February 28, 2011

AIR SPARGING PILOT TEST REPORT

Property Identification:
245 8th Street
Oakland, CA 94607

AEI Project No. 116907
ACEH RO#0000202
RWQCB #01-1244

Prepared for:
Mr. Vic Lum
Vic's Automotive
245 8th Street
Oakland, CA 94607

Prepared by:
AEI Consultants
2500 Camino Diablo
Walnut Creek, CA 94597
(925) 746-6000

February 28, 2011

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

Subject: **Perjury Statement and Report Transmittal**
Air Sparging Pilot Test Report

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

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February 28, 2011

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

Subject: **Air Sparging Pilot Test Report**
245 8th Street
Oakland, California 94607
AEI Project No. 116907

Dear Mr. Wickham:

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 relating to the release of gasoline fuel hydrocarbons from the former underground storage tank (UST) and fuel dispensing system on the subject property. The ongoing investigation and remediation of the release is being performed under the direction of Alameda County Environmental Health (ACEH) local oversight program.

On December 2, 2009, AEI and Mr. Lum met with ACEH staff to discuss the high vacuum dual phase extraction (HVDPE) remediation system status, results of the first rebound evaluation, and recommendations regarding future activities for the site. On February 9, 2009, AEI submitted a workplan to delineate the source zone and complete a performance evaluation and optimization of the HVDPE system. The workplan included a recommendation for an in situ air sparging pilot test contingent upon the results of the source zone investigation. The source zone delineation activities were completed in March 2010 and were reported in AEI's "Source Zone Delineation Report & Air Sparging Pilot Test Workplan", dated May 10, 2010. A significant residual hydrocarbon source was detected below the water table during the March 2010 investigation; therefore, AEI recommended implementing the air sparing pilot test. The pilot test was approved by ACEH in a letter dated May 24, 2010.

This report summarizes the field procedures and results of the air sparge well installation and pilot testing activities completed between July and November, 2010. As requested by ACEH, the nested soil gas probes were field screened more frequently for the first three hours of the initial sparge test and every 30 minutes thereafter.

AEI completed the following scope of work:

- Between June 30 and July 1, 2010, AEI installed four 2-inch diameter air sparge wells to a total depth of 30-feet below ground surface (bgs), screened from 28 to 30-feet bgs.

- On July 5, 2010, AEI developed the air sparge wells by surging and over-pumping with a submersible pump. At least three well volumes were removed.

- Between August and October, 2010, AEI setup a small, pilot-scale air sparging system and interlocked the controls with the existing HVDPE system.

- On September 7, 2010, AEI conducted an initial air injection pressure/flow rate test to determine the initial air injection pressure for comparison with the engineering estimates.

- On October 12, 2010, AEI re-developed the air sparge wells by surging and over-pumping with a submersible pump to remove accumulated fines from the well and sandpack and reduce the air injection backpressure. Six to nine well volumes were removed.

- In November 2010, AEI completed air injection pressure/flow rate tests and transient pressure transducer response test on AS-1 and AS-3 to evaluate the subsurface flow characteristics, performed off-gas sampling to monitor for increases in the mass removal rates and to estimate the saturated zone volatilization rates, and implemented rigorous soil gas sampling protocols to monitor for potential vapor migration into nearby residences.

- In December 2010, AEI monitored groundwater quality after approximately one month of continuous air sparging. Data from the fourth quarter, 2010 groundwater monitoring event was used for this evaluation.

- Between January and February 2011, AEI evaluated the field and analytical results in conjunction with the existing site conceptual site model, prepared data summary tables, graphs and figures, and prepared recommendations discussed at the end of this report regarding the use of air sparging technology at the site.

2.0 SITE DESCRIPTION AND HISTORY

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 groundwater 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) or free phase gasoline was discovered 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 free phase product 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 of 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/extraction wells (MW-5, MW-6 and MW-7 were installed onsite and wells MW-10 to MW-12 were installed offsite at the 708 Alice Street property). Wells 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 of 2008.

- From July 11 to July 27, 2005, a 16-day HVDPE pilot test was performed on wells MW-1, MW-2, MW-5, MW-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 influence was observed at the vadose and saturated zone monitoring points. Approximately 5 pounds per day (lbs/day) of dissolved phase and 697 lbs/day of vapor phase hydrocarbons were recovered during the test. 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. Please 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, operations and maintenance, and monitoring plan. 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, operations and maintenance, and monitoring plan and a separate soil gas investigation work plan were submitted to ACEH for review and comment. Please 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 system completion and delivery was scheduled for delivery during the first quarter, 2007; however, the system was not ready until in April 2007. The remaining infrastructure, such as the rotary phase converter, equipment, fence, and wellhead connections were installed in May of 2007 and 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. Elevated concentrations of TPH-g, BTEX, and MTBE were detected in samples collected from MW-9. Low to none-detectable concentrations of TPH-g, BTEX, and MTBE were detected in MW-8 and MW-13. Elevated concentrations of MTBE were detected in MW-13.

- 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 through MW-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 wells were developed by surging and over-pumping on August 3, 2009. Elevated concentrations of TPH-g and BTEX were detected in samples collected from MW-14. MTBE was not detected in MW-14 at or above the laboratory reporting limit of 1.0 µg/L. Lower concentrations of TPH-g, BTEX, and MTBE were detected in MW-15 and MW-16. Refer to AEI's "Monitoring Well Installation & Quarterly Site Monitoring Report (Third Quarter, 2009)", dated October 13, 2009, for more detailed information.

- On December 2, 2009, the property owner and AEI held a meeting with the ACEH to discuss the HVDPE remediation system status, results of the first rebound evaluation, and recommendations regarding future activities for the site.

- On March 17, 2010, AEI performed a source zone investigation by advancing four continuously cored soil borings (SB-16 to SB-19) to 30-feet bgs. Soil samples were collected from select depths and one discrete groundwater sample (SB-18W) was collected from boring SB-18 at 28 to 30 feet bgs. Based on the results of the analyses, a significant residual hydrocarbon source was identified below 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.

3.0 GEOLOGY AND HYDROLOGY

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 AIR SPARGE WELL INSTALLATION

Between June 30 and July 1, 2010, AEI four air sparge wells in the source zone. The wells were installed by PeneCore Drilling of Woodland, California (C-57 License #906899) using a track-mounted Geoprobe® 6610DT direct-push combo-rig with hollow stem auger capability. An AEI project geologist working under the direct supervision of an AEI licensed geologist provided oversight for the drilling and well installation activities. Soil sampling and analyses was not performed, because the source zone was adequately characterized during previous investigations.

4.1 Air Sparge Well Construction

The air sparge wells were installed approximately 15 to 20-feet apart as shown on Figure 4. As stated in the Workplan, the selected well spacing was based on a combination of AEI's experience at other sites with sandy, relatively homogenous target treatment zones and the "Standard Design Approach" discussed in the "Air Sparging Design Paradigm" (Leeson, et al., 2002). The sparge points were placed approximately 8-feet below the deepest soil contamination with the top of the screen at approximately 28-feet bgs. The total sparge well depth was approximately 30-feet bgs. The wells were installed using 8-inch nominal diameter hollow stem augers. The wells were constructed using 2-inch diameter (Schedule 80) flush-threaded polyvinyl chloride (PVC) well casing and stainless steel sparge points. The sparge points were constructed out of 2-foot long sections of 0.010 slotted stainless steel well screen with a flush threaded top connection and welded bottom plate. The annular space was filled with #2/16 Monterey Sand to approximately 1-foot above the top of the well screen. At least 2-feet of hydrated bentonite chips were installed above the filter pack. The remainder of the borehole was sealed to approximately 0.5-feet bgs with Type II through IV Portland cement grout. The tops of the well casings were secured with expanding well plugs and the wellheads were completed flush to grade with 12-inch diameter traffic-rated well boxes. The air sparge well construction details are shown on Figure 5.

4.2 Air Sparge Well Development and Re-Development

On July 5, 2010, the newly installed air sparge wells were developed by surging and over-pumping with a submersible pump to remove accumulated fines from the casing and stabilize the sand pack. The wells were developed until at least three well volumes of water were removed, or until the discharge water ran clear, and measurements of pH, conductivity, and temperature stabilized.

On September 7, 2010, AEI conducted an initial air injection pressure / flow rate test to determine the air injection backpressure. Because the observed backpressure exceeded the engineering estimates by 5 to 10 pounds per square inch (psi), AEI decided to re-develop all of the sparge wells prior to the pilot test.

On October 12, 2010, the air sparge wells were re-developed by surging and over-pumping to reduce the air injection backpressure. The wells were developed until six to nine well volumes of water were removed and measurements of pH, conductivity, and temperature stabilized.

5.0 AIR SPARGING PILOT TEST OVERVIEW

The air sparging pilot test was conducted from November 8 to 12, 2010. Air sparging was implemented because the site conditions were favorable (i.e., sandy, relatively homogenous aquifer), a significant residual hydrocarbon source was detected below the water table, and the

HVDPE system mass removal rates have declined considerably while the cost per pound or gallon of hydrocarbon removed and treated has increased significantly. The air sparging pilot test was conducted according to the standard methods and procedures outlined in Chapter 5 of the "Air Sparging Design Paradigm" (Leeson, et al. 2002). The following sections describe the specific elements of the test in more detail.

5.1 Pilot Test System Installation

The air sparging pilot test system was constructed, installed, and tested between August and October, 2010. The major system components are listed below:

- A refurbished Becker Pumps (Model 4.25DT) oil-less rotary vane compressor equipped with a pressure relief valve, a 10 micron inlet filter, vibration isolators, and variable frequency drive for controlling the pressure speed and flow rate. The compressor was capable of variable flow rates up to 18 cfm and a maximum pressure of 15 psig.

- One-inch diameter steel air distribution manifold equipped with Dwyer Instruments rotameters (0 to 20 cfm), control valves for each sparge well, a manifold pressure gauge (0 to 30 psig), and a vent valve with a filter silencer.

- One-inch diameter clear PVC air injection hose installed above grade and protected by recycled rubber bump strips.

- Air sparge wells (AS-1 to AS-4) with pressure gauges (0 to 30 psig) installed at each wellhead.

5.2 Injection Pressure / Flow Rate Test

Air injection pressure / flow rate tests were completed on AS-1 and AS-3. The sparge wells were tested individually and flow rate was held constant at 2 cubic feet per minute (cfm) for the duration of each test. The soil type in the target treatment zone is fine-grained sand with silt (SP-SM). Prior to the pilot test, the air sparging system operating pressures were estimated and used to size the pilot test equipment (compressor, air injection lines, pressure relief valve, etc.). The theoretical minimum injection pressure was the sum of hydrostatic pressure and the air entry pressures of the sand pack and formation. Based on soil type, the combined air entry pressure of the sand pack and formation was estimated at 1 to 2 pounds per square inch – gauge pressure (psig). The fracture pressure of the formation, which is the weight of the soil column plus the weight of water above the sparge point, was estimated at 20 psig. The estimated fracture pressure was not exceeded during the pilot test. A vent valve was slowly closed to increase the pressure to initiate flow and to maintain the desired system operating pressure and flow rate. The initial breakthrough pressure was recorded and the flow rate and pressure were recorded every 5 to 10 minutes until reaching stabilization. The injection pressure at both sparge wells stabilized in 1 to 2 hours after initiating sparging. The injection pressure/flow rate tests were completed in about 3 to 4 hours per test.

5.3 Off-Gas Sampling

Off-gas sampling was used to determine the volatilization rates from the saturated zone as the primary measure of air sparging performance. Off-gas samples were collected from MW-1, 2, 5, 6, and 7 and the combined influent (Sample ID "INF") for field screening and laboratory analysis

after the air injection pressure stabilized near the end of the injection pressure/flow rate test. Off-gas samples were collected into 1-liter tedlar bags using the diaphragm pressure/vacuum pump. The samples were field-screened for total volatile hydrocarbons (TVH), methane, oxygen, and carbon dioxide using the RKI Eagle multi-gas detector, then submitted for laboratory analyses. The samples were labeled with unique identifiers, entered onto the chain of custody record, and stored in a cardboard box out of direct sunlight pending transportation to the laboratory. The samples were transported under proper chain of custody protocol and within hold time to McCampbell Analytical, Inc. of Pittsburg, California (DHS Certification #1644) for analyses. The samples were analyzed for THP-g by EPA Method 8015C and BTEX and MTBE by EPA Method 8021B.

5.4 Transient Pressure Transducer Response

During the air injection/flow rate tests, transient pressure response tests were performed (Leeson, et al., 2002 – Appendix E). Pressure transducers were used to log the groundwater pressure response at three inactive sparge wells during the air injection pressure/flow rate tests on AS-1 and AS-3. For example, while sparging into AS-1, transducers were deployed in AS-2, 3, and 4 and while sparging into AS-3, transducers were deployed into AS-1, 2, and 4. Prior to deployment, the site name and address, project number, altitude, logging interval, and an automatic future start time were programmed into the transducers. In order to record the baseline groundwater pressure, the transducers were deployed and started at least 30 minutes prior to initiating sparging. Then, after completing each test, the transducers were left in the well to log the groundwater pressure changes after shutdown. On the following day, the pressure transducers were retrieved and the data was downloaded and reviewed prior to the next test.

5.5 Monitoring & Controls for Vapor Migration

While measurable LNAPL and a significant mass of volatile hydrocarbons (more than 30,000 pounds or 5,000 gallons total) have been removed during the test, a significant residual hydrocarbon source remains in the target treatment zone. Because air sparging presented a potential risk for vapor intrusion into nearby occupied buildings, rigorous monitoring procedures and engineering controls were employed to immediately identify, continuously monitor, and control potential vapor migration. Near continuous monitoring of vapor concentrations at the vapor probes (GP-1 and GP-2) was used to provide early warning of potential adverse vapor migration.

5.5.1 Soil Gas Monitoring

The soil gas pressure and total volatile organic compounds (TVOCs) were measured at regular intervals in the vadose zone. Soil gas samples were collected from GP-1 and GP-2 at 5 and 10-feet bgs for field screening every 20 minutes for the first 3 hours and every 30 minutes thereafter until the end of the test. The soil gas samples were collected into 1-liter tedlar bags using a peristaltic pump and immediately screened using a photo-ionization detector (PID). The PID was equipped with a 10.6 electron volt (eV) lamp.

Typical monitoring scenarios and standard response actions observed during the test are summarized below:

- If positive pressure and elevated concentration of TVOCs were detected at 10-feet bgs, but not at 5-feet bgs, the sparge air flow rate, soil gas pressure, and vapor concentrations were monitored closely.

- If positive pressure was detected at 5 and 10-feet bgs and elevated concentrations of TVOCs were detected at 10-feet bgs, but not at 5-feet bgs, the sparge air flow rate was lowered for a period of time (2 to 4 hours), or until the concentrations of TVOCs at 10-feet bgs were stable or decreasing, and sparge air flow rate, soil gas pressure, and vapor concentrations were monitored closely.

- If positive pressure and elevated concentrations of TVOCs were detected at both 5 and 10-feet bgs, the air sparging system was shutdown immediately and the soil gas pressure and vapor concentrations were monitored closely until the HVDPE system reduced the vapor concentrations to baseline levels.

5.5.2 Engineering Controls

The following engineering controls were employed during the test:

- The primary engineering control was continuous operation of the HVDPE system during the air sparging pilot test. The HVDPE system was operated for several days to several weeks to establish a vapor capture zone prior to the sparge test. The following onsite dual phase extraction wells were operated during the test: MW-1, 2, 5, 6, and 7.

- The second engineering control was to keep sparge air flow rates at a fraction (one-quarter to one-half) of dual phase extraction well flow rates. At the start of the test, when the highest emission rates are expected to occur, only one air sparge well was operated at time. The sparge air was introduced at a very low flow rate (approximately 2 cfm per well) as compared to the HVDPE system flow rate (15 to 20 cfm per well).

- The third and final engineering control was interlocking the logic relay controller for the air sparging system compressor with the HVDPE system. If HVDPE system shutdowns due to an alarm, such as low air flow or liquid ring pump failure, then the air sparging system compressor will also automatically shutdown.

6.0 PILOT TEST RESULTS

6.1 Injection Pressure / Flow Rate

The flow rate was held constant at 2 cfm and the injection pressure was measured at 5-minute intervals for over 120 minutes. The injection pressure was measured at the wellheads. The breakthrough pressure at AS-1 was 13 psig and the pressure stabilized at 5 psig within 60 minutes of initiating sparging. The breakthrough pressure at AS-3 was 14 psig and the pressure stabilized at 6.5 psig within 60 minutes initiating sparging. As expected, the behavior of AS-1 and AS-3 were nearly identical. The air injection pressure over time is summarized in Table 6 and plotted on Figure 6.

6.2 Off-Gas Sampling and Mass Removal Rates

After sparging into AS-1 for approximately 120 minutes, off-gas samples were collected from MW-1, 2, 5, 6, and 7 for field screening and laboratory analyses. The field screening and analytical results are summarized in the following table.

Exhibit 6.2.1: Off-Gas Sampling Data (AS-1 Test)

Monitoring Well ID	TVH (ppmv)	TPH-g (ppmv)	Benzene (ppmv)	Toluene (ppmv)	Ethyl-benzene (ppmv)	Total Xylenes (ppmv)
Baseline Sampling Results: AS-1 (11/08/10)						
MW-1	50	65	0.42	2.6	0.24	1.6
MW-2	420	970	22	51	4.5	39
MW-5	120	300	1.5	8.2	0.65	20
MW-6	200	430	2.1	10	2.5	14
MW-7	1,150	2,100	19	29	1.6	29
INF	150	350	4.1	11	1.0	11
Post-Sparge Test Results: AS-1 (11/08/10)						
MW-1	1,200	730	6.6	8.1	0.45	3.0
MW-2	450	1,000	24	54	5.0	42
MW-5	100	310	1.7	9.1	0.74	21
MW-6	230	490	2.3	11	2.6	16
MW-7	1,150	2,000	17	28	1.4	29
INF	900	830	7.7	14	1.1	12

TVH = total volatile hydrocarbons ppmv = parts per million by volume INF = combined influent sample

After sparging into AS-3 for 120 minutes, off-gas samples were collected from MW-1, 2, 5, 6, and 7 for field screening and laboratory analyses. The results are summarized in the following table.

Exhibit 6.2.2: Off-Gas Sampling Data (AS-3 Test)

Monitoring Well ID	TVH (ppmv)	TPH-g (ppmv)	Benzene (ppmv)	Toluene (ppmv)	Ethyl-benzene (ppmv)	Total Xylenes (ppmv)
Baseline Sampling Results: AS-3 (11/09/10)						
MW-1	30	91	0.95	2.6	0.22	1.9
MW-2	500	990	22	51	5.0	40
MW-5	110	300	1.4	7.8	0.84	19
MW-6	230	500	2.4	12	2.8	17
MW-7	1,500	2,100	21	32	1.5	30
INF	250	330	4.0	9.8	0.82	10
Post-Sparge Test Results: AS-3 (11/09/10)						
MW-1	1,650	360	2.3	3.4	0.21	2.0
MW-2	600	1,000	24	57	5.5	45
MW-5	110	340	1.9	9.2	1.0	24
MW-6	1,450	710	2.7	12	2.4	15
MW-7	>11,000	4,700	46	44	2.0	34
INF	2,900	700	6.2	11	0.94	11

TVH = total volatile hydrocarbons ppmv = parts per million by volume INF = combined influent sample

Mass removal rates were estimated before and after sparging using the combined TPH-g influent concentrations and the total well flow rate. The mass removal rates before, and 120 minutes after sparging into AS-1 and AS-3, are summarized below:

- After sparging into AS-1, the mass removal rate increased from approximately 7 pounds per day (lbs/day) to 16 lbs/day. Based on this data, the volatilization rate from the saturated zone while sparging into AS-1 was approximately 9 lbs/day.

- After sparging into AS-3, the mass removal rate increased from approximately 7 lbs/day to 14 lbs/day. Based on this data, the volatilization rate from the saturated zone while sparging into AS-3 was approximately 7 lbs/day.

- Overall, air sparging essentially doubled the HVPDE system mass removal rates during the pilot test.

The hydrocarbon mass removal rates are presented in Table 7.

