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October 30, 2010

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

**Subject: Perjury Statement and Report Transmittal
Quarterly Site Monitoring Report (Third Quarter, 2010)**

245 8th Street
Oakland, California 94607
AEI Project No. 116907
ACEH RO#0000202

Dear Mr. Wickham:

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

If you have any questions or need additional information, please do not hesitate to call me at (510) 832-9014, or Mr. Ricky Bradford at AEI Consultants, (925) 746-6000 extension 148.

Sincerely,



Victor Lum
Owner
Vic's Automotive

RB/vl

Attachment

cc: Mr. Ricky Bradford, AEI Consultants, 2500 Camino Diablo, Walnut Creek, CA 94597



AEI
CONSULTANTS

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ENVIRONMENTAL & ENGINEERING SERVICES

www.aeiconsultants.com

October 30, 2010

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

Subject: Quarterly Site Monitoring Report (Third Quarter, 2010)

245 8th Street
Oakland, California 94607
AEI Project No. 116907
ACEH RO#0000202

Dear Mr. Wickham:

AEI Consultants (AEI) is pleased to present the *Quarterly Site Monitoring Report (Third Quarter, 2010)*, dated October 30, 2010, for the above-referenced site. As required, an electronic version of this report has been uploaded to GeoTracker and the Alameda County Environmental Health ftp site.

Should you have any questions regarding this report, or need any additional information, please do not hesitate to contact me at (925) 746-6000.

Sincerely,
AEI Consultants


Ricky Bradford
Project Engineer

RB/sl

Enclosure

cc: Mr. Victor Lum, Vic's Automotive, 245 8th Street, Oakland, California 94607

October 30, 2010

**QUATERLY SITE MONITORING REPORT
(THIRD QUARTER, 2010)**

245 8th Street
Oakland, California

AEI Project No. 116907
ACEH RO#00000202

Prepared For:

Vic's Automotive
245 8th Street
Oakland, California 94607

Prepared By:

AEI Consultants
2500 Camino Diablo, Suite 200
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TABLE OF CONTENTS

1.0 INTRODUCTION	1
2.0 SITE DESCRIPTION AND BACKGROUND.....	2
3.0 GEOLOGY AND HYDROGEOLOGY	5
4.0 SUMMARY OF MONITORING ACTIVITIES	5
4.1 Groundwater Gauging and Sampling.....	6
4.2 Soil Gas Monitoring for Vapor Intrusion Evaluation	6
4.3 HVDPE Operation, Maintenance and Monitoring.....	7
5.0 RESULTS AND CONCLUSIONS	7
5.1 Apparent LNAPL Thickness, Groundwater Elevations, and Hydraulic Gradient	7
5.2 Groundwater Analytical Data	7
6.0 SUMMARY AND PLANNED ACTIVITIES.....	9
7.0 REFERENCES	10
8.0 REPORT LIMITATIONS AND SIGNATURES.....	12

FIGURES

<i>FIGURE 1 SITE LOCATION MAP</i>
<i>FIGURE 2 SITE PLAN</i>
<i>FIGURE 3 SYSTEM LAYOUT PLAN</i>
<i>FIGURE 4 GROUNDWATER ELEVATION CONTOURS (08/19/10)</i>
<i>FIGURE 5 GROUNDWATER SAMPLE ANALYTICAL DATA (08/19 – 08/20/10)</i>
<i>FIGURE 6 HYDROCARBON MASS REMOVAL RATES OVER TIME</i>

TABLES

<i>TABLE 1 GROUNDWATER ELEVATION DATA SUMMARY</i>
<i>TABLE 2 GROUNDWATER FLOW SUMMARY</i>
<i>TABLE 3 GROUNDWATER ANALYTICAL DATA SUMMARY</i>
<i>TABLE 4 SOIL GAS ANALYTICAL DATA SUMMARY</i>
<i>TABLE 5 HVDPE VAPOR ANALYTICAL & FIELD SCREENING DATA SUMMARY</i>
<i>TABLE 6 HVDPE PERFORMANCE & MASS REMOVAL DATA SUMMARY</i>

APPENDICES

<i>APPENDIX A MONITORING WELL FIELD SAMPLING FORMS</i>
<i>APPENDIX B LABORATORY ANALYTICAL REPORTS W/ CHAIN OF CUSTODY DOCUMENTATION</i>

1.0 INTRODUCTION

AEI Consultants (AEI) has prepared this report on behalf of Mr. Victor Lum, owner and operator of Vic's Auto automotive repair and former fuel service station located at 245 8th Street in the City of Oakland, Alameda County, California (Figure 1). AEI has been retained by Mr. Lum to provide environmental engineering and consulting services related to the release of gasoline fuel hydrocarbons from the former underground storage tank (UST) and dispensing system on the property. The ongoing investigation and remediation of the release is being performed under the direction of the Alameda County Environmental Health (ACEH) local oversight program. This report has been prepared to document the field activities and results of groundwater monitoring for the third quarter 2010 performed between August 19 and 20, 2010.

The high vacuum dual phase extraction system (HVDPE) system was shutdown on December 23, 2009 due to declining influent concentrations and asymptotic hydrocarbon recovery. The remediation system remained off throughout the first quarter and most of the second and third quarters, 2010 for a rebound evaluation. On April 20, 2010, the HVDPE system was restarted and vapor samples were collected from all of the active extraction wells and the combined system influent. Since rebound was observed at most of the extraction wells, the system was operated, sampled, and optimized on a weekly basis for the next 3 weeks. The mass removal rates ranged from 3 to 13 pounds per day (lbs/day). Due to relatively low mass removal rates and comparatively high operating costs, the system was shutdown on May 11, 2010 pending implementation of the air sparging pilot test. Overall, during the second quarter 2010, the system operated for approximately 21 days and cumulative mass removed was approximately 270 pounds or 45 gallons.

Between June 30 and July 1, 2010, four air sparging wells (AS-1 to AS-4) were installed in the source zone in the vicinity of MW-1, MW-6, and MW-7. The sparge wells were designed to target the source of adsorbed-phase hydrocarbons submerged below the water table in the smear zone. On August 23, 2010, the HVDPE system was restarted and vapor samples were collected from all of the active extraction wells and the combined system influent. In preparation for the air sparging pilot test, the system was operated, sampled, and optimized on a weekly basis for the next 2 weeks. By the end of the second week, the hydrocarbon influent concentrations started to decline and the mass removal rates had decreased from 11 lbs/day to 6 lbs/day. On September, 7, 2010, an initial air injection pressure versus flow rate test was performed on AS-1. The mass removal rate increased from 3 lbs/day to 28 lbs/day after injecting 1 to 3 cubic feet per minute (cfm) of air into AS-1 for a short, 2 to 3-hour period of time. Overall, during the third quarter 2010, the system operated for approximately 15 days and cumulative mass removed was approximately 565 pounds or 94 gallons.

AEI anticipates completing the air sparging pilot test by the end of fourth quarter, 2010. The results of the rebound evaluation and air sparging pilot test, including recommendations for operating and optimizing the HVDPE system, will be reported by the end of the first quarter, 2011.

The individual extraction well and the combined system influent vapor analytical and field screening data is summarized in Table 5. The mass removal rates are summarized in Table 6 and plotted on Figure 6.

2.0 SITE DESCRIPTION AND BACKGROUND

The subject property (hereafter referred to as the “site” or “property”) is located in a mixed commercial and residential area of Oakland. The site is a lot on the south corner of Alice Street and 8th Street, and is currently developed with a gasoline service station and automotive repair facility (Figure 2). The property covers approximately 9,375 square feet and is improved with an approximately 1,200 square foot building located centrally on the property with two bays used for automotive repair, two restrooms, and a cashier’s office. The current UST hold and the dispenser island are located to the north of the building, along 8th Street. The former UST hold was located to the south of the building, along Alice Street. The remainder of the property is paved with asphalt and used for parking and staging vehicles for repairs.

- Between June 1993 and August 1994, AEI removed seven underground storage tanks (USTs) from the property. The tanks consisted of four 1,000-gallon gasoline tanks located in the sidewalk along Alice Street, two 6,000-gallon gasoline tanks and one 250-gallon waste oil tank. Impacted soil was removed from beneath the former tank area. Groundwater was encountered beneath the former 6,000-gallon tanks. Light non-aqueous phase liquid (LNAPL) was observed on the water table beneath the southern tank. The excavated soil was transported to an appropriate disposal facility and the excavation was backfilled with clean fill material. A new tank system was installed just west of the dispenser island.
- In July 1995, two monitoring wells (MW-1 and MW-2) were installed onsite. Total petroleum hydrocarbons as gasoline (TPH-g) and benzene were detected in MW-2 at concentrations up to 210,000 µg/L and 720 µg/L, respectively during the first two monitoring episodes. Light non-aqueous phase liquid (LNAPL) was detected in MW-1. The apparent LNAPL thickness in MW-1 ranged from 1.20 to 4.39 feet between December 1995 and March 1996.
- In August 1996, AEI advanced three soil borings (SB-1 through SB-3) onsite. TPH-g and benzene were detected in the groundwater samples from these borings at concentrations ranging from 120,000 to 140,000 µg/L, and from 12,000 to 19,000 µg/L, respectively. Methyl tertiary-butyl ether (MTBE) was also detected in all three samples at concentrations up to 27,000 µg/L. Although LNAPL was not observed in the field, qualitative laboratory observations indicated an immiscible sheen was present in the samples.
- Manual bailing and pumping of LNAPL from MW-1 occurred intermittently from 1997 to 1998.
- In May 2001, two additional groundwater monitoring wells (MW-3 and MW-4) were installed onsite. In June 2001, a free product recovery system was installed in MW-1. The

free product recovery system removed several hundred gallons of LNAPL between 2001 and 2003.

- In April 2003, AEI advanced 12 additional soil borings (SB-4 to SB-15) onsite and offsite for the collection of soil, shallow groundwater, and soil vapor samples to further characterize the magnitude and lateral extent of the release.
- In January 2005, AEI installed six additional monitoring wells (MW-5, 6, 7, 10, 11, and 12) which are being used as dual-phase extraction well. MW-5, 6 and 7 were installed onsite and wells MW-10, 11, and 12 were installed offsite at the 708 Alice Street property. MW-8 and MW-9 were proposed for installation in the parking lane along 7th and Alice Streets; however, due to difficult insurance wording requirements imposed by the City of Oakland, these wells were not installed until March 2008.
- From July 11 to July 27, 2005, a 16-day HVDPE pilot test was performed on wells MW-1, 2, 5, 6, and MW-7. Combined vapor influent flow rates ranged from approximately 170 to 190 standard cubic feet per minute (scfm) under a sustained vacuum of 16 to 17 inches of mercury (in-Hg). The average water flow rate was approximately 4.1 gallons per minute (gpm). A total of 80,740 gallons of groundwater was recovered, treated, and discharged to the sanitary sewer under a short-term, limited volume groundwater discharge permit from the East Bay Municipal Utilities District (EBMUD). Significant drawdown and vacuum response was observed in the vadose and saturated zone monitoring points. Dissolved and vapor-phase mass removal rates were up to approximately 5 lbs/day and 697 lbs/day, respectively. A total of 10,719 pounds or 1,716 gallons of gasoline was removed during this test. As a result, AEI recommended interim corrective action using HVDPE for 12 to 18 months using fixed equipment. Refer to AEI's *HVDPE Event Report*, dated December 14, 2005, for more information.
- In March 2006, the ACEH concurred with the implementation of HVDPE using fixed equipment and requested a system design and operations, maintenance and monitoring plan (OM&M). In this letter, the ACEH also requested soil vapor sampling to evaluate the potential for vapor intrusion due to the elevated concentrations of fuel hydrocarbons detected in the soil and groundwater onsite and offsite.
- In May 2006, a HVDPE system design and OM&M plan and a separate soil gas investigation workplan were submitted to ACEH for review and comment. Refer to AEI's *High Vacuum Dual Phase Extraction System Design, Operations, and Maintenance Plan*, dated May 24, 2006 and *Soil Gas Investigation Work Plan*, dated May 12, 2006, for more information.
- In November 2006, trenching and installation of the conveyance piping for HVDPE system was conducted. The remaining infrastructure, electrical system and other equipment, including the manifold, carbon vessels, rotary phase converter, fence, and wellhead connections were installed in May 2007. The system was started up on June 26, 2007.

- On June 11, 2007, two 55-gallon drums, or approximately 100 gallons of water containing about 50% LNAPL, was removed from MW-1 and MW-6 by operating the HVDPE system in product skimming mode.
- In November 2007, additional HVDPE conveyance piping was installed above grade behind the onsite building to the rear of the property and the system was expanded to include monitoring/extraction wells MW-10, MW-11, and MW-12.
- In March 2008, wells (MW-8, MW-9 and MW-13) were installed.
- Between August 21 and 22, 2008, soil gas probes GP-3 and GP-4 were decommissioned by physical removal and three horizontal HVDPE conveyance piping laterals were installed to MW-10, 11, and 12 so that these wells could continue to be used for dual phase extraction while the 708 Alice Street property was being developed.
- In July 2009, monitoring wells (MW-14, MW-15, and MW-16) were installed. MW-14 was installed in the parking lane along Alice Street approximately 80 feet southwest of MW-8. MW-15 and MW-16 were installed in the parking lane on the southwest side of 7th Street approximately 60 feet apart. The monitoring well locations are shown on Figure 2.
- On December 2, 2009, the property owner and AEI held a meeting with the ACEH to discuss the results of a rebound evaluation and recommendations regarding future activities for the site.
- On March 17, 2010, AEI performed an additional source area investigation by advancing four (4) temporary soil borings (SB-16 through SB-19) to approximately 30 feet bgs. Soil samples were collected from select depths and a discrete groundwater sample (SB-18W) was collected from boring SB-18 at 28 to 30 feet bgs. Overall, the highest concentrations of TPH-g, BTEX, and MTBE were detected in soil samples collected from SB-16, SB-17, and SB-19 at 20 feet bgs, indicating that a significant source of petroleum hydrocarbons resides submerged under the water table. Relatively low concentrations of TPH-g and benzene were detected in discrete grab groundwater sample SB-18W. Further detail relating to the additional soil source investigation can be found in AEI's *Source Zone Delineation Report & Air Sparging Pilot Test Workplan*, dated May 10, 2010.
- To target the source of adsorbed-phase hydrocarbons identified below the water table during the source zone investigation, AEI proposed using air sparging technology. The proposed scope of work included installation of several permanent air sparge wells and an air sparging pilot test. Between June 30 and July 1, 2010, four (4) air sparging wells (AS-1 to AS-4) were installed in the source zone in the vicinity of MW-1, MW-6, and MW-7.

3.0 GEOLOGY AND HYDROGEOLOGY

The elevation of the site is approximately 27 to 29 feet above mean sea level (amsl). The site is flat; however, the topography of the area slopes gently to the southwest. The site is located between Lake Merritt and the Oakland Inner Harbor channel, approximately one-half mile from each. The near surface sediments are mapped as Holocene and Pleistocene Merritt Sand (Qms), which are further described as “fine-grained, well-sorted, well-drained, Aeolian sand deposits” (Helley and Graymer, 1997 and Graymer, 2000). Depth to the Franciscan Formation basement underlying the unconsolidated deposits is approximately 400 feet (Norfleet Consultants, 1998).

Based on the logs of soil borings advanced on and offsite, the native soils generally consist of fine to medium grained sands with silt and clay present to at least 28 feet bgs, the deepest explored at the site. Typically, silty and clayey fine grained sand have been encountered to depths of 15 to 18 feet bgs. This is underlain by poorly graded, clean to slightly clayey and silty fine to medium sand. Both sand bodies represent a single hydro-geologic system. Sediments have been relatively uniform throughout the investigation area.

Groundwater depths have typically ranged from 13 to 17 feet bgs, corresponding to elevation of approximately 10 to 14 feet above mean sea level (msl). Annual groundwater levels fluctuate by approximately 3 to 4 feet. Groundwater has consistently flowed to the south, southeast, or southwest with a hydraulic gradient of approximately 0.010 ft/ft. Recent water levels have been affected by the groundwater extraction activities.

4.0 SUMMARY OF MONITORING ACTIVITIES

Traditional purging and sampling is currently used for routine groundwater monitoring at the subject site. The monitoring wells are purged of at least three well volumes with a submersible pump and sampled using disposable bailers. This creates significant disturbances in the well, sand pack and surrounding formation and agitates the sediment layer at the bottom of the well. In the source zone or “smear zone”, this procedure produces turbid samples that may contain non-dissolved petroleum and reported concentrations that are biased high. It has been hypothesized that elevated concentrations of TPH-g and BTEX reported in samples collected from the source zone may be attributed to petroleum-affected turbidity (non-dissolved petroleum sorbed to fine-grained soil particles). Studies have shown that samples collected from the smear zone often contain non-dissolved petroleum and produce biased results that are not representative of the actual dissolved-phase (Zemo, 2006; Zemo, 2009; SWRCB, 2010). Employing methods such as low-flow sampling can significantly reduce petroleum-affected turbidity. In order to compare and evaluate the effects of traditional and low-flow purging and sampling techniques on sample-related turbidity and the apparent hydrocarbon concentrations inside and outside the smear zone, monitoring wells (MW-1, 2, 5, 6, 7, and 9) were sampled using the low-flow sampling methodology followed by traditional purging and sampling. Low-flow sampling was approved by Mr. Jerry Wickham of ACEH in an email dated August 17, 2010.

4.1 Groundwater Gauging and Sampling

On August 19, 2010, the water levels in all of the monitoring wells were gauged except MW-6 and MW-10 through MW-12. Since a vehicle was parked over MW-6 and the facility owner did not have the keys, this well was gauged and sampled on August 20, 2010. Although MW-10 through MW-12 can still be used for dual-phase extraction, gauging and sampling is no longer possible because these wells were buried beneath a new residential building in August 2008. Groundwater samples were collected from all the monitoring/dual-phase extraction wells, except for MW-3, MW-4, MW-8, and MW-10 through MW-12, in accordance with the existing monitoring schedule approved by ACEH in December 2009. The well locations are shown on Figure 2.

Prior to sampling, the well caps and/or drop tubes were removed and the water levels were measured from the top of the well casings with an electronic water level indicator. Wells with historic free product (MW-1, MW-6, and MW-7) were checked with an oil-water interface meter. First, low-flow samples were collected using a peristaltic pump by lowering a ¼-inch polyethylene drop tube to a depth ranging from 19 to 21-feet bgs. New, clean disposable tubing was used at each well. The pump was operated at a flow rate of approximately 250 milliliters per minute. Once the field parameters stabilized, groundwater samples were collected directly from the discharge side of peristaltic pump. Traditional purge samples were collected using disposable plastic bailers after removing at least three well volumes of water and once the field parameters stabilized. The following parameters were measured during purging: temperature, pH, specific conductivity, dissolved oxygen (DO), and oxygen reduction potential (ORP). A visual estimate and description of turbidity was noted for each well.

The groundwater samples were collected into 40-milliliter (mL) volatile organic analysis (VOA) vials and capped so that no head space or air bubbles were present within the sample containers. Samples were entered onto a chain of custody record and placed in a pre-chilled cooler on wet ice pending transportation to the laboratory. The samples were delivered on the day of collection under proper chain of custody protocol to McCampbell Analytical, Inc. of Pittsburg, California (DHS Certification #1644) for analysis. Ten groundwater samples were analyzed for TPH-g by EPA Method 8015C and BTEX and MTBE by EPA Method 8021B. Due to the elevated reporting limits for MTBE by EPA Method SW8021B, the traditional purge samples collected from MW-1, 6, 7, and 9 were analyzed for MTBE by EPA Method SW8260B. Six additional low-flow groundwater samples (from wells MW-1, 2, 5, 6, 7, and 9) were analyzed for TPH-g by EPA Method 8015C and BTEX and MTBE by EPA Method 8021B. The low-flow samples were not analyzed for MTBE by EPA Method SW8260B.

4.2 Soil Gas Monitoring for Vapor Intrusion Evaluation

Per concurrence from the ACEH in a letter dated October 3, 2008, quarterly soil gas sampling has been temporarily suspended during operation of the HVDPE system.

4.3 HVDPE Operation, Maintenance and Monitoring

The HVDPE system was shutdown on December 23, 2009 due to declining influent concentrations and asymptotic hydrocarbon recovery. The remediation system remained off throughout the first quarter and most of the second and third quarters, 2010 for a rebound evaluation. The remediation system will be restarted during the fourth quarter, 2010 in preparation for the upcoming air sparging pilot test. As mentioned previously, the results of the rebound evaluation and air sparging pilot test, including recommendations for optimizing the HVDPE system operation, will be reported by the end of the first quarter, 2011.

5.0 RESULTS AND CONCLUSIONS

5.1 Apparent LNAPL Thickness, Groundwater Elevations, and Hydraulic Gradient

The results of the apparent LNAPL thickness measurements, groundwater elevations, and hydraulic gradient for this monitoring episode are summarized below:

- LNAPL was not detected in any of the monitoring wells, although elevated concentrations of dissolved-phase hydrocarbons remain onsite and offsite.
- The current groundwater flow direction was calculated towards the south-southwest with a hydraulic gradient of approximately 0.015 ft/ft. The groundwater flow direction and hydraulic gradient during this quarter was consistent with previous monitoring events.
- Since the HVDPE system was not operating prior to this event, the results are more likely representative of actual hydrogeologic conditions than those events performed when the HVDPE system was running. It should be noted that the wellheads for wells MW-1, MW-2, MW-5, MW-6, and MW-7 were modified for remediation purposes and the top of casing elevations are not accurate. Therefore, the groundwater elevations at these wells were not used for the hydraulic gradient calculation or groundwater elevation contour map.

The groundwater elevation data is summarized in Table 1 and groundwater elevation contours are shown on Figure 4. A summary of the average groundwater elevations and flow directions is presented in Table 2.

5.2 Groundwater Analytical Data

The analytical results for the groundwater samples collected during this monitoring event using low-flow and traditional purging and sampling are summarized in this section.

The following hydrocarbons were detected using traditional purging and sampling techniques:

- The highest concentration of TPH-g was detected in MW-6 at a concentration of 64,000 µg/L. The next highest concentrations of TPH-g were detected in MW-1 and MW-9 at 45,000 µg/L and 35,000 µg/L, respectively.
- The highest concentration of benzene was detected in MW-9 at a concentration of 9,600 µg/L. The next highest concentrations of benzene were detected in MW-6 and MW-7 at 2,000 µg/L and 2,100 µg/L, respectively.
- The highest concentration of MTBE was detected in MW-9 at a concentration of 540 µg/L. The next highest concentrations of MTBE were detected in MW-7 and MW-15 at concentrations of 130 µg/L and 33 µg/L, respectively.
- Petroleum-affected turbidity was observed in the groundwater samples collected from MW-1, 2, 5, 6, and 7 using traditional purging techniques.
- Moderate concentrations of TPH-g and BTEX were detected in MW-5, MW-7, and MW-14.
- Relatively low concentrations of MTBE and BTEX were detected in MW-2.
- TPH-g and MBTEX were not detected at or above reporting limits in MW-13 for the second consecutive quarter.

The following hydrocarbons were detected using low-flow purging and sampling techniques (only employed on MW-1, 2, 5, 6, 7, and 9):

- The highest concentration of TPH-g was detected in MW-9 at a concentration of 30,000 µg/L. The next highest concentrations of TPH-g were detected in MW-7 and MW-1 at 24,000 µg/L and 4,100 µg/L, respectively.
- The highest concentration of benzene was detected in MW-9 at a concentration of 8,400 µg/L. The next highest concentrations of benzene were detected in MW-7 and MW-1 at 3,700 µg/L and 520 µg/L, respectively.
- Petroleum-affected turbidity was significantly reduced in most of groundwater samples collected from MW-1, 2, 5, 6, and 7 using low-flow purging techniques except MW-7.
- MTBE was not detected at or above the laboratory reporting limits in any groundwater samples.
- Moderate concentrations of TPH-g and BTEX were detected in MW-5 and MW-6.
- Relatively low concentrations of MTBE and BTEX were detected in MW-2.

The groundwater analytical data is summarized in Table 3 and the current data is shown on Figure 5. Refer to Appendix A for the monitoring well field sampling forms. The laboratory analytical

reports with chain of custody and quality assurance/quality control documentation are included in Appendix B.

6.0 SUMMARY AND PLANNED ACTIVITIES

This report presented an update on the HVDPE system status and the findings of the third quarter, 2010 groundwater monitoring and sampling activities.

The results of this monitoring event are summarized below:

- LNAPL has not been detected in any of the monitoring wells since the HVDPE system was installed and started up in June 2007. However, elevated concentrations of dissolved-phase hydrocarbons remain onsite and offsite.
- Using traditional sampling techniques, the highest concentrations of TPH-g and BTEX were detected in MW-1, 6, 9, and 7. Using the low-flow sampling methodology, the highest concentrations of TPH-g and BTEX were detected in MW-1, 5, 7, and 9.
- All of the traditional purge samples collected from MW-1, 2, 5, 6, and 7 contained a significant amount of turbidity as an artifact of the sampling process. Sample-related turbidity was significantly reduced, but not completely eliminated, in the low-flow samples.
- No significant differences were observed between the low-flow and traditional purge samples collected from MW-2, 5, and 9 which are located outside the source area. Overall, the hydrocarbon concentrations were similar or within same order of magnitude.
- Significant differences were observed between the low-flow and traditional purge samples collected from MW-1, 6, and 7 which are located within the smear zone. In the low-flow samples collected from MW-1 and MW-6, sample-related turbidity was significantly reduced and TPH-g and BTEX concentrations were much lower than the traditional purge samples. However, in the low-flow sample collected from MW-7, sample-related turbidity was lowered but not eliminated completely and TPH-g and BTEX concentrations were much higher than the traditional purge samples.
- Overall, reported concentrations for the low-flow samples collected in the source zone are more representative of the actual dissolved-phase than the traditional samples because petroleum-affected turbidity was significantly reduced in most of the samples.

The following activities are planned for the fourth quarter 2010:

- Fourth quarter groundwater monitoring and sampling activities are planned for late November to early December, 2010 in accordance with the approved monitoring schedule using the low-flow sampling methodology.

- A report discussing the field activities and results of the upcoming air sparging pilot test will be prepared upon completion of the test, review and evaluation of the data and receipt of the final laboratory analytical reports. This report will also include the results of the rebound evaluation and recommendations for operating, monitoring, and optimizing the HVDPE system performance. This report will be completed by the end of the first quarter, 2011.

7.0 REFERENCES

California State Water Resources Control Board (SWRCB), 2010. "Draft for Public Comment – Leaking Underground Fuel Tank Guidance Manual", Version 1.0, prepared by Sullivan International Group, Inc., August 3, 2010.

Graymer, R.W., 2000. "Geologic Map and Map Database of the Oakland Metropolitan Area, Alameda, Contra Costa, and San Francisco Counties, California", U.S. Geologic Survey, Miscellaneous Field Studies MF2342, Online Version 1.0, includes 1 geologic map and 33 page pamphlet.

Helley, E.J. and Graymer, R.W., 1997. "Quaternary Geology of Alameda County, and parts of Contra Costa, Santa Clara, San Mateo, San Francisco, Stanislaus, and San Joaquin counties, California: A Digital Database", U.S. Geological Survey, Open-File Report 97-97, includes 1 geologic map, 1 map explanation sheet, and 9 page discussion booklet.

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Place, M.C., Coonfare, C.T., Chen, A., Hoepfel, R.E., and Rosansky, S.H., 2001. "Principles and Practices of Bioslurping", Battelle Press, Columbus, Ohio

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United States Army Core of Engineers, 1999. "Multi-Phase Extraction Engineer Manual", EM 1110-1-4010, Washington, DC.

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Zemo, D., 2009. "Suggested Methods to Mitigate Bias From Non-Dissolved Petroleum in Ground Water Samples Collected From the Smear Zone", *Ground Water Monitoring & Remediation* 29, No. 3: 77-83.

8.0 REPORT LIMITATIONS AND SIGNATURES

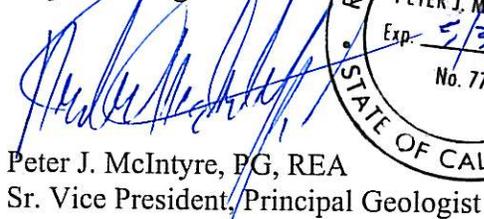
This report presents a summary of work completed by AEI Consultants, including observations and descriptions of site conditions. Where appropriate, it includes analytical results for samples taken during the course of the work. The number and location of samples are chosen to provide requested information, but it cannot be assumed that they are entirely representative of all areas not sampled. All conclusions and recommendations are based on these analyses, observations, and the governing regulations. Conclusions beyond those stated and reported herein should not be inferred from this document. These services were performed in accordance with generally accepted practices in the environmental engineering and geology fields that existed at the time and location of the work.

Should you have any questions or comments, or need any additional information, please contact Mr. Bradford (925) 746-6000, ext. 148 or Mr. McIntyre at (925) 746-6000, ext. 104.

