94526 (925) 820-9391 FAX (925) 837-4853

Chain of Custody

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Aqua Science Engineers, Inc. 208 W. El Pintado Road Chain of Custody Danville, CA 94526 (925) 820-9391 FAX (925) 837-1853 SAMPLER (SIGNATURE) PROJECT NAME M. Ru JOB NO. ADDRESS 250 Street, Oaklad **ANALYSIS REQUEST** PLPGELBLE HALOCARBONS (EPA 501,8010) SPECIAL INSTRUCTIONS: PESTICIDES (EPA 3081) HOLD SAMPLE ID. 58-7 1400 RELINQUISHED BY: RECEIVED BY: COMMENTS: BE LENCUISHED BY: RECEIVED BY LABORATORY: on missa 1154 HU = VOA; (signature) (time) (signature) (time) : ianature) M. Rauser RonMcGee 030207 3-1-07 TURN AROUND TIME (printed name) (date) (printed name) (date) g noted name) (date) STANDARD 24Hr 48Hr 72Hr OTHER: Company-ASE, INC. Company-



Aqua Science Engineers, Inc. 55 Oak Court, Suite 220, Danville, CA 94526 (925) 820-9391 - Fax (925) 837-4853 - www.aquascienceengineers.com

APPENDIX D

Analytical Reports for Soil Vapor Samples



Air Toxics Ltd. Introduces the Electronic Report

Thank you for choosing Air Toxics Ltd. To better serve our customers, we are providing your report by e-mail. This document is provided in Portable Document Format which can be viewed with Acrobat Reader by Adobe.

This electronic report includes the following:

- Work order Summary;
- · Laboratory Narrative;
- · Results; and
- Chain of Custody (copy).

0703294 **WORK ORDER #:**

Work Order Summary

CLIENT:

Mr. Robert Kitay

BILL TO:

Mr. Robert Kitay

Aqua Science Engineering

Aqua Science Engineering

208 West El Pintado

208 West El Pintado Danville, CA 95426

Danville, CA 95426

PHONE: FAX:

925-820-9391

P.O. #

DATE RECEIVED:

925-837-4853 03/12/2007

PROJECT#

2808 Lim

DATE COMPLETED:

03/23/2007

CONTACT:

Sarah Nguyen

			RECEIPT
FRACTION #	<u>NAME</u>	<u>TEST</u>	VAC/PRES.
01 A	SV-1	Modified TO-3	1.0 "Hg
02A	SV-2	Modified TO-3	5.5 "Hg
03A	SV-3	Modified TO-3	3.0 "Hg
04A	SV-4	Modified TO-3	5.5 "Hg
05A	SV-5	Modified TO-3	4.5 "Hg
06A	SV-7	Modified TO-3	5.0 "Hg
07A	Lab Blank	Modified TO-3	NA
08A	LCS	Modified TO-3	NA
08B	LCS	Modified TO-3	NA

CERTIFIED BY:

Sinda d. Fruman

03/23/07 DATE:

Laboratory Director

Certfication numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004

NY NELAP - 11291, UT NELAP - 9166389892

Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,

Accreditation number: E87680, Effective date: 07/01/06, Expiration date: 06/30/07

Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Air Toxics Ltd.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630 (916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020



LABORATORY NARRATIVE Modified TO-3 Aqua Science Engineering Workorder# 0703294

Six 1 Liter Summa Canister samples were received on March 12, 2007. The laboratory performed analysis for volatile organic compounds in air via modified EPA Method TO-3 using gas chromatography with photo ionization and flame ionization detection. The method involves concentrating up to 200 mL of sample. The concentrated aliquot is then dry purged to remove water vapor prior to entering the chromatographic system. The TPH (Gasoline Range) results are calculated using the response factor of Gasoline and correspond to the range of hydrocarbons from C5 to C10. A molecular weight of 100 is used to convert the TPH (Gasoline Range) ppmv result to ug/L.

See the data sheets for the reporting limits for each compound.