6.3 Transient Pressure Transducer Response

Graphs of the pressure transducer response at the inactive sparge wells used for monitoring groundwater pressure changes were created for each active air sparge well. The behaviors of the pressure response graphs were all nearly identical for both AS-1 and AS-3. This was expected

since the target treatment zone is sandy and relatively uniform. In addition, the highest pressure response was measured at the monitoring points closest to the active sparge well. Accordingly, the lowest pressure response was measured at the monitoring point furthest from the active sparge well.

The first area of the graph (before time = 0) shows the baseline pressure response prior to initiating sparging. The next area of the graph shows the pressure buildup as air was being injected into the saturated zone. The peak of the first hump indicates the maximum pressure response and point at which breakthrough occurred at the sparge well. This is also an indicator of the relative soil permeability but also depends on the air injection flow rate. In other words, lower, shorter-duration pressure responses on the order of inches are typically observed in higher permeability soils, such as gravels and sands, and higher, longer-duration pressure responses on the order of feet are observed in lower permeability soils, such as clays and silts. The next area of the graph shows the pressure response declining back towards the baseline pressure which is the point at which the air distribution in the subsurface reached near steady state conditions. The last area of the graph shows the time for the pressure response to return to near baseline conditions and can be used to evaluate the significance of trapped air, presence of confining layers, and potential for lateral spreading of LNAPL and/or dissolve-phase contaminants and adverse vapor migration.

Overall, the pressure responses measured at the monitoring wells demonstrated that air was not being trapped in the subsurface. In addition, the data indicated that lateral spreading of contaminants and adverse vapor migration was not very likely to occur. The transient pressure response graphs during air sparing startup and shutdown are included in Figures 8 and 9.

6.4 Soil Gas Monitoring

The nested soil gas probes (GP-1 and GP-2) at 5-feet and 10-feet bgs were monitored every 20 minutes for the duration of the test. No discernable soil gas pressure changes were observed during the test. The PID field-screening results are summarized below and all of the data is shown in Table 9.

On November 8, 2010, the background PID reading on a sample of ambient air was 0.2 ppmv and ambient air pumped into new 1-liter tedlar bags using new tubing was 0.5 ppmv.

- The baseline PID reading from GP-1 at 5-feet bgs was 0.6 ppmv and the other readings ranged from 0.4 ppmv to 0.6 ppmv.

- The baseline PID reading from GP-1 at 10-feet bgs was 0.6 ppmv and the other readings were 0.6 ppmv.

- The baseline PID reading from GP-2 at 5-feet bgs was 0.7 ppmv and the other readings ranged from 0.6 ppmv to 1.1 ppmv.

- The baseline PID reading from GP-2 at 10-feet bgs was 0.9 ppmv and the other readings ranged from 1.2 ppmv to 3.7 ppmv.

On November 9, 2010, the background PID reading on a sample of ambient air was 1.1 ppmv and ambient air pumped into new 1-liter tedlar bags using new tubing ranged from 1.0 ppmv to 1.3 ppmv.

- The baseline PID reading from GP-1 at 5-feet bgs was 1.5 ppmv and the other readings ranged from 0.7 ppmv to 0.9 ppmv.

- The baseline PID reading from GP-1 at 10-feet bgs was 1.7 ppmv and the other readings ranged from 0.8 ppmv to 1.0 ppmv.

- The baseline PID reading from GP-2 at 5-feet bgs was 2.1 ppmv and the other readings ranged from 0.6 ppmv to 1.2 ppmv.

- The baseline PID reading from GP-2 at 10-feet bgs was 5.5 ppmv and the other readings ranged from 2.7 to 5.6 ppmv.

7.0 SUMMARY & RECOMMENDATIONS

AEI installed four air sparge wells (AS-1 to AS-4), refurbished and constructed a pilot-scale air sparging system, and performed an air sparging pilot test between June and November, 2010. Air sparging was successful at increasing the off-gas vapor concentrations and overall hydrocarbon removal from the source zone. Based on the review of the data, AEI has the following recommendations:

- Continue cycled operation of the pilot-scale air sparging system in conjunction with the HVDPE system. The air sparging system will be operated on two sparge wells (e.g., AS-1 and AS-3) at a time, then manually switched over to the other two sparge wells (e.g., AS-2 and AS-4) every two weeks. Research and practical experience indicates that cycling over a period of weeks can reduce the potential for rebound to occur after the end of active operation.

- Continue optimizing the HVDPE system on a monthly basis and switch from catalytic oxidization to activated carbon for off-gas treatment, once the combined influent vapor concentration stabilize at 500 to 1000 ppmv. This will significantly reduce the long term operating costs.

- Continue quarterly monitoring of selected key wells (i.e., MW-1, 2, 5, 6, 7, and 9) and semi-annual to annual monitoring for all other onsite and offsite wells.

- Schedule meeting with ACEH to review the site remediation progress and develop a low-risk closure strategy.

8.0 REFERENCES

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9.0 REPORT LIMITATIONS AND SIGNATURES

This report presents a summary of work completed by AEI, 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 and observations. 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 construction field that existed at the time and location of the work and were performed under the direction of appropriate California-licensed professionals. Should you have any questions regarding this report, we can be reached at (925) 746-6000.

Sincerely,
AEI Consultants

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Project Engineer

Stephen Lao
Project Manager

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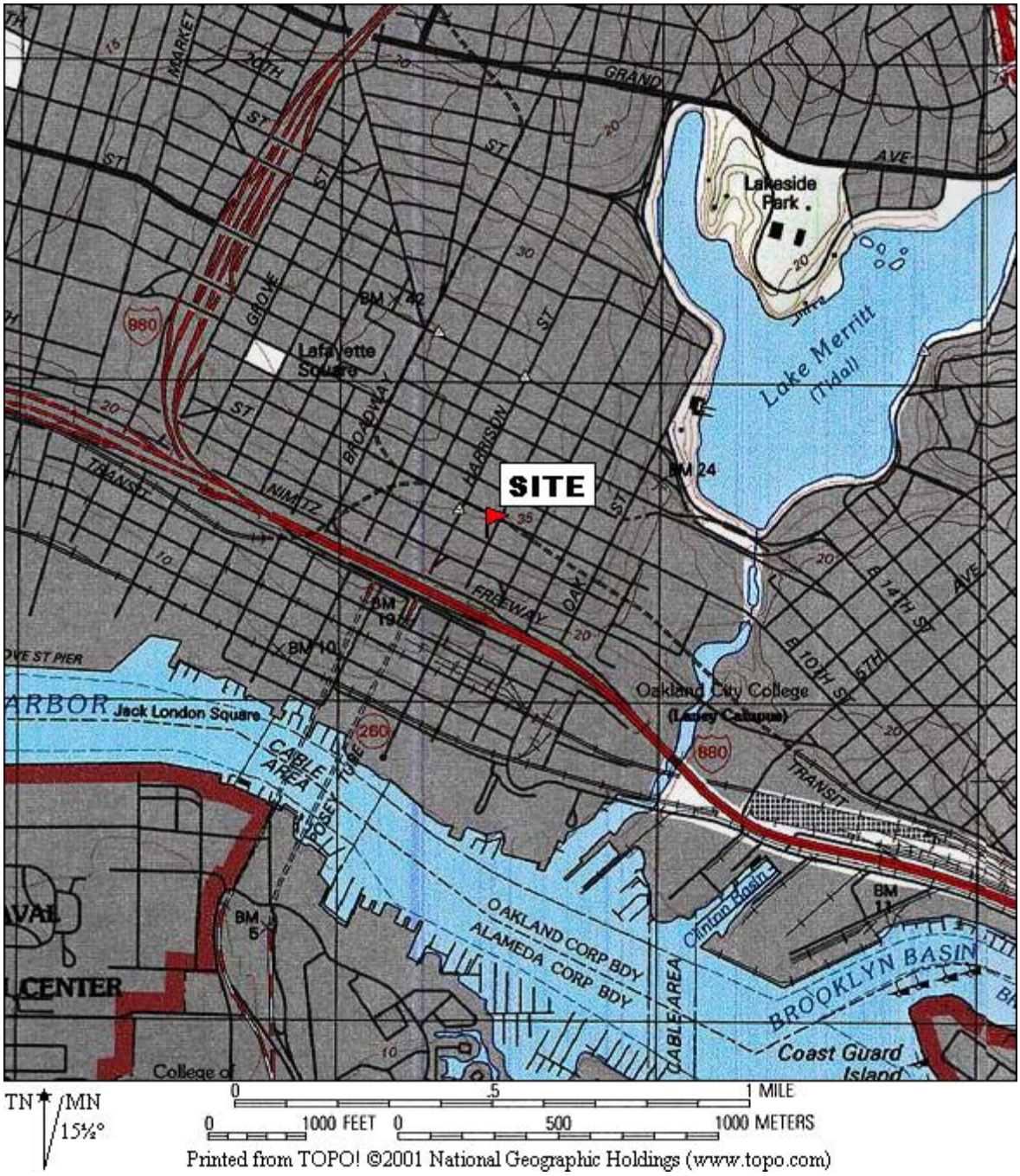
FIGURES



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

SITE LOCATION MAP

245 8th STREET OAKLAND, CALIFORNIA	**FIGURE 1** PROJECT NO. 116907

Drafted By R. Bradford 02–14–11	Revised By R. Bradford 02–25–11
Checked By P. McIntyre 02–21–11	

N
W E
S

COMMERCIAL
RESIDENTIAL
RCIAL
SIDEWALK
ALICE STREET
8th STREET
7th STREET
DRIVEWAY
FENCE
6,000 GAL
1,000 GAL
250 GAL
FORMER UST SYSTEM
HVDPE SYSTEM
CANOPY
VIC'S AUTO (245 8TH STREET)
RESIDENTIAL (718 ALICE ST)
RESIDENTIAL (712 ALICE ST)
RESIDENTIAL (708 ALICE ST)
RESIDENTIAL (704 ALICE ST)
RESIDENTIAL (702 ALICE ST)
RESIDENTIAL (234 7TH ST)
RESIDENTIAL (230 7TH ST)
RESIDENTIAL (228 7TH ST)
RESIDENTIAL (227
PRINGLE ME (216
RESIDENTIAL
MW–1
MW–2
MW–3
MW–4
MW–5
MW–6
MW–7
MW–8
MW–9
MW–10
MW–11
MW–12
MW–13
MW–14
MW–15
MW–16
SB–1
SB–2
SB–3
SB–4
SB–5
SB–6
SB–7
SB–8
SB–9
SB–10
SB–11
SB–12
SB–13
SB–14
SB–15
SB–16
SB–17
SB–18
SB–19
GP–1
GP–2
~~GP–3~~
~~GP–4~~
AS–1
AS–2
AS–3
AS–4

0 25 50
SCALE: 1" = 25'

LEGEND

- MONITORING WELL
- SOIL BORING (1996)
- SOIL BORING (2002 / 2003)
- SOIL GAS PROBE
- ABANDONED SOIL GAS PROBE
- SOIL BORING (2010)
- AIR SPARGE WELL (2010)
- FORMER UST LOCATION

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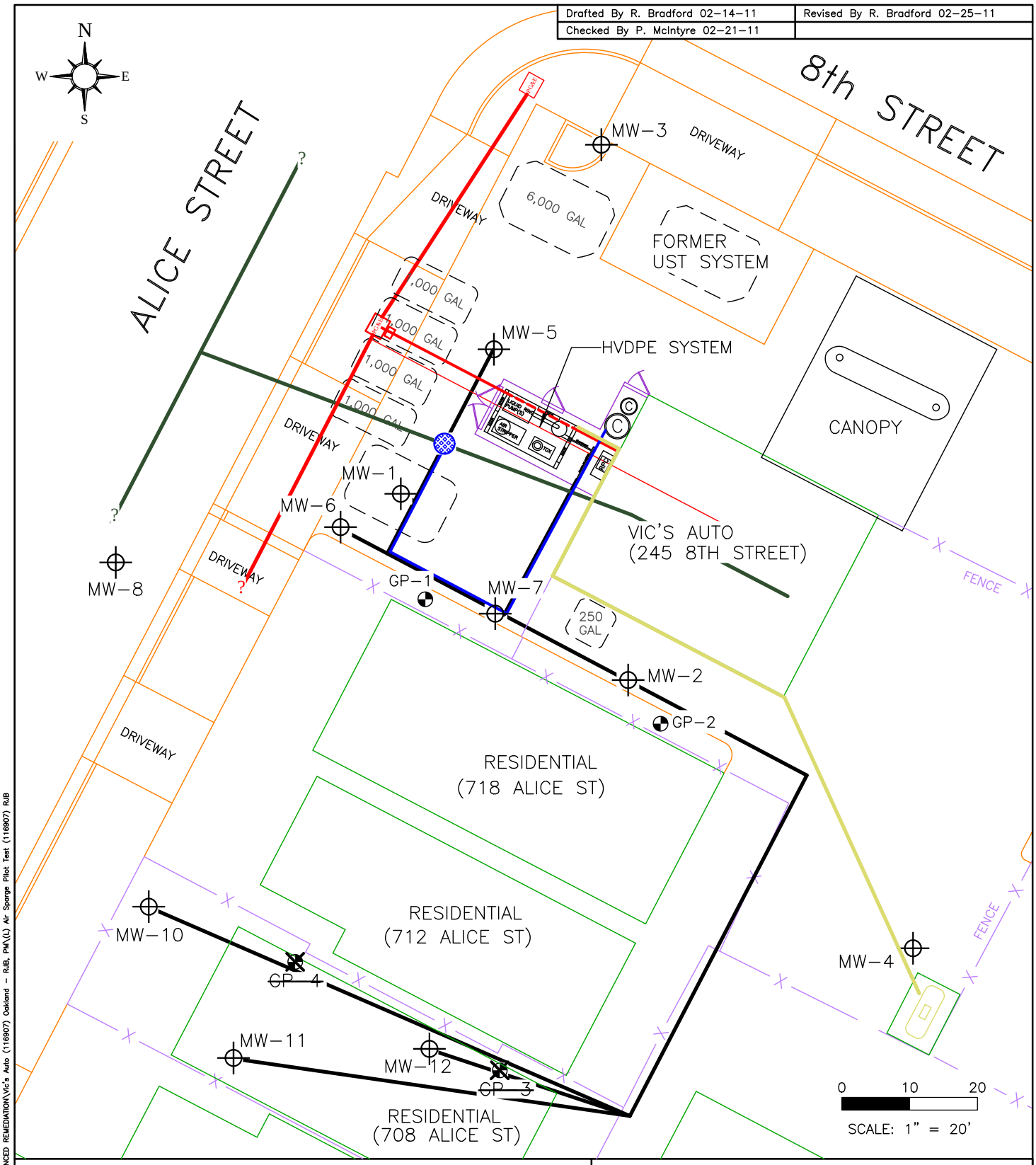
2500 CAMINO DIABLO, SUITE 200, WALNUT CREEK

SITE PLAN

245 8TH STREET
OAKLAND, CALIFORNIA

FIGURE 2
PROJECT NO. 116907

X:\PROJECTS\CHARACTERIZATION & REMEDIATION\ADVANCED REMEDIATION\Vic's Auto (116907) Oakland - RJB, PM\(L) Air Sparge Pilot Test (116907) RJB



LEGEND

- MONITORING WELL
- SOIL GAS PROBE
- ABANDONED SOIL GAS PROBE
- OAKLAND MONITORING STRUCTURE
- HVDPE PIPING (~18 - 24" BGS)
- WATER DISCHARGE (~24" BGS)
- SANITARY SEWER (~36 - 48" BGS)
- ELECTRICAL (~24" BGS)
- PROPANE LINE (~18 - 24" BGS)

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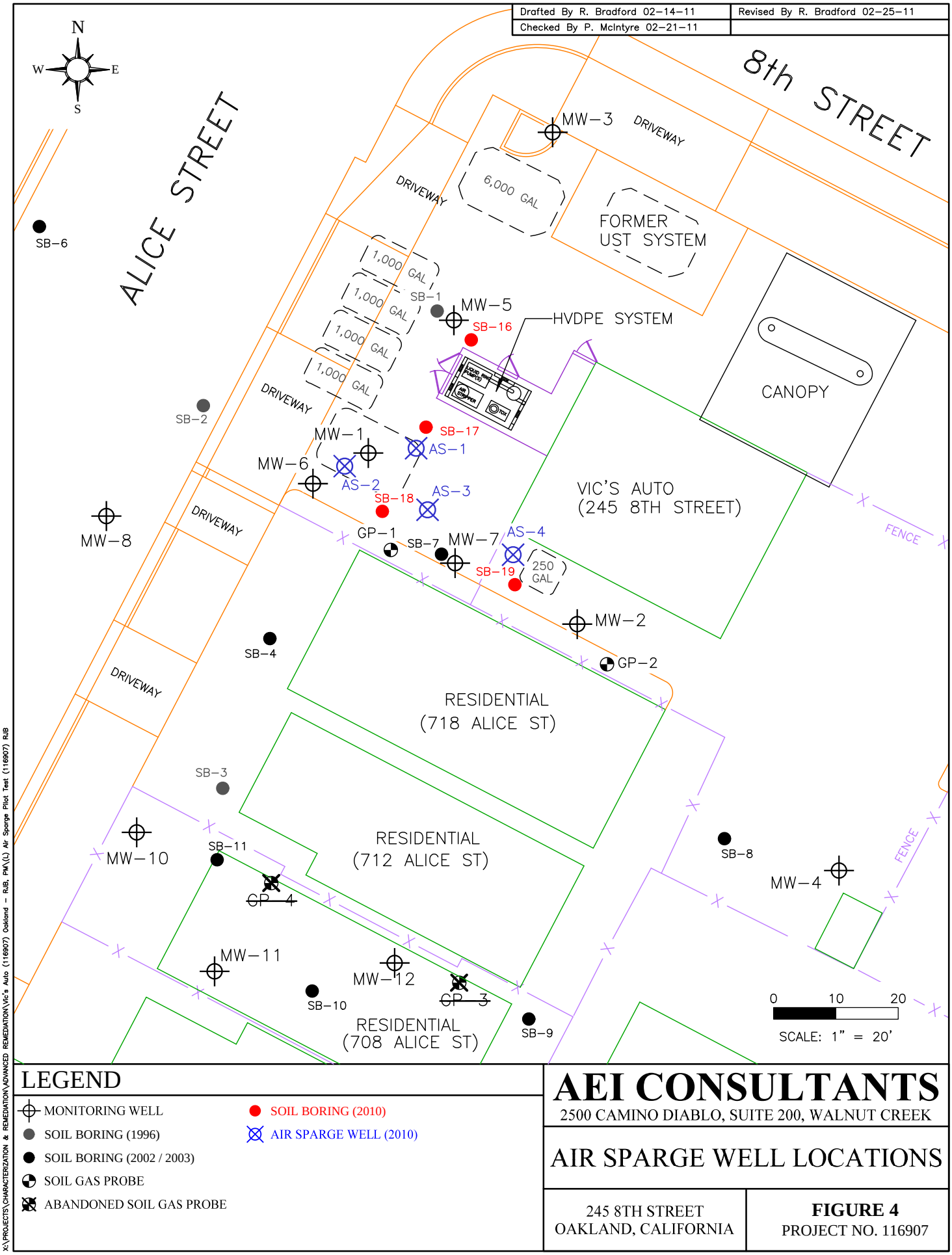
2500 CAMINO DIABLO, SUITE 200, WALNUT CREEK

HVDPE SYSTEM LAYOUT PLAN

245 8TH STREET
OAKLAND, CALIFORNIA

FIGURE 3
PROJECT NO. 116907

X:\PROJECTS\CHARACTERIZATION & REMEDIATION\ADVANCED REMEDIATION\Vic's Auto (116907) Oakland - RJB, PM\(L) Air Sparge Pilot Test (116907) RJB



LEGEND

- MONITORING WELL
- SOIL BORING (1996)
- SOIL BORING (2002 / 2003)
- SOIL GAS PROBE
- ABANDONED SOIL GAS PROBE
- SOIL BORING (2010)
- AIR SPARGE WELL (2010)

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2500 CAMINO DIABLO, SUITE 200, WALNUT CREEK