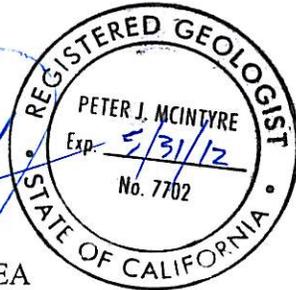
Sincerely,
AEI Consultants



Adrian M. Angel, GIT
Project Geologist



Peter J. McIntyre, PG, REA
Sr. Vice President, Principal Geologist



Ricky Bradford
Project Engineer

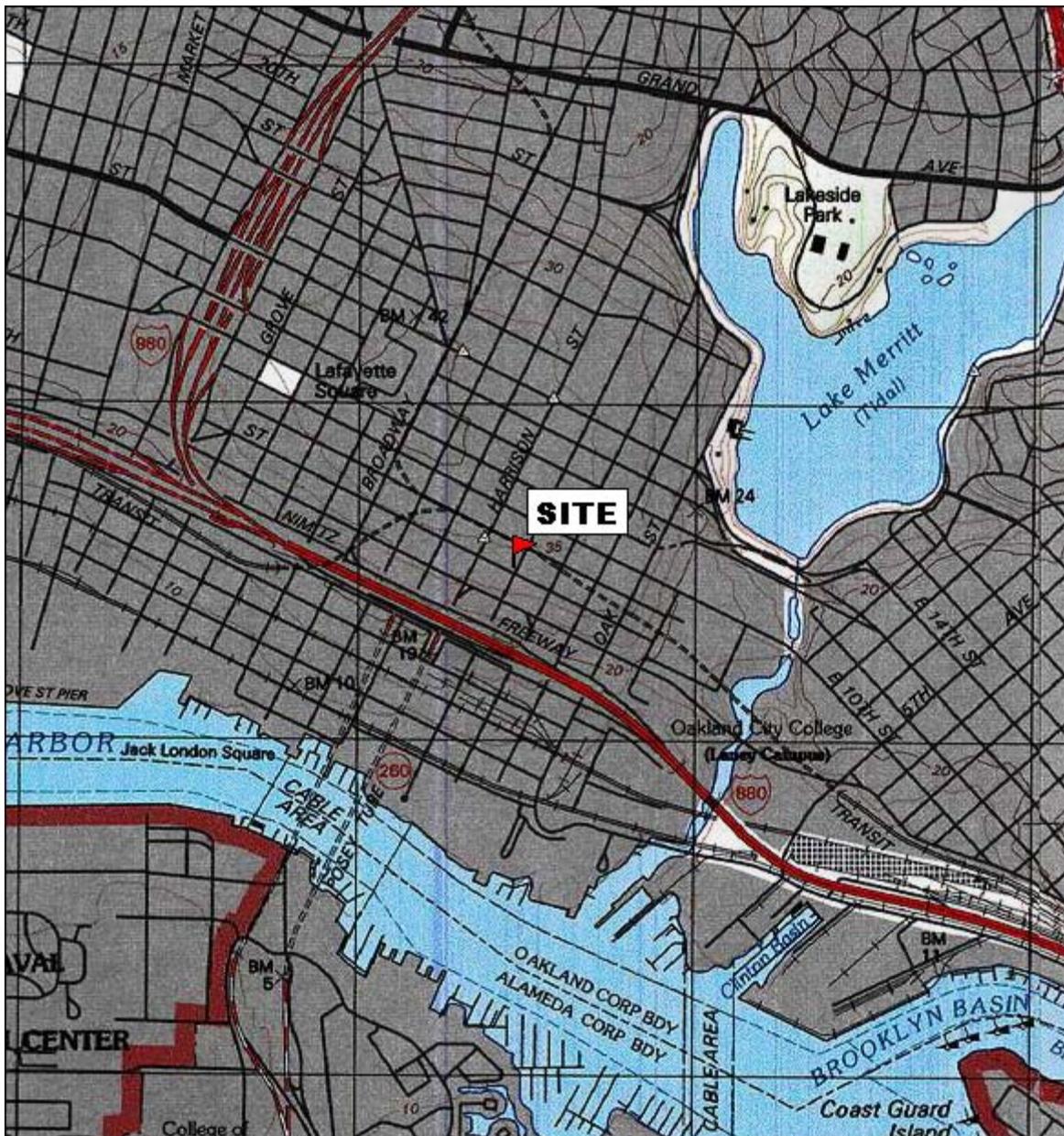
Distribution List:

Mr. Victor Lum (1 hard copy)
Vic's Automotive
245 8th Street
Oakland, California 94607

Attn. Mr. Jerry Wickham (electronic)
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502

SWRCB's GeoTracker Information System (electronic)

FIGURES



TN \star MN
15 1/4°



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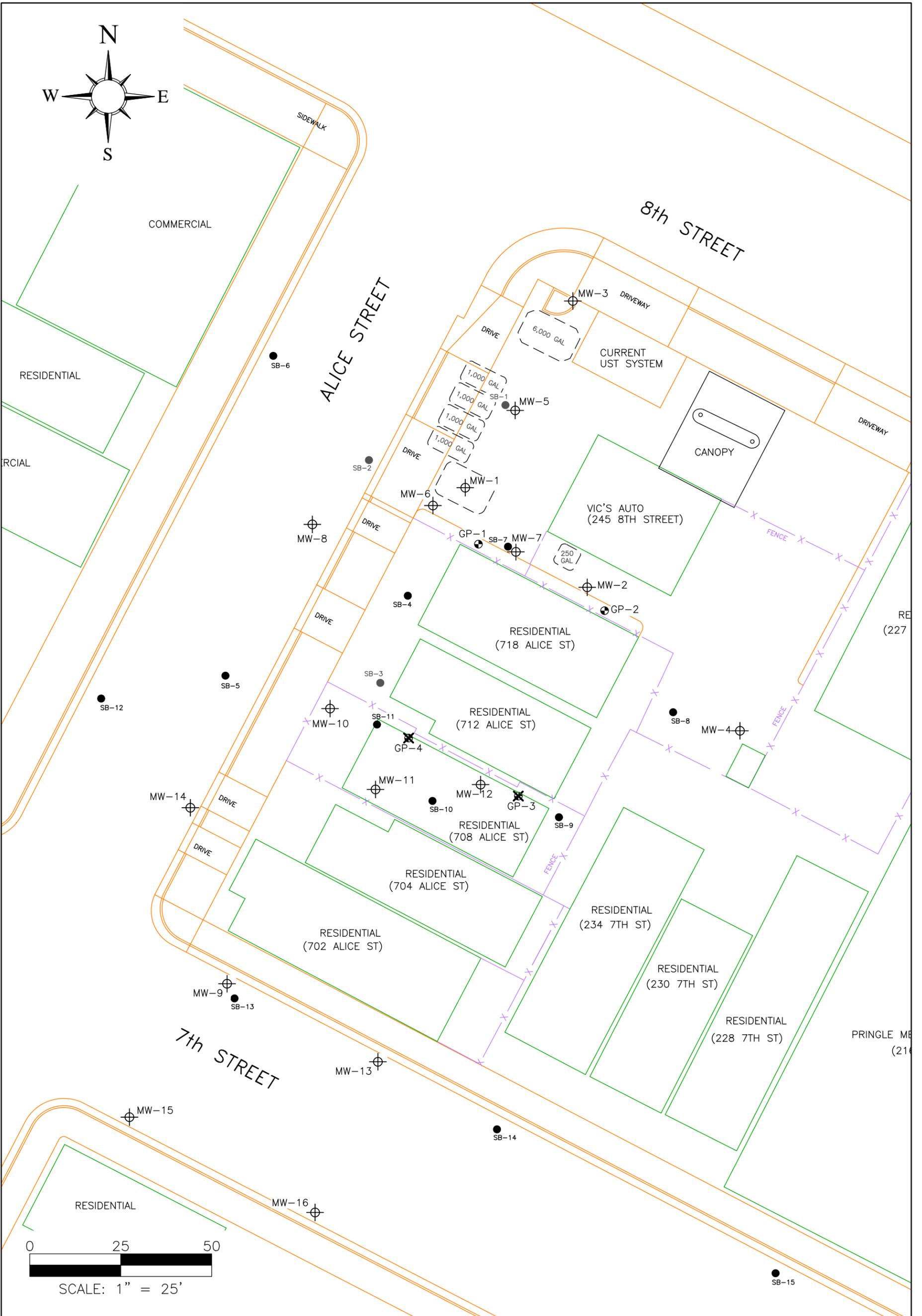
AEI CONSULTANTS

2500 CAMINO DIABLO BLVD, SUITE 200, WALNUT CREEK, CA

SITE LOCATION MAP

245 8th STREET
OAKLAND, CALIFORNIA

FIGURE 1
PROJECT No. 116907



LEGEND

- ⊕ MONITORING WELL
- SOIL BORING (8/9/96)
- SOIL BORING (04/02 & 03/03)
- ⊕ SOIL GAS PROBE
- ⊗ ABANDONED SOIL GAS PROBE

DRAFTED BY RJB 10-01-07
 REVISED BY RJB 10-08-09

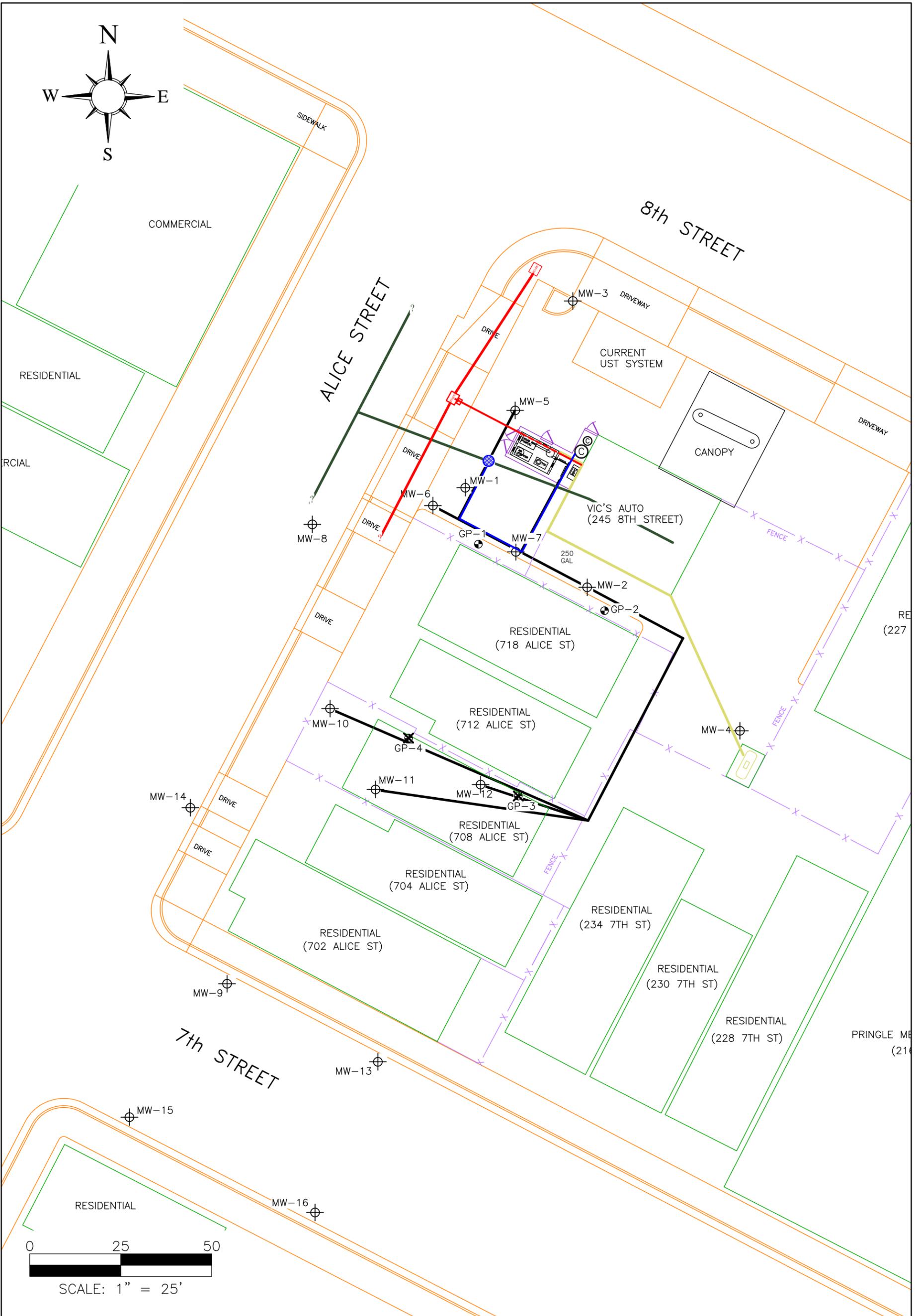
FORMER UST
 LOCATION

AEI CONSULTANTS
 2500 CAMINO DIABLO, SUITE 200, WALNUT CREEK

SITE PLAN

245 8TH STREET
 OAKLAND, CALIFORNIA

FIGURE 2
 PROJECT NO. 116907



LEGEND

- ⊕ MONITORING WELL
- SOIL BORING (8/9/96)
- SOIL BORING (04/02 & 03/03)
- ⊙ SOIL GAS PROBE
- ⊗ ABANDONED SOIL GAS PROBE
- HVDPPE CONVEYANCE PIPING (~18 - 24" BGS)
- WATER DISCHARGE (~24" BGS)
- SANITARY SEWER (~36 - 48" BGS)
- TEMPORARY POWER SERVICE (~24" BGS)
- PROPANE LINE (~18 - 24" BGS)

DRAFTED BY RJB 10-01-07
 REVISED BY RJB 10-08-09



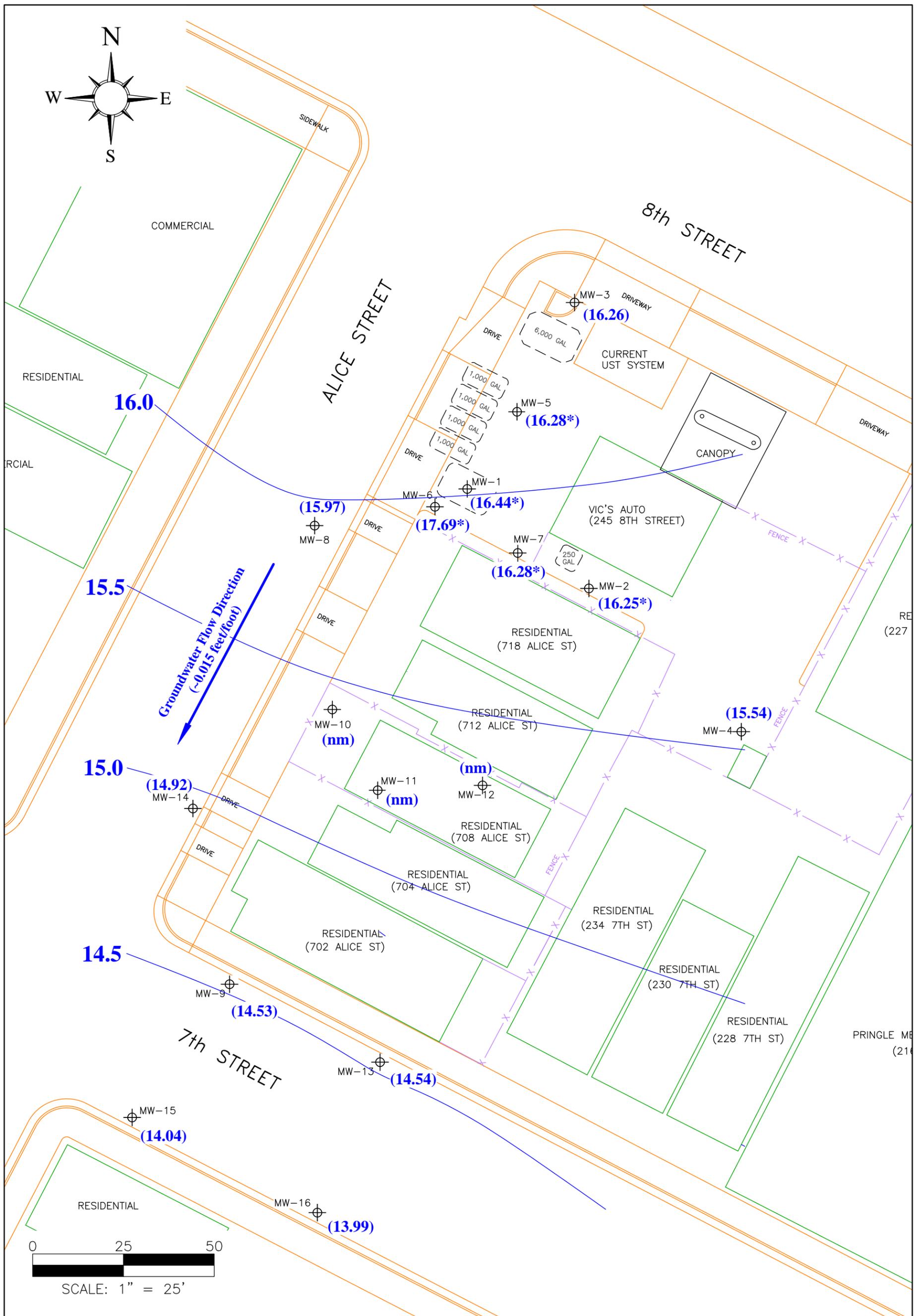
AEI CONSULTANTS

2500 CAMINO DIABLO, SUITE 200, WALNUT CREEK

SYSTEM LAYOUT PLAN

245 8TH STREET
 OAKLAND, CALIFORNIA

FIGURE 3
 PROJECT NO. 116907



LEGEND

⊕ MONITORING WELL

MW-1
(15.46) = feet above mean sea level

Contour Interval = 0.5 feet
Contours plotted with Surfer V.7.0

*Wells MW-1, MW-2, MW-5, MW-6, and MW-7 not used in flow/gradient calculation as these wellheads were modified for remediation purposes
nm = depth to water not measured

□
FORMER UST LOCATION

DRAFTED BY RJB 10-01-07
REVISED BY AMA 10-31-10

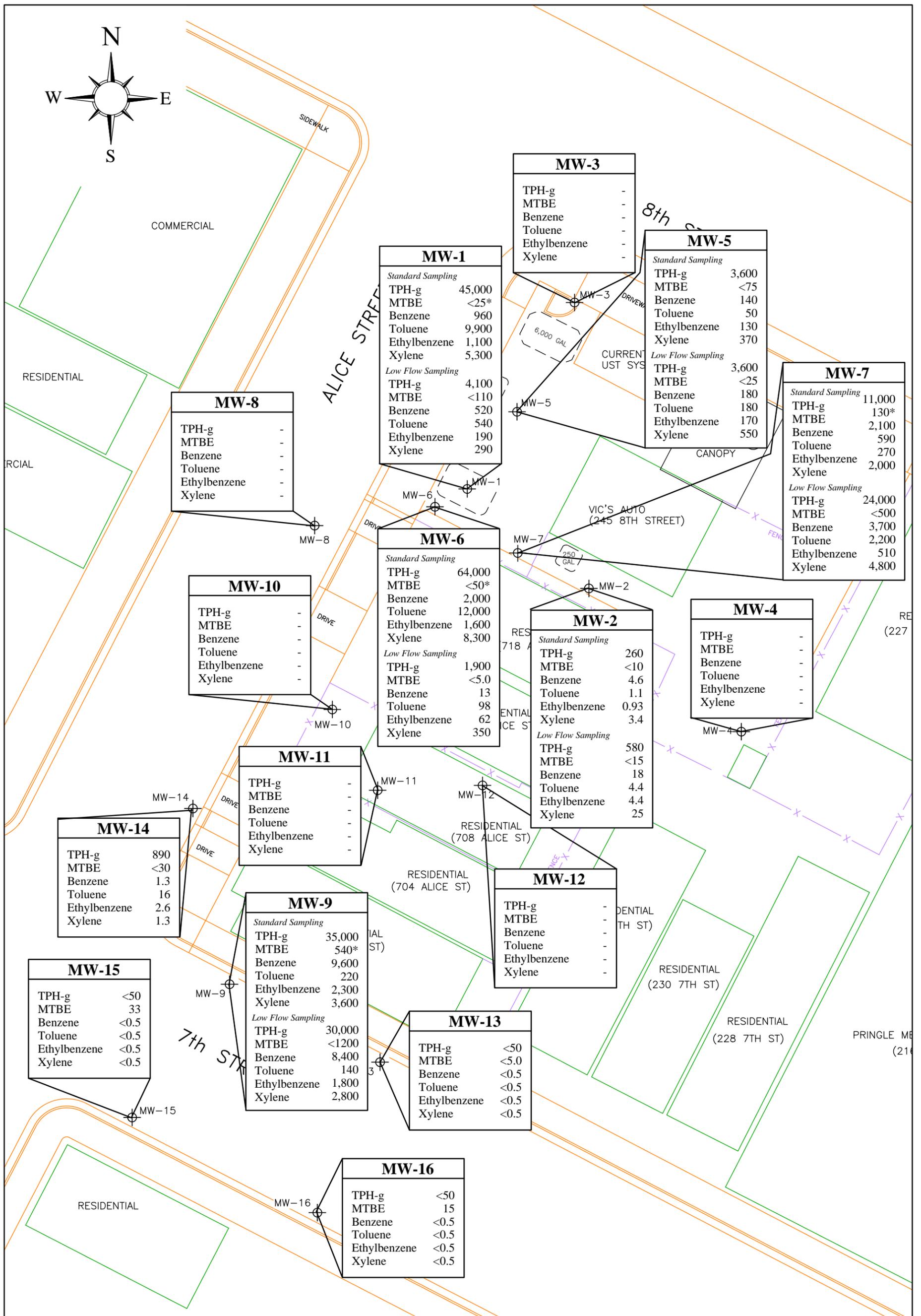
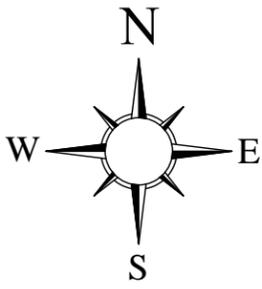
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2500 CAMINO DIABLO, SUITE 200, WALNUT CREEK

GROUNDWATER ELEVATION CONTOURS (8/19/10)

245 8TH STREET
OAKLAND, CALIFORNIA

FIGURE 4
PROJECT NO. 116907



LEGEND

⊕ MONITORING WELL

All groundwater sample analytical data in micrograms per liter (ug/L) or ppb

TPH-g = Total Petroleum Hydrocarbons as gasoline
MTBE = Methyl tertiary-butyl ether
NS/FP= not sampled / free product present

*MTBE by EPA Method SW8260B

□
FORMER UST
LOCATION

DRAFTED BY RJB 10-01-07
REVISED BY AMA 10-30-10

AEI CONSULTANTS

2500 CAMINO DIABLO, SUITE 200, WALNUT CREEK

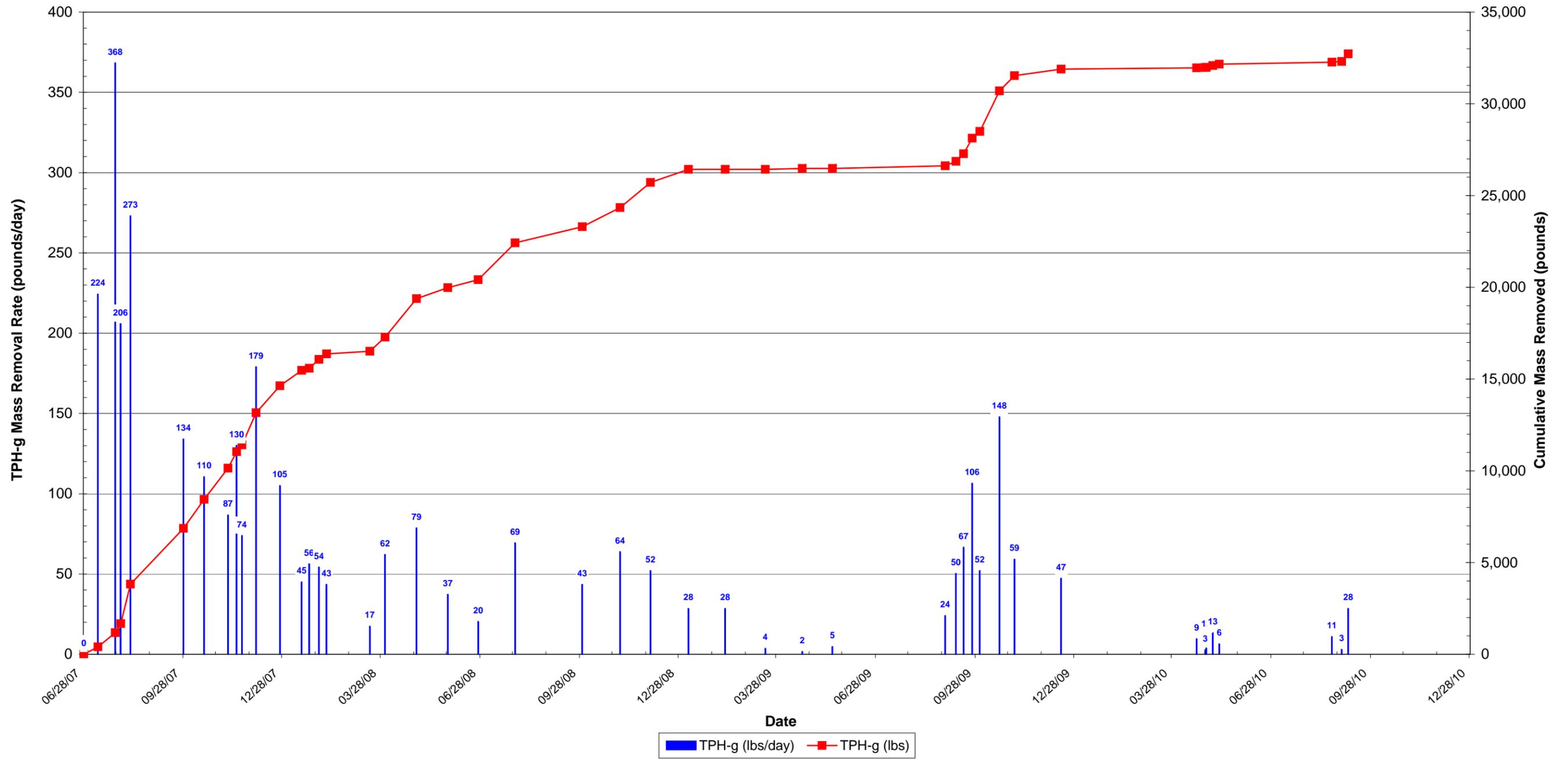
GROUNDWATER ANALYTICAL DATA SUMMARY (08/19 - 08/20/10)

245 8TH STREET
OAKLAND, CALIFORNIA

FIGURE 5
PROJECT NO. 116907

FIGURE 6: HYDROCARBON MASS REMOVAL RATES OVER TIME

Vic's Auto, 245 8th Street, Oakland, California



TABLES

TABLE 1: GROUNDWATER ELEVATION DATA SUMMARY

Vic's Auto, 245 8th Street, Oakland, California

Well ID (screen interval)	Date Collected	Well ^{1,2,5} Elevation (ft amsl)	Depth to ³ Water (ft)	Groundwater ⁴ Elevation (ft amsl)	Depth to LNAPL (ft)	Apparent LNAPL Thickness (ft)	
MW-1* (8-28)	06/29/01	27.73	16.52	11.21	14.89	1.63	
	10/10/01	27.73	15.45	12.28	15.37	0.08	
	01/09/02	27.73	12.61	15.12	-	<0.01	
	04/24/02	27.73	13.35	14.38	-	<0.01	
	07/24/02	27.73	14.19	13.54	-	<0.01	
	11/05/02	27.73	14.85	12.88	-	<0.01	
	02/04/03	27.73	14.91	12.82	-	<0.01	
	05/02/03	27.73	14.43	13.30	-	0.08	
	08/04/03	27.73	15.24	12.49	15.01	0.23	
	11/03/03	27.73	16.94	10.79	15.67	1.27	
	02/09/04	27.73	14.61	13.12	14.43	0.18	
	05/10/04	27.73		Obstructed	-	-	-
	08/09/04	27.73		15.24	12.49	15.03	0.21
	11/09/04	27.73		15.95	11.78	15.71	0.24
	02/03/05	32.55		13.75	18.80	13.58	0.17
	05/09/05	32.55		13.93	18.62	13.81	0.12
	08/05/05	32.55		15.40	17.15	15.39	0.01
	11/09/05	32.55		15.76	16.79	15.75	0.01
	02/09/06	32.55		13.52	19.03	13.50	0.02
	05/04/06	32.55		12.47	20.08	12.46	0.01
	08/04/06	32.55		15.11	17.44	15.09	0.02
	11/08/06	32.55		16.03	16.52	16.02	0.01
	02/08/07	32.55		16.51	16.04	16.48	0.03
	05/29/07	32.55		15.56	16.99	15.51	0.05
	09/05/07	32.55		16.33	16.22	-	Sheen
	12/12/07	32.55		17.62	14.93	-	Sheen
	02/13/08	32.55		15.94	16.61	-	Sheen
	05/15/08	32.55		16.64	15.91	-	-
	08/05/08	32.55		16.99	15.56	-	-
	11/07/08	32.55		17.40	15.15	-	-
	02/05/09	32.55		16.89	15.66	-	-
	05/05/09	32.55		15.69	16.86	-	-
	08/21/09	32.55		17.09	15.46	-	-
11/23/09	32.55		16.92	15.63	-	-	
02/26/10	32.55		14.77	17.78	-	-	
05/12/10	32.55		16.02	16.53	-	-	
08/19/10		32.55	16.11	16.44	-	-	

TABLE 1: GROUNDWATER ELEVATION DATA SUMMARY

Vic's Auto, 245 8th Street, Oakland, California

Well ID (screen interval)	Date Collected	Well ^{1,2,5} Elevation (ft amsl)	Depth to ³ Water (ft)	Groundwater ⁴ Elevation (ft amsl)	Depth to LNAPL (ft)	Apparent LNAPL Thickness (ft)
MW-2* (8-28)	06/29/01	28.16	16.14	12.02	-	-
	10/10/01	28.16	16.43	11.73	-	-
	01/09/02	28.16	13.50	14.66	-	-
	04/24/02	28.16	14.40	13.76	-	-
	07/24/02	28.16	14.91	13.25	-	-
	11/05/02	28.16	16.96	11.20	-	-
	02/04/03	28.16	15.42	12.74	-	-
	05/02/03	28.16	15.24	12.92	-	-
	08/04/03	28.16	15.98	12.18	-	-
	11/03/03	28.16	16.60	11.56	-	Sheen
	02/09/04	28.16	15.22	12.94	-	Sheen
	05/10/04	28.16	15.34	12.82	-	Sheen
	08/09/04	28.16	15.92	12.24	-	Sheen
	11/09/04	28.16	16.51	11.65	-	Sheen
	02/03/05	33.24	14.44	18.80	-	Sheen
	05/09/05	33.24	14.67	18.57	-	Sheen
	08/05/05	33.24	16.27	16.97	-	Sheen
	11/09/05	33.24	16.53	16.71	-	Sheen
	02/09/06	33.24	14.36	18.88	-	Sheen
	05/04/06	33.24	13.46	19.78	-	Sheen
	08/04/06	33.24	15.95	17.29	-	Sheen
	11/08/06	33.24	16.86	16.38	-	Sheen
	02/08/07	33.24	17.13	16.11	-	Sheen
	05/29/07	33.24	16.51	16.73	-	Sheen
	09/05/07	33.24	17.48	15.76	-	-
	12/12/07	33.24	18.72	14.52	-	-
	02/13/08	33.24	16.91	16.33	-	-
	05/15/08	33.24	17.67	15.57	-	-
	08/05/08	33.24	17.94	15.30	-	-
	11/07/08	33.24	18.79	14.45	-	-
	02/05/09	33.24	17.98	15.26	-	-
	05/05/09	33.24	17.52	15.72	-	-
	08/21/09	33.24	18.02	15.22	-	-
11/23/09	33.24	17.94	15.30	-	-	
02/26/10	33.24	15.79	17.45	-	-	
05/12/10	33.24	16.69	16.55	-	-	
08/19/10		33.24	16.99	16.25	-	-

TABLE 1: GROUNDWATER ELEVATION DATA SUMMARY

Vic's Auto, 245 8th Street, Oakland, California

Well ID (screen interval)	Date Collected	Well ^{1,2,5} Elevation (ft amsl)	Depth to ³ Water (ft)	Groundwater ⁴ Elevation (ft amsl)	Depth to LNAPL (ft)	Apparent LNAPL Thickness (ft)
MW-3 (10-25)	06/29/01	29.21	16.60	12.61	-	-
	10/10/01	29.21	16.92	12.29	-	-
	01/09/02	29.21	14.20	15.01	-	-
	04/24/02	29.21	15.07	14.14	-	-
	07/24/02	29.21	16.40	12.81	-	-
	11/05/02	29.21	16.47	12.74	-	-
	02/04/03	29.21	16.92	12.29	-	-
	05/02/03	29.21	15.45	13.76	-	-
	08/04/03	29.21	16.46	12.75	-	-
	11/03/03	29.21	17.15	12.06	-	-
	02/09/04	29.21	15.78	13.43	-	-
	05/10/04	29.21	15.77	13.44	-	-
	08/09/04	29.21	16.45	12.76	-	-
	11/09/04	29.21	17.26	11.95	-	-
	02/03/05	34.25	15.92	18.33	-	-
	05/09/05	34.25	15.03	19.22	-	-
	08/05/05	34.25	16.59	17.66	-	-
	11/09/05	34.25	16.82	17.43	-	-
	02/09/06	34.25	14.65	19.60	-	-
	05/04/06	34.25	13.61	20.64	-	-
	08/04/06	34.25	16.28	17.97	-	-
	11/08/06	34.25	17.28	16.97	-	-
	02/08/07	34.25	17.68	16.57	-	-
	05/29/07	34.25	17.37	16.88	-	-
	09/05/07	34.25	18.53	15.72	-	-
	12/12/07	34.25	19.61	14.64	-	-
	02/13/08	34.25	18.12	16.13	-	-
	05/15/08	34.25	18.64	15.61	-	-
	08/05/08	34.25	18.88	15.37	-	-
	11/07/08	34.25	19.60	14.65	-	-
	02/05/09	34.25	19.02	15.23	-	-
	05/05/09	34.25	17.78	16.47	-	-
	08/21/09	34.25	19.24	15.01	-	-
11/23/09	34.25	19.04	15.21	-	-	
02/26/10	34.25	16.96	17.29	-	-	
05/12/10	34.25	18.23	16.02	-	-	
08/19/10	34.25	17.99	16.26	-	-	