Method modifications taken to run these samples include:

Requirement	TO-3	ATL Modifications
Daily Calibration Standard Frequency	Prior to sample analysis and every 4 - 6 hrs	Prior to sample analysis and after the analytical batch = 20 samples</td
Initial Calibration Calculation	4-point calibration using a linear regression model	5-point calibration using average Response Factor
Initial Calibration Frequency	Weekly	When daily calibration standard recovery is outside 75 - 125 %, or upon significant changes to procedure or instrumentation
Moisture Control	Nafion system	Sorbent system
Minimum Detection Limit (MDL)	Calculated using the equation DL = A+3.3S, where A is intercept of calibration line and S is the standard deviation of at least 3 reps of low level standard	40 CFR Pt. 136 App. B
Preparation of Standards	Levels achieved through dilution of gas mixture	Levels achieved through loading various volumes of the gas mixture

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

The recovery of surrogate Fluorobenzene in samples SV-1, SV-2, SV-3, SV-4 and SV-7 was outside control limits due to high level hydrocarbon matrix interference. Data is reported as qualified.



Definition of Data Qualifying Flags

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:

- B Compound present in laboratory blank greater than reporting limit.
- J Estimated value.
- E Exceeds instrument calibration range.
- S Saturated peak.
- Q Exceeds quality control limits.
- U Compound analyzed for but not detected above the detection limit.
- M Reported value may be biased due to apparent matrix interferences.

File extensions may have been used on the data analysis sheets and indicates as follows:

- a-File was requantified
- b-File was quantified by a second column and detector
- r1-File was requantified for the purpose of reissue



Summary of Detected Compounds MODIFIED EPA METHOD TO-3 GC/PID/FID

Client Sample ID: SV-1

Lab ID#: 0703294-01A

Compound	Rot. Limit (ppmv)	Rpt. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)
Benzene	0.0021	0.0067	0.40	1.3
Toluene	0.0021	0.0079	0.21	0.78
Ethyl Benzene	0.0021	0.0091	0.031	0.13
m,p-Xylene	0.0021	0.0091	0.074	0.32
o-Xylene	0.0021	0.0091	0.044	0.19
TPH (Gasoline Range)	0.052	0.21	7.3	30

Client Sample ID: SV-2

Lab ID#: 0703294-02A

Compound	Rpt. Limit (ppmv)	Rpt. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)
Benzene	0.0025	0.0079	0.19	0.62
Toluene	0.0025	0.0093	0.16	0.62
Ethyl Benzene	0.0025	0.011	0.058	0.25
m,p-Xylene	0.0025	0.011	0.082	0.36
o-Xylene	0.0025	0.011	0.042	0.18
TPH (Gasoline Range)	0.062	0.25	10	42

Client Sample ID: SV-3

Lab ID#: 0703294-03A

Compound	Rpt. Limit (ppmv)	Rpt. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)
Benzene	0.0022	0.0072	0.13	0.42
Toluene	0.0022	0.0084	0.22	0.83
Ethyl Benzene	0.0022	0.0097	0.12	0.55
m,p-Xylene	0.0022	0.0097	0.17	0.74
o-Xylene	0.0022	0.0097	0.075	0.32
TPH (Gasoline Range)	0.056	0.23	12	47

Client Sample ID: SV-4

Lab ID#: 0703294-04A

	Rot. Limit	Rpt. Limit	Amount	Amount	
Compound	(ppmv)	(uG/L)	(ppmv)	(u G/L)	_
Benzene	0.0025	0.0079	0.11	0.36	
Toluene	0.0025	0.0093	0.23	0.86	



Summary of Detected Compounds MODIFIED EPA METHOD TO-3 GC/PID/FID

Client Sample ID: SV-4

Lab	ID#:	07032	294-04A
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0.0025	0.011	0.14	0.59
0.0025	0.011	0.18	0.77
0.0025	0.011	0.048 M	0.21 M
0.062	0.25	16	64
	0.0025 0.0025	0.0025 0.011 0.0025 0.011	0.0025 0.011 0.18 0.0025 0.011 0.048 M

Client Sample ID: SV-5

Lab ID#: 0703294-05A

	Rot. Limit	Rpt. Limit	Amount	Amount
Compound	(ppmv)	(uG/L)	(ppmv)	(uG/L)
Benzene	0.0024	0.0076	0.022	0.070
Toluene	0.0024	0.0090	0.019	0.071
Ethyl Benzene	0.0024	0.010	0.0040	0.017
m,p-Xylene	0.0024	0.010	0.0086	0.038
o-Xylene	0.0024	0.010	0.0047	0.020
TPH (Gasoline Range)	0.060	0.24	1.0	4.2

Client Sample ID: SV-7

Lab ID#: 0703294-06A

Compound	Rpt. Limit (ppmv)	Rpt. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)
Benzene	0.0032	0.010	0.83	2.7
Toluene	0.0032	0.012	0.36	1.4
Ethyl Benzene	0.0032	0.014	0.057	0.25
m,p-Xylene	0.0032	0.014	0.14	0.59
o-Xylene	0.0032	0.014	0.081	0.35
TPH (Gasoline Range)	0.081	0.33	16	64