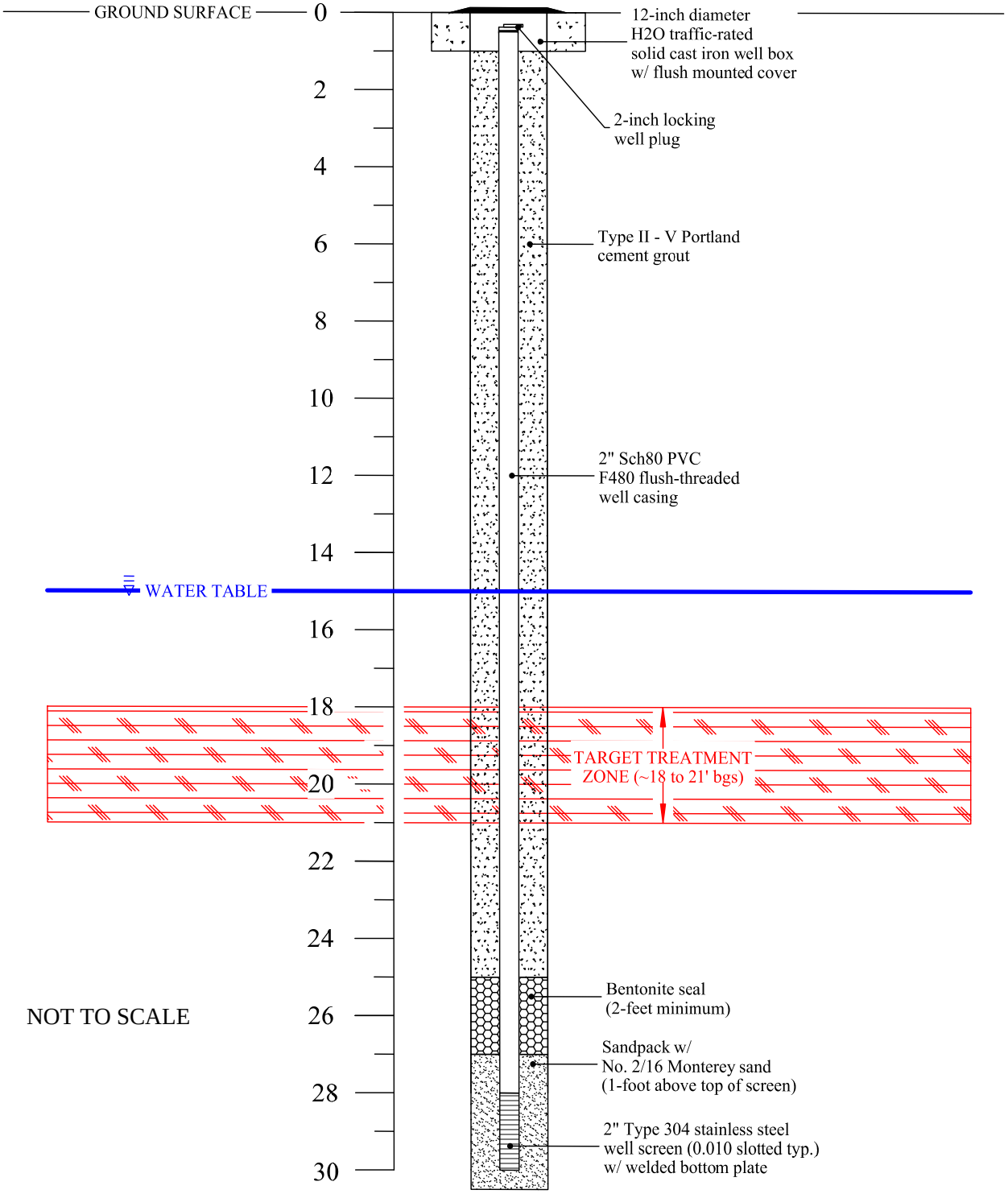
AIR SPARGE WELL LOCATIONS

245 8TH STREET
OAKLAND, CALIFORNIA

FIGURE 4
PROJECT NO. 116907

X:\PROJECTS\CHARACTERIZATION & REMEDIATION\ADVANCED REMEDIATION\Vic's Auto (116907) Oakland - RJB, PM\(L) Air Sparge Pilot Test (116907) RJB

Drafted By R. Bradford 02-14-11	Revised By R. Bradford 02-25-11
Checked By P. McIntyre 02-21-11	



LEGEND

- PORTLAND CEMENT
- BENTONITE PELLETS
- MOTEREY SAND

AEI CONSULTANTS

2500 CAMINO DIABLO, SUITE 200, WALNUT CREEK, CA

AIR SPARGE WELL CONSTRUCTION DETAIL

245 8TH STREET
OAKLAND, CALIFORNIA

FIGURE 5
PROJECT NO. 116907

X:\PROJECTS\CHARACTERIZATION & REMEDIATION\ADVANCED REMEDIATION\Vic's Auto (116907) Oakland - RJB, PM\(L) Air Sparge Pilot Test (116907) RJB

FIGURE 6: AIR INJECTION PRESSURE OVER TIME (AS-1 & AS-3)

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

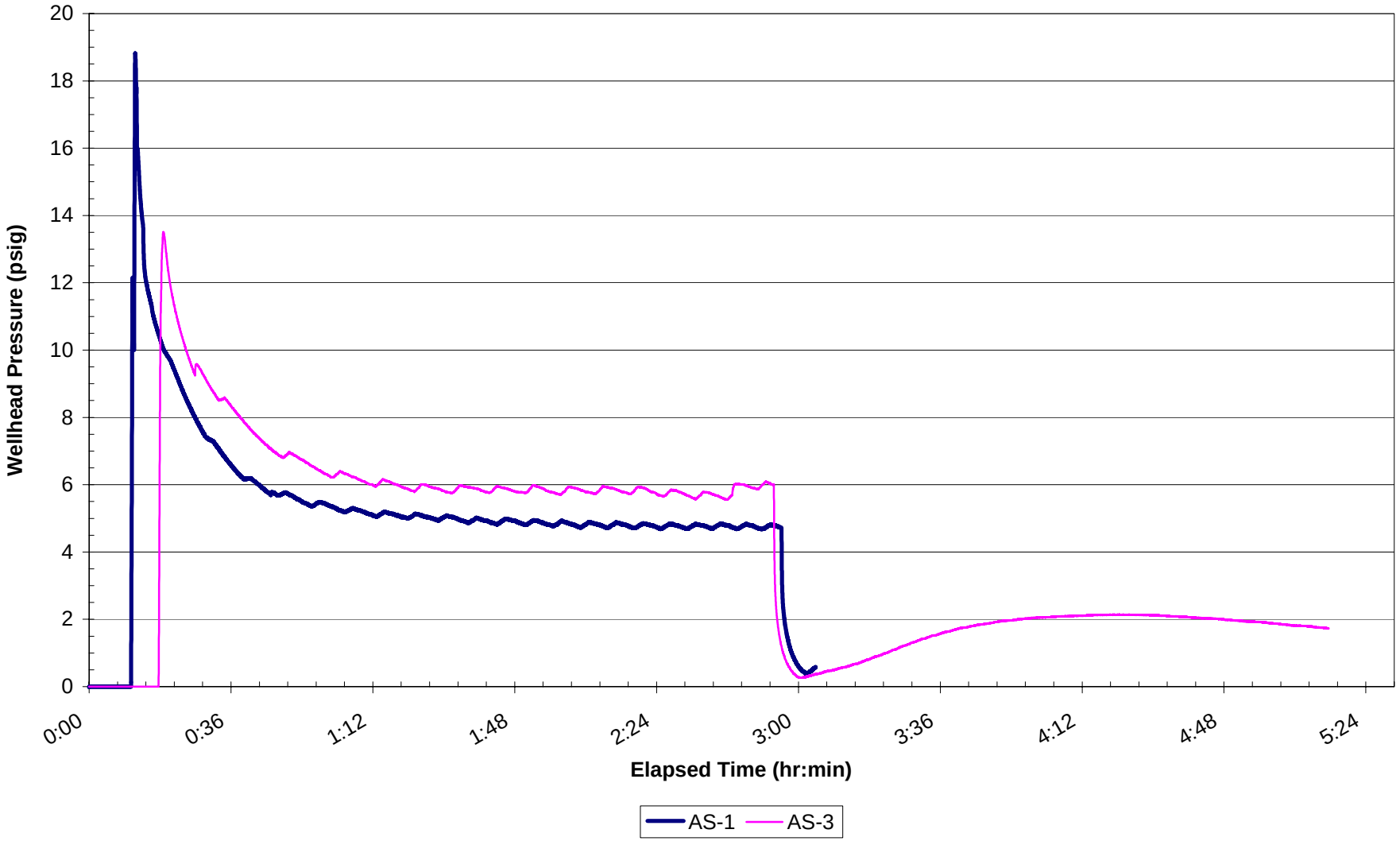


FIGURE 7: HYDROCARBON MASS REMOVAL RATES OVER TIME

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

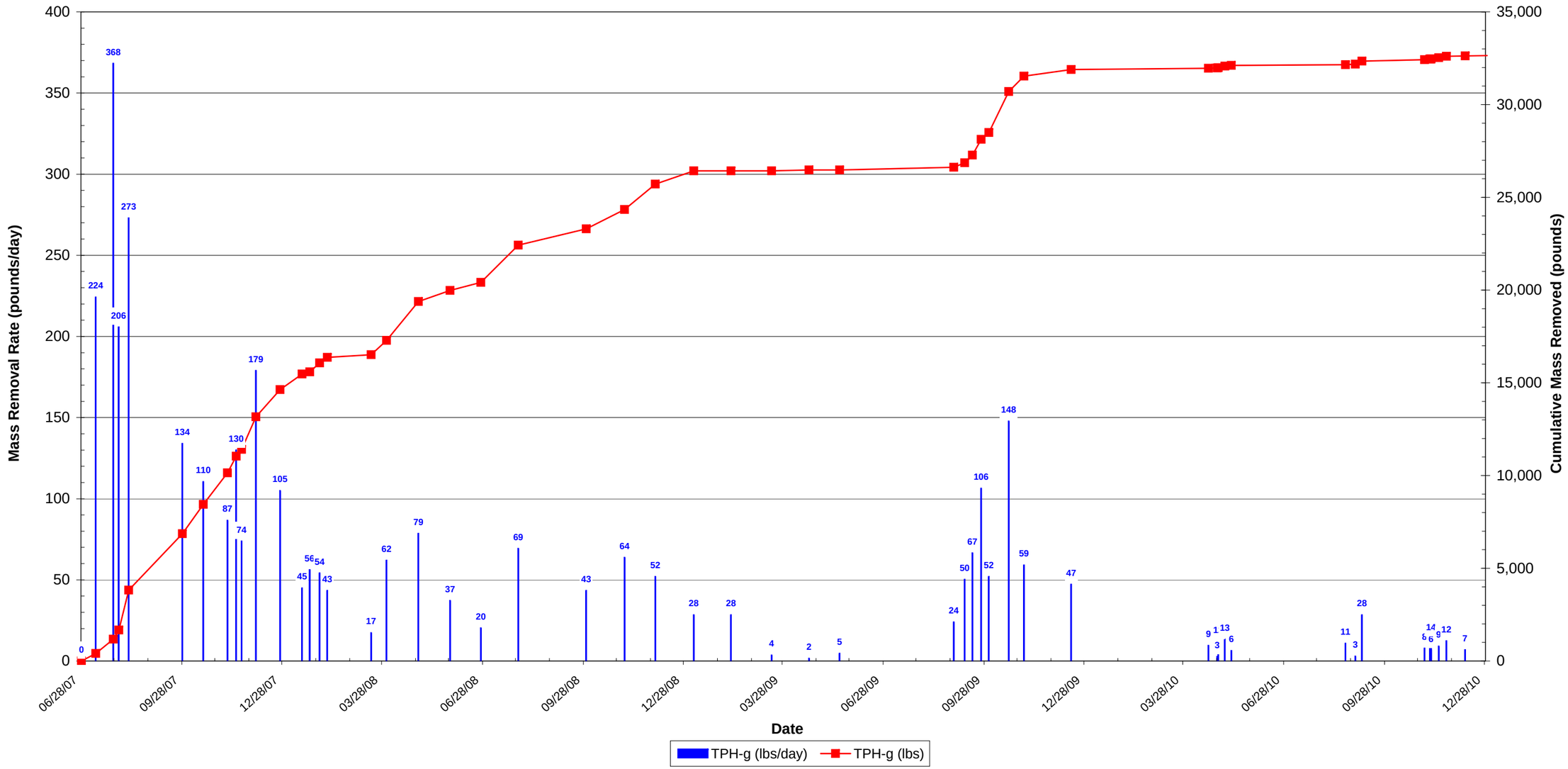


FIGURE 8: TRANSIENT PRESSURE TRANSDUCER RESPONSE (SPARGE TEST AS-1)

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

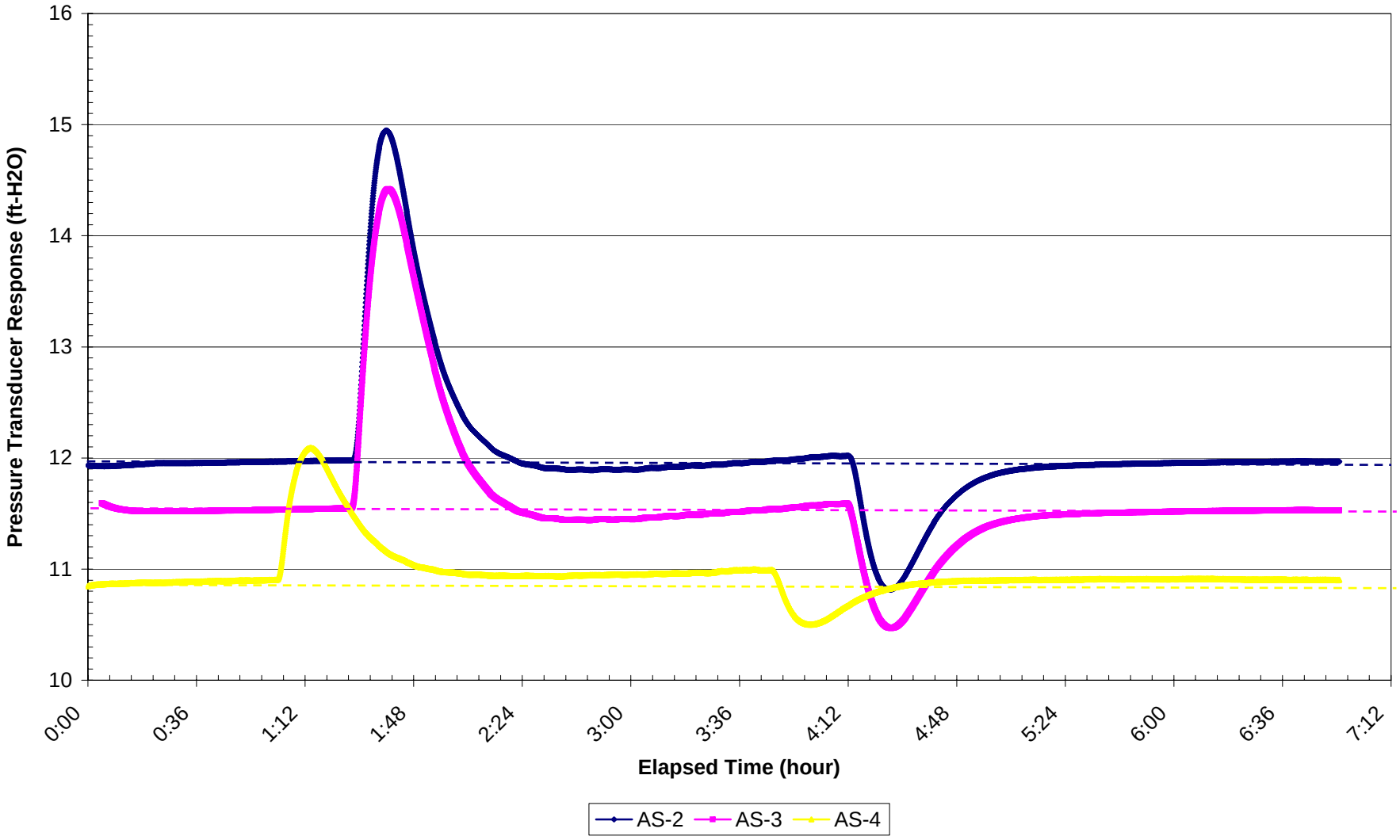
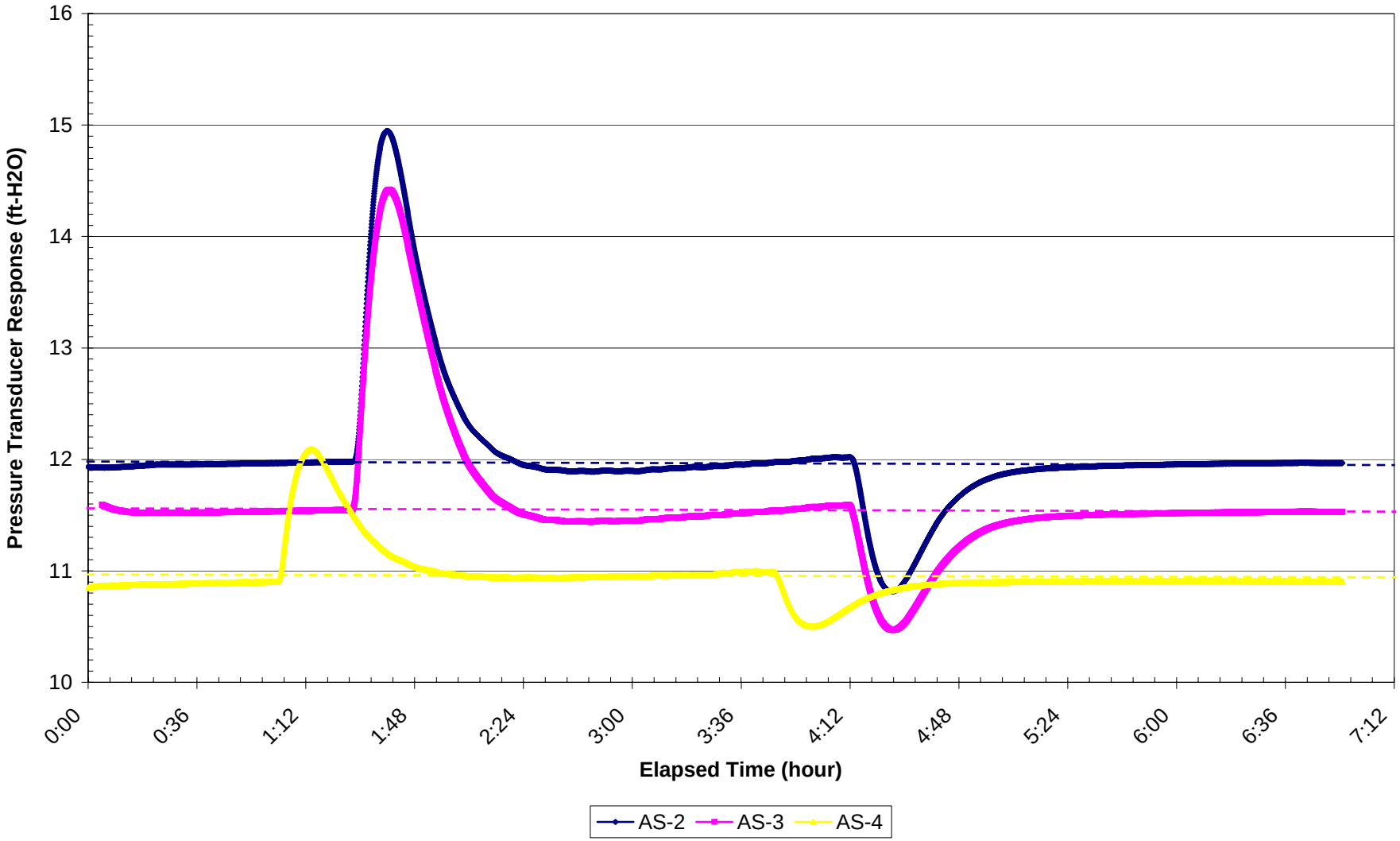


FIGURE 9: GROUNDWATER PRESSURE OVER TIME (SPARGE TEST AS-3)