TABLE 1: GROUNDWATER ELEVATION DATA SUMMARY

Vic's Auto, 245 8th Street, Oakland, California

Well ID (screen interval)	Date Collected	Well ^{1,2,5} Elevation (ft amsl)	Depth to ³ Water (ft)	Groundwater ⁴ Elevation (ft amsl)	Depth to LNAPL (ft)	Apparent LNAPL Thickness (ft)
MW-4 (10-25)	06/29/01	29.38	17.71	11.67	-	-
	10/10/01	29.38	18.00	11.38	-	-
	01/09/02	29.38	15.02	14.36	-	-
	04/24/02	29.38	15.74	13.64	-	-
	07/24/02	29.38	16.69	12.69	-	-
	11/05/02	29.38	17.64	11.74	-	-
	02/04/03	29.38	16.02	13.36	-	-
	05/02/03	29.38	16.72	12.66	-	-
	08/04/03	29.38	17.51	11.87	-	-
	11/03/03	29.38	18.09	11.29	-	-
	02/09/04	29.38	16.67	12.71	-	-
	05/10/04	29.38	16.89	12.49	-	-
	08/09/04	29.38	17.44	11.94	-	-
	11/09/04	29.38	17.89	11.49	-	-
	02/03/05	34.42	14.98	19.44	-	-
	05/09/05	34.42	16.20	18.22	-	-
	08/05/05	34.42	17.73	16.69	-	-
	11/09/05	34.42	17.91	16.51	-	-
	02/09/06	34.42	15.62	18.80	-	-
	05/04/06	34.42	15.12	19.30	-	-
	08/04/06	34.42	17.39	17.03	-	-
	11/08/06	34.42	18.30	16.12	-	-
	02/08/07	34.42	18.57	15.85	-	-
	05/29/07	34.42	18.29	16.13	-	-
	09/05/07	34.42	19.27	15.15	-	-
	12/12/07	34.42	20.44	13.98	-	-
	02/13/08	34.42	18.52	15.90	-	-
	05/15/08	34.42	19.42	15.00	-	-
	08/05/08	34.42	19.67	14.75	-	-
	11/07/08	34.42	20.42	14.00	-	-
	02/05/09	34.42	19.72	14.70	-	-
	05/05/09	34.42	18.51	15.91	-	-
	08/21/09	34.42	19.70	14.72	-	-
11/23/09	34.42	19.79	14.63	-	-	
02/26/10	34.42	17.52	16.90	-	-	
05/12/10	34.42	18.72	15.70	-	-	
08/19/10	34.42	18.88	15.54	-	-	

TABLE 1: GROUNDWATER ELEVATION DATA SUMMARY

Vic's Auto, 245 8th Street, Oakland, California

Well ID (screen interval)	Date Collected	Well ^{1,2,5} Elevation (ft amsl)	Depth to ³ Water (ft)	Groundwater ⁴ Elevation (ft amsl)	Depth to LNAPL (ft)	Apparent LNAPL Thickness (ft)
MW-5* (12-22)	02/03/05	33.33	14.23	19.10	-	-
	05/09/05	33.33	14.33	19.00	-	-
	08/05/05	33.33	15.89	17.44	-	-
	11/09/05	33.33	16.18	17.15	-	-
	02/09/06	33.33	14.02	19.31	-	-
	05/04/06	33.33	12.97	20.36	-	-
	08/04/06	33.33	15.63	17.70	-	-
	11/08/06	33.33	16.55	16.78	-	-
	02/08/07	33.33	16.12	17.21	-	-
	05/29/07	33.33	15.87	17.46	-	-
	09/05/07	33.33	16.95	16.38	-	-
	12/12/07	33.33	18.13	15.20	-	-
	02/13/08	33.33	16.58	16.75	-	-
	05/15/08	33.33	17.08	16.25	-	-
	08/05/08	33.33	17.42	15.91	-	-
	11/07/08	33.33	17.99	15.34	-	-
	02/05/09	33.33	17.42	15.91	-	-
	05/05/09	33.33	16.20	17.13	-	-
	08/21/09	33.33	17.66	15.67	-	-
	11/23/09	33.33	17.39	15.94	-	-
02/26/10	33.33	15.41	17.92	-	-	
05/12/10	33.33	16.51	16.82	-	-	
	08/19/10	33.33	17.05	16.28	-	-
MW-6* (12-22)	02/03/05	32.82	13.99	18.83	-	Sheen
	05/09/05	32.82	13.61	19.21	-	Sheen
	08/05/05	32.82	15.50	17.32	15.13	0.37
	11/09/05	32.82	15.87	16.95	15.50	0.37
	02/09/06	32.82	13.93	18.89	13.22	0.71
	05/04/06	32.82	12.88	19.94	12.13	0.75
	08/04/06	32.82	15.22	17.60	14.81	0.41
	11/08/06	32.82	16.16	16.66	15.78	0.38
	02/08/07	32.82	15.48	17.34	15.14	0.34
	05/29/07	32.82	15.35	17.47	15.04	0.31
	09/05/07	32.82	15.55	17.27	-	-
	12/12/07	32.82	17.22	15.60	-	Sheen
	02/13/08	32.82	15.54	17.28	-	Sheen
	05/15/08	32.82	16.25	16.57	-	-
	08/05/08	32.82	16.48	16.34	-	-
	11/07/08	32.82	17.33	15.49	-	-
	02/05/09	32.82	16.53	16.29	-	-
	05/05/09	32.82	15.46	17.36	-	-
	08/21/09	32.82	16.70	16.12	-	-
	11/23/09	32.82	16.53	16.29	-	-
02/26/10	32.82	14.37	18.45	-	-	
05/12/10	32.82	15.18	17.64	-	-	
	08/19/10	32.82	15.13	17.69	-	-

TABLE 1: GROUNDWATER ELEVATION DATA SUMMARY

Vic's Auto, 245 8th Street, Oakland, California

Well ID (screen interval)	Date Collected	Well ^{1,2,5} Elevation (ft amsl)	Depth to ³ Water (ft)	Groundwater ⁴ Elevation (ft amsl)	Depth to LNAPL (ft)	Apparent LNAPL Thickness (ft)
MW-7* (12-22)	02/03/05	33.07	14.17	18.90	-	Sheen
	05/09/05	33.07	14.47	18.60	14.44	0.03
	08/05/05	33.07	16.07	17.00	16.02	0.05
	11/09/05	33.07	16.47	16.60	16.35	0.12
	02/09/06	33.07	14.18	18.89	14.11	0.07
	05/04/06	33.07	13.12	19.95	13.11	0.01
	08/04/06	33.07	15.74	17.33	-	Sheen
	11/08/06	33.07	16.59	16.48	-	Sheen
	02/08/07	33.07	16.23	16.84	-	Sheen
	05/29/07	33.07	16.13	16.94	-	Sheen
	09/05/07	33.07	16.40	16.67	-	Sheen
	12/12/07	33.07	18.02	15.05	-	Sheen
	02/13/08	33.07	16.27	16.80	-	Sheen
	05/15/08	33.07	17.01	16.06	-	-
	08/05/08	33.07	17.23	15.84	-	-
	11/07/08	33.07	18.18	14.89	-	-
	02/05/09	33.07	17.26	15.81	-	-
	05/05/09	33.07	16.13	16.94	-	-
	08/21/09	33.07	17.39	15.68	-	-
	11/23/09	33.07	17.33	15.74	-	-
	02/26/10	33.07	15.15	17.92	-	-
05/12/10	33.07	16.43	16.64	-	-	
	08/19/10	33.07	16.79	16.28	-	-
MW-8 (12-22)	05/15/08	31.73	16.47	15.26	-	-
	08/05/08	31.73	16.88	14.85	-	-
	11/07/08	31.73	17.28	14.45	-	-
	02/05/09	31.73	16.78	14.95	-	-
	05/05/09	31.73	16.05	15.68	-	-
	08/21/09	31.73	17.05	14.68	-	-
	11/23/09	31.73	16.72	15.01	-	-
	02/26/10	31.73	14.59	17.14	-	-
	05/12/10	31.73	15.79	15.94	-	-
	08/19/10	31.73	15.76	15.97	-	-

TABLE 1: GROUNDWATER ELEVATION DATA SUMMARY

Vic's Auto, 245 8th Street, Oakland, California

Well ID (screen interval)	Date Collected	Well ^{1,2,5} Elevation (ft amsl)	Depth to ³ Water (ft)	Groundwater ⁴ Elevation (ft amsl)	Depth to LNAPL (ft)	Apparent LNAPL Thickness (ft)
MW-9 (12-22)	05/15/08	29.02	15.16	13.86	-	-
	08/05/08	29.02	15.38	13.64	-	-
	11/07/08	29.02	15.84	13.18	-	-
	02/05/09	29.02	15.38	13.64	-	-
	05/05/09	29.02	14.38	14.64	-	-
	08/21/09	29.02	15.41	13.61	-	-
	11/23/09	29.02	15.36	13.66	-	-
	02/26/10	29.02	13.51	15.51	-	-
	05/12/10	29.02	14.30	14.72	-	-
	08/19/10	29.02	14.49	14.53	-	-
MW-10 (12-22)	02/03/05	31.17	12.65	18.52	-	-
	05/09/05	31.17	13.09	18.08	-	-
	08/05/05	31.17	14.68	16.49	-	-
	11/09/05	31.17	14.94	16.23	-	-
	02/09/06	31.17	12.82	18.35	-	-
	05/04/06	31.17	12.11	19.06	-	-
	08/04/06	31.17	14.38	16.79	-	-
	11/08/06	31.17	15.32	15.85	-	-
	02/08/07	31.17	15.59	15.58	-	-
	05/29/07	31.17	15.27	15.90	-	-
	09/05/07	31.17	16.25	14.92	-	-
	12/12/07	31.17	17.75	13.42	-	Sheen
	02/13/08	31.17	15.59	15.58	-	-
	05/15/08	31.17	16.40	14.77	-	-
	08/05/08	31.17	16.67	14.50	-	-
	11/07/08	31.17	nm	-	-	-
	02/05/09	31.17	nm	-	-	-
	05/05/09	31.17	nm	-	-	-
	08/21/09	31.17	nm	-	-	-
	11/23/09	31.17	nm	-	-	-
02/26/10	31.17	nm	-	-	-	
05/12/10	31.17	nm	-	-	-	
08/19/10	31.17	nm	nm	-	-	

TABLE 1: GROUNDWATER ELEVATION DATA SUMMARY

Vic's Auto, 245 8th Street, Oakland, California

Well ID (screen interval)	Date Collected	Well ^{1,2,5} Elevation (ft amsl)	Depth to ³ Water (ft)	Groundwater ⁴ Elevation (ft amsl)	Depth to LNAPL (ft)	Apparent LNAPL Thickness (ft)
MW-11 (12-22)	02/03/05	31.78	13.39	18.39	-	Sheen
	05/09/05	31.78	13.89	17.89	-	Sheen
	08/05/05	31.78	15.47	16.31	-	Sheen
	11/09/05	31.78	15.73	16.05	-	Sheen
	02/09/06	31.78	13.53	18.25	-	Sheen
	05/04/06	31.78	12.73	19.05	-	Sheen
	08/04/06	31.78	15.17	16.61	-	Sheen
	11/08/06	31.78	16.15	15.63	-	-
	02/08/07	31.78	16.36	15.42	-	Sheen
	05/29/07	31.78	16.06	15.72	-	Sheen
	09/05/07	31.78	17.03	14.75	-	Sheen
	12/12/07	31.78	18.68	13.10	-	-
	02/13/08	31.78	16.28	15.50	-	-
	05/15/08	31.78	17.12	14.66	-	-
	08/05/08	31.78	17.33	14.45	-	-
	11/07/08	31.78	nm	-	-	-
	02/05/09	31.78	nm	-	-	-
	05/05/09	31.78	nm	-	-	-
	08/21/09	31.78	nm	-	-	-
	11/23/09	31.78	nm	-	-	-
	02/26/10	31.78	nm	-	-	-
05/12/10	31.78	nm	-	-	-	
08/19/10	31.78	nm	-	-	-	
MW-12 (12-22)	02/03/05	32.05	13.70	18.35	-	Sheen
	05/09/05	32.05	14.17	17.88	-	Sheen
	08/05/05	32.05	15.69	16.36	-	Sheen
	11/09/05	32.05	15.93	16.12	-	Sheen
	02/09/06	32.05	13.78	18.27	-	Sheen
	05/04/06	32.05	12.98	19.07	-	Sheen
	08/04/06	32.05	15.39	16.66	-	Sheen
	11/08/06	32.05	16.29	15.76	-	-
	02/08/07	32.05	16.54	15.51	-	-
	05/29/07	32.05	16.27	15.78	-	-
	09/05/07	32.05	17.24	14.81	-	-
	12/12/07	32.05	18.65	13.40	-	-
	02/14/08	32.05	16.50	15.55	-	-
	05/15/08	32.05	17.34	14.71	-	-
	08/05/08	32.05	17.61	14.41	-	-
	11/07/08	32.05	nm	-	-	-
	02/05/09	32.05	nm	-	-	-
	05/05/09	32.05	nm	-	-	-
	08/21/09	32.05	nm	-	-	-
	11/23/09	32.05	nm	-	-	-
	02/26/10	32.05	nm	-	-	-
05/12/10	32.05	nm	-	-	-	
08/19/10	32.05	nm	-	-	-	

TABLE 1: GROUNDWATER ELEVATION DATA SUMMARY

Vic's Auto, 245 8th Street, Oakland, California

Well ID (screen interval)	Date Collected	Well ^{1,2,5} Elevation (ft amsl)	Depth to ³ Water (ft)	Groundwater ⁴ Elevation (ft amsl)	Depth to LNAPL (ft)	Apparent LNAPL Thickness (ft)
MW-13 (12-22)	05/15/08	28.84	14.87	13.97	-	-
	08/05/08	28.84	15.10	13.74	-	-
	11/07/08	28.84	15.61	13.23	-	-
	02/05/09	28.84	15.09	13.75	-	-
	05/05/09	28.84	14.09	14.75	-	-
	08/21/09	28.84	15.11	13.73	-	-
	11/23/09	28.84	15.11	13.73	-	-
	02/26/10	28.84	13.32	15.52	-	-
	05/12/10	28.84	14.10	14.74	-	-
	08/19/10	28.84	14.30	14.54	-	-
MW-14 (12-22)	08/21/09	29.53	15.66	13.87	-	-
	11/23/09	29.53	15.53	14.00	-	-
	02/26/10	29.53	13.65	15.88	-	-
	05/12/10	29.53	14.48	15.05	-	-
		08/19/10	29.53	14.61	14.92	-
MW-15 (12-22)	08/21/09	29.22	16.03	13.19	-	-
	11/23/09	29.22	15.95	13.27	-	-
	02/26/10	29.22	14.30	14.92	-	-
	05/12/10	29.22	14.89	14.33	-	-
		08/19/10	29.22	15.18	14.04	-
MW-16 (12-22)	08/21/09	28.87	15.61	13.26	-	-
	11/23/09	28.87	15.61	13.26	-	-
	02/26/10	28.87	13.81	15.06	-	-
	05/12/10	28.87	14.81	14.06	-	-
		08/19/10	28.87	14.88	13.99	-

NOTES:

- not applicable

ft = feet

ft amsl = feet above mean sea level

nm = not measured

LNAPL = light non-aqueous phase liquid

*Well head modified to serve as remediation well, top of casing elevation no longer considered surveyed

1) Monitoring well top of casing (TOC) elevations were resurveyed by Morrow Surveying on January 10, 2006 and February 7, 2006

2) Groudwater elevations for the February 3, 2005 and subsequent monitoring episodes use the new well survey data

3) Depth water is measured from the top of the well casing

4) When LNAPL is present at >0.10 ft, the groundwater elevations are assumed to be affected by the LNAPL

5) Monitoring well top of casing (TOC) elevations for MW-8, 9, 13, 14, 15 & 16 were surveyed by Morrow Surveying on September 30, 2009

TABLE 2: GROUNDWATER FLOW SUMMARY

Vic's Auto, 245 8th Street, Oakland, California

Episode #	Date	Average Groundwater Elevation ¹ (feet amsl)	Change from Previous Episode (feet)	Flow direction (gradient)
1	06/29/01	12.10	-	SSE (0.0074)
2	10/10/01	11.80	-0.30	SSE (0.0071)
3	01/09/02	14.68	2.88	SE (0.0054)
4	04/24/02	13.85	-0.83	SSW (0.005)
5	07/24/02	12.92	-0.93	NE (0.021)
6	11/05/02	11.89	-1.02	SW (0.019)
7	02/04/03	12.80	0.90	NNW (0.01)
8	05/02/03	13.11	0.32	SSE (0.01)
9	08/04/03	12.27	-0.85	SSE(0.007)
10	11/03/03	11.64	-0.63	SSE (0.006)
11	02/09/04	13.03	1.39	SSE (0.006)
12	05/10/04	12.92	-0.11	SSE (0.008)
13	08/09/04	12.31	-0.60	SSE (0.006)
14	11/09/04	11.70	-0.62	SSE (0.004)
15	02/03/05	18.75	-	W (0.007)
16	05/09/05	18.53	-0.22	S (0.010)
17	08/05/05	16.94	-1.59	S (0.010)
18	11/09/05	16.65	-0.28	S (0.010)
19	02/09/06	18.83	2.17	SSW (0.010)
20	05/04/06	19.72	0.90	SSW (0.012)
21	08/04/06	17.24	-2.48	SSW (0.010)
22	11/08/06	16.32	-0.93	SSW(0.0007)
23	02/08/07	16.25	-0.07	SSE (0.0009)
24	05/29/07	16.60	0.35	SSE (0.0009)
25*	09/05/07	15.77	-0.84	-
26*	12/12/07	14.38	-1.38	-
27*	02/13/08	16.24	1.86	-
28*	05/15/08	15.25	-1.00	-
29*	08/05/08	14.97	-0.27	-
30*	11/07/08	14.48	-0.49	-
31*	02/05/09	15.12	0.64	-
32*	05/05/09	16.15	1.03	-
33a	08/21/09	14.63	-1.51	SW (0.010)
34	11/23/09	14.74	0.11	SW (0.010)
35b	02/26/10	16.75	2.01	SSW (0.016)
36c	05/17/10	15.07	-1.68	SSW (0.006)
37d	08/19/10	14.97	-0.10	SSW (0.015)

TABLE 2: GROUNDWATER FLOW SUMMARY

Vic's Auto, 245 8th Street, Oakland, California

Episode #	Date	Average Groundwater Elevation ¹ (feet amsl)	Change from Previous Episode (feet)	Flow direction (gradient)
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NOTES:

- not applicable

ft amsl = feet above mean sea level

1) MW-2 to MW-4 only used for episodes 1 through 14; all wells used for episodes 15 and later

* Flow direction not calculated due to onsite operation of dual-phase extraction remediation system

a) HVDPE System was shutdown for approximately three (3) months prior to sampling; therefore, groundwater elevation data was contoured. The groundwater elevation data and contours are shown on Figure 4.

b) HVDPE System was shutdown for approximately four (4) months prior to sampling; therefore, groundwater elevation data was contoured. The groundwater elevation data and contours are shown on Figure 4.

c) HVDPE System was shutdown for approximately seven (7) months prior to sampling; therefore, groundwater elevation data was contoured. In addition, average elevation and change from previous was not calculated for remediation wells MW-1, 2, 5, 6, and 7, since these well heads have been modified since their survey. The groundwater elevation data and contours are shown on Figure 4.

d) HVDPE System was shutdown for approximately three (3) months prior to sampling; therefore, groundwater elevation data was contoured. In addition, average elevation and change from previous was not calculated for remediation wells MW-1, 2, 5, 6, and 7, since these well heads have been modified since their survey. The groundwater elevation data and contours are shown on Figure 4.

TABLE 3: GROUNDWATER ANALYTICAL DATA SUMMARY

Vic's Auto, 245 8th Street, Oakland, California

Well ID (screen interval)	Date Collected	Apparent LNAPL Thickness (ft)	TPH-g (µg/L)	MTBE (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl- benzene (µg/L)	Xylenes (µg/L)	HVOC (µg/L)	
MW-1 (8-28)	06/29/01	1.63	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	-	
	10/10/01	0.08	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	-	
	01/09/02	<0.01	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	-	
	04/24/02	<0.01	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	-	
	07/24/02	~0.01	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	-	
	11/05/02	~0.01	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	-	
	02/04/03	~0.01	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	-	
	05/02/03	0.08	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	-	
	08/04/03	0.23	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	-	
	11/03/03	1.27	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	-	
	02/09/04	0.18	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	-	
	05/10/04	Obstructed	-	-	-	-	-	-	-	
	08/09/04	0.21	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	-
	11/09/04	0.24	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	-
	02/03/05	0.17	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	-
	05/09/05	0.12	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	-
	08/05/05	0.01	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	-
	11/09/05	0.01	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	-
	02/09/06	0.02	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	-
	05/04/06	0.01	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	-
	08/04/06	0.02	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	-
	11/08/06	0.01	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	-
	02/08/07	0.03	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	-
	05/29/07	0.05	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	-
	09/05/07	Sheen	47,000	<500	4,200	11,000	1,100	6,400	-	
	12/12/07	Sheen	80,000	<250	630	22,000	1,700	8,900	-	
	02/13/08	Sheen	22,000	<250	750	4,100	340	3,200	-	
05/15/08	0.00	25,000	<600	580	9,200	970	4,200	-		
08/05/08	0.00	110,000	<1,000	730	22,000	1,700	8,200	-		
11/07/08	0.00	15,000	290	460	1,400	84	2,700	-		
02/05/09	0.00	42,000	<1,000	1,100	8,500	880	4,500	-		
05/05/09	0.00	44,000	<50*	1,300	6,500	1,300	6,800	-		
08/21/09	0.00	63,000	<50*	1,900	15,000	1,200	7,600	-		
11/23/09	0.00	63,000	<17*	3,300	9,800	1,500	8,200	-		
02/26/10	0.00	62,000	<25*	3,500	14,000	1,600	9,300	-		
05/12/10	0.00	13,000	<5.0*	270	2,000	330	1,900	-		
Traditional	08/19/10	0.00	45,000	<25*	960	9,900	1,100	5,300	-	
Low-Flow	08/19/10	0.00	4,100	<110	520	540	190	290	-	

TABLE 3: GROUNDWATER ANALYTICAL DATA SUMMARY

Vic's Auto, 245 8th Street, Oakland, California

Well ID (screen interval)	Date Collected	Apparent LNAPL Thickness (ft)	TPH-g (µg/L)	MTBE (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl- benzene (µg/L)	Xylenes (µg/L)	HVOC (µg/L)
MW-2 (8-28)	06/29/01	0.00	69,000	4,100/4,400*	7,200	6,100	1,500	7,000	-
	10/10/01	0.00	87,000	14,000	22,000	12,000	2,700	9,100	-
	01/09/02	0.00	130,000	11,000	30,000	19,000	3,800	14,000	-
	04/24/02	Sheen	210,000	32,000	38,000	23,000	4,600	19,000	-
	07/24/02	Sheen	170,000	36,000	48,000	12,000	3,700	8,600	-
	11/05/02	Sheen	190,000	36,000	45,000	25,000	4,600	16,000	-
	02/04/03	Sheen	150,000	27,000	51,000	24,000	4,200	14,000	-
	05/02/03	Sheen	150,000	35,000	39,000	11,000	3,800	9,900	-
	08/04/03	Sheen	120,000	29,000	32,000	5,000	3,200	7,200	-
	11/03/03	Sheen	120,000	24,000	33,000	4,300	3,200	5,400	-
	02/09/04	Sheen	130,000	19,000	27,000	7,700	3,100	7,600	-
	05/10/04	Sheen	67,000	13,000	20,000	3,000	2,300	4,100	-
	08/09/04	Sheen	100,000	22,000	27,000	7,100	2,800	6,600	-
	11/09/04	Sheen	100,000	23,000	27,000	6,100	3,000	5,600	-
	02/03/05	Sheen	84,000	11,000	23,000	5,000	3,000	5,500	-
	05/09/05	Sheen	74,000	14,000	21,000	4,200	2,300	3,300	-
	07/27/05	Sheen	9,500	910	1,400	1,000	180	960	-
	08/05/05	Sheen	74,000	4,000	8,800	11,000	1,300	7,600	-
	11/09/05	Sheen	120,000	16,000	21,000	14,000	2,300	13,000	-
	02/09/06	Sheen	120,000	10,000	18,000	16,000	2,200	13,000	-
	05/04/06	Sheen	71,000	8,300	14,000	11,000	1,500	7,600	-
	08/04/06	Sheen	160,000	14,000	22,000	14,000	2,400	11,000	-
	11/08/06	Sheen	110,000	6,400	17,000	9,200	1,600	6,800	<DL
	02/08/07 ¹	Sheen	68,000	5,400	11,000	7,800	1,500	7,700	-
	05/29/07	Sheen	49,000	4,800	7,600	4,400	940	4,600	-
	09/05/07	Sheen	25,000	1,000	3,300	3,400	490	2,800	-
	12/12/07	0.00	5,500	870	1,100	440	28	550	-
	02/13/08	0.00	5,700	250	440	290	43	1,000	-
	05/15/08	0.00	490	68	110	11	0.90	42	-
	08/05/08	0.00	520	<25	26	57	7.6	70	-
11/07/08	0.00	680	72	110	38	3.1	75	-	
02/05/09	0.00	1,000	82	130	50	15	120	-	
05/05/09	0.00	570	8.6*	22	33	9.2	73	-	
08/21/09	0.00	660	<10	13	41	13	48	-	
11/23/09	0.00	400	23*	20	10	1.0	33	-	
02/26/10	0.00	1,400	17*	56	83	18	230	-	
05/12/10	0.00	350	88	63	7.0	3.0	18	-	
Traditional	08/19/10	0.00	260	<10	4.6	1.1	0.93	3.4	-
Low-Flow	08/19/10	0.00	580	<15	18	4.4	4.4	25	-

TABLE 3: GROUNDWATER ANALYTICAL DATA SUMMARY

Vic's Auto, 245 8th Street, Oakland, California

Well ID (screen interval)	Date Collected	Apparent LNAPL Thickness (ft)	TPH-g (µg/L)	MTBE (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl- benzene (µg/L)	Xylenes (µg/L)	HVOC (µg/L)
MW-3 (10-25)	06/29/01	0.00	550	<5.0	<0.5	3.1	3.2	1.2	-
	10/10/01	0.00	470	<5.0	0.77	5.3	3.3	5.9	-
	01/09/02	0.00	1,000	<5.0	0.90	7.6	7.8	25	-
	04/24/02	0.00	1,500	<5.0	0.64	7.2	12	14	-
	07/24/02	0.00	1,200	<5.0	10	17.0	11	25	-
	11/05/02	0.00	1,800	<25	33	43.0	18	31	-
	02/04/03	0.00	450	<5.0	<0.5	5.0	<0.5	0.77	-
	05/02/03	0.00	340	<5.0	7.3	10.0	2.5	7.3	-
	08/04/03	0.00	170	<5.0	5.8	5.9	1.5	4.9	-
	11/03/03	0.00	54	<5.0	<0.5	<0.5	<0.5	<0.5	-
	02/09/04	0.00	190	<5.0	<0.5	3.6	<0.5	<0.5	-
	05/10/04	0.00	280	<5.0	<0.5	3.4	<0.5	<0.5	-
	08/09/04	0.00	290	<5.0	<0.5	3.8	<0.5	<0.5	-
	11/09/04	0.00	220	<5.0	<0.5	4.0	<0.5	<0.5	-
	02/03/05	0.00	160	<5.0	13	30	3	21	-
	05/09/05	0.00	200	<5.0	<0.5	3.9	<0.5	<0.5	-
	08/05/05	0.00	<50	<5.0	<0.5	<0.5	<0.5	<0.5	-
	11/09/05	0.00	130	<5.0	<0.5	2.3	<0.5	<0.5	-
	02/09/06	0.00	270	<5.0	<0.5	5.6	<0.5	<0.5	-
	05/04/06	0.00	220	<5.0	<0.5	4.3	<0.5	<0.5	-
	08/04/06	0.00	93	<5.0	<0.5	1.5	<0.5	<0.5	-
	11/08/06	0.00	160	<5.0	<0.5	2.9	<0.5	<0.5	<DL
	02/08/07 ¹	0.00	<50	<5.0	<0.5	<0.5	<0.5	<0.5	-
	05/29/07	0.00	<50	<5.0	<0.5	<0.5	<0.5	<0.5	-
	09/05/07	0.00	<50	<5.0	<0.5	<0.5	<0.5	<0.5	-
	12/12/07	0.00	<50	<5.0	<0.5	<0.5	<0.5	<0.5	-
	02/13/08	0.00	<50	<5.0	<0.5	<0.5	<0.5	<0.5	-
	05/15/08	0.00	<50	<5.0	0.99	<0.5	<0.5	0.68	-
	08/05/08	0.00	91	<5.0	2.0	8.0	1.3	8.0	-
	11/07/08	0.00	150	<5.0	0.70	6.5	1.3	26	-
	02/05/09	0.00	<50	<5.0	1.7	<0.5	<0.5	<0.5	-
	05/05/09	0.00	<50	<5.0	<0.5	0.76	<0.5	<0.5	-
08/21/09	0.00	<50	<5.0	<0.5	<0.5	<0.5	<0.5	-	
11/23/09	0.00	<50	<5.0	0.90	<0.5	0.59	1.2	-	
02/26/10	-	-	-	-	-	-	-	-	
05/12/10	-	-	-	-	-	-	-	-	
08/19/10	-	-	-	-	-	-	-	-	

TABLE 3: GROUNDWATER ANALYTICAL DATA SUMMARY

Vic's Auto, 245 8th Street, Oakland, California

Well ID (screen interval)	Date Collected	Apparent LNAPL Thickness (ft)	TPH-g (µg/L)	MTBE (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl- benzene (µg/L)	Xylenes (µg/L)	HVOC (µg/L)
MW-4 (10-25)	06/29/01	0.00	<50	<5.0	<0.5	<0.5	<0.5	<0.5	-
	10/10/01	0.00	<50	<5.0	<0.5	<0.5	<0.5	<0.5	-
	01/09/02	0.00	<50	<5.0	<0.5	<0.5	<0.5	<0.5	-
	04/24/02	0.00	<50	<5.0	<0.5	<0.5	<0.5	<0.5	-
	07/24/02	0.00	<50	<5.0	<0.5	<0.5	<0.5	<0.5	-
	11/05/02	0.00	<50	<5.0	<0.5	<0.5	<0.5	<0.5	-
	02/04/03	0.00	<50	<5.0	<0.5	<0.5	<0.5	<0.5	-
	05/02/03	0.00	500	10	68	71	18	65	-
	08/04/03	0.00	270	<5.0	30	29	9.2	32	-
	11/03/03	0.00	<50	<5.0	<0.5	<0.5	<0.5	<0.5	-
	02/09/04	0.00	<50	<5.0	<0.5	<0.5	<0.5	<0.5	-
	05/10/04	0.00	<50	<5.0	<0.5	<0.5	<0.5	<0.5	-
	08/09/04	0.00	130	<5.0	14	13	5.3	17	-
	11/09/04	0.00	<50	<5.0	<0.5	<0.5	<0.5	<0.5	-
	02/03/05	0.00	370	<5.0	<0.5	4.1	<0.5	0.64	-
	05/09/05	0.00	840	<5.0	50	180	21	110	-
	07/27/05	0.00	<50	<5.0	<0.5	<0.5	<0.5	<0.5	-
	08/05/05	0.00	310	<5.0	7.5	57	10	53	-
	11/09/05	0.00	290	<5.0	12	61	8.8	49	-
	02/09/06	0.00	250	<5.0	9.9	42	7.5	45	-
	05/04/06	0.00	300	<5.0	37	76	7.8	42	-
	08/04/06	0.00	270	<5.0	7.3	33	5.6	32	-
	11/08/06	0.00	1,300	<5.0	75	230	31	160	<DL
	02/08/07	0.00	<50	<5.0	<0.5	<0.5	<0.5	<0.5	-
	05/29/07	0.00	<50	<5.0	<0.5	<0.5	<0.5	<0.5	-
	09/05/07	0.00	<50	<5.0	<0.5	<0.5	<0.5	<0.5	-
	12/12/07	0.00	<50	<5.0	<0.5	<0.5	<0.5	<0.5	-
	02/13/08	0.00	75	<5.0	2.4	8.3	1.2	14	-
	05/15/08	0.00	<50	<5.0	0.65	<0.5	<0.5	0.52	-
	08/05/08	0.00	76	<5.0	1.2	8.1	1.5	9.7	-
11/07/08	0.00	100	<5.0	2.8	7.7	1.1	15	-	
02/05/09	0.00	140	<5.0	0.87	19	3.9	29	-	
05/05/09	0.00	85	<5.0	1.2	8.0	2.5	19	-	
08/21/09	0.00	390	<5.0	14	58	11	73	-	
11/23/09	0.00	<50	<5.0	2.6	<0.5	1.5	2.3	-	
02/26/10	-	-	-	-	-	-	-	-	
05/12/10	-	-	-	-	-	-	-	-	
08/19/10	-	-	-	-	-	-	-	-	