Client Sample ID: SV-1 Lab ID#: 0703294-01A

MODIFIED EPA METHOD TO-3 GC/PID/FID

File Mano:	805(41)		Same of Computation Computatio	
Dil. Pactor: Compound	Rpt. Limit (ppmv)	Rpt. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)
Benzene	0.0021	0.0067	0.40	1.3
Toluene	0.0021	0.0079	0.21	0.78
Ethyl Benzene	0.0021	0.0091	0.031	0.13
m.p-Xylene	0.0021	0.0091	0.074	0.32
o-Xylene	0.0021	0.0091	0.044	0.19
TPH (Gasoline Range)	0.052	0.21	7.3	30

Q = Exceeds Quality Control limits, possibly due to matrix effects.

Comunici Type: 1 Ener Cammin Cammin		Method
Surrogates	%Recovery	Limits
Fluorobenzene (FID)	151 Q	75-150
Fluorobenzene (PID)	153 Q	75-125



Client Sample ID: SV-2 Lab ID#: 0703294-02A

MODIFIED EPA METHOD TO-3 GC/PID/FID

Pilotilonia) pr. Factor	207		Danie of California, Disper Danie of Amelicale: 4/14/07 (1):39 PM	
Compound	Rpt. Limit (ppmv)	Rpt. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)
Benzene	0.0025	0.0079	0.19	0.62
Toluene	0.0025	0.0093	0.16	0.62
Ethyl Benzene	0.0025	0.011	0.058	0.25
m,p-Xylene	0.0025	0.011	0.082	0.36
o-Xylene	0.0025	0.011	0.042	0.18
TPH (Gasoline Range)	0.062	0.25	10	42

Q = Exceeds Quality Control limits, possibly due to matrix effects.

Container Type Canada C		Method
Surrogates	%Recovery	Limits
Fluorobenzene (FID)	134	75-150
Fluorobenzene (PID)	127 Q	75-125



Client Sample ID: SV-3 Lab ID#: 0703294-03A

MODIFIED EPA METHOD TO-3 GC/PID/FID

File Name Dit Andre			Committee Commit	
Compound	Rpt. Limit (ppmv)	Rpt. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)
Benzene	0.0022	0.0072	0.13	0.42
Toluene	0.0022	0.0084	0.22	0.83
Ethyl Benzene	0.0022	0.0097	0.12	0.55
m,p-Xylene	0.0022	0.0097	0.17	0.74
o-Xylene	0.0022	0.0097	0.075	0.32
TPH (Gasoline Range)	0.056	0.23	12	47

Q = Exceeds Quality Control limits, possibly due to matrix effects.

Container Type. I Liter Guillia Guinotei		Method
Surrogates	%Recovery	Limits
Fluorobenzene (FID)	137	75-150
Fluorobenzene (PID)	137 Q	75-125



Client Sample ID: SV-4 Lab ID#: 0703294-04A

MODIFIED EPA METHOD TO-3 GC/PID/FID

File Namer Ni Factor	Balle of Collection (SMIT) 2-47 Charles Analysis (SMIT) 2-47 Charles Analysis (SMIT) 2-47 Charles Analysis (SMIT) 2-47 Charles Analysis (SMIT) 2-47 Charles Analysis (SMIT) 2-47 Charles Analysis (SMIT) 2-47 Charles Analysis (SMIT)			
Compound	Rpt. Limit (ppmv)	Rpt. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)
Benzene	0.0025	0.0079	0.11	0.36
Toluene	0.0025	0.0093	0.23	0.86
Ethyl Benzene	0.0025	0.011	0.14	0.59
m,p-Xylene	0.0025	0.011	0.18	0.77
o-Xylene	0.0025	0.011	0.048 M	0.21 M
TPH (Gasoline Range)	0.062	0.25	16	64

M = Reported value may be biased due to apparent matrix interferences.

		metnoa	
Surrogates	%Recovery	Limits	
Fluorobenzene (FID)	128	75-150	
Fluorobenzene (PID)	130 Q	75-125	

Q = Exceeds Quality Control limits, possibly due to matrix effects.