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



TABLES

TABLE 1: WELL CONSTRUCTION DETAILS

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

Well ID	Installation Date	Nominal Diameter (inch)	Total Depth (ft bgs)	Screen Interval (ft bgs)	Sand Pack Interval (ft bgs)	Sand Pack Size	Screen Slot Size (inch)	Bentonite Seal Interval (ft bgs)	Cement Grout Interval (feet bgs)	Casing Material	Design / Use
MW-1*	07/14/95	4	28	8 - 28	6 - 28	#3	0.010	5 - 6	0.5 - 5	SCH40 PVC	Monitoring / DPE Well
MW-2*	07/14/95	2	28	8 - 28	6 - 28	#3	0.010	5 - 6	0.5 - 5	SCH40 PVC	Monitoring / DPE Well
MW-3	05/25/01	2	25	10 - 25	8 - 25	#3	0.010	7 - 8	0.5 - 7	SCH40 PVC	Monitoring Well
MW-4	05/25/01	2	25	10 - 25	8 - 25	#3	0.010	7 - 8	0.5 - 7	SCH40 PVC	Monitoring Well
MW-5*	01/11/05	4	22	12 - 22	11 - 22	#2/12	0.010	10 - 11	0.5 - 10	SCH40 PVC	Monitoring / DPE Well
MW-6*	01/19/05	4	22	12 - 22	11 - 22	#2/12	0.010	10 - 11	0.5 - 10	SCH40 PVC	Monitoring / DPE Well
MW-7*	01/11/05	4	22	12 - 22	11 - 22	#2/12	0.010	10 - 11	0.5 - 10	SCH40 PVC	Monitoring / DPE Well
MW-8	03/18/08	4	22	12 - 22	11 - 22	#2/12	0.010	10 - 11	0.5 - 10	SCH40 PVC	Monitoring Well
MW-9	03/18/08	2	22	12 - 22	11 - 22	#2/12	0.010	10 - 11	0.5 - 10	SCH40 PVC	Monitoring Well
MW-10*	01/20/05	4	22	12 - 22	11 - 22	#2/12	0.010	10 - 11	0.5 - 10	SCH40 PVC	Monitoring / DPE Well
MW-11*	01/20/05	4	22	12 - 22	11 - 22	#2/12	0.010	10 - 11	0.5 - 10	SCH40 PVC	Monitoring / DPE Well
MW-12*	01/20/05	4	22	12 - 22	11 - 22	#2/12	0.010	10 - 11	0.5 - 10	SCH40 PVC	Monitoring / DPE Well
MW-13	03/18/08	2	22	12 - 22	11 - 22	#2/12	0.010	10 - 11	0.5 - 10	SCH40 PVC	Monitoring Well
MW-14	07/28/09	2	22	12 - 22	11 - 22	#2/12	0.010	10 - 11	0.5 - 10	SCH40 PVC	Monitoring Well
MW-15	07/28/09	2	22	12 - 22	11 - 22	#2/12	0.010	10 - 11	0.5 - 10	SCH40 PVC	Monitoring Well
MW-16	07/28/09	2	22	12 - 22	11 - 22	#2/12	0.010	10 - 11	0.5 - 10	SCH40 PVC	Monitoring Well
GP-1	07/13/06	0.25	10	5 & 10	-	#60 - 100	-	-	n/a	Kynar Tubing	Soil Gas Probe
GP-2	07/13/06	0.25	10	5 & 10	-	#60 - 100	-	-	n/a	Kynar Tubing	Soil Gas Probe
~~GP-3~~+	~~07/13/06~~	~~0.25~~	~~10~~	~~5 & 10~~	-	~~#60 - 100~~	-	-	~~n/a~~	~~Kynar Tubing~~	~~Soil Gas Probe~~
~~GP-4~~+	~~07/13/06~~	~~0.25~~	~~10~~	~~5 & 10~~	-	~~#60 - 100~~	-	-	~~n/a~~	~~Kynar Tubing~~	~~Soil Gas Probe~~
AS-1	**06/30/10**	**2**	**30**	**28 - 30**	**27 - 30**	**#2/16**	**0.010**	**25 - 27**	**1 - 25**	**SCH80 PVC**	**Air Sparge Well**
AS-2	**06/30/10**	**2**	**30**	**28 - 30**	**27 - 30**	**#2/16**	**0.010**	**25 - 27**	**1 - 25**	**SCH80 PVC**	**Air Sparge Well**
AS-3	**06/30/10**	**2**	**30**	**28 - 30**	**27 - 30**	**#2/16**	**0.010**	**25 - 27**	**1 - 25**	**SCH80 PVC**	**Air Sparge Well**
AS-4	**06/30/10**	**2**	**30**	**28 - 30**	**27 - 30**	**#2/16**	**0.010**	**25 - 27**	**1 - 25**	**SCH80 PVC**	**Air Sparge Well**

NOTES:

MW = monitoring well

GP = soil gas probe

AS = air sparge well

ft bgs = feet below ground surface

* Monitoring wells MW-1, 2, 5, 6, 7, 10, 11, and 12 are also being used for high vacuum dual phase extraction (HVDPE).

+ In August 2008, soil gas probes GP-1 and GP-2 were decommissioned.

TABLE 2: 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	06/29/01	1.63	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	-
(8-28)	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	-
	11/09/04	0.24	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	-
	05/09/05	0.12	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	-
	11/09/05	0.01	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	-
	05/04/06	0.01	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	-
	11/08/06	0.01	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	-
	05/29/07	0.05	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	-
Low-Flow	**12/22/10**	**0.00**	**12,000**	**<250**	**440**	**1,300**	**270**	**2,300**	**-**

TABLE 2: 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	06/29/01	0.00	69,000	4,100/4,400*	7,200	6,100	1,500	7,000	-
(8-28)	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	-
Low-Flow	**12/22/10**	**0.00**	**1,700**	**130**	**230**	**140**	**33**	**290**	-

TABLE 2: 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	-	-	-	-	-	-	-	-
Low-Flow	**12/22/10**	**0.00**	**<50**	**<5.0**	**<0.5**	**<0.5**	**<0.5**	**1.7**	-

TABLE 2: 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	-	-	-	-	-	-	-	-
Low-Flow	**12/22/10**	**0.00**	**<50**	**<5.0**	**<0.5**	**<0.5**	**<0.5**	**1.2**	-

TABLE 2: 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	02/03/05	0.00	78,000	<1,000	7,600	13,000	2,200	9,600	-
(12-22)	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	-
Low-Flow	**12/22/10**	**0.00**	**9,000**	**<100**	**300**	**1,100**	**180**	**1,700**	-

TABLE 2: 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	02/03/05	Sheen	130,000	<1,000	2,400	33,000	2,400	15,000	-
(12-22)	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	-
Low-Flow	**12/22/10**	**0.00**	**21,000**	**<100**	**180**	**1,300**	**520**	**4,900**	-

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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	02/03/05	Sheen	220,000	18,000	45,000	44,000	3,500	18,000	-
(12-22)	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	-
Low-Flow	**12/22/10**	**0.00**	**16,000**	**<200**	**1,600**	**1,700**	**250**	**2,800**	-

TABLE 2: 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	05/15/08	0.00	90	<5.0	0.62	2.4	<0.5	1.0	-
(12-22)	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	-	-	-	-	-	-	-	-
Low-Flow	**12/22/10**	**0.00**	**<50**	**<5.0**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	-
MW-9	05/15/08	0.00	60,000	960	14,000	410	1,500	3,500	-
(12-22)	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	-
Low-Flow	**12/22/10**	**0.00**	**15,000**	**<300**	**3,600**	**47**	**870**	**730**	-

TABLE 2: 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]	Well now located beneath a new residental building. Impossible to sample.							-

TABLE 2: 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]	Well now located beneath a new residental building. Impossible to sample.							-

TABLE 2: 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]	Well now located beneath a new residental building. Impossible to sample.							-

TABLE 2: 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	05/15/08	0.00	<250	6,700	18	<2.5	<2.5	<2.5	-
(12-22)	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	-
Low-Flow	**12/22/10**	**0.00**	**<50**	**<5.0**	**1.1**	**<0.5**	**<0.5**	**0.63**	-
MW-14	08/21/09	0.00	3,000	<1.0*	11	41	92	40	-
(12 - 22)	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	-
Low-Flow	**12/22/10**	**0.00**	**290**	**<5.0**	**<0.5**	**7.6**	**<0.5**	**0.52**	-
MW-15	08/21/09	0.00	190	23	23	15	6.6	25	-
(12 - 22)	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	-
Low-Flow	**12/22/10**	**0.00**	**<50**	**12**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	-
MW-16	08/21/09	0.00	860	20	80	110	26	130	-
(12 - 22)	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	-
Low-Flow	**12/22/10**	**0.00**	**<50**	**10**	**<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) Groundwate 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 3: GROUNDWATER ANALYTICAL DATA SUMMARY (SOIL BORINGS)

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

Sample ID	Date Collected	TPH-g (µg/L)	MTBE (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)
SB-1 W	08/18/96	140,000	480	12,000	30,000	3,900	19,000
SB-2 W	08/18/96	130,000	2,300	15,000	20,000	2,800	15,000
SB-3 W	08/18/96	120,000	27,000	19,000	29,000	1,900	9,500
SB-4 W	04/02/03	310,000	17,000	45,000	65,000	4,500	23,000
SB-5 W	04/03/03	420	ND<5.0	11	3.7	18	1.1
SB-6 W	04/02/03	210	ND<5.0	0.57	4.2	1.1	1.4
SB-7 W	04/02/03	240,000	69,000	42,000	45,000	3,100	16,000
SB-8 W	04/02/03	51	360	ND<0.5	ND<0.5	ND<0.5	ND<0.5
SB-9 W	04/03/03	7,300	ND<100	2,100	280	300	140
SB-10 W	04/03/03	210,000	ND<5000	22,000	38,000	3,400	18,000
SB-11 W	04/03/03	200,000	ND<2000	18,000	39,000	3,600	18,000
SB-12 W	04/02/03	ND<50	ND<5.0	ND<0.5	0.85	ND<0.5	0.53
SB-13 W	04/03/03	190	ND<20	ND<0.5	1.1	1.9	1.8
SB-14 W	04/03/03	ND<50	140	ND<0.5	0.95	ND<0.5	1.3
SB-15 W	04/03/03	ND<50	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5
SB-18W	03/17/10	230	ND<5.0	3.2	39	10	65

NOTES:

TPH-g by EPA Method 8015C

BTEX & MTBE by EPA Method 8021B

ND = not detected at or above the laboratory reporting limit

µg/L = micrograms per liter

TPH-g = total petroleum hydrocarbons as gasoline

MTBE = Methyl tert-butyl ether

BTEX = Benzene, ethylbenzene, toluene, and xylenes

TABLE 4: SOIL ANALYTICAL DATA SUMMARY

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

Sample ID	Date Collected	Depth (ft bgs)	TPH-g (mg/kg)	TOG (mg/kg)	MTBE (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Xylenes (mg/kg)
MW-1 (6')	7/14/95	6	390	-	-	0.28	0.29	0.29	0.62
MW-1 (11')	7/14/95	11	370	-	-	0.24	0.24	0.23	0.61
MW-2 (6')	7/14/95	6	ND	24	-	ND	ND	ND	ND
MW-2 (11')	7/14/95	11	300	38	-	0.30	0.23	0.24	0.63
SB-1 (18')	8/18/96	18	9,100	-	47	57	580	190	1,000
SB-1 (24')	8/18/96	24	30	-	0.20	0.37	1.4	0.52	2.5
SB-2 (24')	8/18/96	24	1.1	-	0.032	0.11	0.17	0.018	0.099
SB-3 (24')	8/18/96	24	16	-	4.7	1.6	2.5	0.21	0.95
MW-3 15'	05/25/01	15	ND<1.0	-	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005
MW-3 20'	05/25/01	20	ND<1.0	-	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005
MW-4 15'	05/25/01	15	ND<1.0	-	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005
MW-4 20'	05/25/01	20	ND<1.0	-	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005
SB-4 12'	04/02/03	12	25	-	ND<0.5	0.41	1.0	0.2	1.3
SB-4 15'	04/02/03	15	260	-	ND<1.7	3.5	15	4.5	23
SB-5 11'	04/03/03	11	ND<1.0	-	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005
SB-6 16'	04/02/03	16	ND<1.0	-	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005
SB-7 12'	04/02/03	12	700	-	ND<10	6.0	25	9.3	50
SB-7 18'	04/02/03	18	4,900	-	ND<25	65	260	77	400
SB-8 17'	04/02/03	17	ND<1.0	-	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005
SB-9 16'	04/03/03	16	ND<1.0	-	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005
SB-10 12'	04/03/03	12	ND<1.0	-	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005
SB-11 12'	04/03/03	12	1.4	-	ND<0.05	0.12	0.10	0.026	0.066
SB-11 16'	04/03/03	16	2,700	-	ND<30	29	170	49	250
SB-12 15'	04/02/03	15	ND<1.0	-	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005

TABLE 4: SOIL ANALYTICAL DATA SUMMARY

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

Sample ID	Date Collected	Depth (ft bgs)	TPH-g (mg/kg)	TOG (mg/kg)	MTBE (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Xylenes (mg/kg)
SB-13 14'	04/03/03	14	ND<1.0	-	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005
SB-14 14'	04/03/03	14	ND<1.0	-	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005
SB-15 14'	04/03/03	14	ND<1.0	-	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005
MW-5 16'	01/11/05	16	100	-	ND<5.0	2.6	6.0	1.5	8.4
MW-5 20'	01/11/05	20	37	-	ND<0.50	2.6	5.6	0.91	4.6
MW-7 16'	01/11/05	16	19	-	2.9	3.3	3.5	0.4	1.9
MW-7 20.5'	01/11/05	20.5	340	-	ND<5.0	9.6	25	7.0	35
MW-6 20'	01/19/05	20	14	-	ND<0.25	0.099	4.1	0.33	1.7
MW-10 15.5'	01/20/05	15.5	840	-	ND<2.0	11	58	16	83
MW-11 15.5'	01/19/05	15.5	3,200	-	ND<10	35	320	85	430
MW-12 15.5'	01/19/05	15.5	13	-	8.5	2.5	2.8	0.22	1.1
MW-9-15'	03/17/08	15	ND<1.0	-	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005
MW-9-20'	03/17/08	20	1.5	-	ND<0.05	0.37	0.0052	0.047	0.067
MW-13-15'	03/17/08	15	ND<1.0	-	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005
MW-13-20'	03/17/08	20	ND<1.0	-	0.086	ND<0.005	ND<0.005	ND<0.005	ND<0.005
MW-8-15'	03/18/08	15	ND<1.0	-	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005
MW-8-20'	03/18/08	20	ND<1.0	-	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005
MW-14-16'	07/28/09	16	ND<1.0	-	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005
MW-14-23'	07/28/09	23	ND<1.0	-	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005
MW-15-16'	07/27/09	16	ND<1.0	-	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005
MW-15-24'	07/27/09	24	ND<1.0	-	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005
MW-16-16'	07/27/09	16	ND<1.0	-	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005
MW-16-25'	07/27/09	25	ND<1.0	-	0.24	ND<0.005	ND<0.005	ND<0.005	ND<0.005

TABLE 4: SOIL ANALYTICAL DATA SUMMARY

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

Sample ID	Date Collected	Depth (ft bgs)	TPH-g (mg/kg)	TOG (mg/kg)	MTBE (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Xylenes (mg/kg)
SB-16-15'	03/17/10	15	ND<1.0	-	-	ND<0.005	ND<0.005	ND<0.005	ND<0.005
SB-16-17'	03/17/10	17	34	-	-	ND<0.005	ND<0.005	ND<0.005	0.20
SB-16-20'	03/17/10	20	2,100	-	-	ND<1.0	ND<1.0	1.1	68
SB-16-23'	03/17/10	23	5.0	-	-	ND<0.005	0.056	0.019	0.18
SB-16-25'	03/17/10	25	2.0	-	-	ND<0.005	0.028	0.005	0.041
SB-17-15'	03/17/10	15	3.0			ND<0.005	ND<0.005	ND<0.005	ND<0.005
SB-17-18'	03/17/10	18	900	-	-	ND<0.25	ND<0.25	0.52	27
SB-17-19'	03/17/10	19	1,900	-	-	ND<1.0	4.5	4.4	83
SB-17-20'	03/17/10	20	4,300	-	-	87	320	85	430
SB-17-23	03/17/10	23	ND<1.0	-	-	ND<0.005	ND<0.005	ND<0.005	ND<0.005
SB-18-15'	03/17/10	15	ND<1.0	-	-	ND<0.005	ND<0.005	ND<0.005	ND<0.005
SB-18-17'	03/17/10	17	ND<1.0	-	-	ND<0.005	ND<0.005	ND<0.005	ND<0.005
SB-18-20'	03/17/10	20	250	-	-	2.5	8.7	2.7	18
SB-18-21'	03/17/10	21	9.6	-	-	0.05	0.14	0.051	0.31
SB-18-23'	03/17/10	23	1.8	-	-	0.12	0.073	0.044	0.18
SB-18-25'	03/17/10	25	6.1	-	-	0.012	1.3	0.17	0.99
SB-19-15'	03/17/10	15	ND<1.0	-	-	ND<0.005	ND<0.005	ND<0.005	ND<0.005
SB-19-17'	03/17/10	17	18	-	-	ND<0.005	0.018	ND<0.005	0.021
SB-19-20'	03/17/10	20	7,500	-	-	100	490	130	700
SB-19-23	03/17/10	23	ND<1.0	-	-	ND<0.005	ND<0.005	ND<0.005	ND<0.005
SB-19-25	03/17/10	25	ND<1.0	-	-	ND<0.005	ND<0.005	ND<0.005	ND<0.005

NOTES:

ND = not detected at or above the laboratory reporting limit

mg/kg = milligrams per kilogram of soil

TPH-g = total petroleum hydrocarbons as gasoline

MTBE = methyl tertiary-butyl ether

TOG = Total Oil and Grease

TABLE 5: SOIL PHYSICAL PROPERTIES DATA SUMMARY

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

Sample ID	Date	Notes	Gravel (%)	Coarse Sand (%)	Medium Sand (%)	Fine Sand (%)	Silt (%)	Clay (%)	Hydraulic Conductivity (cm/sec)	Moisture Content (%)	Total Porosity (%)	Specific Gravity	TOC (mg/kg)	TOC (%)	Bulk Density (g/cm^3)
MW-7-15.5'	01/11/05	1,3,4	0.2	0.0	1.5	81.8	8.1	8.4	1.0E-06	18.3%	36.1%	2.74	----	----	1.75
MW-7-21'	01/11/05	1,3,4	0.0	0.0	1.9	88.0	4.2	5.9	5.0E-06	23.1%	38.7%	2.73	----	----	1.67
MW-11-15.5'	01/11/05	2	0.1	0.0	2.3	73.8	23.8		----	----	----	----	----	----	----
MW-11-20.5'	01/01/05	2	0.0	0.0	2.8	86.9	10.2		----	----	----	----	----	----	----
MW-8-15'	03/18/08	1,5,6	0.1	----	----	67.3	18.7	13.9	---	13.6%	----	---	440	0.044%	2.20
MW-8-20'	03/18/08	1,6	0.1	----	----	90.8	3.5	5.7	----	----	----	----	ND	ND	2.00
MW-9-15'	03/17/08	1,6	0.0	----	----	78.2	6.8	15	----	----	----	----	290	0.029%	2.00
MW-9-20'	03/17/08	1,6	0.2	----	----	92.9	3.9	3.0	----	----	----	----	ND	ND	2.00

NOTES:

Particle size distribution by ASTM D422 (Sieve Analysis)
Hydraulic conductivity by ASTM D5084 Method C: Falling Head / Rising Tailwater
cm/sec = centimeters per second
% = percent
mg/kg = milligrams per kilogram of soil
TOC = total organic carbon
g/cm^3 = grams per cubic centimeter

Hydraulic Conductivity Unit Conversions
1 cm/sec ≈ 1,035 darcy
1 cm/sec ≈ 2,820 feet/day
1 cm/sec ≈ 864 meter/day

Intrinsic Permeability Unit Conversions
1 cm^2 ≈ 101,320,202 darcy
1 cm^2 ≈ 97,894 cm/sec
1 cm^2 ≈ 84,574,459 meter/day

1) Particle size distribution by sieve and hydrometer (silt and clay reported as separate fractions)
2) Particle size distribution by sieve only (silt and clay reported together)
3) Specific gravity measured with a pycnometer
4) Bulk Density is a "dry bulk density" by ASTM D2937 (sample is always dried)
5) Moisture content by ASTMD2216-92
6) Bulk Density is a "wet bulk density" by the Soil Science Society of America (SSSA) Method #5 (sample is not dried, unless requested)