TABLE 3: GROUNDWATER ANALYTICAL DATA SUMMARY

Vic's Auto, 245 8th Street, Oakland, California

Well ID (screen interval)	Date Collected	Apparent LNAPL Thickness (ft)	TPH-g (µg/L)	MTBE (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl- benzene (µg/L)	Xylenes (µg/L)	HVOC (µg/L)
MW-5 (12-22)	02/03/05	0.00	78,000	<1,000	7,600	13,000	2,200	9,600	-
	05/09/05	0.00	60,000	<900	6,100	9,900	1,600	6,600	-
	07/27/05	nm	120,000	1,100	10,000	19,000	2,100	13,000	-
	08/05/05	0.00	59,000	<500	4,100	10,000	1,200	6,600	-
	11/09/05	0.00	44,000	<500	3,300	7,400	1,100	4,900	-
	02/09/06	0.00	110,000	<500	10,000	22,000	2,400	13,000	-
	05/04/06	0.00	110,000	<250	11,000	22,000	2,900	15,000	-
	08/04/06	0.00	73,000	<500	4,700	8,600	1,700	7,600	-
	11/08/06	0.00	51,000	<500	3,700	7,200	1,400	6,700	<DL
	02/08/07	0.00	67,000	<800	5,100	10,000	1,800	10,000	-
	05/29/07	0.00	86,000	<1000	6,200	12,000	2,000	11,000	-
	09/05/07	0.00	36,000	<350	2,100	4,000	560	4,600	-
	12/12/07	0.00	8,200	<100	160	56	290	1,200	-
	02/13/08	0.00	4,600	<50	77	440	41	1,300	-
	05/15/08	0.00	3,000	<10	59	330	47	670	-
	08/05/08	0.00	4,500	<50	64	490	46	1,100	-
	11/07/08	0.00	5,000	<17	66	400	29	1,200	-
	02/05/09	0.00	2,800	<0.5*	49	120	22	570	-
	05/05/09	0.00	12,000	<5.0*	360	1,300	250	2,000	-
	08/21/09	0.00	11,000	<1.0*	450	610	400	2,300	-
11/23/09	0.00	1,700	<0.5*	47	100	29	240	-	
02/26/10	0.00	3,100	<1.0*	55	220	27	520	-	
05/12/10	0.00	1,300	<5.0	55	190	13	180	-	
Traditional	08/19/10	0.00	3,600	<75	140	50	130	370	-
Low-Flow	08/19/10	0.00	3,600	<25	180	180	170	550	-
Low-Flow^	08/19/10	0.00	5,400	<25	210	230	230	660	-

TABLE 3: GROUNDWATER ANALYTICAL DATA SUMMARY

Vic's Auto, 245 8th Street, Oakland, California

Well ID (screen interval)	Date Collected	Apparent LNAPL Thickness (ft)	TPH-g (µg/L)	MTBE (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl- benzene (µg/L)	Xylenes (µg/L)	HVOC (µg/L)
MW-6 (12-22)	02/03/05	Sheen	130,000	<1,000	2,400	33,000	2,400	15,000	-
	05/09/05	Sheen	170,000	<4,000	11,000	43,000	3,100	16,000	-
	08/05/05	0.37	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	-
	11/09/05	0.37	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	-
	02/09/06	0.71	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	-
	05/04/06	0.75	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	-
	08/04/06	0.41	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	-
	11/08/06	0.38	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	-
	02/08/07	0.34	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	-
	05/29/07	0.31	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	-
	09/05/07	0.00	74,000	<750	870	7,000	2,400	12,000	-
	12/12/07	Sheen	12,000	<10	556	560	550	1,800	-
	02/13/08	Sheen	27,000	<250	700	4,900	620	5,300	<DL
	05/15/08	0.00	25,000	<150	410	2,500	1,000	3,700	-
	08/05/08	0.00	33,000	<350	480	5,500	1,400	6,800	-
	11/07/08 ²	0.00	54,000	<5.0	610	7,000	1,700	8,900	-
	02/05/09	0.00	92,000	<50*	1,100	8,600	2,800	14,000	-
	05/05/09	0.00	58,000	<50*	560	4,300	2,400	13,000	-
	08/21/09	0.00	53,000	<5.0*	1,800	8,100	1,200	12,000	-
	11/23/09	0.00	28,000	<10*	270	710	1,200	5,500	-
02/26/10	0.00	21,000	<10*	84	<5.0	800	3,900	-	
05/12/10	0.00	19,000	<12*	350	1,100	1,000	3,300	-	
Traditional	08/20/10	0.00	64,000	<50*	2,000	12,000	1,600	8,300	-
Low-Flow	08/20/10	0.00	1,900	<5.0	13	98	62	350	-

TABLE 3: GROUNDWATER ANALYTICAL DATA SUMMARY

Vic's Auto, 245 8th Street, Oakland, California

Well ID (screen interval)	Date Collected	Apparent LNAPL Thickness (ft)	TPH-g (µg/L)	MTBE (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl- benzene (µg/L)	Xylenes (µg/L)	HVOC (µg/L)
MW-7 (12-22)	02/03/05	Sheen	220,000	18,000	45,000	44,000	3,500	18,000	-
	05/09/05	0.03	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	-
	08/05/05	0.05	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	-
	11/09/05	0.12	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	-
	02/09/06	0.07	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	-
	05/04/06	0.01	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	-
	08/04/06	Sheen	230,000	19,000	37,000	37,000	3,100	14,000	-
	11/08/06	Sheen	240,000	13,000	41,000	39,000	3,000	14,000	<DL
	02/08/07	Sheen	230,000	15,000	41,000	37,000	3,700	20,000	-
	05/29/07	Sheen	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	-
	09/05/07	Sheen	14,000	<450	41	210	99	1,600	-
	12/12/07	Sheen	9,200	<500	1,100	870	66	1,100	-
	02/13/08	0.00	17,000	590	2,800	2,700	300	1,900	-
	05/15/08	0.00	10,000	230	1,700	1,900	200	950	-
	08/05/08	0.00	6,100	<150	1,100	1,100	120	740	-
	11/07/08	0.00	4,200	<50	580	570	44	400	-
	02/05/09	0.00	7,800	26*	1,100	810	190	690	-
	05/05/09	0.00	7,200	77*	1,200	1,200	150	860	-
	08/21/09	0.00	28,000	390*	6,200	3,200	450	3,100	-
	11/23/09	0.00	17,000	32*	430	1,600	730	2,800	-
02/26/10	0.00	21,000	29*	1,500	1,500	870	3,300	-	
05/12/10	0.00	18,000	51*	1,300	2,700	540	3,100	-	
Traditional	08/19/10	0.00	11,000	<300	2,100	590	270	2,000	-
Low-Flow	08/19/10	0.00	24,000	<500	3,700	2,200	510	4,800	-
Low-Flow[^]	08/19/10	0.00	23,000	<300	3,300	2,000	520	3,900	-

TABLE 3: GROUNDWATER ANALYTICAL DATA SUMMARY

Vic's Auto, 245 8th Street, Oakland, California

Well ID (screen interval)	Date Collected	Apparent LNAPL Thickness (ft)	TPH-g (µg/L)	MTBE (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl- benzene (µg/L)	Xylenes (µg/L)	HVOC (µg/L)
MW-8 (12-22)	05/15/08	0.00	90	<5.0	0.62	2.4	<0.5	1.0	-
	08/05/08	0.00	81	<5.0	0.66	7.2	1.2	9.1	-
	11/07/08	0.00	430	<5.0	2.9	26	6.1	86	-
	02/05/09	0.00	<50	<5.0	0.98	1.3	<0.5	<0.5	-
	05/05/09	0.00	94	<5.0	0.91	7.1	2.2	17	-
	08/21/09	0.00	480	<5.0	30	100	17	130	-
	11/23/09	0.00	62	<5.0	5.3	2.0	2.4	3.3	-
	02/26/10	-	-	-	-	-	-	-	-
	05/12/10	-	-	-	-	-	-	-	-
	08/19/10	-	-	-	-	-	-	-	-
MW-9 (12-22)	05/15/08	0.00	60,000	960	14,000	410	1,500	3,500	-
	08/05/08	0.00	42,000	<1,200	13,000	400	1,800	4,800	-
	11/07/08 ²	0.00	53,000	400	13,000	350	1,800	3,100	-
	02/05/09	0.00	32,000	360*	11,000	310	1,600	2,700	-
	05/05/09	0.00	44,000	730*	14,000	520	1,900	3,400	-
	08/21/09	0.00	48,000	900*	15,000	550	2,000	3,300	-
	11/23/09	0.00	39,000	750	11,000	390	1,800	2,400	-
	02/26/10	0.00	44,000	760*	12,000	360	1,900	3,800	-
	05/12/10	0.00	34,000	390*	6,800	320	1,700	3,600	-
Traditional	08/19/10	0.00	35,000	<1,200	9,600	220	2,300	3,600	-
Low-Flow	08/19/10	0.00	30,000	<1,200	8,400	140	1,800	2,800	-

TABLE 3: GROUNDWATER ANALYTICAL DATA SUMMARY

Vic's Auto, 245 8th Street, Oakland, California

Well ID (screen interval)	Date Collected	Apparent LNAPL Thickness (ft)	TPH-g (µg/L)	MTBE (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl- benzene (µg/L)	Xylenes (µg/L)	HVOC (µg/L)
MW-10 (12-22)	02/03/05	0.00	36,000	<500	4,700	7,200	660	3,400	-
	05/09/05	0.00	88,000	<1,500	6,900	20,000	2,300	9,900	-
	08/05/05	0.00	88,000	<1,100	10,000	21,000	1,900	9,800	-
	11/09/05	0.00	63,000	<1,100	5,400	13,000	1,900	7,900	-
	02/09/06	0.00	100,000	<500	6,600	19,000	2,900	13,000	-
	05/04/06	0.00	100,000	<500	8,500	25,000	3,000	13,000	-
	08/04/06	0.00	190,000	<2,200	17,000	35,000	2,800	13,000	-
	11/08/06	0.00	57,000	<500	2,500	7,600	1,600	5,700	<DL
	02/08/07	0.00	69,000	<1,000	4,400	14,000	2,200	8,800	-
	05/29/07	0.00	100,000	<1,000	5,300	19,000	2,600	12,000	-
	09/05/07	0.00	87,000	<1,000	6,100	20,000	2,400	12,000	-
	12/12/07	Sheen	4,700	<50	95	280	110	730	-
	02/13/08	0.00	4,500	<250	190	370	65	880	-
	05/15/08	0.00	4,800	<50	130	320	110	710	-
	08/05/08	0.00	3,500	<120	230	180	74	190	-
	11/07/08 ³	-	-	-	-	-	-	-	-
	02/05/09	-	-	-	-	-	-	-	-
	05/05/09	-	-	-	-	-	-	-	-
	08/21/09	-	-	-	-	-	-	-	-
	11/23/09	-	-	-	-	-	-	-	-
02/26/10	-	-	-	-	-	-	-	-	
05/12/10	-	-	-	-	-	-	-	-	
08/19/10	-	-	-	-	-	-	-	-	

TABLE 3: GROUNDWATER ANALYTICAL DATA SUMMARY

Vic's Auto, 245 8th Street, Oakland, California

Well ID (screen interval)	Date Collected	Apparent LNAPL Thickness (ft)	TPH-g (µg/L)	MTBE (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl- benzene (µg/L)	Xylenes (µg/L)	HVOC (µg/L)
MW-11 (12-22)	02/03/05	Sheen	170,000	<3,000	23,000	35,000	3,100	16,000	-
	05/09/05	Sheen	210,000	3,500	29,000	40,000	3,400	16,000	-
	07/27/05	Sheen	220,000	2,500	26,000	37,000	3,200	18,000	-
	08/05/05	Sheen	210,000	<2,500	35,000	42,000	3,300	16,000	-
	11/09/05	Sheen	180,000	9,100	32,000	47,000	3,600	18,000	-
	02/09/06	Sheen	210,000	10,000	33,000	39,000	3,800	20,000	-
	05/04/06	Sheen	190,000	12,000	34,000	41,000	3,500	17,000	-
	08/04/06	Sheen	290,000	11,000	33,000	43,000	3,300	15,000	-
	11/08/06	0.00	240,000	14,000	34,000	44,000	3,300	16,000	<DL
	02/08/07	0.00	230,000	19,000	43,000	44,000	3,900	20,000	-
	05/29/07	0.00	230,000	19,000	35,000	39,000	3,600	20,000	-
	09/05/07	0.00	200,000	19,000	34,000	36,000	3,700	23,000	-
	12/12/07	0.00	81,000	4,000	9,400	9,500	1,700	9,700	-
	02/13/08	0.00	36,000	4,200	5,700	4,000	560	5,300	-
	05/15/08	0.00	15,000	2,300	2,800	1,400	120	1,900	-
	08/05/08	0.00	12,000	1,100	1,800	760	98	630	-
	11/07/08 ³	-	-	-	-	-	-	-	-
	02/05/09	-	-	-	-	-	-	-	-
	05/05/09	-	-	-	-	-	-	-	-
	08/21/09	-	-	-	-	-	-	-	-
11/23/09	-	-	-	-	-	-	-	-	
02/26/10	-	-	-	-	-	-	-	-	
05/12/10	-	-	-	-	-	-	-	-	
08/19/10	-	-	-	-	-	-	-	-	

TABLE 3: GROUNDWATER ANALYTICAL DATA SUMMARY

Vic's Auto, 245 8th Street, Oakland, California

Well ID (screen interval)	Date Collected	Apparent LNAPL Thickness (ft)	TPH-g (µg/L)	MTBE (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl- benzene (µg/L)	Xylenes (µg/L)	HVOC (µg/L)	
MW-12 (12-22)	02/03/05	Sheen	250,000	100,000	52,000	41,000	3,400	15,000	-	
	05/09/05	Sheen	210,000	91,000	44,000	28,000	3,300	13,000	-	
	08/05/05	Sheen	170,000	52,000	38,000	28,000	3,000	12,000	-	
	11/09/05	Sheen	180,000	52,000	39,000	25,000	2,900	12,000	-	
	02/09/06	Sheen	170,000	34,000	40,000	23,000	3,500	15,000	-	
	05/04/06	Sheen	160,000	47,000	33,000	28,000	2,800	10,000	-	
	08/04/06	Sheen	240,000	55,000	40,000	24,000	3,200	12,000	-	
	11/08/06	0.00	190,000	33,000	40,000	23,000	2,700	13,000	<DL	
	02/08/07	0.00	150,000	34,000	38,000	19,000	3,300	12,000	-	
	05/29/07	0.00	150,000	30,000	30,000	15,000	3,100	13,000	-	
	09/05/07	0.00	160,000	38,000	33,000	21,000	3,200	14,000	-	
	12/12/07	0.00	58,000	6,700	10,000	7,100	1,200	4,900	-	
	02/13/08	0.00	17,000	3,000	3,600	2,300	440	1,800	-	
	05/15/08	0.00	7,800	1,900	2,000	500	130	640	-	
	08/05/08	0.00	3,900	800	730	130	61	200	-	
	11/07/08 ³	-	-	-	-	-	-	-	-	-
	02/05/09	-	-	-	-	-	-	-	-	-
	05/05/09	-	-	-	-	-	-	-	-	-
	08/21/09	-	-	-	-	-	-	-	-	-
	11/23/09	-	-	-	-	-	-	-	-	-
02/26/10	-	-	-	-	-	-	-	-	-	
05/12/10	-	-	-	-	-	-	-	-	-	
08/19/10	-	-	-	-	-	-	-	-	-	

TABLE 3: GROUNDWATER ANALYTICAL DATA SUMMARY

Vic's Auto, 245 8th Street, Oakland, California

Well ID (screen interval)	Date Collected	Apparent LNAPL Thickness (ft)	TPH-g (µg/L)	MTBE (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	HVOC (µg/L)
MW-13 (12-22)	05/15/08	0.00	<250	6,700	18	<2.5	<2.5	<2.5	-
	08/05/08	0.00	<250	3,400	<2.5	5.7	<2.5	4.3	-
	11/07/08	0.00	61	380	2.8	1.4	0.55	0.87	-
	02/05/09	0.00	<50	14	<0.5	<0.5	<0.5	<0.5	-
	05/05/09	0.00	<50	<5.0	0.53	3.2	1.1	7.5	-
	08/21/09	0.00	85	<5.0	2.0	10	2.2	13	-
	11/23/09	0.00	<50	<5.0	<0.5	<0.5	<0.5	<0.5	-
	02/26/10	0.00	500	<5.0	9.8	58	20	110	-
	05/12/10	0.00	<50	<5.0	<0.5	<0.5	<0.5	<0.5	-
	08/19/10	0.00	<50	<5.0	<0.5	<0.5	<0.5	<0.5	<0.5
MW-14 (12 - 22)	08/21/09	0.00	3,000	<1.0*	11	41	92	40	-
	11/23/09	0.00	1,600	<5.0	6.1	16	33	4.9	-
	02/26/10	0.00	1,800	<5.0	4.7	24	18	11	-
	05/12/10	0.00	970	16	0.63	14	5.3	0.57	-
	08/19/10	0.00	890	<30	1.3	16	2.6	1.3	-
MW-15 (12 - 22)	08/21/09	0.00	190	23	23	15	6.6	25	-
	11/23/09	0.00	280	19	65	4.6	20	28	-
	02/26/10	0.00	96	27	9.9	3.7	3.1	9.2	-
	05/12/10	0.00	<50	20	<0.5	<0.5	<0.5	<0.5	-
	08/19/10	0.00	<50	33	<0.5	<0.5	<0.5	<0.5	-
MW-16 (12 - 22)	08/21/09	0.00	860	20	80	110	26	130	-
	11/23/09	0.00	870	31	280	13	46	63	-
	02/26/10	0.00	240	21	46	28	16	59	-
	05/12/10	0.00	<50	15	2.3	0.62	<0.5	0.79	-
	08/19/10	0.00	<50	15	<0.5	<0.5	<0.5	<0.5	-

NOTES:

- not sampled/analyzed

ft = feet

ns/fp = not sampled / free product present

µg/L = micrograms per liter or parts per billion (ppb)

TPH-g by EPA Method SW8015Cm

BTEX & MTBE by EPA Method SW8021B

TPH-g = total petroleum hydrocarbons as gasoline

MTBE = methyl tertiary-butyl ether

HVOC= halogenated volatile organic compounds (e.g., PCE, TCE, DCE, VC)

DL = detection limit

* = MTBE by EPA Method 8260

^ = Duplicate sample analyzed from different VOA

1) Analytical results for MW-2 and MW-3 reversed from lab data based on historical concentration trends observed

2) Groundwater sample re-analyzed for MTBE-only by EPA Method SW8260B

3) Wellheads removed and wells now located ~4' below grade beneath new residential construction; routine sampling is no longer possible

TABLE 4: SOIL GAS ANALYTICAL DATA SUMMARY

Vic's Auto, 245 8th Street, Oakland, California

Well ID	Date Collected	Sample Depth (ft bgs)	TPH-g (µg/m3)	MTBE (µg/m3)	Benzene (µg/m3)	Toluene (µg/m3)	Ethyl-benzene (µg/m3)	Xylenes (µg/m3)	Ethanol (µg/m3)	PCE (µg/m3)	2-propanol (µg/m3)
GP-1-5	08/04/06	5	331	<8.0	<7.1	<8.4	<9.7	<9.7	<17	17	23
GP-1-5D ₁	08/04/06	5	-	<8.0	<7.1	<8.4	<9.7	<9.7	<17	18	23
GP-1-5	11/08/06	5	1,100	<4.6	<4.0	<4.8	<5.5	<5.5	<9.5	12	<12
GP-1-5	03/06/07*	5	-	-	-	-	-	-	-	-	-
GP-1-5	05/17/07	5	457	<3.6	<3.2	<3.8	<4.4	<4.4	<7.6	14	<9.9
GP-1-5D ₁	05/17/07	5	-	<3.6	<3.2	<3.8	<4.4	<4.4	<7.6	14	<9.9
GP-1-5	12/12/07	5	<1,500	<48	<6.5	<7.7	<8.8	<27	<96	<14	<25
GP-1-5	02/14/08	5	<1,800	<48	<6.5	<7.7	<8.8	<27	<96	<14	<10,000
GP-1-5	05/08/08	5	<1,800	<7.3	<6.5	<7.7	<8.8	<27	-	<14	<25
GP-1-5	08/15/08	5	<1800	<7.3	<6.5	<7.7	<8.8	<27	-	<14	<10,000
GP-1-5 ²	11/07/08	5	-	-	-	-	-	-	-	-	-
GP-1-10	08/04/06	10	493	<4.1	<3.6	<4.3	<5.0	<5.0	<8.6	20	<11
GP-1-10	11/08/06	10	950	<4.2	<3.7	<4.4	<5.0	<5.0	<8.8	<7.9	<11
GP-1-10	03/06/07*	10	-	-	-	-	-	-	-	-	-
GP-1-10	05/17/07^	10	-	-	-	-	-	-	-	-	-
GP-1-10	12/12/07	10	<1,500	<48	<6.5	<7.7	<8.8	<27	<96	<14	<25
GP-1-10	02/14/08	10	<1,800	<48	<6.5	<7.7	<8.8	<27	-	<14	<10,000
GP-1-10	05/08/08	10	<1,800	<7.3	<6.5	<7.7	<8.8	<27	-	<14	<25
GP-1-10	08/15/08	10	<1,800	<7.3	<6.5	<7.7	<8.8	<27	-	<14	<10,000
GP-1-10 ²	11/07/08	10	-	-	-	-	-	-	-	-	-
GP-2-5	08/04/06	5	493	<4.4	<3.9	6.9	<5.4	10	<9.3	600	<12
GP-2-5	11/08/06	5	1,100	<4.0	<3.6	<4.2	<4.9	<4.9	<8.4	240	<11
GP-2-5	03/06/07*	5	-	-	-	-	-	-	-	-	-
GP-2-5	05/17/07	5	582	<4.0	<3.5	<4.1	<4.8	<4.8	<8.3	420	<11
GP-2-5	12/12/07	5	<1,500	<48	<6.5	<7.7	<8.8	<27	<96	<14	<25
GP-2-5	02/14/08	5	<1,800	<48	<6.5	<7.7	<8.8	<27	<14	<14	<10,000
GP-2-5	05/08/08	5	<1,800	<7.3	<6.5	<7.7	<8.8	<27	-	<14	<25
GP-2-5	08/15/08	5	<1,800	<7.3	<6.5	<7.7	<8.8	<27	-	39	<10,000
GP-2-5 ²	11/07/08	5	-	-	-	-	-	-	-	-	-
GP-2-10	08/04/06	10	352	<10	<9.0	18	<12	<12	<21	270	<28
GP-2-10	11/08/06	10	910	<3.9	<3.4	<4.1	<4.7	<4.7	<8.1	450	<11
GP-2-10	03/06/07*	10	-	-	-	-	-	-	-	-	-
GP-2-10	05/17/07	10	748	<3.8	<3.3	<3.9	<4.5	<4.5	<7.9	440	<10
GP-2-10	12/12/07	10	<1,500	<48	<6.5	<7.7	<8.8	<27	<96	<14	<25
GP-2-10	02/14/08	10	<1,800	<48	<6.5	<7.7	<8.8	<27	-	<14	<10,000
GP-2-10	05/08/08	10	<1,800	<7.3	<6.5	<7.7	<8.8	<27	-	<14	<25
GP-2-10	08/15/08	10	<1,800	<7.3	<6.5	<7.7	<8.8	<27	-	48	<10,000
GP-2-10 ²	11/07/08	10	-	-	-	-	-	-	-	-	-

TABLE 4: SOIL GAS ANALYTICAL DATA SUMMARY

Vic's Auto, 245 8th Street, Oakland, California

Well ID	Date Collected	Sample Depth (ft bgs)	TPH-g (µg/m ³)	MTBE (µg/m ³)	Benzene (µg/m ³)	Toluene (µg/m ³)	Ethylbenzene (µg/m ³)	Xylenes (µg/m ³)	Ethanol (µg/m ³)	PCE (µg/m ³)	2-propanol (µg/m ³)
GP-3-5	08/04/06	5	<240	<4.2	<3.7	<4.4	<5.0	<5.0	<8.8	<7.9	<11
GP-3-5	11/08/06	5	930	<4.4	<3.9	<4.6	<5.2	<5.2	<9.1	<8.2	<12
GP-3-5	03/06/07*	5	-	-	-	-	-	-	-	-	-
GP-3-5	05/17/07	5	582	<4.0	<3.5	<4.1	<4.8	<4.8	17	<7.5	<11
GP-3-5D _f	05/17/07	5	582	<4.0	<3.5	<4.1	<4.8	<4.8	<8.3	16	<11
GP-3-5	12/12/07	5	<1,500	<48	<6.5	<7.7	<8.8	<27	<96	<14	<25
GP-3-5	02/14/08	5	<1,800	<48	<6.5	<7.7	<8.8	<27	-	<14	<10,000
GP-3-5	05/08/08	5	<1,800	<7.3	<6.5	<7.7	<8.8	<27	-	<14	<25
GP-3-5	08/15/08	5	<1,800	<7.3	<6.5	<7.7	<8.8	<27	-	<14	<10,000
GP-3-5 ^{1,2}	11/07/08	5	-	-	-	-	-	-	-	-	-
GP-3-10	08/04/06	10	564	<4.2	<3.7	<4.4	<5.0	<5.0	<8.8	<7.9	<11
GP-3-10	11/08/06	10	1,800	<4.0	<3.6	<4.2	<4.9	<4.9	<8.4	<7.6	<11
GP-3-10	03/06/07*	10	-	-	-	-	-	-	-	-	-
GP-3-10	05/17/07	10	1,538	<4.1	<3.6	<4.3	<5.0	<5.0	18	<7.8	12
GP-3-10	12/12/07	10	<1,500	<48	<6.5	<7.7	<8.8	<27	<96	<14	-
GP-3-10	02/14/08	10	<1,800	<48	<6.5	<7.7	<8.8	<27	-	<14	<10,000
GP-3-10	05/08/08	10	<1,800	<7.3	<6.5	<7.7	<8.8	<27	-	<14	<25
GP-3-10	08/15/08	10	<1,800	<7.3	<6.5	<7.7	<8.8	<27	-	<14	<10,000
GP-3-10 ^{1,2}	11/07/08	10	-	-	-	-	-	-	-	-	-
GP-4-5	08/04/06	5	705	<4.4	5.4	<4.6	<5.4	<5.4	<9.3	<8.4	<12
GP-4-5D ₁	08/04/06	5	599	-	-	-	-	-	-	-	-
GP-4-5	11/08/06	5	540	<4	<3.5	<4.1	<4.8	<4.8	<8.3	<7.5	<11
GP-4-5D _f	11/08/06	5	610	<7.7	<6.8	<8.0	<9.2	<9.2	<16	<14	<21
GP-4-5	03/06/07*	5	-	-	-	-	-	-	-	-	-
GP-4-5	05/17/07	5	873	<4	<3.6	<4.2	<4.9	<4.9	15	<7.6	<11
GP-4-5	12/12/07	5	<1,500	<48	<6.5	<7.7	<8.8	<27	<96	<14	<25
GP-4-5D _f	12/12/07	5	<1,500	<48	<6.5	<7.7	<8.8	<27	<96	<14	<25
GP-4-5	02/14/08	5	<1,800	<48	<6.5	<7.7	<8.8	<27	<96	<14	<10,000
GP-4-5	05/08/08	5	<1,800	<7.3	<6.5	<7.7	<8.8	<27	-	<14	<25
GP-4-5	08/15/08	5	<1,800	<7.3	<6.5	<7.7	<8.8	<27	-	<14	<10,000
GP-4-5 ^{1,2}	11/07/08	5	-	-	-	-	-	-	-	-	-
GP-4-10	08/04/06	10	564	<4.1	6.1	17	5.7	16	12	<7.8	<11
GP-4-10D _f	08/05/06	10	529	<3.8	4.2	18	<4.6	17	18	<7.2	<10
GP-4-10	11/08/06	10	900	<4.0	<3.5	4.1	<4.8	5.2	<8.3	<7.5	<11
GP-4-10D ₁	11/08/06	10	880	<1.8	<1.6	<1.9	<2.2	<2.2	<3.8	<3.4	<4.9
GP-4-10	03/06/07*	10	-	-	-	-	-	-	-	-	-
GP-4-10	05/17/07^	10	-	-	-	-	-	-	-	-	-
GP-4-10	12/12/07	10	1,600	<48	<6.5	<7.7	<8.8	<27	<96	<14	<25
GP-4-10	02/14/08	10	-	-	-	-	-	-	-	-	-
GP-4-10	05/08/08	10	<1,800	<7.3	<6.5	<7.7	<8.8	<27	-	<14	<25
GP-4-10	08/15/08	10	<1,800	<7.3	<6.5	<7.7	<8.8	<27	-	<14	<10,000
GP-4-10 ^{1,2}	11/07/08	10	-	-	-	-	-	-	-	-	-

TABLE 4: SOIL GAS ANALYTICAL DATA SUMMARY

Vic's Auto, 245 8th Street, Oakland, California

Well ID	Date Collected	Sample Depth (ft bgs)	TPH-g (µg/m3)	MTBE (µg/m3)	Benzene (µg/m3)	Toluene (µg/m3)	Ethyl-benzene (µg/m3)	Xylenes (µg/m3)	Ethanol (µg/m3)	PCE (µg/m3)	2-propanol (µg/m3)
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NOTES:

- not sampled/analyzed

2-propanol (i.e., isopropyl alcohol) tracer/leak check compound

ft bgs = feet below ground surface

µg/m3 = micrograms per cubic meter

TPH-g = total petroleum hydrocarbons as gasoline

MTBE = methyl tertiary-butyl ether

PCE = tetrachloroethene

ESLs = Environmental Screening Levels - for residential land use

CHHSLs = California Human Health Screening Levels

pp = CHHSL postponed

* = Sampling not possible due to seasonal wet soil conditions

^ = No sample analysis due to presence of free moisture in sample tubing

D_f = after the probe/sample ID indicates a duplicate sample collected in the field

D_l = after the probe/sample ID indicates a duplicate sample prepared and analyzed by the lab

TPH-g by modified EPA Method TO-3

BTEX, MTBE, Ethanol, PCE, 2-propanol by modified EPA Method TO-15

1) On August 21, 2008, GP-3 and GP-4 were decommissioned during the installation of the HVDPE conveyance piping laterals

2) Per concurrence from ACHCSA in a letter dated October 3, 2008, quarterly soil gas sampling has been temporarily suspended during operation of the HVDPE system