Client Sample ID: SV-5 Lab ID#: 0703294-05A

MODIFIED EPA METHOD TO-3 GC/PID/FID

	003/418 2.30		Carrier Codingues	
Compound	Rpt. Limit (ppmv)	Rpt. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)
Benzene	0.0024	0.0076	0.022	0.070
Toluene	0.0024	0.0090	0.019	0.071
Ethyl Benzene	0.0024	0.010	0.0040	0.017
m,p-Xylene	0.0024	0.010	0.0086	0.038
o-Xylene	0.0024	0.010	0.0047	0.020
TPH (Gasoline Range)	0.060	0.24	1.0	4.2

Containor Typor I Zitor Cammil Cameron		Method
Surrogates	%Recovery	Limits
Fluorobenzene (FID)	98	75-150
Fluorobenzene (PID)	100	75-125



Client Sample ID: SV-7 Lab ID#: 0703294-06A

MODIFIED EPA METHOD TO-3 GC/PID/FID

	eraidie		Date of California	
D8. Fector Compound	Rpt. Limit (ppmv)	Rpt. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)
Benzene	0.0032	0.010	0.83	2.7
Toluene	0.0032	0.012	0.36	1.4
Ethyl Benzene	0.0032	0.014	0.057	0.25
m,p-Xylene	0.0032	0.014	0.14	0.59
o-Xylene	0.0032	0.014	0.081	0.35
TPH (Gasoline Range)	0.081	0.33	16	64

Q = Exceeds Quality Control limits, possibly due to matrix effects.

Container Type: 1 Liter Summa Canister

		Method	
Surrogates	%Recovery	Limits	
Fluorobenzene (FID)	165 Q	75-150	
Fluorobenzene (PID)	162 Q	75-125	



Client Sample ID: Lab Blank Lab ID#: 0703294-07A

	IODIFIED ELA MET	TOD TO S GGT ID:	**************************************	
File Name Dil. Factor:	6031403 1:00		Easte of Collections II Date of Acadysis: 3	
Compound	Rot. Limit (ppmv)	Rpt. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)
Benzene	0.0010	0.0032	Not Detected	Not Detected
Toluene	0.0010	0.0038	Not Detected	Not Detected
Ethyl Benzene	0.0010	0.0043	Not Detected	Not Detected
m,p-Xylene	0.0010	0.0043	Not Detected	Not Detected
o-Xvlene	0.0010	0.0043	Not Detected	Not Detected
TPH (Gasoline Range)	0.025	0.10	Not Detected	Not Detected
Container Type: NA - Not Applicable				Method
Surrogates		%Recovery		Limits
Fluorobenzene (FID)		89		75-150
Fluorobenzene (PID)		90		75-125



Client Sample ID: LCS Lab ID#: 0703294-08A

Fiji Namo: 6031 Mr. Papide:		
Compound		%Recovery
Benzene		88
Toluene		86
Ethyl Benzene		82
m,p-Xylene		81
o-Xylene		80
Container Type: NA - Not Applicable		Method
Surrogates	%Recovery	Limits
Fluorobenzene (PID)	91	75-125



Client Sample ID: LCS Lab ID#: 0703294-08B

	%Recovery
	112
	V 1 12
	Method
%Recovery	Limits
99	75-150
	%Recovery 99



Summary of Detected Compounds MODIFIED EPA METHOD TO-3 GC/PID/FID

Client Sample ID: SV-6 Lab ID#: 0703262-01A

Compound	Rpt. Limit (ppmv)	Rpt. Limit (uG/L)	Amount (ppmv)	(uG/L)
Benzene	0.0022	0.0072	0.56 M	1.8 M
Toluene	0.0022	0.0084	0.035 M	0.13 M
Ethyl Benzene	0.0022	0.0097	0.020 M	0.085 M
m,p-Xylene	0.0022	0.0097	0.030 M	0.13 M
o-Xylene	0.0022	0.0097	0.017	0.073
TPH (Gasoline Range)	0.056	0.23	28	110

Client Sample ID: SV-6 Duplicate

Lab ID#: 0703262-01AA

Compound	Rpt. Limit (ppmv)	Rpt. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)
Benzene	0.0022	0.0072	0.55 M	1.8 M
Toluene	0.0022	0.0084	0.036 M	0.14 M
Ethvi Benzene	0.0022	0.0097	0.020 M	0.087 M
m.p-Xylene	0.0022	0.0097	0.028 M	0.12 M
o-Xylene	0.0022	0.0097	0.016	0.072
TPH (Gasoline Range)	0.056	0.23	28	110

WORK ORDER #: 0703262

Work Order Summary

CLIENT: Mr. Robert Kitay BILL TO: Mr. Robert Kitay

Aqua Science Engineering
208 West El Pintado
208 West El Pintado
Danville, CA 95426