TABLE 6: AIR SPARGE WELL INJECTION PRESSURE OVER TIME

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

Well ID: AS-1				Well ID: AS-3			
Date	**Time**	**Elapsed Time (min)**	**Wellhead Pressure (psig)**	**Date**	**Time**	**Elapsed Time (min)**	**Wellhead Pressure (psig)**
11/08/10	8:40	0	18	11/09/10	8:40	0	14
	8:45	5	11		8:45	5	12
	8:50	10	10		8:50	10	10
	8:55	15	8.0		8:55	15	9.5
	9:00	20	7.0		9:00	20	8.5
	9:05	25	6.5		9:05	25	8.0
	9:10	30	6.0		9:10	30	8.0
	9:15	35	5.5		9:15	35	7.5
	9:20	40	5.0		9:20	40	7.0
	9:25	45	5.0		9:25	45	7.0
	9:30	50	5.0		9:30	50	7.0
	9:35	55	5.0		9:35	55	6.5
	9:40	60	5.0		9:40	60	6.5
	9:45	65	5.0		9:45	65	6.5
	9:50	70	5.0		9:50	70	6.5
	9:55	75	5.0		9:55	75	6.5
	10:00	80	5.0		10:00	80	6.5
	10:05	85	5.0		10:05	85	6.5
	10:10	90	5.0		10:10	90	6.5
	10:15	95	5.0		10:15	95	6.5
	10:20	100	5.0		10:20	100	6.5
	10:25	105	5.0		10:25	105	6.5
	10:30	110	5.0		10:30	110	6.5
	10:35	115	5.0		10:35	115	6.5
	10:40	120	5.0		10:40	120	6.5
	10:45	125	5.0		10:45	125	6.5
	10:50	130	5.0		11:00	140	6.5
	10:55	135	5.0		11:15	155	6.5
	11:00	140	5.0		11:20	160	6.5
	11:05	145	5.0				
	11:10	150	5.0				
	11:15	155	5.0				
	11:20	160	5.0				
	11:25	165	5.0				
	11:30	170	5.0				

NOTES:

min = minutes

psig = pounds per square inch - gauge pressure

TABLE 7: VAPOR ANALYTICAL & FIELD SCREENING DATA SUMMARY

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

Sample ID	Date Collected	TVH (ppmv)	TPH-g (ppmv)	MTBE (ppmv)	Benzene (ppmv)	Toluene (ppmv)	Ethyl-benzene (ppmv)	Xylenes (ppmv)
MW-1S	11/03/10	15	43	ND<0.68	0.33	2.1	0.23	1.4
	11/8/10 7:15	50	65	ND<0.68	0.42	2.6	0.24	1.6
	11/8/10 11:05	1,200	730	ND<10	6.6	8.1	0.45	3.0
	11/9/10 6:55	30	91	ND<5.0	0.95	2.6	0.22	1.9
	11/9/10 10:55	1,650	360	ND<10	2.3	3.4	0.21	2.0
	11/16/10	45	120	ND<0.68	0.71	3.5	0.39	4.8
	11/23/10	220	200	ND<1.4	1.0	4.2	0.24	3.5
	12/10/10	80	110	ND<0.68	0.92	3.9	0.37	3.0
MW-2S	11/03/10	20	650	ND<2.7	16	43	3.9	34
	11/8/10 7:20	420	970	ND<5.0	22	51	4.5	39
	11/8/10 11:10	450	1,000	ND<10	24	54	5.0	42
	11/9/10 7:00	500	990	ND<5.0	22	51	5.0	40
	11/9/10 11:00	600	1,000	ND<10	24	57	5.5	45
	11/16/10	650	1,400	ND<5.0	33	73	7.0	56
	11/23/10	620	1,300	ND<14	35	69	4.7	42
	12/10/10	950	1,500	ND<10	31	66	5.6	57
MW-5S	11/03/10	70	230	ND<4.5	1.2	7.9	0.73	15
	11/8/10 7:25	120	300	ND<2.7	1.5	8.2	0.65	20
	11/8/10 11:15	100	310	ND<2.7	1.7	9.1	0.74	21
	11/9/10 7:05	110	300	ND<1.4	1.4	7.8	0.84	19
	11/9/10 11:05	110	340	ND<1.4	1.9	9.2	1.0	24
	11/16/10	190	400	ND<1.4	1.5	8.6	0.99	28
	12/10/10	150	310	ND<2.7	2.3	9.2	0.81	23
MW-6S	11/03/10	120	320	ND<6.8	1.9	9.9	3.3	18
	11/8/10 7:30	200	430	ND<4.5	2.1	10	2.5	14
	11/8/10 11:20	230	490	ND<2.7	2.3	11	2.6	16
	11/9/10 7:10	230	500	ND<2.7	2.4	12	2.8	17
	11/9/10 11:10	1,450	710	ND<10	2.7	12	2.4	15
	11/16/10	390	850	ND<2.7	3.4	16	2.6	22
	11/23/10	580	1,000	ND<2.7	3.5	19	2.4	21
	12/10/10	300	580	ND<4.5	4.5	18	5.3	29
MW-7S	11/03/10	790	1,400	ND<6.8	18	31	1.5	24
	11/8/10 7:35	1,150	2,100	ND<10	19	29	1.6	29
	11/8/10 11:25	1,150	2,000	ND<15	17	28	1.4	29
	11/9/10 7:15	1,500	2,100	ND<10	21	32	1.5	30
	11/9/10 11:15	>11,000	4,700	ND<120	46	44	2.0	34
	11/16/10	2,200	2,800	ND<10	28	48	5.5	96
	11/23/10	9,250	3,500	ND<30	38	48	2.4	47
	12/10/10	>11,000	2,700	ND<25	42	46	3.3	44

TABLE 7: VAPOR ANALYTICAL & FIELD SCREENING DATA SUMMARY

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

Sample ID	Date Collected	TVH (ppmv)	TPH-g (ppmv)	MTBE (ppmv)	Benzene (ppmv)	Toluene (ppmv)	Ethyl-benzene (ppmv)	Xylenes (ppmv)
INF (PRED)	11/03/10	20	250	ND<2.7	3.0	9.1	0.92	9.0
	11/8/10 7:10	150	350	ND<2.7	4.1	11	1.0	11
	11/8/10 11:00	900	830	ND<10	7.7	14	1.1	12
	11/9/10 6:50	250	330	ND<2.0	4.0	9.8	0.82	10
	11/9/10 10:55	2,900	700	ND<15	6.2	11	0.94	11
	11/16/10	210	460	ND<1.4	5.4	13	1.5	19
	11/23/10	670	630	ND<5.0	7.3	15	1.2	16
	12/10/10	260	350	ND<2.7	4.7	10	1.1	12
	12/30/10	100	64	<0.68	2.1	2.6	0.34	2.0

NOTES:

ppmv - parts per million by volume

TVH = total volatile hydrocarbons

TPH-g = total petroleum hydrocarbons as gasoline

MTBE = methyl tertiary butyl ether

TPH-g by EPA Method 8015Bm

BTEX & MTBE by EPA Method 8021B

ND<5.0 not detected at or above the stated laboratory reporting limit

TABLE 8: HVDPE MASS REMOVAL DATA SUMMARY

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

Sample Date	Notes	Inlet Temp (°F)	Inlet Vacuum (in-Hg)	Well Velocity (fpm)	Well Flow (scfm)	Influent TPH-g (ppmv)	Mass Removal Rate (lbs/day)	Mass Removal Rate (gal/day)
11/03/10	1	60	15	1,600	79	250	7.9	1.3
11/08/10		60	14	1,000	49	350	6.9	1.1
11/08/10	2	60	14	1,000	49	830	16	2.7
11/09/10		60	14	1,000	49	330	6.5	1.1
11/09/10	3	60	14	1,000	49	700	14	2.3
11/16/10	4	60	14	1,000	49	460	9.1	1.5
11/23/10	5	60	15	1,000	49	630	12	2.1
12/10/10		60	16	1,000	49	350	6.9	1.1
12/30/10		60	15	1,000	49	64	1.3	0.21

NOTES:

°F = degree Fahrenheit

in-Hg = inches of mercury (gauge pressure)

fpm = feet per minute

scfm = standard cubic feet per minute

ppmv = parts per million by volume

lbs/day = pounds per day

gal/day = gallons per day

TPH-g = Total Petroleum Hydrocarbons as gasoline by EPA Method 8015

TPH-g by EPA Method 8015C

Well Flow = Well Velocity x Pipe Cross Sectional Area

Cross Sectional Area of 3" Pipe = 0.0491 ft^2

Well Flow = Well Velocity * 0.0491

1 gallon gas ~ 6 pounds

1) Baseline sampling one week prior to air sparging pilot test

2) Sample collected after sparging into AS-1 for approximately 120 minutes

3) Sample collected after sparging into AS-3 for approximately 120 minutes

4) Sample collected approximately one week after air sparging pilot test (sparging into AS-3 only)

5) Sample collected approximately two weeks after air sparging pilot test (sparging into AS-3 only)

MASS REMOVAL RATE (MRR) ESTIMATE ASSUMPTIONS:

MRR Estimate = (20,000*10^-6)*(50scfm)*(1440min/day)*(28.32L/ft^3)*(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

1 lb = 454 grams

STP is 21°C and 1 atm

1ft^3 = 28.38 liters

Revised February 25, 2011

TABLE 9: SOIL GAS FIELD SCREENING DATA SUMMARY

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

Soil Gas Probe ID	Date	Time	Notes	Peristaltic Pump Head Tubing	Pump Speed (rpms)	*Vacuum/ Pressure (in-H2O)	Background PID (ppmv)	PID (ppmv)
Ambient Air	11/08/10	8:00		PharmaPure	600	nm	0.2	-
	11/09/10	7:50		PharmaPure	600	nm	1.1	-
GP-1-5'	Equip Blank	8:00		PharmaPure	600	nm	0.2	0.5
	11/08/10	8:20		PharmaPure	600	-0.85	0.2	0.6
		8:45		PharmaPure	600	-0.85	0.2	0.6
		9:05		PharmaPure	600	-0.85	0.2	0.6
		9:25		PharmaPure	600	-0.85	0.2	0.6
		9:45		PharmaPure	600	-0.85	0.1	0.5
		10:05		PharmaPure	600	-0.85	0.1	0.5
		10:25		PharmaPure	600	-0.85	0.1	0.5
		10:45		PharmaPure	600	-0.85	0.3	0.4
	Equip Blank	7:50		PharmaPure	600	nm	1.1	1.0
	11/09/10	8:00		PharmaPure	600	-0.80	0.7	1.5
		8:50		PharmaPure	600	-0.80	0.4	0.9
		9:10		PharmaPure	600	-0.80	0.3	0.8
		9:30		PharmaPure	600	-0.80	0.3	0.8
		9:50		PharmaPure	600	-0.80	0.3	0.8
		10:10		PharmaPure	600	-0.80	0.3	0.9
		10:30		PharmaPure	600	-0.80	0.2	0.7
		10:50		PharmaPure	600	nm	nm	nm
		11:10		PharmaPure	600	nm	nm	nm
GP-1-10'	Equip Blank	8:00		PharmaPure	600	nm	0.2	0.5
	11/08/10	8:15		PharmaPure	600	-0.90	0.2	0.6
		8:40		PharmaPure	600	-0.90	0.2	0.6
		9:00		PharmaPure	600	-0.90	0.1	0.6
		9:20		PharmaPure	600	-0.90	0.1	0.5
		9:40		PharmaPure	600	-0.90	0.1	0.5
		10:00		PharmaPure	600	-0.90	0.1	0.5
		10:20		PharmaPure	600	-0.90	0.1	0.5
		10:40		PharmaPure	600	-0.90	0.1	0.4
	Equip Blank	7:50		PharmaPure	600	nm	1.1	1.3
	11/09/10	8:00		PharmaPure	600	-0.85	0.7	1.7
		8:45		PharmaPure	600	-0.85	0.4	0.8
		9:05		PharmaPure	600	-0.85	0.3	0.8
		9:25		PharmaPure	600	-0.85	0.4	1.0
		9:45		PharmaPure	600	-0.85	0.4	1.0
		10:05		PharmaPure	600	-0.85	0.5	0.9
		10:25		PharmaPure	600	-0.85	0.2	0.9
		10:45		PharmaPure	600	-0.85	nm	nm
		11:05		PharmaPure	600	-0.85	nm	nm

TABLE 9: SOIL GAS FIELD SCREENING DATA SUMMARY

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

Soil Gas Probe ID	Date	Time	Notes	Peristaltic Pump Head Tubing	Pump Speed (rpms)	*Vacuum/ Pressure (in-H2O)	Background PID (ppmv)	PID (ppmv)
GP-2-5'	Equip Blank	8:00		PharmaPure	600	nm	0.2	0.5
	11/08/10	8:30		PharmaPure	600	0.00	0.3	0.7
		8:55		PharmaPure	600	0.00	0.2	1.0
		9:15		PharmaPure	600	0.00	0.1	1.0
		9:35		PharmaPure	600	0.00	0.1	1.0
		9:55		PharmaPure	600	0.00	0.1	1.2
		10:15		PharmaPure	600	0.00	0.1	1.0
		10:35		PharmaPure	600	0.00	0.1	0.7
		10:55		PharmaPure	600	0.00	0.1	0.6
	Equip Blank	7:50		PharmaPure	600	nm	1.1	1.2
	11/09/10	8:00		PharmaPure	600	0.00	0.8	2.1
		9:00		PharmaPure	600	0.00	0.3	1.4
		9:20		PharmaPure	600	0.00	0.4	1.6
		9:40		PharmaPure	600	0.00	0.4	2.8
		10:00		PharmaPure	600	0.00	0.3	2.8
		10:20		PharmaPure	600	0.00	0.2	3.0
		10:40		PharmaPure	600	0.00	0.2	2.4
		11:00		PharmaPure	600	nm	nm	nm
		11:20		PharmaPure	600	nm	nm	nm
GP-2-10'	Equip Blank	8:00		PharmaPure	600	nm	0.2	0.5
	11/08/10	8:25		PharmaPure	600	0.00	0.3	0.9
		8:50		PharmaPure	600	0.00	0.2	1.2
		9:10		PharmaPure	600	0.00	0.2	1.8
		9:30		PharmaPure	600	0.00	0.2	2.0
		9:50		PharmaPure	600	0.00	0.2	3.7
		10:10		PharmaPure	600	0.00	0.1	2.4
		10:30		PharmaPure	600	0.00	0.1	2.4
		10:50		PharmaPure	600	0.00	0.2	2.1
	Equip Blank	7:50	1,2	PharmaPure	600	nm	1.1	4.6
	11/09/10	8:00	1,2	PharmaPure	600	0.00	0.8	5.5
		8:55	1,2	PharmaPure	600	0.00	0.4	2.7
		9:15	1,2	PharmaPure	600	0.00	0.3	3.6
		9:35	1,2	PharmaPure	600	0.00	0.3	4.3
		9:55	1,2	PharmaPure	600	0.00	0.3	5.5
		10:15	1,2	PharmaPure	600	0.00	0.3	5.6
		10:35	1,2	PharmaPure	600	0.00	0.3	5.5
		10:55	1,2	PharmaPure	600	0.00	nm	nm
		11:15	1,2	PharmaPure	600	0.00	nm	nm

TABLE 9: SOIL GAS FIELD SCREENING DATA SUMMARY

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

Soil Gas Probe ID	Date	Time	Notes	Peristaltic Pump Head Tubing	Pump Speed (rpms)	*Vacuum/ Pressure (in-H2O)	Background PID (ppmv)	PID (ppmv)

NOTES:

rpms = revolutions per minute

in-H2O = inches of water

ppmv = parts per million by volume

PID = photo-ionization detector

Equip Blank = equipment blank

Equipment Blanks were prepared by pumping ambient air into a new 1-liter tedlar bags using new pieces of PharmaPure tubing.

*A minus (-) sign to indicate vacuum and a plus (+) sign to indicate positive pressure

1) Significant moisture or water was present in 1-liter tedlar bag during field screening.

2) High humidity can cause a significant false positive PID response.

TABLE 10: AIR SPARGING SYSTEM DATA SUMMARY

245 8th Oakland, California

Date	Time	Notes	Hour[1] Meter	Actual Runtime (hrs)	Actual Runtime (days)	System Uptime (%)	System Status (ON/OFF)	Active Sparge Well	Manifold Temp (°F)	Manifold Pressure (psig)	Flow Rate (acfh)	Flow[2] Rate (acfm)	Flow[3] Rate (scfm)	Wellhead Pressure (psig)
11/08/10	11:20		12,133.16	0			ON	AS-1	60	5.0	120	2.0	2.2	5.0
11/09/10	11:15	a	12,157.36	24	1	100%	ON	AS-3	60	6.5	120	2.0	2.3	6.5
11/10/10	7:30		12,174.90	18	1	100%	ON	AS-3	58	6.5	100	1.7	1.9	6.5
11/11/10	6:30		12,198.80	24	1	100%	ON	AS-3	52	6.5	120	2.0	2.3	6.5
11/12/10	6:30		12,221.60	23	1	95%	ON	AS-3	50	6.5	120	2.0	2.3	6.5
11/16/10	6:30		12,320.12	99	4	100%	ON	AS-3	60	6.5	120	2.0	2.3	6.5
11/23/10	8:15		12,482.71	163	7	100%	ON	AS-3	50	6.5	120	2.0	2.3	6.5
12/10/10	10:45	b	12,542.71	60	3	15%	ON	AS-3/4	58	7.0	120	2.0	2.3	7.0
12/10/10	13:45		12,545.49	3	0	100%	ON	AS-4	64	5.0	120	2.0	2.2	5.0
12/30/10	7:30		12,810.13	265	11	55%	ON	AS-4	42	7.0	120	2.0	2.3	7.0
01/21/11	10:35	c, d, e	5,813.40	0.0	0.0	---	ON	AS-1/3	78	10.0	300	5.0	6.1	10/10
01/31/11	11:15		6,056.40	243	10	100%	ON	AS-1/3	78	9.0	---	6.0	7.1	9/9
02/04/11	10:15		6,151.00	95	4	89%	ON	AS-1/3	78	8.5	---	6.0	7.0	8.5/8.5
02/04/11	11:45	f	6,152.50	1.5	0.06	100%	ON	AS-2/4	82	10.0	---	6.0	7.2	10/10
02/18/11	10:30		6,442.00	289.5	12.06	86%	ON	AS-2/4	72	10.0	---	6.0	7.3	10/10
02/18/11	11:30	g	6,443.00	1.0	0.04	100%	ON	AS-1/3	68	9.0	---	6.0	7.2	9/9

TABLE 10: AIR SPARGING SYSTEM DATA SUMMARY

245 8th Oakland, California

Date	Time	Notes	Hour[1] Meter	Actual Runtime (hrs)	Actual Runtime (days)	System Uptime (%)	System Status (ON/OFF)	Active Sparge Well	Manifold Temp (°F)	Manifold Pressure (psig)	Flow Rate (acfh)	Flow[2] Rate (acfm)	Flow[3] Rate (scfm)	Wellhead Pressure (psig)

NOTES:

psig = pounds per square inch

°F = degrees Fahrenheit

acfh = actual cubic feet per hour

acfm = actual cubic feet per minute

scfm = standard cubic feet per minute

1) Recording of HVDPE system and thermal oxidizer hour meter from 11/8/10 to 1/12/11

2) Flow Rate (acfm) = Flow Rate (acfh) / 60 (min/hour)

3) Flow Rate (scfm) = Flow Rate (acfm) *√(((14.7+Manifold Pressure)*530)/(14.7*(530+Manifold Temp)))

a) AS-3 left on after testing on 11/08/10; air sparging system interlocked w/ HVDPE system.

b) Turned off AS-3; turned on AS-4

c) Turned off AS-4; turned on AS-1 & 3

d) Repaired hour meter for refurbished AS system

e) Increased flow rate from 2 acfm per well to 5 -6 acfm per well

f) Turned off AS-1 & 3; turned on AS-2 & 4.

g) Turned off AS-2 & 4; turned on AS-1 & 3.