TABLE 5: HVDPE VAPOR ANALYTICAL & FIELD SCREENING DATA SUMMARY

Vic's Auto, 245 8th Street, Oakland, California

Sample Port ID	Sample Date	Notes	Initial Valve Position	Final Valve Position	Manifold Vacuum (in-Hg)	Field Screening Data				Vapor Analytical Data					
						TVH (ppmv)	CH ₄ (%)	O ₂ (%)	CO ₂ (%)	TPH-g (ppmv)	MTBE (ppmv)	Benzene (ppmv)	Toluene (ppmv)	Ethyl-benzene (ppmv)	Xylenes (ppmv)
MW-1S	08/10/07		100%	OFF	21	-	-	-	-	3,400	ND<14	68	210	30	160
	09/28/07	1,2	OFF	OFF	20	-	-	-	-	-	-	-	-	-	-
	10/17/07		OFF	50%	21	0	0.0	20.9	0.0	380	ND<14	26	58	5.7	46
	11/16/07		50%	50%	21	2,800	0.5	20.7	0.5	3,200	ND<14	69	220	20	110
	12/26/07		50%	50%	18	3,000	1.5	20.7	0.4	3,900	ND<27	79	210	41	210
	01/22/08		50%	OFF	18	160	0.0	19.7	0.3	660	ND<14	5.8	23	2.7	28
	02/07/08	4	OFF	OFF	21.5	0	0.0	20.9	0.0	-	-	-	-	-	-
	03/18/08		OFF	OFF	14.5	0	xx	20.9	0.0	140	ND<0.68	1.3	6.9	0.78	6.9
	04/30/08		OFF	OFF	18	50	0.0	20.9	0.1	520	3.3	13	38	6.7	53
	05/29/08		OFF	OFF	19.5	-	-	-	-	-	-	-	-	-	-
	06/26/08		OFF	OFF	23	-	-	-	-	-	-	-	-	-	-
	07/30/08	7	OFF	OFF	17	310	0.0	18.3	1.1	-	-	-	-	-	-
	09/30/08		OFF	100%	16.5	5	0.0	20.9	0.4	65	0.71	0.44	2.2	0.65	12
	11/04/08		100%	100%	13	4,250	1.5	12.6	2.9	3,100	ND<180	63	140	14	120
	12/02/08		100%	100%	10	2,710	0.5	20.3	0.9	3,300	ND<14	57	150	12	110
	01/06/09		100%	100%	12	55	0.0	20.9	0.0	35	ND<0.68	3.6	5.6	0.22	1.8
	02/09/09		100%	100%	12	15	0.0	20.9	0.0	36	ND<0.68	4.7	6.7	0.35	3.1
	03/18/09		100%	100%	10	10	0.0	20.9	0.3	120	ND<1.0	1.8	9.6	0.69	4.2
	04/21/09		100%	100%	11	10	0.0	20.4	0.2	42	ND<0.68	0.56	2.3	0.29	1.9
	05/19/09		100%	100%	11.5	35	0.0	19.8	0.7	54	ND<0.68	1.1	6.2	0.79	4.0
	08/31/09		100%	OFF	12	540	0.0	13.7	3.2	39	ND<0.68	0.54	2.0	0.27	2.8
	09/10/09		OFF	OFF	15	-	-	-	-	-	-	-	-	-	-
	09/17/09		OFF	OFF	14	30	-	20.9	0.2	51	ND<2.7	1.3	8.8	0.59	4.2
	09/25/09		OFF	OFF	13	-	-	-	-	-	-	-	-	-	-
	10/02/09		OFF	OFF	14	-	-	-	-	-	-	-	-	-	-
	10/20/09		OFF	OFF	12	340	0.0	20.9	0.1	130	ND<2.7	5.2	15	1.8	13
	11/03/09		OFF	OFF	-	-	-	-	-	-	-	-	-	-	-
	12/11/09		OFF	OFF	13	250	0.0	20.9	0.0	160	ND<1.4	5.1	12	1.5	14
	04/20/10		OFF	100%	13	0	0.0	16.1	0.8	42	3.6	11	1.3	0.53	1.3
	04/28/10		100%	OFF	15	25	0.0	20.4	0.7	13	5.6	1.5	0.48	0.11	0.75
	05/05/10		OFF	100%	14	35	0.0	20.9	0.1	44	ND<2.0	2.4	21	1.7	9.0
	05/11/10		100%	100%	12	25	0.0	20.9	0.2	34	ND<0.68	0.55	3.0	0.37	1.9
08/23/10		100%	100%	17	150	0.0	18.2	1.4	85	ND<3.0	2.6	18	1.2	6.6	
09/01/10		100%	100%	14	15	0.5	20.9	0.2	23	ND<0.68	0.41	2.3	0.22	1.1	
09/07/10	15	100%	100%	11.5	4,500	1.5	19.8	0.4	1,900	ND<25	11	12	0.67	3.8	

TABLE 5: HVDPE VAPOR ANALYTICAL & FIELD SCREENING DATA SUMMARY

Vic's Auto, 245 8th Street, Oakland, California

Sample Port ID	Sample Date	Notes	Initial Valve Position	Final Valve Position	Manifold Vacuum (in-Hg)	Field Screening Data				Vapor Analytical Data					
						TVH (ppmv)	CH ₄ (%)	O ₂ (%)	CO ₂ (%)	TPH-g (ppmv)	MTBE (ppmv)	Benzene (ppmv)	Toluene (ppmv)	Ethyl-benzene (ppmv)	Xylenes (ppmv)
MW-2S	08/10/07		100%	100%	21	-	-	-	-	11,000	ND<110	280	770	81	360
	09/28/07	1	100%	100%	20	5,900	2.5	20.6	0.4	5,100	ND<35	110	310	46	260
	10/17/07		100%	100%	21	1,450	1.0	20.9	0.1	1,900	ND<20	59	120	12	73
	11/16/07		100%	100%	21	4,600	2.5	20.7	0.5	5,800	ND<27	120	340	40	200
	12/26/07		100%	100%	18	2,600	1.5	20.9	0.4	3,100	ND<27	84	230	37	190
	01/22/08		100%	100%	18	1,000	0.5	17.7	0.6	3,000	ND<14	61	190	24	180
	02/07/08	5	100%	100%	21.5	1,000	0.5	20.9	0.2	-	-	-	-	-	-
	03/18/08		100%	100%	14.5	100	xx	20.9	0.6	1,400	2.3	17	51	13	81
	04/30/08		100%	OFF	18	190	0.0	20.7	0.5	1,900	ND<6.8	22	75	16	110
	05/29/08		OFF	OFF	19.5	-	-	-	-	-	-	-	-	-	-
	06/26/08		OFF	OFF	23	-	-	-	-	-	-	-	-	-	-
	07/30/08	7	OFF	OFF	17	100	0.0	20.3	0.6	-	-	-	-	-	-
	09/30/08		OFF	100%	16.5	160	0.0	16.7	1.8	220	ND<0.68	0.44	3.1	1.0	17
	11/04/08		100%	100%	13	6,800	1.5	11.8	3.1	3,800	ND<14	78	170	18	150
	12/02/08		100%	100%	10	3,200	0.5	18.3	0.9	3,200	ND<14	66	170	14	130
	01/06/09		100%	100%	11	1,950	0.5	17.7	1.6	3,400	ND<30	69	150	13	95
	02/09/09		100%	100%	12	900	0.0	16.4	1.4	1,100	ND<10	25	53	4.9	49
	03/18/09		100%	100%	10	30	0.0	20.9	0.0	130	ND<0.68	1.1	5.6	0.43	2.6
	04/21/09		100%	100%	11	15	0.0	17.1	1.4	130	ND<0.68	1.3	3.9	0.36	4.9
	05/19/09		100%	100%	11.5	190	0.0	12.6	3.5	460	ND<2.0	4.3	13	2.0	19
	08/31/09		100%	100%	12	980	0.0	8.5	5.1	1,800	ND<20	29	57	8.6	79
	09/10/09		100%	100%	15	1,700	0.5	15.3	3.2	2,000	ND<15	52	100	6.4	74
	09/17/09		100%	100%	14	2,400	0.5	19.8	1.6	2,700	ND<25	80	140	11	100
	09/25/09		100%	100%	13	2,500	0.5	20.0	1.2	2,900	ND<10	67	130	10	77
	10/02/09		100%	100%	14	2,800	0.5	20.2	1.1	2,800	ND<10	63	130	8.5	72
	10/20/09		100%	100%	13	2,900	1.0	19.8	1.3	3,000	ND<35	85	170	9.7	82
	11/03/09		100%	100%	14	2,450	0.5	20.2	1.0	2,500	ND<14	68	130	8.6	69
	12/11/09		100%	100%	13	1,400	0.0	9.2	4.4	1,600	ND<10	39	81	6.6	52
	04/20/10		100%	100%	13	20	0.0	15.1	1.0	91	ND<5.0	18	2.6	1.2	5.4
	04/28/10		100%	100%	15	0	0.0	18.8	1.3	18	6.4	1.3	0.62	0.25	1.1
05/05/10		100%	100%	18	-	-	-	-	-	-	-	-	-	-	
05/11/10		100%	100%	12	230	0.0	20	1.4	350	ND<1.5	5.4	16	1.5	13	
08/23/10			100%	100%	17	220	0.0	11.4	2.9	640	ND<6.8	7.2	21	2.9	25
09/01/10			100%	100%	14	50	0.0	20.5	0.3	180	ND<1.0	3.7	9.4	0.74	7.2

TABLE 5: HVDPE VAPOR ANALYTICAL & FIELD SCREENING DATA SUMMARY

Vic's Auto, 245 8th Street, Oakland, California

Sample Port ID	Sample Date	Notes	Initial Valve Position	Final Valve Position	Manifold Vacuum (in-Hg)	Field Screening Data				Vapor Analytical Data					
						TVH (ppmv)	CH ₄ (%)	O ₂ (%)	CO ₂ (%)	TPH-g (ppmv)	MTBE (ppmv)	Benzene (ppmv)	Toluene (ppmv)	Ethylbenzene (ppmv)	Xylenes (ppmv)
MW-5S	08/10/07		100%	100%	21	-	-	-	-	54	ND<0.68	0.60	2.7	0.60	3.7
	09/28/07	1	100%	100%	20	8,000	5.5	20.2	0.3	3,800	ND<60	70	150	19	120
	10/17/07		100%	100%	21	880	0.5	20.9	0.1	1,100	ND<14	27	56	5.3	36
	11/16/07		100%	100%	21	4,600	3.0	20.0	0.7	3,800	ND<110	64	170	21	170
	12/26/07		100%	OFF	18	200	0.0	20.9	0.0	140	ND<0.68	0.45	3.7	1.5	14
	01/22/08		OFF	OFF	18	300	0.0	18.0	0.4	760	ND<4.5	3.3	16	2.4	28
	02/07/08	4	OFF	OFF	21.5	-	-	-	-	-	-	-	-	-	-
	03/18/08		OFF	OFF	14.5	0	xx	19.9	0.3	580	ND<2.7	3.0	24	4.2	39
	04/30/08		OFF	OFF	18	0	0.0	19.4	1.0	2,000	ND<10	18	56	5.7	63
	05/29/08		OFF	OFF	19.5	-	-	-	-	-	-	-	-	-	-
	06/26/08		OFF	OFF	23	-	-	-	-	-	-	-	-	-	-
	07/30/08	7	OFF	50%	17	1,000	0.0	14.0	2.8	-	-	-	-	-	-
	09/30/08		50%	100%	16.5	1,850	0.0	16.0	2.8	2,000	ND<14	27	61	6.2	87
	11/04/08		100%	100%	13	2,450	0.5	14.6	2.3	3,900	ND<27	30	100	6.1	150
	12/02/08		100%	100%	10	1,810	0.0	19.7	0.1	1,900	ND<27	ND<3.1	29	2.9	81
	01/06/09	8	100%	100%	11	1,350	0.0	17.3	0.3	-	-	-	-	-	-
	02/09/09		100%	100%	12	260	0.0	19.7	0.3	270	ND<4.5	2.4	7.5	0.90	23
	03/18/09		100%	100%	10	50	0.0	20.8	0.3	99	ND<2.0	2.1	6.0	0.76	6.2
	04/21/09		100%	100%	11	20	0.0	20.3	0.3	40	ND<1.0	1.1	4.0	0.51	4.4
	05/19/09		100%	100%	11.5	400	0.0	19.4	0.5	450	ND<3.0	1.7	6.8	0.71	5.6
	08/31/09		100%	100%	-	660	-	13.5	3.3	1,300	ND<10	9.6	21	3.0	54
	09/10/09		100%	100%	15	1,100	0.0	16.8	1.9	1,800	ND<6.8	18	49	4.0	110
	09/17/09		100%	100%	14	1,050	0.0	19.2	1.2	2,200	ND<6.8	19	66	6.6	160
	09/25/09		100%	100%	13	1,100	0.0	19.1	1.3	2,100	ND<2.7	11	44	5.9	110
	10/02/09		100%	100%	14	1,300	0.0	19.2	1.3	2,100	ND<2.7	9.4	35	4.9	100
	10/20/09		100%	100%	13	1,150	0.0	19.4	1.1	1,700	ND<5.0	6.3	28	2.9	88
	11/03/09		100%	100%	14	550	0.0	19.5	1.0	1,300	ND<2.7	4.7	24	2.0	82
	12/11/09		100%	100%	13	350	0.0	18.2	1.0	440	ND<2.7	2.6	9.8	1.8	26
	04/20/10		100%	100%	13	0	0.0	19.3	0.2	29	ND<0.68	1.3	2.9	0.55	3.2
	04/28/10		100%	100%	15	0	0.0	20.8	0.1	14	ND<0.68	0.60	1.3	0.15	0.98
05/05/10		100%	100%	18	-	-	-	-	-	-	-	-	-	-	
05/11/10		100%	100%	12	30	0.0	20.4	0.5	110	ND<1.4	1.2	5.4	0.67	7.4	
08/23/10			100%	100%	17	160	0.0	14.5	1.1	100	ND<1.9	2.0	8.2	1.5	9.3
09/01/10			100%	100%	14	20	0.0	20.3	0.4	59	ND<0.68	0.67	2.8	0.30	2.6

TABLE 5: HVDPE VAPOR ANALYTICAL & FIELD SCREENING DATA SUMMARY

Vic's Auto, 245 8th Street, Oakland, California

Sample Port ID	Sample Date	Notes	Initial Valve Position	Final Valve Position	Manifold Vacuum (in-Hg)	Field Screening Data				Vapor Analytical Data						
						TVH (ppmv)	CH ₄ (%)	O ₂ (%)	CO ₂ (%)	TPH-g (ppmv)	MTBE (ppmv)	Benzene (ppmv)	Toluene (ppmv)	Ethyl-benzene (ppmv)	Xylenes (ppmv)	
MW-6S	08/10/07	1	100%	100%	21	-	-	-	-	5,800	ND<30	69	280	24	140	
	09/28/07		100%	100%	20	>11,000	8.0	19.7	0.5	6,800	ND<60	100	360	34	190	
	10/17/07		100%	100%	21	1,350	0.5	20.9	0.1	1,700	ND<10	24	90	9.7	79	
	11/16/07		100%	100%	21	6,300	4.5	19.2	1.0	6,400	ND<27	56	270	40	310	
	12/26/07		100%	100%	18	4,600	2.5	18.5	1.3	4,200	ND<27	21	96	14	180	
	01/22/08		100%	100%	18	1,050	0.5	15.6	1.0	1,900	ND<14	11	74	13	100	
	02/07/08		-	-	21.5	-	-	-	-	-	-	-	-	-	-	-
	03/18/08		100%	100%	14.5	15	xx	20.5	0.1	230	ND<1.4	1.2	9.2	2.4	16	
	04/30/08		100%	OFF	18	140	0.0	20.7	0.7	760	ND<6.8	3.5	18	3.2	36	
	05/29/08		OFF	OFF	19.5	-	-	-	-	-	-	-	-	-	-	
	06/26/08	OFF	100%	23	210	0.0	19.8	0.4	400	ND<10	2.0	18	3.1	24		
	07/30/08	7	100%	100%	17	270	0.0	20.2	0.7	460	ND<4.5	1.7	14	2.2	19	
	09/30/08		100%	100%	16.5	570	0.0	17.4	2.0	640	ND<14	7.7	42	3.7	31	
	11/04/08		100%	100%	13	580	0.0	17.4	1.2	900	ND<2.7	4.6	21	4.6	46	
	12/02/08		100%	100%	10	460	0.0	20.6	0.3	710	ND<14	3.2	13	1.4	30	
	01/06/09		100%	100%	11	280	0.0	19.9	0.4	520	ND<14	4.1	17	2.3	32	
	02/09/09		100%	100%	12	80	0.0	20.9	0.1	60	ND<0.68	1.4	3.4	0.49	8.2	
	03/18/09		100%	100%	10	70	0.0	20.9	0.0	61	ND<3.0	1.3	1.7	0.38	4.0	
	04/21/09		100%	100%	11	10	0.0	20.9	0.0	18	0.98	0.41	0.47	0.13	1.4	
	05/19/09		100%	100%	11	-	-	-	-	20	ND<0.68	0.59	0.98	0.17	2.1	
	08/31/09		100%	OFF	12	170	0.0	18.9	0.9	330	ND<2.7	5.5	27	3.7	26	
	09/10/09	OFF	OFF	15	-	-	-	-	-	-	-	-	-	-		
	09/17/09	OFF	OFF	14	560	0.0	19.6	0.3	370	ND<3.0	1.9	6.9	1.4	9.2		
	09/25/09	OFF	OFF	13	-	-	-	-	-	-	-	-	-	-		
	10/02/09	OFF	OFF	14	-	-	-	-	-	-	-	-	-	-		
	10/20/09	OFF	OFF	12	80	0.0	20.9	0.0	78	ND<0.68	0.69	2.7	1.7	9.5		
	11/03/09	OFF	OFF	-	-	-	-	-	-	-	-	-	-	-		
	12/11/09	OFF	OFF	13	50	0.0	20.9	0.0	29	ND<0.68	0.20	1.1	0.30	3.1		
	04/20/10	OFF	100%	13	210	0.0	9.6	3.0	450	ND<25	46	29	6.7	37		
	04/28/10	100%	100%	15	150	0.0	20.4	0.9	250	ND<15	7.4	31	6.8	39		
05/05/10	100%	100%	18	110	0.0	20.2	0.8	240	ND<6.8	3.9	11	1.1	7.4			
05/11/10	100%	100%	12	0	0.0	20.9	0.0	13	ND<0.68	0.13	0.56	0.089	0.97			
	08/23/10		100%	100%	17	680	0.0	12.5	2.1	1,100	ND<14	34	170	22	100	
	09/01/10		100%	100%	14	35	0.0	20.5	0.3	110	ND<1.4	1.8	6.2	1.8	9.8	

TABLE 5: HVDPE VAPOR ANALYTICAL & FIELD SCREENING DATA SUMMARY

Vic's Auto, 245 8th Street, Oakland, California

Sample Port ID	Sample Date	Notes	Initial Valve Position	Final Valve Position	Manifold Vacuum (in-Hg)	Field Screening Data				Vapor Analytical Data						
						TVH (ppmv)	CH ₄ (%)	O ₂ (%)	CO ₂ (%)	TPH-g (ppmv)	MTBE (ppmv)	Benzene (ppmv)	Toluene (ppmv)	Ethylbenzene (ppmv)	Xylenes (ppmv)	
MW-7S	08/10/07				21	-	-	-	-	19,000	ND<450	620	590	27	100	
	09/28/07	1	100%	100%	20	11,000	19	20.0	0.5	13,000	ND<150	350	630	69	370	
	10/17/07		100%	100%	21	0	0.0	20.9	0.0	390	ND<14	27	60	6.0	51	
	11/16/07		100%	50%	21	10,000	8.0	20.5	0.4	7,700	ND<45	170	390	47	280	
	12/26/07		50%	100%	18	5,500	3.0	20.4	0.5	4,700	ND<45	100	220	27	190	
	01/22/08		100%	100%	18	2,050	1.0	18.2	0.4	3,900	ND<14	69	200	20	210	
	02/07/08		-	-	21.5	-	-	-	-	-	-	-	-	-	-	-
	03/18/08		100%	100%	14.5	390	xx	20.2	0.3	2,000	ND<5.0	25	81	11	78	
	04/30/08		100%	OFF	18	600	1.0	19.0	1.2	4,100	ND<14	66	150	15	150	
	05/29/08		OFF	OFF	19.5	-	-	-	-	-	-	-	-	-	-	-
	06/26/08		OFF	100%	23	5,200	1.5	15.8	2.7	4,800	ND<30	56	71	4.0	110	
	07/30/08	7	100%	100%	17	2,750	0.5	18.3	1.7	-	-	-	-	-	-	-
	09/30/08		100%	100%	16.5	4,200	1.0	12.6	5.9	2,800	ND<30	57	72	4.2	110	
	11/04/08		100%	100%	13	9,100	1.5	7.5	3.5	4,100	ND<14	53	87	4.3	130	
	12/02/08		100%	100%	10	4,350	0.5	19.5	1.1	3,900	ND<27	44	89	4.1	110	
	01/06/09		100%	100%	11	3,150	0.5	15.4	2.3	2,000	ND<4.5	19	43	3.0	77	
	02/09/09		100%	100%	12	1,050	0.0	13.4	2.5	1,100	ND<10	19	21	1.8	34	
	03/18/09		100%	100%	10	440	0.0	15.3	2.7	690	ND<14	28	22	1.9	17	
	04/21/09		100%	100%	11	30	0.0	20.4	1.3	53	4.5	2.7	2.2	0.28	3.0	
	05/19/09		100%	100%	11.5	490	0.0	9.2	5.2	890	ND<14	29	33	1.8	20	
	08/31/09		100%	100%	12	1,450	0.0	9.3	8.2	1,900	ND<30	52	37	3.0	64	
	09/10/09		100%	100%	15	3,800	0.0	10.6	4.2	3,100	ND<20	68	71	3.8	130	
	09/17/09		100%	100%	14	7,000	2.0	18.8	1.8	5,200	ND<35	120	140	9.0	200	
	09/25/09		100%	100%	13	7,600	2.0	18.8	1.6	5,500	ND<25	89	130	8.0	150	
	10/02/09		100%	100%	14	8,050	2.0	18.8	1.6	5,300	ND<35	100	160	11	210	
	10/20/09		100%	100%	13	5,450	1.5	18.8	1.7	3,800	ND<40	63	110	6.9	120	
	11/03/09		100%	100%	14	3,900	1.0	19.0	1.5	3,800	ND<20	42	87	6.3	140	
	12/11/09		100%	100%	13	1,250	0.0	9.5	7.0	1,300	ND<5.0	20	50	11	63	
	04/20/10		100%	100%	13	220	0.0	8.2	6.3	540	ND<25	36	21	5.3	31	
	04/28/10		100%	100%	15	220	0.0	19.0	1.7	720	ND<25	15	20	1.3	18	
	05/05/10		100%	100%	18	440	0.0	19.3	1.5	1,000	ND<35	21	28	1.3	16	
	05/11/10		100%	100%	12	740	0.0	18.2	2.2	1,800	ND<14	25	42	2.7	29	
	08/23/10		100%	100%	17	300	0.0	12.6	3.5	820	ND<2.7	26	18	2.2	15	
	09/01/10		100%	100%	14	85	0.0	20.5	0.4	450	ND<2.0	4.8	6.9	0.33	5.2	

TABLE 5: HVDPE VAPOR ANALYTICAL & FIELD SCREENING DATA SUMMARY

Vic's Auto, 245 8th Street, Oakland, California

Sample Port ID	Sample Date	Notes	Initial Valve Position	Final Valve Position	Manifold Vacuum (in-Hg)	Field Screening Data				Vapor Analytical Data					
						TVH (ppmv)	CH ₄ (%)	O ₂ (%)	CO ₂ (%)	TPH-g (ppmv)	MTBE (ppmv)	Benzene (ppmv)	Toluene (ppmv)	Ethyl-benzene (ppmv)	Xylenes (ppmv)
MW-10S	11/21/07		100%	100%	19	>44,000	43.0	17.0	2.2	28,000	ND<68	300	800	63	230
	12/26/07		100%	100%	18	3,900	2.5	19.4	0.5	6,300	ND<14	55	350	64	300
	01/22/08		100%	100%	16.5	1,850	0.5	16.1	0.5	4,700	ND<14	38	230	49	310
	02/07/08		-	-	-	-	-	-	-	-	-	-	-	-	-
	03/18/08		100%	100%	14.5	270	xx	19.0	0.9	2,100	ND<14	13	73	31	190
	04/30/08		100%	100%	18	310	0.5	19.6	0.9	2,500	ND<14	11	76	33	230
	05/29/08		100%	100%	18	1,750	0.0	19.6	0.8	1,800	ND<6.8	13	47	17	120
	06/26/08		100%	100%	23	370	0.0	20.7	0.1	780	ND<1.4	4.1	15	4.9	38
	07/30/08	7	100%	100%	17	1,050	0.0	20.3	0.8	1,600	ND<14	16	50	9.5	95
	09/30/08		100%	OFF	16.5	640	0.0	20.9	0.4	690	ND<4.0	10	29	5.1	53
	11/04/08		OFF	100%	13	1,900	0.5	13.0	2.5	2,300	ND<14	36	89	8.1	120
	12/02/08		100%	100%	10	1,550	0.0	20.3	0.6	1,500	ND<14	26	73	8.4	71
	01/06/09		100%	100%	11	1,150	0.0	18.2	1.2	2,200	ND<15	31	64	6.7	64
	02/09/09		100%	100%	12	310	0.0	17.8	0.7	400	ND<2.7	5.6	12	1.1	21
	03/18/09		100%	100%	10	130	0.0	18.7	0.7	220	ND<10	8.9	7.7	1.4	10
	04/21/09		100%	100%	11	110	0.0	16.9	1.0	240	ND<5.0	4.4	5.7	0.98	9.6
	05/19/09		100%	100%	11.5	75	0.0	12.2	2.3	370	ND<5.0	4.9	7.7	1.2	13
	08/31/09		100%	100%	12	650	-	8.3	0.0	1,700	ND<10	18	22	4.4	67
	09/10/09		100%	100%	15	730	0.0	15.9	2.6	1,600	ND<10	29	63	5.3	75
	09/17/09		100%	100%	14	1,300	0.0	19.4	1.5	1,900	ND<15	40	82	7.2	85
	09/25/09		100%	100%	13	450	0.0	19.7	1.2	2,400	ND<10	37	81	8.1	72
	10/02/09		100%	100%	14	2,150	0.0	19.6	1.1	1,700	ND<20	38	79	6.6	76
	10/20/09		100%	100%	13	2,000	0.5	19.4	1.3	2,200	ND<20	47	97	7.2	65
	11/03/09		100%	100%	14	1,400	0.0	19.3	1.3	2,300	ND<10	39	85	6.5	72
	12/11/09		100%	100%	13	1,250	0.0	7.1	4.2	1,500	ND<14	24	40	3.0	37
	04/20/10		100%	100%	13	50	0.0	15.4	0.9	140	ND<5.0	23	4.6	2.0	11
	04/28/10		100%	100%	15	110	0.0	18.6	1.5	310	ND<3.0	4.5	6.1	0.55	7.5
05/05/10		100%	100%	18	120	0.0	19.6	0.9	-	-	-	-	-	-	
05/11/10		100%	100%	12	25	0.0	19.4	1.0	190	ND<0.68	3.0	5.6	0.66	7.3	
08/23/10			100%	100%	17	85	0.0	6.8	3.1	430	ND<6.8	3.6	8.4	1.1	8.0
09/01/10			100%	100%	14	35	0.0	20.3	0.4	270	ND<0.68	2.5	5.6	0.34	5.2

TABLE 5: HVDPE VAPOR ANALYTICAL & FIELD SCREENING DATA SUMMARY

Vic's Auto, 245 8th Street, Oakland, California

Sample Port ID	Sample Date	Notes	Initial Valve Position	Final Valve Position	Manifold Vacuum (in-Hg)	Field Screening Data				Vapor Analytical Data						
						TVH (ppmv)	CH ₄ (%)	O ₂ (%)	CO ₂ (%)	TPH-g (ppmv)	MTBE (ppmv)	Benzene (ppmv)	Toluene (ppmv)	Ethylbenzene (ppmv)	Xylenes (ppmv)	
MW-11S	11/21/07	7	100%	50%	19	36,600	26.5	19.2	2.2	20,000	ND<68	240	640	63	240	
	12/26/07		50%	100%	18	1,350	0.5	20.9	0.2	3,400	ND<75	50	220	50	230	
	01/22/08		100%	100%	16.5	1,000	0.0	19.3	0.2	3,000	ND<30	81	190	39	230	
	02/07/08		-	-	-	-	-	-	-	-	-	-	-	-	-	-
	03/18/08		100%	100%	14.5	130	xx	20.0	0.3	1,700	ND<14	26	66	26	150	
	04/30/08		100%	100%	18	120	0.0	20.9	0.2	600	ND<5.0	6.7	23	5.9	49	
	05/29/08		100%	100%	18	950	0.0	20.9	0.3	1,800	ND<30	24	47	18	120	
	06/26/08		100%	100%	23	480	0.0	20.9	0.1	940	ND<15	12	28	8.4	57	
	07/30/08		100%	100%	17	980	0.0	20.9	0.3	1,600	ND<30	22	50	13	100	
	09/30/08		100%	OFF	16.5	510	0.0	20.9	0.2	490	ND<10	11	22	3.8	40	
	11/04/08		OFF	100%	13	360	0.0	16.5	1.4	820	ND<20	22	21	5.2	57	
	12/02/08		100%	100%	10	320	0.0	20.9	0.2	1,400	ND<35	23	57	6.3	73	
	01/06/09		100%	100%	11	790	0.0	18.9	0.6	1,200	ND<20	29	53	5.7	56	
	02/09/09		100%	100%	12	380	0.0	17.6	0.8	500	ND<6.0	14	18	2.3	28	
	03/18/09		100%	100%	10	280	0.0	17.3	1.2	400	ND<3.0	48	18	3.4	20	
	04/21/09		100%	100%	11	210	0.0	16.9	1.2	460	ND<20	32	20	3.3	31	
	05/19/09		100%	100%	11.5	200	0.0	15.5	1.5	80	ND<3.0	5.1	3.2	0.58	6.7	
	08/31/09		100%	100%	12	360	-	9.1	3.5	1,000	ND<20	36	17	3.7	63	
	09/10/09		100%	100%	15	420	0.0	17.7	1.5	870	ND<30	38	32	5.7	68	
	09/17/09		100%	100%	14	490	0.0	20.6	0.7	890	ND<25	27	39	4.1	63	
	09/25/09		100%	100%	13	510	0.0	20.6	0.5	840	ND<30	19	31	2.6	33	
	10/02/09		100%	100%	14	820	0.0	20.6	0.5	880	ND<15	22	40	3.9	55	
	10/20/09		100%	100%	13	750	0.0	20.4	0.6	800	ND<15	20	32	3.4	39	
	11/03/09		100%	100%	14	400	0.0	20.7	0.4	820	ND<10	16	30	2.6	42	
	12/11/09		100%	100%	13	350	0.0	13.0	2.5	660	ND<6.8	19	19	2.2	28	
	04/20/10		100%	100%	13	140	0.0	9.0	2.4	440	16	77	12	4.7	30	
	04/28/10		100%	OFF	15	80	0.0	20.8	0.5	150	15	15	4.9	1.6	9.4	
05/05/10	OFF	OFF	18	-	-	-	-	-	-	-	-	-	-			
05/11/10	OFF	OFF	12	-	-	-	-	-	-	-	-	-	-			
08/23/10	OFF	OFF	17	-	-	-	-	-	-	-	-	-	-			
09/01/10	OFF	OFF	11.5	-	-	-	-	-	-	-	-	-	-			