Aqua Science Engineering
208 West El Pintado
Danville, CA 95426

PHONE: 925-820-9391 P.O. #

FAX: 925-837-4853 PROJECT # 2808 Lim

DATE RECEIVED: 03/12/2007 CONTACT: Sarah Nguyen

DATE COMPLETED: 03/23/2007 CONTACT: Sarah Nguye

			RECEIPT
FRACTION #	NAME	<u>TEST</u>	VAC./PRES.
01A	SV-6	Modified TO-3	3.0 "Hg
01AA	SV-6 Duplicate	Modified TO-3	3.0 "Hg
02A	Lab Blank	Modified TO-3	NA
03A	LCS	Modified TO-3	NA
03B	LCS	Modified TO-3	NA

CERTIFIED BY: DATE: 03/23/07

Laboratory Director

Certfication numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004 NY NELAP - 11291, UT NELAP - 9166389892

Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,

Accreditation number: E87680, Effective date: 07/01/06, Expiration date: 06/30/07

Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

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LABORATORY NARRATIVE Modified TO-3 Aqua Science Engineering Workorder# 0703262

One 1 Liter Summa Canister sample was received on March 12, 2007. The laboratory performed analysis for volatile organic compounds in air via modified EPA Method TO-3 using gas chromatography with photo ionization and flame ionization detection. The method involves concentrating up to 200 mL of sample. The concentrated aliquot is then dry purged to remove water vapor prior to entering the chromatographic system. The TPH (Gasoline Range) results are calculated using the response factor of Gasoline. A molecular weight of 100 is used to convert the TPH (Gasoline Range) ppmv result to ug/L. See the data sheets for the reporting limits for each compound.

Method modifications taken to run these samples include:

Requirement	TO-3	ATL Modifications
Daily Calibration Standard Frequency	Prior to sample analysis and every 4 - 6 hrs	Prior to sample analysis and after the analytical batch = 20 samples</td
Initial Calibration Calculation	4-point calibration using a linear regression model	5-point calibration using average Response Factor
Initial Calibration Frequency	Weekly	When daily calibration standard recovery is outside 75 - 125 %, or upon significant changes to procedure or instrumentation
Moisture Control	Nafion system	Sorbent system
Minimum Detection Limit (MDL)	Calculated using the equation DL = A+3.3S, where A is intercept of calibration line and S is the standard deviation of at least 3 reps of low level standard	40 CFR Pt. 136 App. B
Preparation of Standards	Levels achieved through dilution of gas mixture	Levels achieved through loading various volumes of the gas mixture

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

The recovery of surrogate Fluorobenzene in samples SV-6 and SV-6 Duplicate was outside control limits due to high level hydrocarbon matrix interference. Data is reported as qualified.

Definition of Data Qualifying Flags

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:



- B Compound present in laboratory blank greater than reporting limit.
- J Estimated value.
- E Exceeds instrument calibration range.
- S Saturated peak.
- Q Exceeds quality control limits.
- U Compound analyzed for but not detected above the detection limit.
- M Reported value may be biased due to apparent matrix interferences.

File extensions may have been used on the data analysis sheets and indicates as follows:

- a-File was requantified
- b-File was quantified by a second column and detector
- r1-File was requantified for the purpose of reissue



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Summary of Detected Compounds MODIFIED EPA METHOD TO-3 GC/PID/FID

Client Sample ID: SV-6

Lab ID#: 0703262-01A

_	Rot. Limit	Rpt. Limit	Amount	Amount
Compound	(ppmv)	(uG/L)	(ppmv)	(uG/L)
Benzene	0.0022	0.0072	0.56 M	1.8 M
Toluene	0.0022	0.0084	0.035 M	0.13 M
Ethyl Benzene	0.0022	0.0097	0.020 M	0.085 M
m,p-Xylene	0.0022	0.0097	0.030 M	0.13 M
o-Xylene	0.0022	0.0097	0.017	0.073
TPH (Gasoline Range)	0.056	0.23	28	110

Client Sample ID: SV-6 Duplicate

Lab ID#: 0703262-01AA

Compound	Rpt. Limit (ppmv)	Rpt. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)
Benzene	0.0022	0.0072	0.55 M	1.8 M
Toluene	0.0022	0.0084	0.036 M	0.1 4 M
Ethyl Benzene	0.0022	0.0097	0.020 M	0.087 M
m,p-Xylene	0.0022	0.0097	0.028 M	0.12 M
o-Xylene	0.0022	0.0097	0.016	0.072
TPH (Gasoline Range)	0.056	0.23	28	110