APPENDIX A

ACPWA DRILLING PERMITS

Alameda County Public Works Agency - Water Resources Well Permit

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

Application Approved on: 06/23/2010 By jamesy

Permit Numbers: W2010-0448
Permits Valid from 06/30/2010 to 07/01/2010

Application Id: 1276823270246 **City of Project Site:** Oakland
Site Location: 245 8th Street
Project Start Date: 06/30/2010 **Completion Date:** 07/01/2010
Assigned Inspector: Contact Vicky Hamlin at (510) 670-5443 or vickyh@acpwa.org

Applicant: AEI Consultants - Adrian Angel **Phone:** 408-559-7600
2500 Camino Diablo, Walnut Creek, CA 94597
Property Owner: Victor Lum **Phone:** 510-832-9014
245 8th Street, Oakland, CA 94607
Client: ** same as Property Owner **
Contact: Adrian Angel **Phone:** 408-559-7600
Cell: 831-331-3547

Total Due: $265.00
Receipt Number: WR2010-0216 **Total Amount Paid:** $265.00
Payer Name : Peter McIntyre Paid By: VISA **PAID IN FULL**

Works Requesting Permits:

Remediation Well Construction-Injection - 4 Wells
Driller: PeneCore Drilling - Lic #: 906899 - Method: auger **Work Total: $265.00**

Specifications

Permit #	Issued Date	Expire Date	Owner Well Id	Hole Diam.	Casing Diam.	Seal Depth	Max. Depth
W2010-0448	06/23/2010	09/28/2010	AS-1	8.00 in.	2.00 in.	25.00 ft	30.00 ft
W2010-0448	06/23/2010	09/28/2010	AS-2	8.00 in.	2.00 in.	25.00 ft	30.00 ft
W2010-0448	06/23/2010	09/28/2010	AS-3	8.00 in.	2.00 in.	25.00 ft	30.00 ft
W2010-0448	06/23/2010	09/28/2010	AS-4	8.00 in.	2.00 in.	25.00 ft	30.00 ft

Specific Work Permit Conditions

1. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.

2. Permittee, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.

3. Compliance with the well-sealing specifications shall not exempt the well-sealing contractor from complying with appropriate State reporting-requirements related to well construction or destruction (Sections 13750 through 13755 (Division 7, Chapter 10, Article 3) of the California Water Code). Contractor must complete State DWR Form 188 and mail original to the Alameda County Public Works Agency, Water Resources Section, within 60 days. Including permit number and site map.

4. Applicant shall submit the copies of the approved encroachment permit to this office within 60 days.

5. Applicant shall contact Vicky Hamlin for an inspection time at 510-670-5443 or email to vickyh@acpwa.org at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.

6. Minimum seal depth (Neat Cement Seal) is 2 feet below ground surface (BGS).

7. Minimum surface seal thickness is two inches of cement grout placed by tremie

8. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of $500.00.

9. Prior to any drilling activities onto any public right-of-ways, it shall be the applicants responsibilities to contact and coordinate a Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits required for that City or to the County and follow all City or County Ordinances. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County a Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

PROGRAMS AND SERVICES

Well Standards Program

The Alameda County Public Works Agency, Water Resources is located at:
399 Elmhurst Street
Hayward, CA 94544
For Driving Directions or General Info, Please Contact 510-670-5480 or wells@acpwa.org
For Drilling Permit information and process contact James Yoo at
Phone: 510-670-6633
FAX: 510-782-1939
Email: Jamesy@acpwa.org

Alameda County Public Works is the administering agency of General Ordinance Code, Chapter 6.88 . The purpose of this chapter is to provide for the regulation of groundwater wells and exploratory holes as required by California Water Code. The provisions of these laws are administered and enforced by Alameda County Public Works Agency through its Well Standards Program.

Drilling Permit Jurisdictions in Alameda County: There are four jurisdictions in Alameda County.

Location: Agency with Jurisdiction Contact Number

Berkeley City of Berkeley Ph: 510-981-7460
Fax: 510-540-5672

Fremont, Newark, Union City Alameda County Water District Ph: 510-668-4460
Fax: 510-651-1760

Pleasanton, Dublin, Livermore, Sunol Zone 7 Water Agency Ph: 925-454-5000
Fax: 510-454-5728

The Alameda County Public Works Agency, Water Resources has the responsibility and authority to issue drilling permits and to enforce the County Water Well Ordinance 73-68. This jurisdiction covers the western Alameda County area of **Oakland**, **Alameda**,**Piedmont**, **Emeryville**, **Albany**, **San Leandro**, **San Lorenzo**, **Castro Valley**, and **Hayward** . The purpose of the drilling permits are to ensure that any new well or the destruction of wells, including geotechnical investigations and environmental sampling within the above jurisdiction and within Alameda County will not cause pollution or contamination of ground water or otherwise jeopardize the health, safety or welfare of the people of Alameda County.

Permits are required for all work pertaining to wells and exploratory holes at any depth within the jurisdiction of the Well Standards Program. A completed permit application *(30 Kb)** , along with a site map, should be submitted at least **ten (10) working days prior to the planned start of work**. Submittals should be sent to the address or fax number provided on the application form. When submitting an application via fax, please use a high resolution scan to retain legibility.

Fees
Beginning April 11, 2005 , the following fees shall apply:

A permit to construct, rehabilitate, or destroy wells, including cathodic protection wells, but excluding dewatering wells (*Horizontal hillside dewatering and dewatering for construction period only), shall cost $300.00 per well.

A permit to bore exploratory holes, including temporary test wells, shall cost $200 per site. A site includes the project parcel as well as any adjoining parcels.

Please make checks payable to: **Treasurer, County of Alameda**

Permit Fees are exempt to State & Federal Projects
Applicants shall submit a letter from the agency requesting the fee exemption.

Scheduling Work/Inspections:
Alameda County Public Works Agency (ACPWA), Water Resources Section requires scheduling and inspection of permitted work. All drilling activities must be scheduled in advance. Availability of inspections will vary from week to week and will come on a first come, first served bases. To ensure inspection availability on your desired or driller scheduled date, the following procedures are required:

Please contact **James Yoo at 510-670-6633** to schedule the inspection date and time (You must have drilling permit approved prior to scheduling).

Schedule the work as far in advance as possible (at least 5 days in advance); and confirm the scheduled drilling date(s) at least 24 hours prior to drilling.

Once the work has been scheduled, an ACPWA Inspector will coordinate the inspection requirements as well as how the Inspector can be reached if they are not at the site when Inspection is required. Expect for special circumstances given, all work will require the inspection to be conducted during the working hours of 8:30am to 2:30pm., Monday to Friday, excluding holidays.

Request for Permit Extension:
Permits are only valid from the start date to the completion date as stated on the drilling permit application and Conditions of Approval. To request an extension of a drilling permit application, applicants must request in writing prior to the completion date as set forth in the Conditions of Approval of the drilling permit application. Please send fax or email to Water Resources Section, Fax 510-782-1939 or email at wells@acpwa.org. There are no additional fees for permit extensions or for re-scheduling inspection dates. You may not extend your drilling permit dates beyond 90 days from the approval date of the permit application. **NO refunds** shall be given back after 90 days and the permit shall be deemed voided.

Cancel a Drilling Permit:
Applicants may cancel a drilling permit only in writing by mail, fax or email to Water Resources Section, Fax 510-782-1939 or email at wells@acpwa.org. If you do not cancel your drilling permit application before the drilling completion date or notify in writing within 90 days, Alameda County Public Works Agency, Water Resources Section may void the permit and No refunds may be given back.

Refunds/Service Charge:
A service charge of $25.00 dollars for the first check returned and $35.00 dollars for each subsequent check returned.

Applicants who cancel a drilling permit application **before** we issue the approved permit(s), will receive a **FULL** refund (at any amount) and will be mailed back within two weeks.

Applicants who cancel a drilling permit application **after** a permit has been issued will then be charged a service fee of $50.00 (fifty Dollars).

To collect the remaining funds will be determined by the amount of the refund to be refunded (see process below).

Board of Supervisors Minute Order, File No. 9763, dated January 9, 1996, gives blanket authority to the Auditor-Controller to process claims, from all County departments for the refund of fees which do not exceed $500 (Five Hundred Dollars)(with the exception of the County Clerk whose limit is $1,500).

Refunds over the amounts must be authorized by the Board of Supervisors Minute Order, File No. 9763 require specific approval by the Board of Supervisors. The forms to request for refunds under $500.00 (Five Hundred Dollars) are available at this office or any County Offices. If the amount is exceeded, a Board letter and Minute Order must accompany the claim. Applicant shall fill out the request form and the County Fiscal department will process the request.

Enforcement
Penalty. Any person who does any work for which a permit is required by this chapter and who fails to obtain a permit shall be guilty of a misdemeanor punishable by fine not exceeding Five Hundred Dollars ($500.00) or by imprisonment not exceeding six months, or by both such fine and imprisonment, and such person shall be deemed guilty of a separate offense for each and every day or portion thereof during which any such

violation is committed, continued, or permitted, and shall be subject to the same punishment as for the original offense. (Prior gen. code §3-160.6)

Enforcement actions will be determined by this office on a case-by-case basis
Drilling without a permit shall be the cost of the permit(s) and a fine of $500.00 (Five Hundred Dollars).

Well Completion Reports (State DWR-188 forms) must be filed with the Well Standards Program within 60 days of completing work. Staff will review the report, assign a state well number, and then forward it to the California Department of Water Resources (DWR). Drillers should not send completed reports to DWR directly. Failure to file a Well Completion Report or deliberate falsification of the information is a misdemeanor; it is also grounds for disciplinary action by the Contractors' State License Board. Also note that filed Well Completion Reports are considered private record protected by state law and can only be released to the well owner or those specifically authorized by government agencies.

See our website (www.acgov.org/pwa/wells/index.shtml) for links to additional forms.

APPENDIX B

AIR SPARGE WELL CONSTRUCTION LOGS

Project: Vic's Auto
Project Location: 245 8th Street, Oakland, CA
Project Number: 116907

Log of Boring AS-1

Sheet 1 of 1

Date(s) Drilled **June 30, 2010**	Logged By **Adrian Angel**	Checked By **Ricky Bradford**
Drilling Method **Hollow Stem Auger**	Drill Bit Size/Type **8 1/4 inch**	Total Depth of Borehole **30 feet bgs**
Drill Rig Type **GeoProbe 6610DT**	Drilling Contractor **PeneCore (C57 #906899)**	Approximate Surface Elevation **33 feet**
Groundwater Level and Date Measured **Not Measured**	Sampling Method(s) **None**	Well Permit No. **ACPWA #W2010-0448**
Borehole Backfill **Well Completion**	Location **Approximately 10-feet northeast of MW-1**	

Elevation, feet	Depth, feet	Sample Type	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	Well Log	REMARKS AND OTHER TESTS
33	0					Boring not logged.	TOC 1-foot bgs	
28	5						Annular Seal (Neat Cement Grout)	
23	10							
18	15						2" SCH80 PVC Casing	
13	20							
8	25						Transition Seal (3/8" Hydrated Bentonite Chips)	
							Sandpack (2/16 Monterey Sand)	
							2" 316 SS Sparge Point (0.010 Screen)	
3	30					Bottom of Boring at 30 feet bgs		

Figure

X:\PROJECTS\CHARACTERIZATION & REMEDIATION\ADVANCED REMEDIATION\Vic's Auto (116907) Oakland - RJB, PM(LJ) Air Sparge Pilot Test (116907) RJB\AS-1 to AS-4 Logs.bgs [Basic Well Log (RJB).tpl]

Project: Vic's Auto
Project Location: 245 8th Street, Oakland, CA
Project Number: 116907

Log of Boring AS-2

Sheet 1 of 1

Date(s) Drilled **June 30, 2010**	Logged By **Adrian Angel**	Checked By **Ricky Bradford**
Drilling Method **Hollow Stem Auger**	Drill Bit Size/Type **8 1/4 inch**	Total Depth of Borehole **30 feet bgs**
Drill Rig Type **GeoProbe 6610DT**	Drilling Contractor **PeneCore (C57 #906899)**	Approximate Surface Elevation **33 feet**
Groundwater Level and Date Measured **Not Measured**	Sampling Method(s) **None**	Well Permit No. **ACPWA #W2010-0448**
Borehole Backfill **Well Completion**	Location **Approximately 10-feet northeast of MW-1**	

Elevation, feet	Depth, feet	Sample Type	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	Well Log	REMARKS AND OTHER TESTS
33	0					Boring not logged.		TOC 1-foot bgs
28	5							Annular Seal (Neat Cement Grout)
23	10							
18	15							2" SCH80 PVC Casing
13	20							
8	25							Transition Seal (3/8" Hydrated Bentonite Chips)
								Sandpack (2/16 Monterey Sand)
								2" 316 SS Sparge Point (0.010 Screen)
3	30					Bottom of Boring at 30 feet bgs		

Figure

X:\PROJECTS\CHARACTERIZATION & REMEDIATION\ADVANCED REMEDIATION\Vic's Auto (116907) Oakland - RJB, PM(L) Air Sparge Pilot Test (116907) RJB\AS-1 to AS-4 Logs.bgs [Basic Well Log (RJB).tpl]

Project: Vic's Auto
Project Location: 245 8th Street, Oakland, CA
Project Number: 116907

Log of Boring AS-3

Sheet 1 of 1

Date(s) Drilled **June 30, 2010**	Logged By **Adrian Angel**	Checked By **Ricky Bradford**
Drilling Method **Hollow Stem Auger**	Drill Bit Size/Type **8 1/4 inch**	Total Depth of Borehole **30 feet bgs**
Drill Rig Type **GeoProbe 6610DT**	Drilling Contractor **PeneCore (C57 #906899)**	Approximate Surface Elevation **33 feet**
Groundwater Level and Date Measured **Not Measured**	Sampling Method(s) **None**	Well Permit No. **ACPWA #W2010-0448**
Borehole Backfill **Well Completion**	Location **Approximately 10-feet northeast of MW-1**	

Elevation, feet	Depth, feet	Sample Type	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	Well Log	REMARKS AND OTHER TESTS
33	0					Boring not logged.		TOC 1-foot bgs
28	5							Annular Seal (Neat Cement Grout)
23	10							
18	15							2" SCH80 PVC Casing
13	20							
8	25							Transition Seal (3/8" Hydrated Bentonite Chips)
								Sandpack (2/16 Monterey Sand)
								2" 316 SS Sparge Point (0.010 Screen)
3	30					Bottom of Boring at 30 feet bgs		

Figure

X:\PROJECTS\CHARACTERIZATION & REMEDIATION\ADVANCED REMEDIATION\Vic's Auto (116907) Oakland - RJB, PM(LJ) Air Sparge Pilot Test (116907) RJB\AS-1 to AS-4 Logs.bgs [Basic Well Log (RJB).tpl]

Project: Vic's Auto
Project Location: 245 8th Street, Oakland, CA
Project Number: 116907

Log of Boring AS-4

Sheet 1 of 1

Date(s) Drilled **June 30, 2010**	Logged By **Adrian Angel**	Checked By **Ricky Bradford**
Drilling Method **Hollow Stem Auger**	Drill Bit Size/Type **8 1/4 inch**	Total Depth of Borehole **30 feet bgs**
Drill Rig Type **GeoProbe 6610DT**	Drilling Contractor **PeneCore (C57 #906899)**	Approximate Surface Elevation **33 feet**
Groundwater Level and Date Measured **Not Measured**	Sampling Method(s) **None**	Well Permit No. **ACPWA #W2010-0448**
Borehole Backfill **Well Completion**	Location **Approximately 10-feet northeast of MW-1**	

Elevation, feet	Depth, feet	Sample Type	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	Well Log	REMARKS AND OTHER TESTS
33	0					Boring not logged.		TOC 1-foot bgs
28	5							Annular Seal (Neat Cement Grout)
23	10							
18	15							2" SCH80 PVC Casing
13	20							
8	25							Transition Seal (3/8" Hydrated Bentonite Chips)
								Sandpack (2/16 Monterey Sand)
								2" 316 SS Sparge Point (0.010 Screen)
3	30					Bottom of Boring at 30 feet bgs		

Figure

X:\PROJECTS\CHARACTERIZATION & REMEDIATION\ADVANCED REMEDIATION\Vic's Auto (116907) Oakland - RJB, PM(LJ) Air Sparge Pilot Test (116907) RJB\AS-1 to AS-4 Logs.bgs [Basic Well Log (RJB).tpl]

APPENDIX C

LABORATORY ANALYTICAL REPORTS
w/ CHAIN OF CUSTODY DOCUMENTATION

McCampbell 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	Client Project ID: #116907; Vic's Automotive	Date Sampled: 11/03/10
		Date Received: 11/03/10
2500 Camino Diablo, Ste. #200	Client Contact: Ricky Bradford	Date Reported: 11/09/10
Walnut Creek, CA 94597	Client P.O.: #WC082705	Date Completed: 11/09/10

WorkOrder: 1011089

November 09, 2010

Dear Ricky:

Enclosed within are:

1) The results of the **6** analyzed samples from your project: **#116907; Vic's Automotive,**
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

McCampbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
Laboratory Manager
McCampbell Analytical, Inc.

1011089

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

PO# WC082705

E-Mail: rbradford@aeiconsultatns.com

Telephone: (925) 746-6000 Fax: (925) 746-6099

AEI Project No. 116907 Project Name: Vic's Automotive

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

Sampler Signature: John Stagg

SAMPLE ID	FIELD POINT NAME	SAMPLING Date	SAMPLING Time	# of Containers	Type Containers	MATRIX Water	Soil	Air	Sludge	Other	METHOD PRESERVED Ice	HCl	HNO_3	Other	BTEX & TPH as Gas (602/8020 + 8015C)/MTBE	TPH as Diesel (8015)	Total Petroleum Oil & Grease (5520 E&F/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 601 / 8010	BTEX ONLY (EPA 602 / 8020)	EPA 608 / 8080	EPA 608 / 8080 PCB's ONLY	EPA 624 / 8240 / 8260	EPA 625 / 8270	PAH's / PNA's by EPA 625 / 8270 / 8310	CAM-17 Metals	LUFT 5 Metals	Lead (7240/7421/239.2/6010)	RCI	HVOCs – (8010 target list) by EPA 8260B	MTBE Only by EPA 8260B			*Please report analytical data in both µg/L and ppmv
MW-1S	MW-1S	11-3-10	1000	1	TB			X							X																			X
MW-2S	MW-2S		1010	1	TB			X							X																			X
MW-5S	MW-5S		1020	1	TB			X							X																			X
MW-6S	MW-6S		1030	1	TB			X							X																			X
MW-7S	MW-7S		1040	1	TB			X							X																			X
~~MW-10S~~	~~MW-10S~~		~~1050~~	~~1~~	~~TB~~			X							X																			X
PRED	PRED		1100	1	TB			X							X																			X

Analysis Request | Other | Comments

Relinquished By:	Date:	Time:	Received By:
John Stagg	11-3-10	1255	
Relinquished By:	Date:	Time:	Received By:
Relinquished By:	Date:	Time:	Received By:

ICE/t° n/a ✓

GOOD CONDITION ✓

HEAD SPACE ABSENT

DECHLORINATED IN LAB

	VOAS	O&G	METALS	OTHER
PRESERVATION				
APPROPRIATE	✓			
CONTAINERS	✓			

PERSERVED IN LAB

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1011089 **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: #WC082705
ProjectNo: #116907; Vic's Automotive

Bill to:
Jeanette Brown
AEI Consultants
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597
jbrown@aeiconsultants.com

Requested TAT: 5 days

Date Received: **11/03/2010**
Date Printed: **11/03/2010**

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
1011089-001	MW-1S	Air	11/3/2010 10:00	☐	A	A										
1011089-002	MW-2S	Air	11/3/2010 10:10	☐	A											
1011089-003	MW-5S	Air	11/3/2010 10:20	☐	A											
1011089-004	MW-6S	Air	11/3/2010 10:30	☐	A											
1011089-005	MW-7S	Air	11/3/2010 10:40	☐	A											
1011089-006	PRED	Air	11/3/2010 11:00	☐	A											

Test Legend:

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

The following SampIDs: 001A, 002A, 003A, 004A, 005A, 006A contain testgroup.

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.