TABLE 5: HVDPE VAPOR ANALYTICAL & FIELD SCREENING DATA SUMMARY

Vic's Auto, 245 8th Street, Oakland, California

Sample Port ID	Sample Date	Notes	Initial Valve Position	Final Valve Position	Manifold Vacuum (in-Hg)	Field Screening Data				Vapor Analytical Data					
						TVH (ppmv)	CH ₄ (%)	O ₂ (%)	CO ₂ (%)	TPH-g (ppmv)	MTBE (ppmv)	Benzene (ppmv)	Toluene (ppmv)	Ethylbenzene (ppmv)	Xylenes (ppmv)
MW-12S	11/21/07		50%	50%	19	110	0.0	20.9	0.7	1,400	ND<100	87	51	10	40
	12/26/07		50%	50%	18	720	0.0	20.9	0.1	1,200	ND<45	27	100	13	74
	01/22/08		100%	100%	16.5	630	0.0	19.3	0.2	1,100	ND<45	14	50	8.4	65
	02/07/08		-	-	-	-	-	-	-	-	-	-	-	-	-
	03/18/08		100%	100%	14.5	0	xx	20.9	0.0	460	ND<30	42	32	4.2	36
	04/30/08		100%	100%	18	65	0.0	20.9	0.2	390	5	8.8	17	3.9	30
	05/29/08		100%	100%	18	150	0.0	20.9	0.3	490	ND<10	14	23	4.4	30
	06/26/08		100%	100%	23	140	0.0	20.9	0.1	300	4.1	5.1	14	2.6	22
	07/30/08	7	100%	100%	17	240	0.0	20.9	0.3	450	ND<5.0	4.5	20	3.8	32
	09/30/08		100%	OFF	16.5	190	0.0	20.9	0.2	230	ND<5.0	3.9	12	2.2	28
	11/04/08		OFF	100%	13	140	0.0	18	0.8	260	ND<5.0	6.5	7.4	1.2	14
	12/02/08		100%	100%	10	150	0.0	20.5	0.6	660	ND<5.0	7.3	29	4.5	66
	01/06/09		100%	100%	11	380	0.0	20.3	0.4	490	ND<6.8	9.1	18	2.2	37
	02/09/09		100%	100%	12	70	0.0	20.1	0.3	110	ND<5.0	4.2	4.0	0.58	8.1
	03/18/09		100%	100%	10	25	0.0	20.9	0.2	98	ND<5.0	7.6	4.2	0.53	2.5
	04/21/09		100%	100%	11	30	0.0	20.6	0.5	40	3.4	6.5	2.1	0.41	2.0
	05/19/09		100%	100%	11.5	20	0.0	19.2	0.7	52	ND<3.0	4.7	1.8	0.47	3.5
	08/31/09		100%	OFF	12	20	-	16.0	1.4	130	ND<3.0	3.9	3.0	0.67	8.0
	09/10/09		OFF	OFF	15	-	-	-	-	-	-	-	-	-	-
	09/17/09		OFF	OFF	14	20	-	20.8	0.4	24	ND<2.0	1.7	1.8	0.18	1.9
	09/25/09		OFF	OFF	13	-	-	-	-	-	-	-	-	-	-
	10/02/09		OFF	OFF	14	-	-	-	-	-	-	-	-	-	-
	10/20/09		OFF	OFF	12	20	0.0	20.9	0.2	120	ND<1.4	4.2	7.9	0.70	8.6
	11/03/09		OFF	OFF	-	-	-	-	-	-	-	-	-	-	-
	12/11/09		OFF	OFF	13	35	0.0	17.8	0.6	60	ND<1.0	2.6	4.4	0.45	5.6
	04/20/10		OFF	100%	13	0	0.0	16.2	0.8	46	2.9	5.0	1.1	0.62	3.7
04/28/10		100%	OFF	15	15	0.0	20.8	0.5	31	5.5	3.5	0.54	0.44	1.6	
05/05/10		OFF	OFF	18	-	-	-	-	-	-	-	-	-	-	
05/11/10		OFF	OFF	12	-	-	-	-	-	-	-	-	-	-	
08/23/10		OFF	OFF	17	-	-	-	-	-	-	-	-	-	-	
09/01/10		OFF	OFF	11.5	-	-	-	-	-	-	-	-	-	-	

TABLE 5: HVDPE VAPOR ANALYTICAL & FIELD SCREENING DATA SUMMARY

Vic's Auto, 245 8th Street, Oakland, California

Sample Port ID	Sample Date	Notes	Initial Valve Position	Final Valve Position	Manifold Vacuum (in-Hg)	Field Screening Data				Vapor Analytical Data					
						TVH (ppmv)	CH ₄ (%)	O ₂ (%)	CO ₂ (%)	TPH-g (ppmv)	MTBE (ppmv)	Benzene (ppmv)	Toluene (ppmv)	Ethylbenzene (ppmv)	Xylenes (ppmv)
AS	10/17/07	7	100%	100%	-	0	0.0	20.9	0.0	130	ND<1.4	4.3	11	1.4	12
	11/08/07		100%	100%	-	0	0.0	20.9	0.0	19	ND<0.68	0.60	1.8	0.18	3.2
	01/15/08		100%	100%	-	-	-	-	-	1,100	19	31	100	17	180
	01/31/08		100%	100%	-	-	-	-	-	69	ND<4.5	1.7	5.0	0.81	11
	02/07/08		100%	100%	-	0	0.0	20.9	0.0	31	1.4	0.47	1.5	0.21	4.1
	03/18/08		100%	100%	-	-	-	-	-	31	0.71	0.60	1.8	0.34	3.2
	04/30/08		100%	100%	-	10	0.0	20.9	0.0	37	ND<0.68	0.36	1.4	0.34	4.1
	05/29/08		100%	100%	-	60	0.0	20.9	0.0	ND<7.0	ND<0.68	ND<0.077	ND<0.065	ND<0.057	0.16
	06/26/08		100%	100%	-	10	0.0	20.9	0.0	44	0.97	0.89	2.5	0.54	6.3
	07/30/08		100%	100%	-	0	0.0	20.9	0.0	41	ND<1.4	0.81	2.2	0.20	4.2
	09/30/08		100%	100%	-	0	0.0	20.9	0.0	-	-	-	-	-	-
	11/04/08		100%	100%	-	0	0.0	20.9	0.1	21	ND<0.68	0.38	0.91	0.13	2.6
	12/02/09		100%	100%	-	0	0.0	20.9	0.1	10	ND<0.68	ND<0.077	0.22	ND<0.057	0.79
	01/06/09		100%	100%	-	0	0.0	20.9	0.1	150	ND<1.5	1.9	6.9	1.1	22
	02/09/09		100%	100%	-	15	0.0	20.9	0.0	18	ND<0.68	0.28	0.57	0.078	1.5
	03/18/09		100%	100%	-	0	0.0	20.9	0.0	ND<7.0	ND<0.68	ND<0.077	0.085	ND<0.057	0.15
	04/21/09		100%	100%	-	0	0.0	20.9	0.0	ND<7.0	ND<0.68	ND<0.077	ND<0.065	ND<0.057	ND<0.057
	05/19/09		100%	100%	-	0	0.0	20.9	0.0	ND<7.0	ND<0.68	ND<0.077	ND<0.065	ND<0.057	ND<0.057
	08/31/09		100%	100%	-	0	0.0	20.9	0.0	ND<7.0	ND<0.68	ND<0.077	0.096	ND<0.057	0.24
	09/10/09		100%	100%	-	0	0.0	20.9	0.0	-	-	-	-	-	-
	09/17/09		100%	100%	-	0	0.0	20.9	0.0	-	-	-	-	-	-
	09/25/09		100%	100%	-	0	0.0	20.9	0.0	-	-	-	-	-	-
	10/02/09		100%	100%	-	0	0.0	20.9	0.0	7.3	ND<1.0	0.27	0.57	ND<0.057	0.93
10/20/09	100%	100%	-	-	-	-	-	-	-	-	-	-	-		
11/03/09	100%	100%	-	0	0.0	20.9	0.0	ND<7.0	ND<0.68	ND<0.077	ND<0.065	ND<0.057	ND<0.057		
12/11/09	100%	100%	-	-	-	-	-	-	-	-	-	-	-		
04/20/10	100%	100%	-	0	0.0	20.9	0.0	11	0.91	0.69	1.2	0.18	1.1		
08/23/10	100%	100%	-	-	-	-	-	-	-	-	-	-	-		
09/01/10	100%	100%	-	100%	-	5	0.0	20.9	0.0	ND<7.0	ND<0.68	0.096	0.26	ND<0.057	0.51

TABLE 5: HVDPE VAPOR ANALYTICAL & FIELD SCREENING DATA SUMMARY

Vic's Auto, 245 8th Street, Oakland, California

Sample Port ID	Sample Date	Notes	Initial Valve Position	Final Valve Position	Manifold Vacuum (in-Hg)	Field Screening Data				Vapor Analytical Data					
						TVH (ppmv)	CH ₄ (%)	O ₂ (%)	CO ₂ (%)	TPH-g (ppmv)	MTBE (ppmv)	Benzene (ppmv)	Toluene (ppmv)	Ethyl-benzene (ppmv)	Xylenes (ppmv)
PRED	06/28/07		-	-	18.5	-	-	-	-	-	-	-	-	-	-
	07/11/07		-	-	21.5	10,750	-	-	-	6,600	ND<90	180	340	39	190
	07/27/07		-	-	20	>11,000	-	-	-	11,000	ND<75	170	330	38	160
	08/01/07		-	-	19	6,000	9.1	18.5	1.1	5,500	ND<70	140	250	16	71
	08/10/07		-	-	21	-	-	-	-	7,700	ND<90	210	410	41	190
	09/28/07	1	-	-	20	5,700	3.5	20.7	0.3	4,000	ND<50	90	170	9.3	42
	10/17/07		-	-	21	9,050	-	-	-	5,100	ND<60	130	210	8.6	51
	11/08/07		-	-	21	0	0.0	20.9	0.0	4,000	ND<0.68	0.35	2.2	0.68	6.6
	11/16/07		-	-	21	3,050	2.0	20.7	0.4	3,700	ND<120	63	170	20	120
	11/16/07		-	-	21	6,100	4.5	20.3	0.7	6,000	ND<27	100	250	27	170
	11/21/07		-	-	19	12,000	13.5	19.4	1.2	2,500	ND<14	39	120	16	79
	12/04/07		-	-	20	10,500	9.5	18.8	0.9	7,900	ND<32	120	340	48	280
	12/26/07		-	-	18	3,650	2.0	20.9	0.5	4,100	ND<27	72	250	42	270
	01/08/08	3	-	-	18	-	-	-	-	-	-	-	-	-	-
	01/15/08		-	-	19	710	0.0	20.0	0.3	1,900	ND<14	29	89	16	100
	01/22/08		-	-	18	800	0.0	17.8	0.5	1,900	ND<14	34	100	13	100
	01/31/08		-	-	21	1,250	0.5	20.9	0.5	2,200	ND<14	36	120	19	160
	02/07/08		-	-	21.5	700	0.0	20.9	0.4	2,000	ND<35	34	110	10	130
	03/18/08		-	-	14.5	160	xx	15.3	0.9	630	ND<3.0	7.0	25	5.6	38
	04/30/08		-	-	18	280	0.5	20.2	0.0	2,100	ND<5.0	20	63	16	120
	05/29/08		-	-	19.5	1,500	0.0	19.6	0.8	2,100	ND<10	21	45	18	120
	06/26/08		-	-	23	280	0.5	20.2	0.0	860	ND<5.0	11	27	6.5	50
	07/30/08	7	-	-	17	1,350	0.0	19.3	1.1	2,200	ND<6.8	24	62	10	90
	09/30/08		-	-	16.5	1,650	0.5	16.1	1.8	1,100	ND<10	20	42	8.2	78
	11/04/08		-	-	13	2,500	0.5	16.1	1.8	2,700	ND<10	31	77	9.3	130
	12/02/08		-	-	10	1,100	0.0	20.5	0.6	2,200	ND<5.0	27	80	8.7	130

TABLE 5: HVDPE VAPOR ANALYTICAL & FIELD SCREENING DATA SUMMARY

Vic's Auto, 245 8th Street, Oakland, California

Sample Port ID	Sample Date	Notes	Initial Valve Position	Final Valve Position	Manifold Vacuum (in-Hg)	Field Screening Data				Vapor Analytical Data					
						TVH (ppmv)	CH ₄ (%)	O ₂ (%)	CO ₂ (%)	TPH-g (ppmv)	MTBE (ppmv)	Benzene (ppmv)	Toluene (ppmv)	Ethylbenzene (ppmv)	Xylenes (ppmv)
PRED Cont.	01/06/09		-	-	11	1,300	0.0	18.4	1.2	1,200	ND<80	21	58	5.7	78
	02/09/09		-	-	12	880	0.0	15.6	1.5	1,200	ND<10	17	31	3.1	46
	03/18/09		-	-	10	60	0.0	20.8	0.4	130	ND<0.68	5.2	11	1.2	7.1
	04/21/09		-	-	11	35	0.0	19.9	0.3	58	ND<1.4	1.9	3.5	0.44	3.7
	05/19/09		-	-	11.5	100	0.0	19.2	0.8	190	ND<2.7	3.4	7.3	0.95	8.0
	08/31/09		-	-	12	400	-	13.8	26	870	ND<4.5	11	21	3.0	29
	09/10/09		-	-	15	1,650	0.5	15.9	2.5	1,700	ND<20	34	62	5.8	110
	09/17/09	8	-	-	14	1,950	0.5	19.4	1.4	2,600	ND<20	52	100	7.5	140
	09/17/09	9	-	-	7	520	0.0	20.3	0.5	-	-	-	-	-	-
	09/25/09		-	-	13	2,450	0.5	19.6	1.2	2,700	ND<6.8	36	80	6.6	91
	10/02/09		-	-	14	2,200	0.0	19.6	1.1	2,400	ND<20	43	85	8.3	110
	10/20/09	10	-	-	13	2,200	0.5	19.6	1.2	2,500	ND<20	38	80	6.7	110
	10/20/09	11	-	-	12	930	0.0	20.9	0.3	590	ND<5.0	7.7	19	2.0	30
	11/03/09		-	-	14	1,450	0.5	20.9	1.0	2,000	ND<10	27	58	4.5	71
	12/11/09	12	-	-	13	380	0.0	14.7	2.2	690	ND<2.7	10	20	2.0	25
	12/11/09	13	-	-	13	1,050	0.0	18.9	1.5	-	-	-	-	-	-
	12/16/09	14	-	-	13	1,200	0.0	20.1	1.2	1,200	ND<14	35	72	5.1	52
	04/20/10		-	-	13	140	0.0	16.5	1.4	240	ND<5.0	17	21	3.3	17
	04/28/10		-	-	15	65	0.0	20.9	0.5	120	ND<5.0	5.1	7.0	0.90	5.9
	04/29/10		-	-	20	150	0.0	19.3	1.3	300	ND<14	9.1	20	3.0	18
05/05/10		-	-	18	210	0.0	19.7	1.2	340	ND<10	6.5	15	1.3	12	
05/11/10		-	-	12	60	0.0	20.9	0.5	160	ND<1.4	2.1	6.2	0.64	5.0	
08/23/10		-	-	17	150	0.0	16.8	1.7	220	ND<2.7	4.8	19	2.1	12	
09/01/10		-	-	14	35	0.0	20.9	0.1	110	ND<0.68	1.2	3.4	0.59	4.4	
09/07/10	15	-	-	11.5	3,300	1.0	19.4	0.7	1,600	ND<15	11	14	1.0	8.4	

TABLE 5: HVDPE VAPOR ANALYTICAL & FIELD SCREENING DATA SUMMARY

Vic's Auto, 245 8th Street, Oakland, California

Sample Port ID	Sample Date	Notes	Initial Valve Position	Final Valve Position	Manifold Vacuum (in-Hg)	Field Screening Data				Vapor Analytical Data					
						TVH (ppmv)	CH ₄ (%)	O ₂ (%)	CO ₂ (%)	TPH-g (ppmv)	MTBE (ppmv)	Benzene (ppmv)	Toluene (ppmv)	Ethylbenzene (ppmv)	Xylenes (ppmv)
POSTD	06/28/07		-	-	-	10,000	6.5	18.2	1.4	3,800	ND<60	120	160	22	110
	07/11/07		-	-	-	3,550	-	-	-	1,400	ND<14	36	82	12	67
	07/27/07		-	-	-	4,550	-	-	-	3,400	ND<14	56	120	15	70
	08/01/07		-	-	-	5,200	-	-	-	2,500	ND<27	59	140	17	95
	08/10/07		-	-	-	4,800	2.0	19.9	0.5	5,300	ND<45	130	290	37	180
	09/28/07		-	-	-	6,750	4.0	20.7	0.3	4,800	ND<60	100	210	23	120
	10/17/07		-	-	-	4,500	2.5	20.9	0.0	1,800	ND<14	41	110	14	100
	11/08/07		-	-	-	1,300	1.0	20.9	0.4	2,000	ND<15	42	100	12	88
	11/16/07		-	-	-	4,150	2.0	20.5	0.4	3,600	ND<14	58	190	25	180
	11/21/07		-	-	-	8,600	7.5	20.5	0.8	5,500	ND<25	75	210	28	130
	12/04/07		-	-	-	6,500	5.0	19.8	0.6	3,400	ND<16	44	120	22	120
	12/26/07		-	-	-	2,000	1.0	20.9	0.3	1,300	ND<45	26	96	15	100
	01/08/08		-	-	-	1,200	0.5	20.9	0.3	1,700	ND<14	23	79	13	83
	01/15/08		-	-	-	45	0.0	20.7	0.0	620	ND<14	11	39	6.6	44
	01/22/08		-	-	-	280	0.0	20.2	0.0	1,100	ND<14	14	50	8.4	65
	01/31/08		-	-	-	470	0.0	20.9	0.1	770	ND<14	12	38	6.9	62
	02/07/08		-	-	-	120	0.0	20.9	0.0	690	ND<6.8	10	37	6.6	58
	03/18/08		-	-	-	75	xx	20.2	0.4	310	ND<3.5	3.9	12	3.0	20
	04/30/08		-	-	-	55	0.0	20.9	0.2	700	ND<2.0	7.6	23	5.0	42
	05/29/08		-	-	-	630	0.0	20.7	0.2	500	ND<3.5	5.4	12	4.1	29
	06/26/08		-	-	-	55	0.0	20.9	0.2	620	ND<10	7.8	25	5.4	45
	07/30/08	6,7	-	-	-	-	-	-	-	-	-	-	-	-	-
	09/30/08		-	-	-	-	-	-	-	-	-	-	-	-	-
	11/04/08		-	-	-	-	-	-	-	-	-	-	-	-	-
	12/02/08		-	-	-	-	-	-	-	-	-	-	-	-	-
	01/06/09		-	-	-	-	-	-	-	-	-	-	-	-	-
	02/09/09		-	-	-	-	-	-	-	-	-	-	-	-	-
	03/18/09		-	-	-	-	-	-	-	-	-	-	-	-	-
	04/21/09		-	-	-	-	-	-	-	-	-	-	-	-	-
	05/19/09		-	-	-	-	-	-	-	-	-	-	-	-	-
	08/31/09		-	-	-	-	-	-	-	-	-	-	-	-	-
	09/10/09		-	-	-	-	-	-	-	-	-	-	-	-	-
	09/17/09		-	-	-	-	-	-	-	-	-	-	-	-	-
	09/25/09		-	-	-	-	-	-	-	-	-	-	-	-	-
	10/02/09		-	-	-	-	-	-	-	-	-	-	-	-	-
	10/20/09		-	-	-	-	-	-	-	-	-	-	-	-	-
	11/03/09		-	-	-	-	-	-	-	-	-	-	-	-	-
	12/11/09		-	-	-	-	-	-	-	-	-	-	-	-	-

TABLE 5: HVDPE VAPOR ANALYTICAL & FIELD SCREENING DATA SUMMARY

Vic's Auto, 245 8th Street, Oakland, California

Sample Port ID	Sample Date	Notes	Initial Valve Position	Final Valve Position	Manifold Vacuum (in-Hg)	Field Screening Data				Vapor Analytical Data					
						TVH (ppmv)	CH ₄ (%)	O ₂ (%)	CO ₂ (%)	TPH-g (ppmv)	MTBE (ppmv)	Benzene (ppmv)	Toluene (ppmv)	Ethylbenzene (ppmv)	Xylenes (ppmv)
STACK	06/28/07		-	-	-	0	0.0	12.3	5.4	ND<7.0	ND<0.68	ND<0.077	ND<0.065	ND<0.057	ND<0.057
	07/27/08		-	-	-	-	-	-	-	-	-	-	-	-	-
	08/10/07		-	-	-	-	-	-	-	ND<7.0	ND<0.68	ND<0.077	ND<0.065	ND<0.057	ND<0.057
	09/28/07		-	-	-	0	0.0	14.0	4.5	ND<7.0	ND<0.68	ND<0.077	ND<0.065	ND<0.057	ND<0.057
	10/17/07		-	-	-	-	-	-	-	ND<7.0	ND<0.68	ND<0.077	ND<0.065	ND<0.057	ND<0.057
	11/08/07		-	-	-	-	-	-	-	21	ND<0.68	0.24	1.5	0.29	2.4
	11/16/07		-	-	-	0	0.0	14.8	4.8	ND<7.0	ND<0.68	ND<0.077	ND<0.065	ND<0.057	ND<0.057
	12/26/07		-	-	-	-	-	-	-	-	-	-	-	-	-
	01/18/08		-	-	-	-	-	-	-	ND<7.0	ND<0.68	ND<0.077	ND<0.065	ND<0.057	ND<0.057
	02/07/08		-	-	-	0	0.0	19.0	1.7	-	-	-	-	-	-
	03/18/08		-	-	-	0	xx	18.0	1.9	ND<7.0	ND<0.68	ND<0.077	ND<0.065	ND<0.057	ND<0.057
	04/30/08		-	-	-	0	0.0	17.7	2.0	ND<7.0	ND<0.68	ND<0.077	ND<0.065	ND<0.057	ND<0.057
	05/29/08		-	-	-	0	0.0	17.7	2.5	ND<7.0	ND<0.68	ND<0.077	ND<0.065	ND<0.057	ND<0.057
	06/26/08		-	-	-	0	0.0	17.9	1.9	ND<7.0	ND<0.68	ND<0.077	ND<0.065	ND<0.057	ND<0.057
	07/30/08	7	-	-	-	0	0.0	17.0	1.8	27	ND<0.68	0.09	0.64	0.16	2.1
	09/30/08		-	-	-	0	0.0	16.1	2.0	ND<7.0	ND<0.68	ND<0.077	ND<0.065	ND<0.057	ND<0.057
	11/04/08		-	-	-	0	0.0	15.7	2.9	ND<7.0	ND<0.68	ND<0.077	ND<0.065	ND<0.057	ND<0.057
	12/02/08		-	-	-	0	0.0	17.7	2.3	52	ND<0.68	0.19	1.5	0.34	4.4
	01/06/09		-	-	-	0	0.0	17.7	2.3	26	ND<0.68	ND<0.077	0.52	0.11	1.9
	02/09/09		-	-	-	0	0.0	16.1	2.6	ND<7.0	ND<0.68	ND<0.077	ND<0.065	ND<0.057	ND<0.057
	03/18/09		-	-	-	0	0.0	18.3	2.0	ND<7.0	ND<0.68	ND<0.077	ND<0.065	ND<0.057	ND<0.057
	04/21/09		-	-	-	0	0.0	18.3	2.2	ND<7.0	ND<0.68	ND<0.077	ND<0.065	ND<0.057	ND<0.057
	05/19/09		-	-	-	0	0.0	17.9	2.2	ND<7.0	ND<0.68	ND<0.077	ND<0.065	ND<0.057	ND<0.057
	08/31/09		-	-	-	0	0.0	16.0	3.0	ND<7.0	ND<0.68	ND<0.077	0.069	ND<0.057	0.35
	09/10/09		-	-	-	0	0.0	18.1	2.0	-	-	-	-	-	-
	10/02/09		-	-	-	0	0.0	17.6	2.5	ND<7.0	ND<0.68	ND<0.077	ND<0.065	ND<0.057	ND<0.057
	10/20/09		-	-	-	-	-	-	-	-	-	-	-	-	-
	11/03/09		-	-	-	0	0.0	17.7	2.4	ND<7.0	ND<0.68	ND<0.077	ND<0.065	ND<0.057	ND<0.057
12/11/09		-	-	-	-	-	-	-	-	-	-	-	-	-	
04/20/10		-	-	-	-	20	0.0	17.3	3.1	ND<7.0	ND<0.68	ND<0.077	ND<0.065	ND<0.057	ND<0.057
08/23/10		-	-	-	-	0	0.0	18.2	2.1	ND<7.0	ND<0.68	ND<0.077	ND<0.065	ND<0.057	ND<0.057

TABLE 5: HVDPE VAPOR ANALYTICAL & FIELD SCREENING DATA SUMMARY

Vic's Auto, 245 8th Street, Oakland, California

Sample Port ID	Sample Date	Notes	Initial Valve Position	Final Valve Position	Manifold Vacuum (in-Hg)	Field Screening Data				Vapor Analytical Data					
						TVH (ppmv)	CH ₄ (%)	O ₂ (%)	CO ₂ (%)	TPH-g (ppmv)	MTBE (ppmv)	Benzene (ppmv)	Toluene (ppmv)	Ethylbenzene (ppmv)	Xylenes (ppmv)

NOTES:

TPH-g = total petroleum hydrocarbons as gasoline

MTBE = methyl tertiary-butyl ether

in-Hg = inches of mercury

ppmv = parts per million by volume

% = percent concentration by volume

PRED = pre-dilution sample port at combined inlet

POSTD = post-dilution sample part at thermal/catalytic oxidizer inlet

- not sampled/analyzed

TPH-g by EPA Method 8015C

BTEX & MTBE by EPA Method 8021B

xx = methane sensor damaged; pending replacement

TVH = total volatile hydrocarbons (calibrated w/ hexane)

CH₄ = methane by infrared detection (0 to 100% by volume)

O₂ = oxygen by electrochemical detection (0-40% by volume)

CO₂ = carbon dioxide by infrared detection (0 to 20% by volume)

TVH, CH₄, O₂, and CO₂ measured w/ RKI Eagle gas detector

- 1) Individual well water separator trap used for the 1st time.
- 2) Vacuum leak detected at wellhead due to broken wellhead seal; well turned off.
- 3) Pump failed, not strong enough to collect sample from PRED @ 18 in-Hg.
- 4) Opened 100% for field screening, turned OFF after screening, no lab sample collected.
- 5) Opened 100% for field screening, no lab sample collected.
- 6) Discontinued POSTD process sampling port starting in the 3rd Quarter, 2008 because it no longer provides any additional useful information.
- 7) HVDPE system shutdown most of the month of August for quarterly soil gas monitoring and pending repair of the rotary phase converter.
- 8) Field screened and sampled with MW-1S, MW-6S, and MW-12S OFF.
- 9) Field screened and sampled with MW-1S, MW-6S, and MW-12S ON; note the significant loss of applied vacuum and decrease in the concentration of hydrocarbons.
- 10) Field screened and sampled with MW-1S, MW-6S, and MW-12S OFF.
- 11) Field screened and sampled with MW-1S, MW-6S, and MW-12S ON; note the slight loss of applied vacuum (~1 in-Hg) and decrease in the concentration of hydrocarbons.
- 12) Field screened and sampled with MW-1S, MW-6S, and MW-12S ON.
- 13) Field screened and sampled with MW-1S, MW-6S, and MW-12S OFF; note the significant increase in the concentration of hydrocarbons.
- 14) The 1-Liter Tedlar® bag was damaged during transportation to the laboratory on 12/11/09; therefore, the samples was recollected on 12/16/09.
- 15) Influent vapor sample collected after sparging into AS-1 for 2 to 3-hours.