Client Sample ID: SV-6 Lab ID#: 0703262-01A

MODIFIED EPA METHOD TO-3 GC/PID/FID

File Name: Dil. Factor:	6031508 224		Date of Collection: 5/807 Date of Analysis: 3/10/07 12:52 PM	
Compound	Rot. Limit (ppmv)	Rpt. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)
Benzene	0.0022	0.0072	0.56 M	1.8 M
Toluene	0.0022	0.0084	0.035 M	0.13 M
Ethyl Benzene	0.0022	0.0097	0.020 M	0.085 M
m,p-Xylene	0.0022	0.0097	0.030 M	0.13 M
o-Xylene	0.0022	0.0097	0.017	0.073
TPH (Gasoline Range)	0.056	0.23	28	110

M = Reported value may be biased due to apparent matrix interferences.

Container Type: 1 Liter Summa Canister

		metnoa	
Surrogates	%Recovery	Limits	
Fluorobenzene (FID)	175 Q	75-150	
Fluorobenzene (PID)	152 Q	75-125	

Q = Exceeds Quality Control limits, due to matrix effects. Matrix effects confirmed by re-analysis.



Client Sample ID: SV-6 Duplicate Lab ID#: 0703262-01AA

MODIFIED EPA METHOD TO-3 GC/PID/FID

File Maries. Dil. Faccion	6091500 2.28		Date of Collection: 2007 Date of Applicate: 2015(3) (1-53 PM		
Compound	Rot. Limit (ppmv)	Rpt. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)	
Benzene	0.0022	0.0072	0.55 M	1.8 M	
Toluene	0.0022	0.0084	0.036 M	0.14 M	
Ethyl Benzene	0.0022	0.0097	0.020 M	0.087 M	
m,p-Xylene	0.0022	0.0097	0.028 M	0.12 M	
o-Xylene	0.0022	0.0097	0.016	0.072	
TPH (Gasoline Range)	0.056	0.23	28	110	

M = Reported value may be biased due to apparent matrix interferences.

Container Type: 1 Liter Summa Canister

Container Type. I End. Samma Samster		Method
Surrogates	%Recovery	Limits
Fluorobenzene (FID)	177 Q	75-150
Fluorobenzene (PID)	154 Q	75-125

Q = Exceeds Quality Control limits, due to matrix effects. Matrix effects confirmed by re-analysis.



Client Sample ID: Lab Blank Lab ID#: 0703262-02A

MODIFIED EPA METHOD TO-3 GC/PID/FID

File Name: ON, Factor:	6031503 1.00		Date of Collection: NA Bale of Analysis: 3/1587709:05 AM		
Compound	Rpt. Limit (ppmv)	Rpt. Limit (uG/L)	Amount (ppmv)	Amount (uG/L)	
Benzene	0.0010	0.0032	Not Detected	Not Detected	
Toluene	0.0010	0.0038	Not Detected	Not Detected	
Ethyl Benzene	0.0010	0.0043	Not Detected	Not Detected	
m,p-Xylene	0.0010	0.0043	Not Detected	Not Detected	
o-Xylene	0.0010	0.0043	Not Detected	Not Detected	
TPH (Gasoline Range)	0.025	0.10	Not Detected	Not Detected	

Container Type: NA - Not Applicable

		Method	
Surrogates	%Recovery	Limits	
Fluorobenzene (FID)	86	75-150	
Fluorobenzene (PID)	88	75-125	



Client Sample ID: LCS Lab ID#: 0703262-03A

MODIFIED EPA METHOD TO-3 GC/PID/FID

File Name: DR. Fector:	6031510b 1,00	Carlotte (Carlotte (Carlot	

Compound	%Recovery
Benzene	88
Toluene	87
Ethyl Benzene	82
m,p-Xylene	81
o-Xylene	80

Container Type: NA - Not Applicable

		Method	
Surrogates	%Recovery	Limits	
Fluorobenzene (PID)	97	75-125	



Client Sample ID: LCS Lab ID#: 0703262-03B

File Nume: 800151; Dil, Factor: 1.00		PART BUSINESS PRO
Compound		%Recovery
TPH (Gasoline Range)		96
Container Type: NA - Not Applicable		Method
Surrogates	%Recovery	Limits
Fluorobenzene (FID)	122	75-150