McCampbell 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

Sample Receipt Checklist

Client Name: **AEI Consultants**

Date and Time Received: **11/3/2010 1:11:38 PM**

Project Name: **#116907; Vic's Automotive**

Checklist completed and reviewed by: Melissa Valles

WorkOrder N°: **1011089** Matrix Air

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:		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 ☑	

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

Client contacted: Date contacted: Contacted by:

Comments:

McCampbell 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	Client Project ID: #116907; Vic's Automotive	Date Sampled: 11/03/10
		Date Received: 11/03/10
2500 Camino Diablo, Ste. #200	Client Contact: Ricky Bradford	Date Extracted: 11/03/10-11/04/10
Walnut Creek, CA 94597	Client P.O.: #WC082705	Date Analyzed: 11/03/10-11/04/10

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

Extraction method: SW5030B Analytical methods: SW8021B/8015Bm Work Order: 1011089

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comments
001A	MW-1S	A	150	ND	1.1	8.2	1.0	6.0	1	104	d1
002A	MW-2S	A	2300	ND<10	51	170	17	150	4	102	d1
003A	MW-5S	A	830	ND<17	4.0	30	3.2	65	6.7	---#	d1
004A	MW-6S	A	1100	ND<25	6.0	38	15	79	10	---#	d1
005A	MW-7S	A	5000	ND<25	58	120	6.8	110	10	107	d1
006A	PRED	A	910	ND<10	9.6	35	4.0	40	4	109	d1

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	A	25	2.5	0.25	0.25	0.25	0.25	µg/L
	S	1.0	0.05	0.005	0.005	0.005	0.005	mg/Kg

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

cluttered chromatogram; sample peak coelutes with surrogate peak.

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

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

d1) weakly modified or unmodified gasoline is significant

DHS ELAP Certification 1644

CC for Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

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

AEI Consultants	Client Project ID: #116907; Vic's Automotive	Date Sampled: 11/03/10
		Date Received: 11/03/10
2500 Camino Diablo, Ste. #200	Client Contact: Ricky Bradford	Date Extracted: 11/03/10-11/04/10
Walnut Creek, CA 94597	Client P.O.: #WC082705	Date Analyzed: 11/03/10-11/04/10

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

Extraction method: SW5030B Analytical methods: SW8021B/8015Bm Work Order: 1011089

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comments
001A	MW-1S	A	43	ND	0.33	2.1	0.23	1.4	1	104	d1
002A	MW-2S	A	650	ND<2.7	16	43	3.9	34	4	102	d1
003A	MW-5S	A	230	ND<4.5	1.2	7.9	0.73	15	6.7	---#	d1
004A	MW-6S	A	320	ND<6.8	1.9	9.9	3.3	18	10	---#	d1
005A	MW-7S	A	1400	ND<6.8	18	31	1.5	24	10	107	d1
006A	PRED	A	250	ND<2.7	3.0	9.1	0.92	9.0	4	109	d1

ppm (mg/L) to ppmv (ul/L) conversion for TPH(g) assumes the molecular weight of gasoline to be equal to that of hexane.

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	A	7.0	0.68	0.077	0.065	0.057	0.057	1	uL/L
	S	NA	NA	NA	NA	NA	NA	1	mg/Kg

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

cluttered chromatogram; sample peak coelutes with surrogate peak.

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

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

d1) weakly modified or unmodified gasoline is significant

DHS ELAP Certification 1644

CC for Angela Rydelius, Lab Manager

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QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Air QC Matrix: Water BatchID: 54192 WorkOrder 1011089

EPA Method SW8021B/8015Bm **Extraction SW5030B** **Spiked Sample ID: 1011087-005A**

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
TPH(btex)£	ND	60	95.5	98.5	3.13	96.9	97.7	0.791	70 - 130	20	70 - 130	20
MTBE	ND	10	113	119	5.70	116	121	4.15	70 - 130	20	70 - 130	20
Benzene	ND	10	108	110	2.14	107	108	0.409	70 - 130	20	70 - 130	20
Toluene	ND	10	94.6	97.7	3.30	95.5	94.9	0.581	70 - 130	20	70 - 130	20
Ethylbenzene	ND	10	92.3	96.6	4.49	93.3	93.8	0.521	70 - 130	20	70 - 130	20
Xylenes	ND	30	106	111	4.37	110	108	1.40	70 - 130	20	70 - 130	20
%SS:	103	10	101	101	0	98	101	2.82	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 54192 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1011089-001A	11/03/10 10:00 AM	11/04/10	11/04/10 6:19 PM	1011089-002A	11/03/10 10:10 AM	11/03/10	11/03/10 8:07 PM
1011089-003A	11/03/10 10:20 AM	11/03/10	11/03/10 8:40 PM	1011089-004A	11/03/10 10:30 AM	11/03/10	11/03/10 9:13 PM
1011089-005A	11/03/10 10:40 AM	11/03/10	11/03/10 9:46 PM	1011089-006A	11/03/10 11:00 AM	11/03/10	11/03/10 10:18 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 = 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.

DHS ELAP Certification 1644

QA/QC Officer

McCampbell 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	Client Project ID: #116907; Vic's Automotive	Date Sampled: 11/08/10
		Date Received: 11/08/10
2500 Camino Diablo, Ste. #200	Client Contact: Ricky Bradford	Date Reported: 11/11/10
Walnut Creek, CA 94597	Client P.O.: #WC082742	Date Completed: 11/10/10

WorkOrder: 1011246

November 11, 2010

Dear Ricky:

Enclosed within are:

1) The results of the **12** analyzed samples from your project: **#116907; Vic's Automotive,**
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

McCampbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
Laboratory Manager
McCampbell Analytical, Inc.

1011246

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

PO# WC082742

E-Mail: rbradford@aeiconsultatns.com

Telephone: (925) 746-6000 Fax: (925) 746-6099

AEI Project No. 116907 Project Name: Vic's Automotive

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

Sampler Signature: John Bradford

SAMPLE ID	FIELD POINT NAME	SAMPLING Date	SAMPLING Time	# of Containers	Type Containers	MATRIX: Water	Soil	Air	Sludge	Other	METHOD PRESERVED: Ice	HCl	HNO_3	Other	BTEX & TPH as Gas (602/8020 + 8015C)/MTBE	TPH as Diesel (8015)	Total Petroleum Oil & Grease (5520 E&F/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 601 / 8010	BTEX ONLY (EPA 602 / 8020)	EPA 608 / 8080	EPA 608 / 8080 PCB's ONLY	EPA 624 / 8240 / 8260	EPA 625 / 8270	PAH's / PNA's by EPA 625 / 8270 / 8310	CAM-17 Metals	LUFT 5 Metals	Lead (7240/7421/239.2/6010)	RCI	HVOCs – (8010 target list) by EPA 8260B	MTBE Only by EPA 8260B			*Please report analytical data in both µg/L and ppmv
MW-1S	MW-1S	11-8-10	0715	1	TB			X							X																			X
MW-2S	MW-2S	"	0720	1	TB			X							X																			X
MW-5S	MW-5S	"	0725	1	TB			X							X																			X
MW-6S	MW-6S	"	0730	1	TB			X							X																			X
MW-7S	MW-7S	"	0735	1	TB			X							X																			X
PRED	PRED	"	0710	1	TB			X							X																			X
MW-1S	MW-1S	"	1105	1	TB			X							X																			X
MW-2S	MW-2S	"	1110	1	TB			X							X																			X
MW-5S	MW-5S	"	1115	1	TB			X							X																			X
MW-6S	MW-6S		1120	1	TB			X							X																			X
MW-7S	MW-7S		1125	1	TB			X							X																			X
PRED	PRED	"	1100	1	TB			X							X																			X

Analysis Request | Other | Comments

Relinquished By:	Date:	Time:	Received By:
John Bradford	11-8-10	12:44	
Relinquished By: ENVIRO-TECH SVCS. AA	Date: 11/8/10	Time: 15:31	Received By:
Relinquished By:	Date: 11/8/10	Time: 1600	Received By:

ICE/t° N/A

GOOD CONDITION ✓

HEAD SPACE ABSENT

DECHLORINATED IN LAB

PRESERVATION APPROPRIATE ✓

PERSERVED IN LAB

VOAS	O&G	METALS	OTHER

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1011246 **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: #WC082742
ProjectNo: #116907; Vic's Automotive

Bill to:
Jeanette Brown
AEI Consultants
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597
jbrown@aeiconsultants.com

Requested TAT: 5 days

Date Received: **11/08/2010**
Date Printed: **11/08/2010**

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
1011246-001	MW-1S	Air	11/8/2010 7:15	☐	A	A										
1011246-002	MW-2S (0720)	Air	11/8/2010 7:20	☐	A											
1011246-003	MW-5S (0725)	Air	11/8/2010 7:25	☐	A											
1011246-004	MW-6S (0730)	Air	11/8/2010 7:30	☐	A											
1011246-005	MW-7S (0735)	Air	11/8/2010 7:35	☐	A											
1011246-006	PRED (0710)	Air	11/8/2010 7:10	☐	A											
1011246-007	MW-1S (1105)	Air	11/8/2010 11:05	☐	A											
1011246-008	MW-2S (1110)	Air	11/8/2010 11:10	☐	A											
1011246-009	MW-5S (1115)	Air	11/8/2010 11:15	☐	A											
1011246-010	MW-6S (1120)	Air	11/8/2010 11:20	☐	A											
1011246-011	MW-7S (1125)	Air	11/8/2010 11:25	☐	A											
1011246-012	PRED (1100)	Air	11/8/2010 11:00	☐	A											

Test Legend:

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

The following SampIDs: 001A, 002A, 003A, 004A, 005A, 006A, 007A, 008A, 009A, 010A, 011A, 012A contain testgroup.

Prepared by: Maria Venegas

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.

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Sample Receipt Checklist

Client Name: **AEI Consultants**

Date and Time Received: **11/8/2010 4:32:23 PM**

Project Name: **#116907; Vic's Automotive**

Checklist completed and reviewed by: Maria Venegas

WorkOrder N°: **1011246** Matrix Air

Carrier: Derik Cartan (MAI Courier)

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:		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 ☑	

** 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	Client Project ID: #116907; Vic's Automotive	Date Sampled: 11/08/10
		Date Received: 11/08/10
2500 Camino Diablo, Ste. #200	Client Contact: Ricky Bradford	Date Extracted: 11/08/10-11/09/10
Walnut Creek, CA 94597	Client P.O.: #WC082742	Date Analyzed: 11/08/10-11/09/10

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

Extraction method: SW5030B Analytical methods: SW8021B/8015Bm Work Order: 1011246

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comments
001A	MW-1S	A	230	ND	1.4	9.9	1.1	7.2	1	97	d1
002A	MW-2S (0720)	A	3500	ND<20	70	200	20	170	5	98	d1
003A	MW-5S (0725)	A	1100	ND<10	5.0	32	2.9	87	4	86	d1
004A	MW-6S (0730)	A	1500	ND<17	6.9	39	11	63	6.7	106	d1
005A	MW-7S (0735)	A	7400	ND<35	60	110	7.0	130	4	123	d1
006A	PRED (0710)	A	1200	ND<10	13	42	4.5	51	4	109	d1
007A	MW-1S (1105)	A	2600	ND<45	21	31	2.0	13	2	106	d1
008A	MW-2S (1110)	A	3700	ND<35	77	210	22	180	4	120	d1
009A	MW-5S (1115)	A	1100	ND<10	5.6	35	3.3	93	4	111	d1
010A	MW-6S (1120)	A	1700	ND<10	7.5	42	11	71	4	89	d1
011A	MW-7S (1125)	A	7100	ND<60	56	110	6.3	130	4	87	d1
012A	PRED (1100)	A	3000	ND<30	25	54	4.8	51	4	115	d1

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	A	25	2.5	0.25	0.25	0.25	0.25	µg/L
	S	1.0	0.05	0.005	0.005	0.005	0.005	mg/Kg

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

cluttered chromatogram; sample peak coelutes with surrogate peak.

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

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

d1) weakly modified or unmodified gasoline is significant

DHS ELAP Certification 1644

Angela Rydelius, Lab Manager

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

AEI Consultants	Client Project ID: #116907; Vic's Automotive	Date Sampled: 11/08/10
		Date Received: 11/08/10
2500 Camino Diablo, Ste. #200	Client Contact: Ricky Bradford	Date Extracted: 11/08/10-11/09/10
Walnut Creek, CA 94597	Client P.O.: #WC082742	Date Analyzed: 11/08/10-11/09/10

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

Extraction method: SW5030B Analytical methods: SW8021B/8015Bm Work Order: 1011246

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comments
001A	MW-1S	A	65	ND	0.42	2.6	0.24	1.6	1	97	d1
002A	MW-2S (0720)	A	970	ND<5.0	22	51	4.5	39	5	98	d1
003A	MW-5S (0725)	A	300	ND<2.7	1.5	8.2	0.65	20	4	86	d1
004A	MW-6S (0730)	A	430	ND<4.5	2.1	10	2.5	14	6.7	106	d1
005A	MW-7S (0735)	A	2100	ND<10	19	29	1.6	29	4	123	d1
006A	PRED (0710)	A	350	ND<2.7	4.1	11	1.0	11	4	109	d1
007A	MW-1S (1105)	A	730	ND<10	6.6	8.1	0.45	3.0	2	106	d1
008A	MW-2S (1110)	A	1000	ND<10	24	54	5.0	42	4	120	d1
009A	MW-5S (1115)	A	310	ND<2.7	1.7	9.1	0.74	21	4	111	d1
010A	MW-6S (1120)	A	490	ND<2.7	2.3	11	2.6	16	4	89	d1
011A	MW-7S (1125)	A	2000	ND<15	17	28	1.4	29	4	87	d1
012A	PRED (1100)	A	830	ND<10	7.7	14	1.1	12	4	115	d1

ppm (mg/L) to ppmv (ul/L) conversion for TPH(g) assumes the molecular weight of gasoline to be equal to that of hexane.

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	A	7.0	0.68	0.077	0.065	0.057	0.057	1	uL/L
	S	NA	NA	NA	NA	NA	NA	1	mg/Kg

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

cluttered chromatogram; sample peak coelutes with surrogate peak.

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

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

d1) weakly modified or unmodified gasoline is significant

DHS ELAP Certification 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
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Telephone: 877-252-9262 Fax: 925-252-9269

QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Air | QC Matrix: Water | BatchID: 54319 | WorkOrder 1011246

EPA Method SW8021B/8015Bm **Extraction SW5030B** **Spiked Sample ID: N/A**

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
TPH(btex)£	N/A	60	N/A	N/A	N/A	125	118	5.46	N/A	N/A	70 - 130	20
MTBE	N/A	10	N/A	N/A	N/A	119	118	0.816	N/A	N/A	70 - 130	20
Benzene	N/A	10	N/A	N/A	N/A	94.6	102	7.20	N/A	N/A	70 - 130	20
Toluene	N/A	10	N/A	N/A	N/A	91.8	94.6	2.99	N/A	N/A	70 - 130	20
Ethylbenzene	N/A	10	N/A	N/A	N/A	90.8	93.6	3.01	N/A	N/A	70 - 130	20
Xylenes	N/A	30	N/A	N/A	N/A	91.8	93.9	2.27	N/A	N/A	70 - 130	20
%SS:	N/A	10	N/A	N/A	N/A	96	99	3.49	N/A	N/A	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 54319 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1011246-001A	11/08/10 7:15 AM	11/09/10	11/09/10 7:54 PM	1011246-002A	11/08/10 7:20 AM	11/08/10	11/08/10 8:38 PM
1011246-003A	11/08/10 7:25 AM	11/08/10	11/08/10 9:10 PM	1011246-004A	11/08/10 7:30 AM	11/08/10	11/08/10 9:41 PM
1011246-005A	11/08/10 7:35 AM	11/08/10	11/08/10 10:13 PM	1011246-006A	11/08/10 7:10 AM	11/08/10	11/08/10 10:44 PM
1011246-007A	11/08/10 11:05 AM	11/08/10	11/08/10 11:15 PM	1011246-008A	11/08/10 11:10 AM	11/08/10	11/08/10 11:46 PM
1011246-009A	11/08/10 11:15 AM	11/09/10	11/09/10 12:17 AM	1011246-010A	11/08/10 11:20 AM	11/09/10	11/09/10 12:48 AM
1011246-011A	11/08/10 11:25 AM	11/09/10	11/09/10 1:19 AM	1011246-012A	11/08/10 11:00 AM	11/09/10	11/09/10 1:50 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 = 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.

DHS ELAP Certification 1644

QA/QC Officer

McCampbell Analytical, Inc.
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Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants	Client Project ID: #116907; Vic's Automotive	Date Sampled: 11/09/10
		Date Received: 11/10/10
2500 Camino Diablo, Ste. #200	Client Contact: Ricky Bradford	Date Reported: 11/16/10
Walnut Creek, CA 94597	Client P.O.: #WC082743	Date Completed: 11/16/10

WorkOrder: 1011306

November 16, 2010

Dear Ricky:

Enclosed within are:

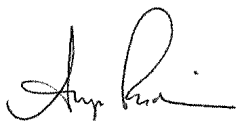
1) The results of the **12** analyzed samples from your project: **#116907; Vic's Automotive,**
2) A QC report for the above samples,
3) A copy of the chain of custody, and
4) An invoice for analytical services.

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

McCampbell Analytical Laboratories for your analytical needs.

Best regards,



Angela Rydelius
Laboratory Manager
McCampbell Analytical, Inc.

1011306

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

PO# WC082743

E-Mail: rbradford@aeiconsultatns.com

Telephone: (925) 746-6000 Fax: (925) 746-6099

AEI Project No. 116907 Project Name: Vic's Automotive

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

Sampler Signature: John Sigg

SAMPLE ID	FIELD POINT NAME	SAMPLING Date	SAMPLING Time	# of Containers	Type Containers	MATRIX Water	MATRIX Soil	MATRIX Air	MATRIX Sludge	MATRIX Other	METHOD PRESERVED Ice	METHOD PRESERVED HCl	METHOD PRESERVED HNO_3	METHOD PRESERVED Other	Analysis Request: BTEX & TPH as Gas (602/8020 + 8015C)/MTBE	TPH as Diesel (8015)	Total Petroleum Oil & Grease (5520 E&F/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 601 / 8010	BTEX ONLY (EPA 602 / 8020)	EPA 608 / 8080	EPA 608 / 8080 PCB's ONLY	EPA 624 / 8240 / 8260	EPA 625 / 8270	PAH's / PNA's by EPA 625 / 8270 / 8310	CAM-17 Metals	LUFT 5 Metals	Lead (7240/7421/239.2/6010)	RCI	Other: HVOCs – (8010 target list) by EPA 8260B	MTBE Only by EPA 8260B			Comments: *Please report analytical data in both µg/L and ppmv
MW-1S	MW-1S	11-9-10	0655	1	TB			X							X																			X
MW-2S	MW-2S		0700	1	TB			X							X																			X
MW-5S	MW-5S		0705	1	TB			X							X																			X
MW-6S	MW-6S		0710	1	TB			X							X																			X
MW-7S	MW-7S		0715	1	TB			X							X																			X
PRED	PRED		0650	1	TB			X							X																			X
MW-1S	MW-1S		1055	1	TB			X							X																			X
MW-2S	MW-2S		1100	1	TB			X							X																			X
MW-5S	MW-5S		1105	1	TB			X							X																			X
MW-6S	MW-6S		1110	1	TB			X							X																			X
MW-7S	MW-7S		1115	1	TB			X							X																			X
PRED	PRED		1050	1	TB			X							X																			X

Relinquished By:	Date:	Time:	Received By:
John Sigg	11-10-10	10:30a	Mpe Valle
Relinquished By:	Date:	Time:	Received By:
Relinquished By:	Date:	Time:	Received By:

ICE/t° n/a ✓

GOOD CONDITION ✓

HEAD SPACE ABSENT

DECHLORINATED IN LAB PERSERVED IN LAB

	VOAS	O&G	METALS	OTHER
PRESERVATION				
APPROPRIATE CONTAINERS	✓			

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1011306 **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: #WC082743
ProjectNo: #116907; Vic's Automotive

Bill to:
Jeanette Brown
AEI Consultants
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597
jbrown@aeiconsultants.com

Requested TAT: 5 days

Date Received: **11/10/2010**
Date Printed: **11/10/2010**

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
1011306-001	MW-1S 6:55	Air	11/9/2010 6:55	☐	A	A										
1011306-002	MW-2S 7:00	Air	11/9/2010 7:00	☐	A											
1011306-003	MW-5S 7:05	Air	11/9/2010 7:05	☐	A											
1011306-004	MW-6S 7:10	Air	11/9/2010 7:10	☐	A											
1011306-005	MW-7S 7:15	Air	11/9/2010 7:15	☐	A											
1011306-006	PRED 6:50	Air	11/9/2010 6:50	☐	A											
1011306-007	MW-1S 10:55	Air	11/9/2010 10:55	☐	A											
1011306-008	MW-2S 11:00	Air	11/9/2010 11:00	☐	A											
1011306-009	MW-5S 11:05	Air	11/9/2010 11:05	☐	A											
1011306-010	MW-6S 11:10	Air	11/9/2010 11:10	☐	A											
1011306-011	MW-7S 11:15	Air	11/9/2010 11:15	☐	A											
1011306-012	PRED 10:50	Air	11/9/2010 10:50	☐	A											

Test Legend:

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

The following SampIDs: 001A, 002A, 003A, 004A, 005A, 006A, 007A, 008A, 009A, 010A, 011A, 012A contain testgroup.