TABLE 6: HVDPE PERFORMANCE & MASS REMOVAL DATA SUMMARY

Vic's Auto, 245 8th Street, Oakland, California

Sample Date	Notes	Possible Runtime (days)	Possible Runtime (hrs)	Hour Meter Reading	Actual Runtime (days)	Actual Runtime (hrs)	System Runtime (%)	Inlet Temp (°F)	Inlet Vac (in-Hg)	Well Velocity (fpm)	Well Flow (scfm)	PRED TPH-g (ppmv)	Mass Removal Rate (lbs/day)	Total Mass Removed (pounds)	Total Mass Removed (gallons)
06/28/07	1 Startup	-	-	10	-	-	-	60	18	850	42	-	0	0	0
07/11/07		13	312	53	2	43	14%	60	22	1,725	85	6,600	224	402	67
07/27/07		16	384	103	2	51	13%	60	20	1,700	83	11,000	368	1,180	197
08/01/07		5	120	160	2	57	47%	60	19	1,900	93	5,500	206	1,668	278
08/10/07	2,3	9	216	350	8	189	88%	60	22	1,800	88	7,700	273	3,820	637
09/28/07	4	49	1,176	896	23	546	46%	60	20	1,700	83	4,000	134	6,865	1,144
10/17/07		19	456	1,239	14	343	75%	60	21	1,100	54	5,100	110	8,446	1,408
11/08/07		22	528	1,709	20	470	89%	60	22	1,100	54	4,000	87	10,141	1,690
11/16/07		8	192	1,874	7	166	86%	60	21	1,100	54	6,000	130	11,038	1,840
11/21/07	5	5	120	1,994	5	120	100%	60	20.5	1,500	74	2,500	74	11,407	1,901
12/04/07		13	312	2,231	10	236	76%	60	20	1,150	56	7,900	179	13,168	2,195
12/26/07		22	528	2,566	14	335	63%	60	18	1,300	64	4,100	105	14,633	2,439
01/15/08		20	480	3,016	19	451	94%	60	19	1,200	59	1,900	45	15,476	2,579
01/22/08	6,7	7	168	3,064	2	48	29%	60	18	1,500	74	1,900	56	15,589	2,598
01/31/08		9	216	3,276	9	212	98%	60	20	1,250	61	2,200	54	16,067	2,678
02/07/08		7	168	3,443	7	167	99%	60	22	1,100	54	2,000	43	16,368	2,728
03/18/08	8,9	40	960	3,653	9	210	22%	60	15	1,400	69	630	17	16,520	2,753
04/01/08		14	336	3,952	12	299	89%	60	19	1,500	74	2,100	62	17,292	2,882
04/30/08		29	696	4,591	27	639	92%	60	19	1,900	93	2,100	79	19,383	3,231
05/29/08		29	696	4,978	16	387	56%	60	19.5	900	44	2,100	37	19,983	3,331
06/26/08		28	672	5,489	21	511	76%	60	23	1,200	59	860	20	20,416	3,403
07/30/08		34	816	6,184	29	694	85%	60	17	1,600	79	2,200	69	22,422	3,737
09/30/08		62	1,488	6,673	20	489	33%	60	9	2,000	98	1,100	43	23,304	3,884
11/04/08		35	840	7,062	16	389	46%	60	11	1,200	59	2,700	64	24,339	4,057
12/02/08		28	672	7,697	26	635	94%	60	10	1,200	59	2,200	52	25,715	4,286

TABLE 6: HVDPE PERFORMANCE & MASS REMOVAL DATA SUMMARY

Vic's Auto, 245 8th Street, Oakland, California

Sample Date	Notes	Possible Runtime (days)	Possible Runtime (hrs)	Hour Meter Reading	Actual Runtime (days)	Actual Runtime (hrs)	System Runtime (%)	Inlet Temp (°F)	Inlet Vac (in-Hg)	Well Velocity (fpm)	Well Flow (scfm)	PRED TPH-g (ppmv)	Mass Removal Rate (lbs/day)	Total Mass Removed (pounds)	Total Mass Removed (gallons)
01/06/09		35	840	8,298	25	601	72%	60	11	1,200	59	1,200	28	26,425	4,404
02/09/09		34	816	8,300	0	2	0%	60	12	1,200	59	1,200	28	26,427	4,405
03/18/09		37	888	8,320	1	20	2%	60	10	1,400	69	130	4	26,430	4,405
04/21/09		34	816	8,975	27	655	80%	60	11	1,400	69	58	2	26,474	4,412
05/19/09		28	672	9,001	1	26	4%	60	10	1,250	61	190	5	26,479	4,413
08/31/09		104	2,496	9,149	6	148	6%	60	12	1,400	69	870	24	26,626	4,438
09/10/09		10	240	9,260	5	111	46%	60	15	1,500	74	1,700	50	26,859	4,476
09/17/09		7	168	9,411	6	151	90%	60	14	1,300	64	2,600	67	27,277	4,546
09/25/09		8	192	9,602	8	192	100%	60	13	2,000	98	2,700	106	28,126	4,688
10/02/09		7	168	9,771	7	169	100%	60	14	1,100	54	2,400	52	28,491	4,749
10/20/09		18	432	10,131	15	360	83%	60	13	3,000	147	2,500	148	30,706	5,118
11/03/09		14	336	10,468	14	337	100%	60	14	1,500	74	2,000	59	31,536	5,256
12/16/09		43	1,032	10,648	7	180	17%	60	14	2,000	98	1,200	47	31,890	5,315
04/20/10		125	3,000	10,820	7	172	6%	60	13	2,000	98	240	9	31,958	5,326
04/28/10		8	192	11,009	8	189	100%	60	15	1,100	54	120	3	31,979	5,330
04/29/10		1	24	11,033	1	24	100%	60	20	2,000	98	300	12	31,990	5,332
05/05/10		7	168	11,179	7	170	100%	60	18	2,000	98	340	13	32,085	5,347
05/11/10		12	288	11,321	12	288	100%	60	12	2,000	98	160	6	32,161	5,360
08/23/10		110	2,640	11,416	10	237	9%	60	16.5	2,500	123	220	11	32,268	5,378
09/01/10		113	2,712	11,635	13	313	12%	60	14	1,300	64	110	3	32,304	5,384
09/07/10	10	15	360	11,773	15	357	100%	60	11.5	900	44	1,600	28	32,726	5,454

TABLE 6: HVDPE PERFORMANCE & MASS REMOVAL DATA SUMMARY

Vic's Auto, 245 8th Street, Oakland, California

Sample Date	Notes	Possible Runtime (days)	Possible Runtime (hrs)	Hour Meter Reading	Actual Runtime (days)	Actual Runtime (hrs)	System Runtime (%)	Inlet Temp (°F)	Inlet Vac (in-Hg)	Well Velocity (fpm)	Well Flow (scfm)	PRED TPH-g (ppmv)	Mass Removal Rate (lbs/day)	Total Mass Removed (pounds)	Total Mass Removed (gallons)
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NOTES:

ppmv = parts per million by volume

TPH-g = total petroleum hydrocarbons as gasoline

TPH-g by EPA Method 8015C

in-Hg = inches of mercury (gauge pressure)

hrs = hours

- not analyzed/applicable

fpm = feet per minute

scfm = standard cubic feet per minute

Flow = Velocity x Cross Sectional Area of the Pipe

Cross Sectional Area of 3" Pipe = 0.0491 ft²

Well Flow = Well Velocity * 0.0491

PRED = TPH-g influent concentration

1) System installed and started up on June 26, 2007

2) Propane delivery missed; system shutdown on 08/06/07

3) Propane delivery missed; system shutdown on 08/21/07

4) System down between 09/11 and 09/24/08 due to electrical problems

5) System expanded; MW-10, MW-11 and MW-12 extraction added online

6) Propane delivery missed; system shutdown on 01/02/08

7) Propane delivery missed; system shutdown on 01/22/08

8) System shutdown most of February to evaluate free product recovery

9) Catalyst module installed and started up in March of 2008

10) Combined influent samples collected after sparging into AS-1 for 2 to 3-hours

MASS REMOVAL RATE (MRR) ESTIMATE ASSUMPTIONS:

MRR Estimate = (20,000*10⁻⁶)*(50scfm)*(1440min/day)*(28.32L/ft³)*(1mol/22.4L)*(100g/mol)*(1lb/454g)

MRR Estimate assumes negligible change in air density, constant concentration and average molecular weight

1 mole occupies 22.4 Liters at STP

STP is 21°C and 1 atm

MW_{gas} = 100 grams/mole (weathered gasoline)

1 day = 1440 minutes

1ft³ = 28.38 liters

1 lb = 454 grams

1 gallon gas ~ 6 pounds

APPENDIX A

MONITORING WELL FIELD SAMPLING FORMS

AEI CONSULTANTS
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-1

Project Name:	Vic's Automotive (Q3, 2010)	Date of Sampling:	8/19/2010
Job Number:	116907	Name of Sampler:	J. Sigg
Project Address:	245 8th Street, Oakland		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	4		
Wellhead Condition	OK		
Elevation of Top of Casing (feet above msl)	32.55		
Depth of Well	28.00		
Depth to Water (from top of casing)	16.11		
Depth to Free Product (from top of casing)	NA		
Water Elevation (feet above msl)	16.44		
Well Volumes Purged (Default = 3)	3		
Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)	23.2		
Actual Volume Purged (gallons)	24.0		
Appearance of Purge Water	Clear with black solids		
Free Product Present?	No	Thickness (ft):	-

GROUNDWATER SAMPLES

Number of Samples/Container Size				Three (3) 40mL VOAs			
Time	Vol Removed (gal)	Temperature (deg C)	Conductivity	DO	PH	ORP (meV)	Comments
15:16	3	18.66	801	0.38	7.19	-6.7	Dark grey
	6	18.76	688	0.32	7.12	-21.3	Clear
	9	18.63	499	1.14	7.20	-27.1	Clear
	12	18.67	471	1.36	7.18	-24.0	Clear
	15	18.67	457	1.44	7.17	-22.5	Clear
	18	18.67	436	1.51	7.15	-17.5	Clear
	21	18.67	427	1.57	7.12	-13.2	Clear
15:37	24	18.67	424	1.58	7.12	12.3	Clear

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

Large amount black solids present in VOAs

AEI CONSULTANTS
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-2

Project Name:	Vic's Automotive (Q3, 2010)	Date of Sampling:	8/19/2010
Job Number:	116907	Name of Sampler:	J. Sigg
Project Address:	245 8th Street, Oakland		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	2		
Wellhead Condition	OK		
Elevation of Top of Casing (feet above msl)	33.24		
Depth of Well	28.00		
Depth to Water (from top of casing)	16.99		
Depth to Free Product (from top of casing)	NA		
Water Elevation (feet above msl)	16.25		
Well Volumes Purged (Default = 3)	3		
Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)	5.3		
Actual Volume Purged (gallons)	5.0		
Appearance of Purge Water	Clear with black solids		
Free Product Present?	No	Thickness (ft):	-

GROUNDWATER SAMPLES

Number of Samples/Container Size				Three (3) 40mL VOAs			
Time	Vol Removed (gal)	Temperature (deg C)	Conductivity	DO	PH	ORP (meV)	Comments
12:55	1	18.70	630	3.41	6.94	51.0	Black
	2	18.49	538	1.13	6.97	50.0	Clear
	3	18.40	489	0.75	6.98	45.6	Clear
	4	18.29	455	0.51	6.98	40.0	Clear
12:58	5	18.30	448	0.45	6.98	37.2	Clear

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

Small to moderate amount black solids present in VOAs

AEI CONSULTANTS
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-3

Project Name:	Vic's Automotive (Q3, 2010)	Date of Sampling:	8/19/2010
Job Number:	116907	Name of Sampler:	J. Sigg
Project Address:	245 8th Street, Oakland		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	4		
Wellhead Condition	OK		
Elevation of Top of Casing (feet above msl)	34.25		
Depth of Well	25.00		
Depth to Water (from top of casing)	17.99		
Water Elevation (feet above msl)	16.26		
Well Volumes Purged (Default = 3)	Well Not Sampled		
Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)	NA		
Actual Volume Purged (gallons)	na		
Appearance of Purge Water	na		
Free Product Present?	No	Thickness (ft):	-

GROUNDWATER SAMPLES

Number of Samples/Container Size							
Time	Vol Removed (gal)	Temperature (deg C)	Conductivity	DO	PH	ORP (meV)	Comments

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

Checked depth to water only - well not sampled.

AEI CONSULTANTS
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-4

Project Name:	Vic's Automotive (Q3, 2010)	Date of Sampling:	8/19/2010
Job Number:	116907	Name of Sampler:	J. Sigg
Project Address:	245 8th Street, Oakland		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	4		
Wellhead Condition	OK ▼		
Elevation of Top of Casing (feet above msl)	34.42		
Depth of Well	25.00		
Depth to Water (from top of casing)	18.88		
Water Elevation (feet above msl)	15.54		
Well Volumes Purged (Default = 3)	Well Not Sampled		
Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)	NA		
Actual Volume Purged (gallons)	na		
Appearance of Purge Water	na		
Free Product Present?	No	Thickness (ft):	-

GROUNDWATER SAMPLES

Number of Samples/Container Size							
Time	Vol Removed (gal)	Temperature (deg C)	Conductivity	DO	PH	ORP (meV)	Comments

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

Checked depth to water only - well not sampled.

AEI CONSULTANTS
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-5

Project Name:	Vic's Automotive (Q3, 2010)	Date of Sampling:	8/19/2010
Job Number:	116907	Name of Sampler:	J. Sigg
Project Address:	245 8th Street, Oakland		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	4		
Wellhead Condition	OK		
Elevation of Top of Casing (feet above msl)	33.33		
Depth of Well	22.00		
Depth to Water (from top of casing)	17.05		
Depth to Free Product (from top of casing)	NA		
Water Elevation (feet above msl)	16.28		
Well Volumes Purged (Default = 3)	3		
Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)	9.7		
Actual Volume Purged (gallons)	10.0		
Appearance of Purge Water	Clear with black solids		
Free Product Present?	No	Thickness (ft):	-

GROUNDWATER SAMPLES

Number of Samples/Container Size				Three (3) 40mL VOAs			
Time	Vol Removed (gal)	Temperature (deg C)	Conductivity	DO	PH	ORP (meV)	Comments
11:32	1	19.16	581	1.59	7.23	61.4	Black
11:33	2	18.89	585	0.95	7.17	51.8	Clear
11:34	3	18.86	573	0.87	7.19	41.9	Clear
11:44	4	19.14	445	20.05	7.13	54.6	Clear
11:45	5	19.01	448	0.74	7.1	49.5	Clear
11:46	6	18.92	445	0.49	7.11	42.1	Clear

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

Well ran dry @ 3 gallons - recharged for 10 minutes
Well ran dry @ 6 gallons - collected sample
Small to moderate amount black solids present in VOAs

AEI CONSULTANTS
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-6

Project Name:	Vic's Automotive (Q3, 2010)	Date of Sampling:	8/19/2010
Job Number:	116907	Name of Sampler:	J. Sigg
Project Address:	245 8th Street, Oakland		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	4		
Wellhead Condition	OK		
Elevation of Top of Casing (feet above msl)	32.82		
Depth of Well	22.00		
Depth to Water (from top of casing)	15.13		
Depth to Free Product (from top of casing)	NA		
Water Elevation (feet above msl)	17.69		
Well Volumes Purged (Default = 3)	3		
Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)	13.4		
Actual Volume Purged (gallons)	14.0		
Appearance of Purge Water	Clear with black solids		
Free Product Present?	No	Thickness (ft):	-

GROUNDWATER SAMPLES

Number of Samples/Container Size				Three (3) 40mL VOAs			
Time	Vol Removed (gal)	Temperature (deg C)	Conductivity	DO	PH	ORP (meV)	Comments
8:09	2	1820	214	2.18	6.67	93.6	Dark gray
	4	1836	200	0.98	6.65	83.1	Clear
	6	1836	197	0.73	6.65	75.4	Clear
	8	1834	210	0.63	6.65	70.7	Clear
	10	1831	231	0.54	6.67	63.2	Clear
	12	1831	256	0.61	6.73	54.9	Clear
8:20	14	1835	260	0.93	6.79	49.7	Light grey

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

Large amount black solids present in VOAs

AEI CONSULTANTS
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-7

Project Name:	Vic's Automotive (Q3, 2010)	Date of Sampling:	8/19/2010
Job Number:	116907	Name of Sampler:	J. Sigg
Project Address:	245 8th Street, Oakland		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	4		
Wellhead Condition	OK		
Elevation of Top of Casing (feet above msl)	33.07		
Depth of Well	22.00		
Depth to Water (from top of casing)	16.79		
Depth to Free Product (from top of casing)	NA		
Water Elevation (feet above msl)	16.28		
Well Volumes Purged (Default = 3)	3		
Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)	10.2		
Actual Volume Purged (gallons)	8.0		
Appearance of Purge Water	Clear with black solids		
Free Product Present?	No	Thickness (ft):	-

GROUNDWATER SAMPLES

Number of Samples/Container Size				Three (3) 40mL VOAs			
Time	Vol Removed (gal)	Temperature (deg C)	Conductivity	DO	PH	ORP (meV)	Comments
14:05	1	18.77	818	1.80	6.91	40.1	Black
	2	18.48	824	0.95	6.88	37.3	Clear
	3	18.43	821	0.76	6.86	32.5	""
14:08	4	18.43	811	0.61	6.88	24.5	""
	5	18.51	693	0.87	6.95	9.7	Black
14:12	6	18.53	695	0.56	6.93	8.8	Clear
	7	18.58	692	0.47	6.92	7.3	""
	8	18.54	669	0.42	6.84	5.4	""

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

Well ran dry @ 4 gallons - recharged for 5 minutes
Well ran dry @ 8 gallons - collected sample
Large amount black solids present in VOAs

AEI CONSULTANTS
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-8

Project Name:	Vic's Automotive (Q3, 2010)	Date of Sampling:	8/19/2010
Job Number:	116907	Name of Sampler:	J. Sigg
Project Address:	245 8th Street, Oakland		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	4"		
Wellhead Condition	OK ▼		
Elevation of Top of Casing (feet above msl)	31.73		
Depth of Well	22.00		
Depth to Water (from top of casing)	15.76		
Water Elevation (feet above msl)	15.97		
Well Volumes Purged (Default = 3)	Well Not Sampled		
Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)	NA		
Actual Volume Purged (gallons)	na		
Appearance of Purge Water	na		
Free Product Present?	No	Thickness (ft):	-

GROUNDWATER SAMPLES

Number of Samples/Container Size							
Time	Vol Removed (gal)	Temperature (deg C)	Conductivity	DO	PH	ORP (meV)	Comments

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

Checked depth to water only - well not sampled.

AEI CONSULTANTS
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-9

Project Name:	Vic's Automotive (Q3, 2010)	Date of Sampling:	8/19/2010
Job Number:	116907	Name of Sampler:	J. Sigg
Project Address:	245 8th Street, Oakland		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	2"		
Wellhead Condition	OK		
Elevation of Top of Casing (feet above msl)	29.02		
Depth of Well	22.73		
Depth to Water (from top of casing)	14.49		
Water Elevation (feet above msl)	14.53		
Well Volumes Purged (Default = 3)	3		
Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)	3.95		
Actual Volume Purged (gallons)	4.0		
Appearance of Purge Water	Clear w/ silt and/or clay sediment		
Free Product Present?	No	Thickness (ft):	-

GROUNDWATER SAMPLES

Number of Samples/Container Size				Three (3) 40mL VOAs			
Time	Vol Removed (gal)	Temperature (deg C)	Conductivity	DO	PH	ORP (meV)	Comments
10:08	1	19.36	357	1.10	7.03	126.7	Clear
	2	19.46	354	0.80	7.01	122.6	Clear
	3	19.42	357	0.70	6.99	119.0	Clear
10:11	4	19.37	371	0.58	6.96	112.5	Clear

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

Sample clear with trace amount of light gray silt and/or clay sediment

AEI CONSULTANTS
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-10

Project Name:	Vic's Automotive (Q3, 2010)	Date of Sampling:	8/19/2010
Job Number:	116907	Name of Sampler:	J. Sigg
Project Address:	245 8th Street, Oakland		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	4		
Wellhead Condition	OK ▼		
Elevation of Top of Casing (feet above msl)	31.17		
Depth of Well	22.00		
Depth to Water (from top of casing)	-		
Water Elevation (feet above msl)	-		
Well Volumes Purged (Default = 3)	Well Not Sampled		
Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)	NA		
Actual Volume Purged (gallons)	na		
Appearance of Purge Water	na		
Free Product Present?	---	Thickness (ft)	---

GROUNDWATER SAMPLES

Number of Samples/Container Size							
Time	Vol Removed (gal)	Temperature (deg C)	Conductivity	DO	PH	ORP (meV)	Comments

Well plumbed to HVDPE system from beneath building slab as of August 2008.
Therefore, well not used for groundwater monitoring.

AEI CONSULTANTS
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-11

Project Name:	Vic's Automotive (Q3, 2010)	Date of Sampling:	8/19/2010
Job Number:	116907	Name of Sampler:	J. Sigg
Project Address:	245 8th Street, Oakland		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	4		
Wellhead Condition	OK		
Elevation of Top of Casing (feet above msl)	31.78		
Depth of Well	22.00		
Depth to Water (from top of casing)	-		
Water Elevation (feet above msl)	-		
Well Volumes Purged (Default = 3)	Well Not Sampled		
Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)	NA		
Actual Volume Purged (gallons)	na		
Appearance of Purge Water	na		
Free Product Present?	---	Thickness (ft)	---

GROUNDWATER SAMPLES

Number of Samples/Container Size							
Time	Vol Removed (gal)	Temperature (deg C)	Conductivity	DO	PH	ORP (meV)	Comments

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

Well plumbed to HVDPE system from beneath building slab as of August 2008.
Therefore, well not used for groundwater monitoring.

AEI CONSULTANTS
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-12

Project Name:	Vic's Automotive (Q3, 2010)	Date of Sampling:	8/19/2010
Job Number:	116907	Name of Sampler:	J. Sigg
Project Address:	245 8th Street, Oakland		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	4		
Wellhead Condition	OK		
Elevation of Top of Casing (feet above msl)	32.05		
Depth of Well	22.00		
Depth to Water (from top of casing)	-		
Water Elevation (feet above msl)	-		
Well Volumes Purged (Default = 3)	Well Not Sampled		
Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)	NA		
Actual Volume Purged (gallons)	na		
Appearance of Purge Water	na		
Free Product Present?	---	Thickness (ft)	---

GROUNDWATER SAMPLES

Number of Samples/Container Size							
Time	Vol Removed (gal)	Temperature (deg C)	Conductivity	DO	PH	ORP (meV)	Comments

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

Well plumbed to HVDPE system from beaneath building slab as of August 2008.
Therefore, well not used for groundwater monitoring.

AEI CONSULTANTS
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-13

Project Name:	Vic's Automotive (Q3, 2010)	Date of Sampling:	8/19/2010
Job Number:	116907	Name of Sampler:	J. Sigg
Project Address:	245 8th Street, Oakland		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	2		
Wellhead Condition	OK		
Elevation of Top of Casing (feet above msl)	28.84		
Depth of Well	22.00		
Depth to Water (from top of casing)	14.30		
Water Elevation (feet above msl)	14.54		
Well Volumes Purged (Default = 3)	3		
Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)	3.7		
Actual Volume Purged (gallons)	4.0		
Appearance of Purge Water	Clear		
Free Product Present?	No	Thickness (ft)	-

GROUNDWATER SAMPLES

Number of Samples/Container Size				Three (3) 40mL VOAs			
Time	Vol Removed (gal)	Temperature (deg C)	Conductivity	DO	PH	ORP (meV)	Comments
8:16	1	19.11	310	3.90	8.35	298.9	Clear
	2	19.41	328	2.83	8.06	298.0	Clear
	3	19.33	340	2.31	7.88	297.1	Clear
8:20	4	19.22	319	2.63	7.76	294.7	Clear

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

AEI CONSULTANTS
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-14

Project Name:	Vic's Automotive (Q3, 2010)	Date of Sampling:	8/19/2010
Job Number:	116907	Name of Sampler:	J. Sigg
Project Address:	245 8th Street, Oakland		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	2		
Wellhead Condition	OK		
Elevation of Top of Casing (feet above msl)	29.53		
Depth of Well	22.00		
Depth to Water (from top of casing)	14.61		
Water Elevation (feet above msl)	14.92		
Well Volumes Purged (Default = 3)	3		
Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)	3.5		
Actual Volume Purged (gallons)	4.0		
Appearance of Purge Water	Clear		
Free Product Present?	No	Thickness (ft)	-

GROUNDWATER SAMPLES

Number of Samples/Container Size				Three (3) 40mL VOAs			
Time	Vol Removed (gal)	Temperature (deg C)	Conductivity	DO	PH	ORP (meV)	Comments
8:38	1	19.53	408	2.88	8.12	300.4	Clear
	2	19.55	398	2.80	8.13	300.4	""
	3	19.56	379	2.78	8.14	300.3	""
9:42	4	19.57	370	2.75	8.15	300.1	""

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

Samples clear with trace amount of orange-brown clay sediment

AEI CONSULTANTS
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-15

Project Name:	Vic's Automotive (Q3, 2010)	Date of Sampling:	8/19/2010
Job Number:	116907	Name of Sampler:	J. Sigg
Project Address:	245 8th Street, Oakland		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	2		
Wellhead Condition	OK		
Elevation of Top of Casing (feet above msl)	29.22		
Depth of Well	22.00		
Depth to Water (from top of casing)	15.18		
Water Elevation (feet above msl)	14.04		
Well Volumes Purged (Default = 3)	3		
Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)	3.3		
Actual Volume Purged (gallons)	3.0		
Appearance of Purge Water	Clear		
Free Product Present?	No	Thickness (ft)	-

GROUNDWATER SAMPLES

Number of Samples/Container Size				Three (3) 40mL VOAs			
Time	Vol Removed (gal)	Temperature (deg C)	Conductivity	DO	PH	ORP (meV)	Comments
	1	18.68	481	2.07	8.51	311.6	Light brown
	2	19.10	488	1.14	7.96	310.5	Clear
	3	19.08	495	0.92	7.73	307.4	Clear

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

Samples clear with trace amount of orange-brown clay sediment

AEI CONSULTANTS
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-16

Project Name:	Vic's Automotive (Q3, 2010)	Date of Sampling:	8/19/2010
Job Number:	116907	Name of Sampler:	J. Sigg
Project Address:	245 8th Street, Oakland		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	2		
Wellhead Condition	OK		
Elevation of Top of Casing (feet above msl)	28.87		
Depth of Well	22.00		
Depth to Water (from top of casing)	14.88		
Water Elevation (feet above msl)	13.99		
Well Volumes Purged (Default = 3)	3		
Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)	3.4		
Actual Volume Purged (gallons)	1.0		
Appearance of Purge Water	Clear		
Free Product Present?	No	Thickness (ft)	-

GROUNDWATER SAMPLES

Number of Samples/Container Size				Three (3) 40mL VOAs			
Time	Vol Removed (gal)	Temperature (deg C)	Conductivity	DO	PH	ORP (meV)	Comments
9:08	1	18.78	520	2.94	7.85	291.4	Clear

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

Well ran dry @ 1 gallon
Samples clear with trace amount of orange-brown clay sediment

AEI CONSULTANTS
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-1

Project Name:	Vic's Automotive (Q3, 2010) Low-Flow	Date of Sampling:	8/19/2010
Job Number:	116907	Name of Sampler:	J. Sigg
Project Address:	245 8th Street, Oakland		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	4		
Wellhead Condition	▼		
Elevation of Top of Casing (feet above msl)	32.55		
Depth of Well	28.00		
Depth to Water (from top of casing)	Before: 15.83	After: 16.11	
Depth to Free Product (from top of casing)	Before: NA	After: NA	
Water Elevation (feet above msl)	Before: 16.72	After: 16.44	
Purging and Sampling Method	Low-Flow (Minimal Drawdown) Purging / Sampling		
Drop Tube Depth (feet bgs)	21.0		
Pump Speed (Default = 300 rpms)	150		
Estimated Purge Rate (Pump Speed * 1.67 ml/rev)	250		
Actual Volume Purged (liters)	5.0		
Appearance of Purge Water	Clear		
Free Product Present?	No	Thickness (ft):	-

GROUNDWATER SAMPLES

Number of Samples/Container Size				Three (3) 40ml VOA vials			
Time	Volume Removed (liters)	Temperature (deg C)	Conductivity (uS/cm)	DO (mg/l)	pH	ORP (meV)	Comments
14:44	1	19.72	865	1.53	7.17	93.1	Clear
14:50	2	19.36	865	0.47	7.19	-1.6	Clear
14:56	3	19.26	859	0.33	7.20	-46.9	Clear
15:02	4	19.22	854	0.25	7.19	-61.1	Clear
15:08	5	19.22	851	0.23	7.21	-67.2	Clear

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

Use low-flow (minimal drawdown) purging and sampling method
Position 1/4" polyethylene drop tube at 21-feet bgs
Stabilization criteria: pH +/- 0.1; conductivity +/- 3%; DO +/- 10%; ORP +/- 10 meV
Purge rate @ 150 rpm x 1.67 = 250 ml/min
Samples are mostly clear; no black solids observed in VOAs

AEI CONSULTANTS
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-2

Project Name:	Vic's Automotive (Q3, 2010) Low-Flow	Date of Sampling:	8/19/2010
Job Number:	116907	Name of Sampler:	J. Sigg
Project Address:	245 8th Street, Oakland		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	2		
Wellhead Condition	▼		
Elevation of Top of Casing (feet above msl)	33.24		
Depth of Well	28.00		
Depth to Water (from top of casing)	Before: 16.99	After: 16.99	
Depth to Free Product (from top of casing)	Before: NA	After: NA	
Water Elevation (feet above msl)	Before: 16.25	After: 16.25	
Purging and Sampling Method	Low-Flow (Minimal Drawdown) Purging / Sampling		
Drop Tube Depth (feet bgs)	21.0		
Pump Speed (Default = 300 rpms)	150		
Estimated Purge Rate (Pump Speed * 1.67 ml/rev)	250		
Actual Volume Purged (liters)	5.0		
Appearance of Purge Water	Clear		
Free Product Present?	No	Thickness (ft):	-

GROUNDWATER SAMPLES

Number of Samples/Container Size				Three (3) 40ml VOA vials			
Time	Volume Removed (liters)	Temperature (deg C)	Conductivity (uS/cm)	DO (mg/l)	pH	ORP (meV)	Comments
12:17	1	19.42	819	1.01	6.86	87.7	Clear
12:23	2	19.00	824	0.64	6.88	22.5	Clear
12:29	3	18.72	760	0.43	6.91	-6.5	Clear
12:35	4	18.64	692	0.34	6.98	-12.4	Clear
12:41	5	18.57	645	0.31	6.96	-11.7	Clear

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

Use low-flow (minimal drawdown) purging and sampling method
Position 1/4" polyethylene drop tube at 21-feet bgs
Stabilization criteria: pH +/- 0.1; conductivity +/- 3%; DO +/- 10%; ORP +/- 10 meV
Purge rate @ 150 rpm x 1.67 = 250 ml/min
Samples are mostly clear; no black solids observed in VOAs

AEI CONSULTANTS
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-5

Project Name:	Vic's Automotive (Q3, 2010) Low-Flow	Date of Sampling:	8/19/2010
Job Number:	116907	Name of Sampler:	J. Sigg
Project Address:	245 8th Street, Oakland		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	4		
Wellhead Condition	▼		
Elevation of Top of Casing (feet above msl)	33.33		
Depth of Well	22.00		
Depth to Water (from top of casing)	Before: 16.40	After: 17.05	
Depth to Free Product (from top of casing)	Before: NA	After: NA	
Water Elevation (feet above msl)	Before: 16.93	After: 16.28	
Purging and Sampling Method	Low-Flow (Minimal Drawdown) Purging / Sampling		
Drop Tube Depth (feet bgs)	21.0		
Pump Speed (Default = 300 rpms)	300 (start) / 150 (end)		
Estimated Purge Rate (Pump Speed * 1.67 ml/rev)	500 (start) / 250 (end)		
Actual Volume Purged (liters)	7.0		
Appearance of Purge Water	Clear with balck sediment		
Free Product Present?	No	Thickness (ft):	-

GROUNDWATER SAMPLES

Number of Samples/Container Size				Three (3) 40ml VOA vials			
Time	Volume Removed (liters)	Temperature (deg C)	Conductivity (uS/cm)	DO (mg/l)	pH	ORP (meV)	Comments
10:52	1	19.12	756	1.35	7.13	94.5	Clear
	2	18.93	749	0.65	7.15	46.7	Clear
	3	18.93	748	0.51	7.16	20.7	Clear
11:02	4	18.89	742	0.41	7.16	-10.8	Clear
	5	18.90	739	0.39	7.17	-23.6	Clear
	6	18.89	732	0.34	7.17	-30.1	Clear
11:11	7	19.94	706	0.28	7.19	-37.9	Clear

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

Use low-flow (minimal drawdown) purging and sampling method
Position 1/4" polyethylene drop tube at 21-feet bgs
Stabilization criteria: pH +/- 0.1; conductivity +/- 3%; DO +/- 10%; ORP +/- 10 meV
Purge rate @ 150 rpm x 1.67 = 250 ml/min
Small amount of balck solids present in VOAs

AEI CONSULTANTS
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-6

Project Name:	Vic's Automotive (Q3, 2010) Low-Flow	Date of Sampling:	8/19/2010
Job Number:	116907	Name of Sampler:	J. Sigg
Project Address:	245 8th Street, Oakland		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	4		
Wellhead Condition	▼		
Elevation of Top of Casing (feet above msl)	32.82		
Depth of Well	22.00		
Depth to Water (from top of casing)	Before: 15.13	After: 15.21	
Depth to Free Product (from top of casing)	Before: NA	After: NA	
Water Elevation (feet above msl)	Before: 17.69	After: 17.61	
Purging and Sampling Method	Low-Flow (Minimal Drawdown) Purging / Sampling		
Drop Tube Depth (feet bgs)	19.0		
Pump Speed (Default = 300 rpms)	150		
Estimated Purge Rate (Pump Speed * 1.67 ml/rev)	250		
Actual Volume Purged (liters)	5.0		
Appearance of Purge Water	Clear		
Free Product Present?	No	Thickness (ft):	-

GROUNDWATER SAMPLES

Number of Samples/Container Size				Three (3) 40ml VOA vials			
Time	Volume Removed (liters)	Temperature (deg C)	Conductivity (uS/cm)	DO (mg/l)	pH	ORP (meV)	Comments
7:33	1	17.88	205	2.17	6.87	232.7	Clear
7:39	2	18.06	205	1.43	6.81	162.5	Clear
7:45	3	18.18	207	1.02	6.79	123.5	Clear
7:52	4	18.22	206	0.68	6.76	83.5	Clear
7:58	5	18.22	206	0.62	6.75	76.2	Clear

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

Use low-flow (minimal drawdown) purging and sampling method
Position 1/4" polyethylene drop tube at 19-feet bgs
Stabilization criteria: pH +/- 0.1; conductivity +/- 3%; DO +/- 10%; ORP +/- 10 meV
Purge rate @ 150 rpm x 1.67 = 250 ml/min
Samples are mostly clear; no black solids observed in VOAs

AEI CONSULTANTS
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-7

Project Name:	Vic's Automotive (Q3, 2010) Low-Flow	Date of Sampling:	8/19/2010
Job Number:	116907	Name of Sampler:	J. Sigg
Project Address:	245 8th Street, Oakland		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	4		
Wellhead Condition	▼		
Elevation of Top of Casing (feet above msl)	33.07		
Depth of Well	22.00		
Depth to Water (from top of casing)	Before: 16.30	After: 16.79	
Depth to Free Product (from top of casing)	Before: NA	After: NA	
Water Elevation (feet above msl)	Before: 16.77	After: 16.28	
Purging and Sampling Method	Low-Flow (Minimal Drawdown) Purging / Sampling		
Drop Tube Depth (feet bgs)	19.0		
Pump Speed (Default = 300 rpms)	150		
Estimated Purge Rate (Pump Speed * 1.67 ml/rev)	250		
Actual Volume Purged (liters)	5.0		
Appearance of Purge Water	Clear with balck solids		
Free Product Present?	No	Thickness (ft):	-

GROUNDWATER SAMPLES

Number of Samples/Container Size				Three (3) 40ml VOA vials			
Time	Volume Removed (liters)	Temperature (deg C)	Conductivity (uS/cm)	DO (mg/l)	pH	ORP (meV)	Comments
13:30	1	19.05	1.50	1.50	6.77	53.3	Clear
13:36	2	18.78	0.78	0.78	6.78	14.4	Clear
13:42	3	18.54	0.45	0.45	6.80	-6.9	Clear
13:48	4	18.48	0.33	0.33	6.81	-13.9	Clear
13:54	5	18.48	0.31	0.31	6.82	-16.9	Clear

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

Use low-flow (minimal drawdown) purging and sampling method
Position 1/4" polyethylene drop tube at 19-feet bgs
Stabilization criteria: pH +/- 0.1; conductivity +/- 3%; DO +/- 10%; ORP +/- 10 meV
Purge rate @ 150 rpm x 1.67 = 250 ml/min
Small to moderate amount of balck solids present in VOAs

AEI CONSULTANTS
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-9

Project Name:	Vic's Automotive (Q3, 2010) Low-Flow	Date of Sampling:	8/19/2010
Job Number:	116907	Name of Sampler:	J. Sigg
Project Address:	245 8th Street, Oakland		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	2"		
Wellhead Condition	▼		
Elevation of Top of Casing (feet above msl)	29.02		
Depth of Well	22.73		
Depth to Water (from top of casing)	Before: 14.49	After: -	
Depth to Free Product (from top of casing)	Before:	After: NA	
Water Elevation (feet above msl)	Before: 14.53	After: -	
Purging and Sampling Method	Low-Flow (Minimal Drawdown) Purging / Sampling		
Drop Tube Depth (feet bgs)	19.0		
Pump Speed (Default = 300 rpms)	300		
Estimated Purge Rate (Pump Speed * 1.67 ml/rev)	501		
Actual Volume Purged (liters)	5.0		
Appearance of Purge Water	Clear		
Free Product Present?	No	Thickness (ft):	-

GROUNDWATER SAMPLES

Number of Samples/Container Size				Three (3) 40ml VOA vials			
Time	Volume Removed (liters)	Temperature (deg C)	Conductivity (uS/cm)	DO (mg/l)	pH	ORP (meV)	Comments
9:47	1	19.46	319	0.64	7.22	224.3	Clear
	2	19.44	369	0.58	7.05	185.5	Clear
9:52	3	19.41	388	0.52	6.97	169.1	Clear
	4	19.38	399	0.46	6.95	152.2	Clear
9:56	5	19.37	406	0.47	6.93	140.9	Clear

COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

Use low-flow (minimal drawdown) purging and sampling method
Position 1/4" polyethylene drop tube at 19-feet bgs
Stabilization criteria: pH +/- 0.1; conductivity +/- 3%; DO +/- 10%; ORP +/- 10 meV
Purge rate @ 150 rpm x 1.67 = 250 ml/min
Samples are mostly clear; no black solids or orange clay sediment observed in VOAs

APPENDIX B

LABORATORY ANALYTICAL REPORTS W/ CHAIN OF CUSTODY DOCUMENTATION



McC Campbell Analytical, Inc.

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mcccampbell.com E-mail: main@mcccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #116907; Vic's Auto (Q3, 2010)	Date Sampled: 08/19/10-08/20/10
		Date Received: 08/20/10
	Client Contact: Ricky Bradford	Date Reported: 08/26/10
	Client P.O.: #WC082598	Date Completed: 08/26/10

WorkOrder: 1008611

August 26, 2010

Dear Ricky:

Enclosed within are:

- 1) The results of the **10** analyzed samples from your project: **#116907; Vic's Auto (Q3, 2010)**,
- 2) A QC report for the above samples,
- 3) A copy of the chain of custody, and
- 4) An invoice for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing

McC Campbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
Laboratory Manager
McC Campbell Analytical, Inc.

Standard Purgina

1008610

McCAMPBELL ANALYTICAL INC.
 1538 Willow Pass Road, Pittsburg, CA 94565
 Telephone: (925) 252-9262 Fax: (925) 252-9269

CHAIN OF CUSTODY RECORD
 TURN AROUND TIME RUSH 24 HR 48 HR 72 HR 5 DAY
 EDF Required? Yes No PDF Required? Yes No

Report To: Ricky Bradford Bill To: AEI Consultants
 Company: AEI Consultants, 2500 Camino Diablo, Walnut Creek, CA 94597
 P.O. # WC082598
 E-Mail: rbradford@aeiconsultatns.com
 Telephone: (925) 944-2899, ext. 148 Fax: (925) 944-2895
 Project No: 116907 Project Name: Vic's Auto (Q3, 2010)
 Project Location: 245 8th Street, Oakland, CA 94607
 Sampler Signature: *[Signature]*

SAMPLE ID	FIELD POINT NAME	SAMPING		# of Containers	Type Containers	MATRIX					METHOD PRESERVED				Analysis Request	Other	Comments
		Date	Time			Water	Soil	Air	Sludge	Other	Ice	HCl	HNO ₃	Other			
MW-1	MW-1	8-19	1540	2	VOA	X					X	X				DPE Well	
MW-2	MW-2		1300	3	VOA	X					X	X				DPE Well	
MW-3	MW-3															DTW Only!	
MW-4	MW-4															DTW Only!	
MW-5	MW-5		1155	3	VOA	X					X	X				DPE Well	
MW-6	MW-6	8-20	0827	3	VOA	X					X	X				DPE Well	
MW-7	MW-7	8-19	1420	3	VOA	X					X	X				DPE Well	
MW-8	MW-8															DTW Only!	
MW-9	MW-9		1016	3	VOA	X					X	X					
MW-10	MW-10			3	VOA	X					X	X				Not Sampled	
MW-11	MW-11			3	VOA	X					X	X				Not Sampled	
MW-12	MW-12			3	VOA	X					X	X				Not Sampled	
MW-13	MW-13		0825	3	VOA	X					X	X					

Relinquished By: *[Signature]* Date: 8-20-10 Time: 1148 Received By: *[Signature]*
 Relinquished By: Date: Time: Received By:
 Relinquished By: Date: Time: Received By:

ICE/r° 10.9i
 GOOD CONDITION
 HEAD SPACE ABSENT
 DECHLORINATED IN LAB
 PRESERVATION APPROPRIATE
 CONTAINERS PRESERVED IN LAB
 VOAS O&G METALS OTHER

McC Campbell Analytical, Inc.



1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1008611

ClientCode: AEL

WaterTrax
 WriteOn
 EDF
 Excel
 Fax
 Email
 HardCopy
 ThirdParty
 J-flag

Report to: Ricky Bradford AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597 (925) 283-6000 FAX (925) 944-2895	Email: rbradford@aeiconsultants.com cc: PO: #WC082598 ProjectNo: #116907; Vic's Auto (Q3, 2010)	Bill to: Denise Mockel AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597 dmockel@aeiconsultants.com	Requested TAT: 5 days Date Received: 08/20/2010 Date Printed: 08/20/2010
--	--	---	---

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
1008611-001	MW-1	Water	8/19/2010 15:40	<input type="checkbox"/>	A	A											
1008611-002	MW-2	Water	8/19/2010 13:00	<input type="checkbox"/>	A												
1008611-003	MW-5	Water	8/19/2010 11:55	<input type="checkbox"/>	A												
1008611-004	MW-6	Water	8/20/2010 8:27	<input type="checkbox"/>	A												
1008611-005	MW-7	Water	8/19/2010 14:20	<input type="checkbox"/>	A												
1008611-006	MW-9	Water	8/19/2010 10:16	<input type="checkbox"/>	A												
1008611-007	MW-13	Water	8/19/2010 8:25	<input type="checkbox"/>	A												
1008611-008	MW-14	Water	8/19/2010 8:50	<input type="checkbox"/>	A												
1008611-009	MW-15	Water	8/19/2010 8:00	<input type="checkbox"/>	A												
1008611-010	MW-16	Water	8/19/2010 9:20	<input type="checkbox"/>	A												

Test Legend:

1	G-MBTX W	2	PREDF REPORT	3		4		5	
6		7		8		9		10	
11		12							

Prepared by: Melissa Valles

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.



Sample Receipt Checklist

Client Name: **AEI Consultants** Date and Time Received: **8/20/2010 12:16:26 PM**
 Project Name: **#116907; Vic's Auto (Q3, 2010)** Checklist completed and reviewed by: **Melissa Valles**
 WorkOrder N°: **1008611** Matrix Water Carrier: Client Drop-In

Chain of Custody (COC) Information

Chain of custody present? Yes No
 Chain of custody signed when relinquished and received? Yes No
 Chain of custody agrees with sample labels? Yes No
 Sample IDs noted by Client on COC? Yes No
 Date and Time of collection noted by Client on COC? Yes No
 Sampler's name noted on COC? Yes No

Sample Receipt Information

Custody seals intact on shipping container/cooler? Yes No NA
 Shipping container/cooler in good condition? Yes No
 Samples in proper containers/bottles? Yes No
 Sample containers intact? Yes No
 Sufficient sample volume for indicated test? Yes No

Sample Preservation and Hold Time (HT) Information

All samples received within holding time? Yes No
 Container/Temp Blank temperature Cooler Temp: 10.8°C NA
 Water - VOA vials have zero headspace / no bubbles? Yes No No VOA vials submitted
 Sample labels checked for correct preservation? Yes No
 Metal - pH acceptable upon receipt (pH<2)? Yes No NA
 Samples Received on Ice? Yes No
 (Ice Type: WET ICE)

* NOTE: If the "No" box is checked, see comments below.

Client contacted: Date contacted: Contacted by:

Comments:



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Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #116907; Vic's Auto (Q3, 2010)	Date Sampled: 08/19/10-08/20/10
	Client Contact: Ricky Bradford	Date Received: 08/20/10
	Client P.O.: #WC082598	Date Extracted: 08/23/10-08/26/10
		Date Analyzed: 08/23/10-08/26/10

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE*

Extraction method: SW5030B

Analytical methods: SW8021B/8015Bm

Work Order: 1008611

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comments
001A	MW-1	W	45,000	ND<500	960	9900	1100	5300	100	97	d1
002A	MW-2	W	260	ND<10	4.6	1.1	0.93	3.4	1	101	d1
003A	MW-5	W	3600	ND<75	140	50	130	370	5	92	d1,b1
004A	MW-6	W	64,000	ND<1000	2000	12,000	1600	8300	200	92	d1
005A	MW-7	W	11,000	ND<300	2100	590	270	2000	5	---#	d1,b1
006A	MW-9	W	35,000	ND<1200	9600	220	2300	3600	50	114	d1
007A	MW-13	W	ND	ND	ND	ND	ND	ND	1	100	
008A	MW-14	W	890	ND<30	1.3	16	2.6	1.3	1	84	d1
009A	MW-15	W	ND	33	ND	ND	ND	ND	1	100	
010A	MW-16	W	ND	15	ND	ND	ND	ND	1	95	

Reporting Limit for DF = 1; ND means not detected at or above the reporting limit	W	50	5.0	0.5	0.5	0.5	0.5	0.5	µg/L
	S	1.0	0.05	0.005	0.005	0.005	0.005	0.005	mg/Kg

* water and vapor samples are reported in ug/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts in mg/L.

cluttered chromatogram; sample peak coelutes w/surrogate peak; low surrogate recovery due to matrix interference.

%SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

+The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation:

b1) aqueous sample that contains greater than ~1 vol. % sediment
d1) weakly modified or unmodified gasoline is significant



QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 52640

WorkOrder 1008611

Analyte	EPA Method SW8021B/8015Bm		Extraction SW5030B						Spiked Sample ID: 1008611-007A			
	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex) [£]	ND	60	117	111	5.41	119	116	2.55	70 - 130	20	70 - 130	20
MTBE	ND	10	98.1	91.4	7.03	100	99.9	0.488	70 - 130	20	70 - 130	20
Benzene	ND	10	123	122	0.966	123	123	0	70 - 130	20	70 - 130	20
Toluene	ND	10	120	119	1.12	120	120	0	70 - 130	20	70 - 130	20
Ethylbenzene	ND	10	122	120	1.63	122	123	1.26	70 - 130	20	70 - 130	20
Xylenes	ND	30	125	120	4.23	125	126	0.427	70 - 130	20	70 - 130	20
%SS:	100	10	104	101	2.29	103	103	0	70 - 130	20	70 - 130	20

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 52640 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1008611-001A	08/19/10 3:40 PM	08/26/10	08/26/10 8:28 AM	1008611-002A	08/19/10 1:00 PM	08/25/10	08/25/10 12:06 AM
1008611-003A	08/19/10 11:55 AM	08/23/10	08/23/10 9:30 PM	1008611-004A	08/20/10 8:27 AM	08/26/10	08/26/10 9:59 AM
1008611-005A	08/19/10 2:20 PM	08/24/10	08/24/10 12:05 AM	1008611-006A	08/19/10 10:16 AM	08/25/10	08/25/10 2:09 AM
1008611-007A	08/19/10 8:25 AM	08/24/10	08/24/10 10:32 PM	1008611-008A	08/19/10 8:50 AM	08/24/10	08/24/10 3:08 AM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = matrix interference and/or analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content, or inconsistency in sample containers.



QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 52648

WorkOrder 1008611

Analyte	EPA Method SW8021B/8015Bm		Extraction SW5030B						Spiked Sample ID: 1008643-003A			
	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex) [£]	ND	60	96	93.6	2.56	91	76.2	17.7	70 - 130	20	70 - 130	20
MTBE	ND	10	118	118	0	116	120	2.95	70 - 130	20	70 - 130	20
Benzene	ND	10	110	109	1.17	113	109	3.25	70 - 130	20	70 - 130	20
Toluene	ND	10	98.8	96.6	2.25	102	97.1	4.50	70 - 130	20	70 - 130	20
Ethylbenzene	ND	10	98.9	96.1	2.88	97.8	97.6	0.199	70 - 130	20	70 - 130	20
Xylenes	ND	30	112	109	2.72	113	112	1.46	70 - 130	20	70 - 130	20
%SS:	98	10	99	100	0.570	102	99	2.54	70 - 130	20	70 - 130	20

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 52648 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1008611-009A	08/19/10 8:00 AM	08/25/10	08/25/10 7:59 AM	1008611-010A	08/19/10 9:20 AM	08/24/10	08/24/10 1:17 AM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = matrix interference and/or analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content, or inconsistency in sample containers.



McC Campbell Analytical, Inc.

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #116907; Vic's Auto (Q3, 2010)	Date Sampled: 08/19/10-08/20/10
		Date Received: 08/20/10
	Client Contact: Ricky Bradford	Date Reported: 09/01/10
	Client P.O.: #WC082598	Date Completed: 09/01/10

WorkOrder: 1008611 A

September 01, 2010

Dear Ricky:

Enclosed within are:

- 1) The results of the **6** analyzed samples from your project: **#116907; Vic's Auto (Q3, 2010)**,
- 2) A QC report for the above samples,
- 3) A copy of the chain of custody, and
- 4) An invoice for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing

McC Campbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
Laboratory Manager
McC Campbell Analytical, Inc.

Standard Purging

1008618

McCAMPBELL ANALYTICAL INC.

1538 Willow Pass Road, Pittsburg, CA 94565

Telephone: (925) 252-9262

Fax: (925) 252-9269

CHAIN OF CUSTODY RECORD

TURN AROUND TIME

RUSH 24 HR 48 HR 72 HR 5 DAY

EDF Required? Yes No

PDF Required? Yes No

Report To: Ricky Bradford
 Company: AEI Consultants, 2500 Camino Diablo, Walnut Creek, CA 94597
 P.O. # WC082598

Bill To: AEI Consultants

E-Mail: rbradford@aeiconsultatns.com

Telephone: (925) 944-2899, ext. 148

Fax: (925) 944-2895

Project No: 116907

Project Name: Vic's Auto (Q3, 2010)

Project Location: 245 8th Street, Oakland, CA 94607

Sampler Signature: *[Signature]*

Analysis Request Other Comments

SAMPLE ID	FIELD POINT NAME	SAMPLING		# of Containers	Type Containers	MATRIX					METHOD PRESERVED				TPH-g & MBTEX (SW8015C/8021B) TPH-d (SW8015C) MTBE by 8260B added per RB 5-day/1c	MTBE Only (SW8260B)	Comments
		Date	Time			Water	Soil	Air	Sludge	Other	Ice	HCl	HNO ₃	Other			
MW-1	MW-1	8-19	1540	2	VOA	X					X	X		X	<input checked="" type="checkbox"/>	DPE Well	
MW-2	MW-2		1300	3	VOA	X					X	X		X		DPE Well	
MW-3	MW-3															DTW Only!	
MW-4	MW-4															DTW Only!	
MW-5	MW-5		1155	3	VOA	X					X	X		X		DPE Well	
MW-6	MW-6	8-20	0827	3	VOA	X					X	X		X	<input checked="" type="checkbox"/>	DPE Well	
MW-7	MW-7	8-19	1420	3	VOA	X					X	X		X	<input checked="" type="checkbox"/>	DPE Well	
MW-8	MW-8															DTW Only!	
MW-9	MW-9		1016	3	VOA	X					X	X		X	<input checked="" type="checkbox"/>		
MW-10	MW-10			3	VOA	X					X	X		X		Not Sampled	
MW-11	MW-11			3	VOA	X					X	X		X		Not Sampled	
MW-12	MW-12			3	VOA	X					X	X		X		Not Sampled	
MW-13	MW-13		0825	3	VOA	X					X	X		X			

Relinquished By: <i>[Signature]</i>	Date: 8-20-10	Time: 1148	Received By: <i>[Signature]</i>
Relinquished By:	Date:	Time:	Received By:
Relinquished By:	Date:	Time:	Received By:

ICE/r° 10.9c	VOAS	O&G	METALS	OTHER
GOOD CONDITION <input checked="" type="checkbox"/>	PRESERVATION APPROPRIATE <input checked="" type="checkbox"/>			
HEAD SPACE ABSENT <input checked="" type="checkbox"/>	CONTAINERS <input checked="" type="checkbox"/>			
DECHLORINATED IN LAB <input type="checkbox"/>	PERSERVED IN LAB <input type="checkbox"/>			

McC Campbell Analytical, Inc.



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Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1008611 **A** ClientCode: AEL

WaterTrax
 WriteOn
 EDF
 Excel
 Fax
 Email
 HardCopy
 ThirdParty
 J-flag

Report to:

Ricky Bradford
AEI Consultants
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597
(925) 283-6000 FAX (925) 944-2895

Email: rbradford@aeiconsultants.com
cc:
PO: #WC082598
ProjectNo: #116907; Vic's Auto (Q3, 2010)

Bill to:

Denise Mockel
AEI Consultants
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597
dmockel@aeiconsultants.com

Requested TAT: 5 days

Date Received: 08/20/2010

Date Add-On: 08/26/2010

Date Printed: 08/26/2010

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
1008611-001	MW-1	Water	8/19/2010 15:40	<input type="checkbox"/>	B												
1008611-004	MW-6	Water	8/20/2010 8:27	<input type="checkbox"/>	B												
1008611-005	MW-7	Water	8/19/2010 14:20	<input type="checkbox"/>	B												
1008611-006	MW-9	Water	8/19/2010 10:16	<input type="checkbox"/>	B												

Test Legend:

1	MTBE_W	2		3		4		5	
6		7		8		9		10	
11		12							

Prepared by: Melissa Valles

Comments: MTBE by 8260B added per R.B. 5-day 08/26/10.

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.



QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 52781

WorkOrder 1008611

EPA Method SW8260B		Extraction SW5030B							Spiked Sample ID: 1008821-001B			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
Methyl-t-butyl ether (MTBE)	1.4	10	118	117	0.456	111	103	7.42	70 - 130	30	70 - 130	30
%SS1:	97	25	95	95	0	109	109	0	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 52781 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1008611-001B	08/19/10 3:40 PM	08/27/10	08/27/10 7:02 PM	1008611-004B	08/20/10 8:27 AM	08/27/10	08/27/10 7:41 PM
1008611-005B	08/19/10 2:20 PM	08/27/10	08/27/10 5:45 PM	1008611-006B	08/19/10 10:16 AM	08/27/10	08/27/10 6:23 PM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.



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Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #116907; Vic's Auto (Q3, 2010)	Date Sampled: 08/19/10-08/20/10
		Date Received: 08/20/10
	Client Contact: Ricky Bradford	Date Reported: 08/27/10
	Client P.O.: #WC082599	Date Completed: 08/27/10

WorkOrder: 1008610

August 27, 2010

Dear Ricky:

Enclosed within are:

- 1) The results of the **6** analyzed samples from your project: **#116907; Vic's Auto (Q3, 2010)**,
- 2) A QC report for the above samples,
- 3) A copy of the chain of custody, and
- 4) An invoice for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing

McC Campbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
Laboratory Manager
McC Campbell Analytical, Inc.

Low-Flow Purging

1008610

McCAMPBELL ANALYTICAL INC.

1538 Willow Pass Road, Pittsburg, CA 94565

Telephone: (925) 252-9262

Fax: (925) 252-9269

CHAIN OF CUSTODY RECORD

TURN AROUND TIME

RUSH 24 HR 48 HR 72 HR 5 DAY

EDF Required? Yes No

PDF Required? Yes No

Report To: Ricky Bradford Bill To: AEI Consultants
Company: AEI Consultants, 2500 Camino Diablo, Walnut Creek, CA 94597

P.O. # WC082599

E-Mail: rbradford@aeiconsultatns.com

Telephone: (925) 944-2899, ext. 148

Fax: (925) 944-2895

Project No: 116907

Project Name: Vic's Auto (Q3, 2010)

Project Location: 245 8th Street, Oakland, CA 94607

Sampler Signature: *John Sigg*

Analysis Request

Other

Comments

SAMPLE ID	FIELD POINT NAME	SAMPLING		# of Containers	Type Containers	MATRIX					METHOD PRESERVED				TPH-g & MBTEX (SW8015C/8021B) TPH-d (SW8015C)	MTBE Only (SW8260B)	?	Page 1 of 1
		Date	Time			Water	Soil	Air	Sludge	Other	Ice	HCl	HNO ₃	Other				
MW-1 LF	MW-1	8-19	1500	2	VOA	X					X	X			X			DPE Well
MW-2 LF	MW-2	8-19	1245	6	VOA	X					X	X			X			DPE Well
MW-5 LF	MW-5	8-19	1120	6	VOA	X					X	X			X			DPE Well
MW-6 LF	MW-6	8-20	0800	2	VOA	X					X	X			X			DPE Well
MW-7 LF	MW-7	8-19	1350	6	VOA	X					X	X			X			DPE Well
MW-9 LF	MW-9	8-19	0958	3	VOA	X					X	X			X			

Relinquished By: <i>John Sigg</i>	Date: 8-20-10	Time: 1148	Received By: <i>Life Hall</i>
Relinquished By:	Date:	Time:	Received By:
Relinquished By:	Date:	Time:	Received By:

ICE/° 10.8°C
 GOOD CONDITION
 HEAD SPACE ABSENT
 DECHLORINATED IN LAB
 PRESERVATION APPROPRIATE
 CONTAINERS PRESERVED IN LAB
 VOAS O&G METALS OTHER

McC Campbell Analytical, Inc.



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CHAIN-OF-CUSTODY RECORD

WorkOrder: 1008610

ClientCode: AEL

WaterTrax
 WriteOn
 EDF
 Excel
 Fax
 Email
 HardCopy
 ThirdParty
 J-flag

Report to:	Ricky Bradford	Email: rbradford@aeiconsultants.com	Bill to:	Denise Mockel	Requested TAT:	5 days
	AEI Consultants	cc:		AEI Consultants	Date Received:	08/20/2010
	2500 Camino Diablo, Ste. #200	PO: #WC082599		2500 Camino Diablo, Ste. #200	Date Printed:	08/20/2010
	Walnut Creek, CA 94597	ProjectNo: #116907; Vic's Auto (Q3, 2010)		Walnut Creek, CA 94597		
	(925) 283-6000 FAX (925) 944-2895			dmockel@aeiconsultants.com		

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
1008610-001	MW-1 LF	Water	8/19/2010 15:00	<input type="checkbox"/>	A	A											
1008610-002	MW-2 LF	Water	8/19/2010 12:45	<input type="checkbox"/>	A												
1008610-003	MW-5 LF	Water	8/19/2010 11:20	<input type="checkbox"/>	A												
1008610-004	MW-6 LF	Water	8/20/2010 8:00	<input type="checkbox"/>	A												
1008610-005	MW-7 LF	Water	8/19/2010 13:50	<input type="checkbox"/>	A												
1008610-006	MW-9 LF	Water	8/19/2010 9:58	<input type="checkbox"/>	A												

Test Legend:

1	G-MBTEX_W	2	PREDF REPORT	3		4		5	
6		7		8		9		10	
11		12							

Prepared by: Melissa Valles

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
 Hazardous samples will be returned to client or disposed of at client expense.



Sample Receipt Checklist

Client Name: **AEI Consultants** Date and Time Received: **8/20/2010 12:13:08 PM**
Project Name: **#116907; Vic's Auto (Q3, 2010)** Checklist completed and reviewed by: **Melissa Valles**
WorkOrder N°: **1008610** Matrix Water Carrier: Client Drop-In

Chain of Custody (COC) Information

Chain of custody present? Yes No
Chain of custody signed when relinquished and received? Yes No
Chain of custody agrees with sample labels? Yes No
Sample IDs noted by Client on COC? Yes No
Date and Time of collection noted by Client on COC? Yes No
Sampler's name noted on COC? Yes No

Sample Receipt Information

Custody seals intact on shipping container/cooler? Yes No NA
Shipping container/cooler in good condition? Yes No
Samples in proper containers/bottles? Yes No
Sample containers intact? Yes No
Sufficient sample volume for indicated test? Yes No

Sample Preservation and Hold Time (HT) Information

All samples received within holding time? Yes No
Container/Temp Blank temperature Cooler Temp: 10.8°C NA
Water - VOA vials have zero headspace / no bubbles? Yes No No VOA vials submitted
Sample labels checked for correct preservation? Yes No
Metal - pH acceptable upon receipt (pH<2)? Yes No NA
Samples Received on Ice? Yes No
(Ice Type: WET ICE)

* NOTE: If the "No" box is checked, see comments below.

Client contacted: Date contacted: Contacted by:

Comments:



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Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #116907; Vic's Auto (Q3, 2010)	Date Sampled: 08/19/10-08/20/10
	Client Contact: Ricky Bradford	Date Received: 08/20/10
	Client P.O.: #WC082599	Date Extracted: 08/23/10-08/26/10
		Date Analyzed: 08/23/10-08/26/10

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE*

Extraction method: SW5030B

Analytical methods: SW8021B/8015Bm

Work Order: 1008610

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comments
001A	MW-1 LF	W	4100	ND<110	520	540	190	290	10	102	d1
002A	MW-2 LF	W	580	ND<15	18	4.4	4.4	25	1	108	d1
003A	MW-5 LF	W	3600	ND<25	180	180	170	550	5	117	d1
004A	MW-6 LF	W	1900	ND	13	98	62	350	1	121	d1
005A	MW-7 LF	W	24,000	ND<500	3700	2200	510	4800	10	113	d1
006A	MW-9 LF	W	30,000	ND<1200	8400	140	1800	2800	100	111	d1

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	5.0	0.5	0.5	0.5	0.5	0.5	µg/L
	S	1.0	0.05	0.005	0.005	0.005	0.005	0.005	mg/Kg

* water and vapor samples are reported in ug/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts in mg/L.

cluttered chromatogram; sample peak coelutes w/surrogate peak; low surrogate recovery due to matrix interference.

%SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

+The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation:

d1) weakly modified or unmodified gasoline is significant



QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 52640

WorkOrder 1008610

Analyte	EPA Method SW8021B/8015Bm		Extraction SW5030B						Spiked Sample ID: 1008611-007A			
	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex) ^f	ND	60	117	111	5.41	119	116	2.55	70 - 130	20	70 - 130	20
MTBE	ND	10	98.1	91.4	7.03	100	99.9	0.488	70 - 130	20	70 - 130	20
Benzene	ND	10	123	122	0.966	123	123	0	70 - 130	20	70 - 130	20
Toluene	ND	10	120	119	1.12	120	120	0	70 - 130	20	70 - 130	20
Ethylbenzene	ND	10	122	120	1.63	122	123	1.26	70 - 130	20	70 - 130	20
Xylenes	ND	30	125	120	4.23	125	126	0.427	70 - 130	20	70 - 130	20
%SS:	100	10	104	101	2.29	103	103	0	70 - 130	20	70 - 130	20

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 52640 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1008610-001A	08/19/10 3:00 PM	08/23/10	08/23/10 3:52 PM	1008610-002A	08/19/10 12:45 PM	08/24/10	08/24/10 11:35 PM
1008610-003A	08/19/10 11:20 AM	08/24/10	08/24/10 11:04 PM	1008610-004A	08/20/10 8:00 AM	08/23/10	08/23/10 10:32 PM
1008610-005A	08/19/10 1:50 PM	08/23/10	08/23/10 4:23 PM	1008610-006A	08/19/10 9:58 AM	08/26/10	08/26/10 11:29 AM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = matrix interference and/or analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content, or inconsistency in sample containers.



McC Campbell Analytical, Inc.

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Web: www.mcccampbell.com E-mail: main@mcccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #116907; Vic's Auto (Q3, 2010)	Date Sampled: 08/19/10
		Date Received: 08/20/10
	Client Contact: Ricky Bradford	Date Reported: 08/27/10
	Client P.O.: #WC082599	Date Completed: 08/31/10

WorkOrder: 1008610 A

September 01, 2010

Dear Ricky:

Enclosed within are:

- 1) The results of the **4** analyzed samples from your project: **#116907; Vic's Auto (Q3, 2010)**,
- 2) A QC report for the above samples,
- 3) A copy of the chain of custody, and
- 4) An invoice for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing

McC Campbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
Laboratory Manager
McC Campbell Analytical, Inc.

McC Campbell Analytical, Inc.



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Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1008610 **A**

ClientCode: AEL

WaterTrax
 WriteOn
 EDF
 Excel
 Fax
 Email
 HardCopy
 ThirdParty
 J-flag

Report to:

Ricky Bradford
AEI Consultants
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597
(925) 283-6000 FAX (925) 746-6099

Email: rbradford@aeiconsultants.com
cc:
PO: #WC082599
ProjectNo: #116907; Vic's Auto (Q3, 2010)

Bill to:

Denise Mockel
AEI Consultants
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597
dmockel@aeiconsultants.com

Requested TAT: 5 days

Date Received: 08/20/2010

Date Add-On: 08/27/2010

Date Printed: 08/27/2010

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
1008610-003	MW-5 LF (new voa)	Water	8/19/2010 11:20	<input type="checkbox"/>	B												
1008610-005	MW-7 LF (new voa)	Water	8/19/2010 13:50	<input type="checkbox"/>	B												

Test Legend:

1	G-MBTEX_W	2		3		4		5	
6		7		8		9		10	
11		12							

Prepared by: Melissa Valles

Comments: Re-run TPH(g)+MBTEX on new voas for 003 and 005 added per R.B. 5-day 08/27/10.

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.



QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 52801

WorkOrder 1008610

Analyte	EPA Method SW8021B/8015Bm		Extraction SW5030B						Spiked Sample ID: 1008877-005A			
	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex) ^f	ND	60	90.2	102	11.9	95.1	103	7.98	70 - 130	20	70 - 130	20
MTBE	ND	10	113	117	3.40	115	119	3.52	70 - 130	20	70 - 130	20
Benzene	ND	10	109	115	5.32	99.7	109	8.85	70 - 130	20	70 - 130	20
Toluene	ND	10	98.6	111	12.1	91.1	99.4	8.73	70 - 130	20	70 - 130	20
Ethylbenzene	ND	10	97.1	98.7	1.65	89.8	97	7.70	70 - 130	20	70 - 130	20
Xylenes	ND	30	111	120	7.81	104	112	7.49	70 - 130	20	70 - 130	20
%SS:	102	10	102	102	0	92	99	7.50	70 - 130	20	70 - 130	20

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 52801 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1008610-003B	08/19/10 11:20 AM	08/30/10	08/30/10 7:52 PM	1008610-005B	08/19/10 1:50 PM	08/30/10	08/30/10 8:25 PM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = matrix interference and/or analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content, or inconsistency in sample containers.