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.

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

Sample Receipt Checklist

Client Name: **AEI Consultants**

Date and Time Received: **11/10/2010 11:01:45 AM**

Project Name: **#116907; Vic's Automotive**

Checklist completed and reviewed by: Melissa Valles

WorkOrder N°: **1011306** Matrix Air

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:		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 ☑	

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

Client contacted: Date contacted: Contacted by:

Comments:

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AEI Consultants	Client Project ID: #116907; Vic's Automotive	Date Sampled: 11/09/10
2500 Camino Diablo, Ste. #200		Date Received: 11/10/10
	Client Contact: Ricky Bradford	Date Extracted: 11/10/10-11/11/10
Walnut Creek, CA 94597	Client P.O.: #WC082743	Date Analyzed: 11/10/10-11/11/10

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

Extraction method: SW5030B Analytical methods: SW8021B/8015Bm Work Order: 1011306

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comments
001A	MW-1S 6:55	A	330	ND	3.1	10	0.97	8.2	1	91	d1
002A	MW-2S 7:00	A	3500	ND<5.0	73	200	22	180	5	99	d1
003A	MW-5S 7:05	A	1100	ND<5.0	4.7	30	3.7	84	2	91	d1
004A	MW-6S 7:10	A	1800	ND<10	7.8	48	12	76	4	102	d1
005A	MW-7S 7:15	A	7500	ND<45	67	120	6.5	130	6.7	90	d1
006A	PRED 6:50	A	1200	ND<10	13	38	3.6	45	2	97	d1
007A	MW-1S 10:55	A	1300	ND<35	7.4	13	0.93	8.8	2	90	d1
008A	MW-2S 11:00	A	3700	ND<35	79	220	24	200	4	88	d1
009A	MW-5S 11:05	A	1200	ND<5.0	6.3	35	4.6	110	2	91	d1
010A	MW-6S 11:10	A	2600	ND<35	8.9	47	11	68	4	86	d1
011A	MW-7S 11:15	A	17,000	ND<450	150	170	8.6	150	6.7	102	d1
012A	PRED 10:50	A	2500	ND<60	20	43	4.1	46	4	97	d1

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	A	25	2.5	0.25	0.25	0.25	0.25	µg/L
	S	1.0	0.05	0.005	0.005	0.005	0.005	mg/Kg

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

cluttered chromatogram; sample peak coelutes with surrogate peak.

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

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

d1) weakly modified or unmodified gasoline is significant

DHS ELAP Certification 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
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AEI Consultants	Client Project ID: #116907; Vic's Automotive	Date Sampled: 11/09/10
2500 Camino Diablo, Ste. #200		Date Received: 11/10/10
	Client Contact: Ricky Bradford	Date Extracted: 11/10/10-11/11/10
Walnut Creek, CA 94597	Client P.O.: #WC082743	Date Analyzed: 11/10/10-11/11/10

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

Extraction method: SW5030B Analytical methods: SW8021B/8015Bm Work Order: 1011306

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comments
001A	MW-1S 6:55	A	91	ND<5.0	0.95	2.6	0.22	1.9	1	91	d1
002A	MW-2S 7:00	A	990	ND<5.0	22	51	5.0	40	5	99	d1
003A	MW-5S 7:05	A	300	ND<1.4	1.4	7.8	0.84	19	2	91	d1
004A	MW-6S 7:10	A	500	ND<2.7	2.4	12	2.8	17	4	102	d1
005A	MW-7S 7:15	A	2100	ND<10	21	32	1.5	30	6.7	90	d1
006A	PRED 6:50	A	330	ND<2.0	4.0	9.8	0.82	10	2	97	d1
007A	MW-1S 10:55	A	360	ND<10	2.3	3.4	0.21	2.0	2	90	d1
008A	MW-2S 11:00	A	1000	ND<10	24	57	5.5	45	4	88	d1
009A	MW-5S 11:05	A	340	ND<1.4	1.9	9.2	1.0	24	2	91	d1
010A	MW-6S 11:10	A	710	ND<10	2.7	12	2.4	15	4	86	d1
011A	MW-7S 11:15	A	4700	ND<120	46	44	2.0	34	6.7	102	d1
012A	PRED 10:50	A	700	ND<15	6.2	11	0.94	11	4	97	d1

ppm (mg/L) to ppmv (ul/L) conversion for TPH(g) assumes the molecular weight of gasoline to be equal to that of hexane.

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	A	7.0	0.68	0.077	0.065	0.057	0.057	1	uL/L
	S	NA	NA	NA	NA	NA	NA	1	mg/Kg

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

cluttered chromatogram; sample peak coelutes with surrogate peak.

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

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

d1) weakly modified or unmodified gasoline is significant

DHS ELAP Certification 1644

Angela Rydelius, Lab Manager

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QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Air | QC Matrix: Water | BatchID: 54319 | WorkOrder 1011306

EPA Method SW8021B/8015Bm **Extraction SW5030B** **Spiked Sample ID: N/A**

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
TPH(btex)£	N/A	60	N/A	N/A	N/A	125	118	5.46	N/A	N/A	70 - 130	20
MTBE	N/A	10	N/A	N/A	N/A	119	118	0.816	N/A	N/A	70 - 130	20
Benzene	N/A	10	N/A	N/A	N/A	94.6	102	7.20	N/A	N/A	70 - 130	20
Toluene	N/A	10	N/A	N/A	N/A	91.8	94.6	2.99	N/A	N/A	70 - 130	20
Ethylbenzene	N/A	10	N/A	N/A	N/A	90.8	93.6	3.01	N/A	N/A	70 - 130	20
Xylenes	N/A	30	N/A	N/A	N/A	91.8	93.9	2.27	N/A	N/A	70 - 130	20
%SS:	N/A	10	N/A	N/A	N/A	96	99	3.49	N/A	N/A	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 54319 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1011306-001A	11/09/10 6:55 AM	11/10/10	11/10/10 7:42 PM	1011306-002A	11/09/10 7:00 AM	11/10/10	11/10/10 8:14 PM
1011306-003A	11/09/10 7:05 AM	11/10/10	11/10/10 8:46 PM	1011306-004A	11/09/10 7:10 AM	11/10/10	11/10/10 9:18 PM
1011306-005A	11/09/10 7:15 AM	11/10/10	11/10/10 9:50 PM	1011306-006A	11/09/10 6:50 AM	11/10/10	11/10/10 10:22 PM
1011306-007A	11/09/10 10:55 AM	11/10/10	11/10/10 10:53 PM	1011306-008A	11/09/10 11:00 AM	11/10/10	11/10/10 11:25 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 = 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.

DHS ELAP Certification 1644

QA/QC Officer

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

QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Air QC Matrix: Water BatchID: 54351 WorkOrder 1011306

EPA Method SW8021B/8015Bm **Extraction SW5030B** **Spiked Sample ID: N/A**

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
TPH(btex)£	N/A	60	N/A	N/A	N/A	96.3	103	6.95	N/A	N/A	70 - 130	20
MTBE	N/A	10	N/A	N/A	N/A	119	121	2.28	N/A	N/A	70 - 130	20
Benzene	N/A	10	N/A	N/A	N/A	107	112	4.55	N/A	N/A	70 - 130	20
Toluene	N/A	10	N/A	N/A	N/A	95.5	100	5.03	N/A	N/A	70 - 130	20
Ethylbenzene	N/A	10	N/A	N/A	N/A	94.4	97.4	3.12	N/A	N/A	70 - 130	20
Xylenes	N/A	30	N/A	N/A	N/A	108	114	4.78	N/A	N/A	70 - 130	20
%SS:	N/A	10	N/A	N/A	N/A	102	104	2.37	N/A	N/A	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 54351 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1011306-009A	11/09/10 11:05 AM	11/10/10	11/10/10 11:56 PM	1011306-010A	11/09/10 11:10 AM	11/11/10	11/11/10 12:27 AM
1011306-011A	11/09/10 11:15 AM	11/11/10	11/11/10 12:59 AM	1011306-012A	11/09/10 10:50 AM	11/11/10	11/11/10 1:30 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 = 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.

DHS ELAP Certification 1644

QA/QC Officer

McCampbell 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	Client Project ID: #116907; Vic's Automotive	Date Sampled: 11/16/10
		Date Received: 11/16/10
2500 Camino Diablo, Ste. #200	Client Contact: Ricky Bradford	Date Reported: 11/19/10
Walnut Creek, CA 94597	Client P.O.: #WC082749	Date Completed: 11/17/10

WorkOrder: 1011437

November 19, 2010

Dear Ricky:

Enclosed within are:

1) The results of the **6** analyzed samples from your project: **#116907; Vic's Automotive,**
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

McCampbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
Laboratory Manager
McCampbell Analytical, Inc.

1011437

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

PO# WC082749

E-Mail: rbradford@aeiconsultatns.com

Telephone: (925) 746-6000 Fax: (925) 746-6099

AEI Project No. 116907 Project Name: Vic's Automotive

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

Sampler Signature: John Sogge

SAMPLE ID	FIELD POINT NAME	SAMPLING Date	SAMPLING Time	# of Containers	Type Containers	MATRIX Water	MATRIX Soil	MATRIX Air	MATRIX Sludge	MATRIX Other	METHOD PRESERVED Ice	METHOD PRESERVED HCl	METHOD PRESERVED HNO_3	METHOD PRESERVED Other	Analysis Request: BTEX & TPH as Gas (602/8020 + 8015C)/MTBE	TPH as Diesel (8015)	Total Petroleum Oil & Grease (5520 E&F/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 601 / 8010	BTEX ONLY (EPA 602 / 8020)	EPA 608 / 8080	EPA 608 / 8080 PCB's ONLY	EPA 624 / 8240 / 8260	EPA 625 / 8270	PAH's / PNA's by EPA 625 / 8270 / 8310	CAM-17 Metals	LUFT 5 Metals	Lead (7240/7421/239.2/6010)	RCI	Other: HVOCs – (8010 target list) by EPA 8260B	Other: MTBE Only by EPA 8260B	Other	Other	Comments: *Please report analytical data in both µg/L and ppmv
MW-1S	MW-1S	11-16-10	0820	1	TB			X							X																		X
MW-2S	MW-2S	↓	0830	1	TB			X							X																		X
MW-5S	MW-5S		0840	1	TB			X							X																		X
MW-6S	MW-6S		0850	1	TB			X							X																		X
MW-7S	MW-7S		0900	1	TB			X							X																		X
PRED	PRED		0815	1	TB			X							X																		X

Relinquished By:	Date:	Time:	Received By:
John Sogge	11-16-10	1115	
John Sogge			

ICE/t° N/A

GOOD CONDITION ✓

HEAD SPACE ABSENT ____

DECHLORINATED IN LAB ____

PRESERVATION	VOAS	O&G	METALS	OTHER
APPROPRIATE CONTAINERS ✓				

PERSERVED IN LAB ____

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1011437 **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: #WC082749
ProjectNo: #116907; Vic's Automotive

Bill to:
Jeanette Brown
AEI Consultants
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597
jbrown@aeiconsultants.com

Requested TAT: 5 days

Date Received: **11/16/2010**
Date Printed: **11/16/2010**

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
1011437-001	MW-1S	Air	11/16/2010 8:20	☐	A	A										
1011437-002	MW-2S	Air	11/16/2010 8:30	☐	A											
1011437-003	MW-5S	Air	11/16/2010 8:40	☐	A											
1011437-004	MW-6S	Air	11/16/2010 8:50	☐	A											
1011437-005	MW-7S	Air	11/16/2010 9:00	☐	A											
1011437-006	PRED	Air	11/16/2010 8:15	☐	A											

Test Legend:

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

The following SampIDs: 001A, 002A, 003A, 004A, 005A, 006A contain testgroup.

Prepared by: Maria Venegas

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.

McCampbell Analytical, Inc.
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Telephone: 877-252-9262 Fax: 925-252-9269

Sample Receipt Checklist

Client Name: **AEI Consultants**

Date and Time Received: **11/16/2010 11:22:24 AM**

Project Name: **#116907; Vic's Automotive**

Checklist completed and reviewed by: Maria Venegas

WorkOrder N°: **1011437** Matrix Air

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:		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 ☑	

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

Client contacted: Date contacted: Contacted by:

Comments:

McCampbell Analytical, Inc.
"When Quality Counts"

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

AEI Consultants	Client Project ID: #116907; Vic's Automotive	Date Sampled: 11/16/10
		Date Received: 11/16/10
2500 Camino Diablo, Ste. #200	Client Contact: Ricky Bradford	Date Extracted: 11/16/10
Walnut Creek, CA 94597	Client P.O.: #WC082749	Date Analyzed: 11/16/10

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

Extraction method: SW5030B Analytical methods: SW8021B/8015Bm Work Order: 1011437

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comments
001A	MW-1S	A	420	ND	2.3	13	1.7	21	1	88	d1
002A	MW-2S	A	4800	ND<25	110	280	31	250	5	87	d1
003A	MW-5S	A	1400	ND<5.0	4.8	33	4.4	120	2	96	d1
004A	MW-6S	A	3100	ND<10	11	63	11	97	4	101	d1
005A	MW-7S	A	10,000	ND<35	92	180	24	420	6.7	106	d1
006A	PRED	A	1600	ND<5.0	17	51	6.4	83	2	112	d1

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	A	25	2.5	0.25	0.25	0.25	0.25	µg/L
	S	1.0	0.05	0.005	0.005	0.005	0.005	mg/Kg

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

cluttered chromatogram; sample peak coelutes with surrogate peak.

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

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

d1) weakly modified or unmodified gasoline is significant

DHS ELAP Certification 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

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

AEI Consultants	Client Project ID: #116907; Vic's Automotive	Date Sampled: 11/16/10
		Date Received: 11/16/10
2500 Camino Diablo, Ste. #200	Client Contact: Ricky Bradford	Date Extracted: 11/16/10
Walnut Creek, CA 94597	Client P.O.: #WC082749	Date Analyzed: 11/16/10

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

Extraction method: SW5030B Analytical methods: SW8021B/8015Bm Work Order: 1011437

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comments
001A	MW-1S	A	120	ND	0.71	3.5	0.39	4.8	1	88	d1
002A	MW-2S	A	1400	ND<5.0	33	73	7.0	56	5	87	d1
003A	MW-5S	A	400	ND<1.4	1.5	8.6	0.99	28	2	96	d1
004A	MW-6S	A	850	ND<2.7	3.4	16	2.6	22	4	101	d1
005A	MW-7S	A	2800	ND<10	28	48	5.5	96	6.7	106	d1
006A	PRED	A	460	ND<1.4	5.4	13	1.5	19	2	112	d1

ppm (mg/L) to ppmv (ul/L) conversion for TPH(g) assumes the molecular weight of gasoline to be equal to that of hexane.

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	A	7.0	0.68	0.077	0.065	0.057	0.057	1	uL/L
	S	NA	NA	NA	NA	NA	NA	1	mg/Kg

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

cluttered chromatogram; sample peak coelutes with surrogate peak.

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

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

d1) weakly modified or unmodified gasoline is significant

DHS ELAP Certification 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

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

QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Air | QC Matrix: Water | BatchID: 54442 | WorkOrder 1011437

EPA Method SW8021B/8015Bm **Extraction SW5030B** **Spiked Sample ID: 1011430-003A**

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
TPH(btex)£	ND	60	96.1	95.8	0.324	97.3	95.6	1.79	70 - 130	20	70 - 130	20
MTBE	ND	10	115	115	0	123	121	1.54	70 - 130	20	70 - 130	20
Benzene	ND	10	110	109	0.856	111	107	3.66	70 - 130	20	70 - 130	20
Toluene	ND	10	97.8	96.5	1.33	97	94.5	2.64	70 - 130	20	70 - 130	20
Ethylbenzene	ND	10	96.1	96.2	0.171	96.6	93.7	3.11	70 - 130	20	70 - 130	20
Xylenes	ND	30	110	109	0.851	110	106	3.03	70 - 130	20	70 - 130	20
%SS:	100	10	103	100	2.94	99	98	0.663	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 54442 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1011437-001A	11/16/10 8:20 AM	11/16/10	11/16/10 7:24 PM	1011437-002A	11/16/10 8:30 AM	11/16/10	11/16/10 7:56 PM
1011437-003A	11/16/10 8:40 AM	11/16/10	11/16/10 8:29 PM	1011437-004A	11/16/10 8:50 AM	11/16/10	11/16/10 6:51 PM
1011437-005A	11/16/10 9:00 AM	11/16/10	11/16/10 9:01 PM	1011437-006A	11/16/10 8:15 AM	11/16/10	11/16/10 9:33 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 = 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.

DHS ELAP Certification 1644

QA/QC Officer

McCampbell 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	Client Project ID: #116907; Vic's Automotive	Date Sampled: 11/23/10
		Date Received: 11/23/10
2500 Camino Diablo, Ste. #200	Client Contact: Ricky Bradford	Date Reported: 11/30/10
Walnut Creek, CA 94597	Client P.O.: #WC082765	Date Completed: 11/29/10

WorkOrder: 1011683

November 30, 2010

Dear Ricky:

Enclosed within are:

1) The results of the **7** analyzed samples from your project: **#116907; Vic's Automotive,**
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

McCampbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
Laboratory Manager
McCampbell Analytical, Inc.

1011683

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

PO# WC08 2765

E-Mail: rbradford@aeiconsultatns.com

Telephone: (925) 746-6000 Fax: (925) 746-6099

AEI Project No. 116907 Project Name: Vic's Automotive

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

Sampler Signature: John Sigg

SAMPLE ID	FIELD POINT NAME	SAMPLING Date	SAMPLING Time	# of Containers	Type Containers	MATRIX Water	MATRIX Soil	MATRIX Air	MATRIX Sludge	MATRIX Other	METHOD PRESERVED Ice	METHOD PRESERVED HCl	METHOD PRESERVED HNO_3	METHOD PRESERVED Other	Analysis Request: BTEX & TPH as Gas (602/8020 + 8015C)/MTBE	TPH as Diesel (8015)	Total Petroleum Oil & Grease (5520 E&F/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 601 / 8010	BTEX ONLY (EPA 602 / 8020)	EPA 608 / 8080	EPA 608 / 8080 PCB's ONLY	EPA 624 / 8240 / 8260	EPA 625 / 8270	PAH's / PNA's by EPA 625 / 8270 / 8310	CAM-17 Metals	LUFT 5 Metals	Lead (7240/7421/239.2/6010)	RCI	Other: HVOCs – (8010 target list) by EPA 8260B	Other: MTBE Only by EPA 8260B	Other	Other	Comments: *Please report analytical data in both µg/L and ppmv
MW-1S	MW-1S	11-23-10	0800	1	TB			X							X																		X
MW-2S	MW-2S		0810	1	TB			X							X																		X
MW-6S	MW-6S		0820	1	TB			X							X																		X
MW-7S	MW-7S		0830	1	TB			X							X																		X
PRED	PRED		0840	1	TB			X							X																		X
AS	AS		0850	1	TB			X							X																		X
STACK	STACK		0900	1	TB			X							X																		X
~~MW-1S~~	~~MW-1S~~			1	TB			X							X																		X
~~MW-2S~~	~~MW-2S~~			1	TB			X							X																		X
~~MW-6S~~	~~MW-6S~~			1	TB			X							X																		X
~~MW-7S~~	~~MW-7S~~			1	TB			X							X																		X
~~PRED~~	~~PRED~~			1	TB			X							X																		X

Relinquished By:	Date:	Time:	Received By:
John Sigg	11-23-10	1106	
Relinquished By:	Date:	Time:	Received By:
Relinquished By:	Date:	Time:	Received By:

ICE/t° N/17

GOOD CONDITION ✓

HEAD SPACE ABSENT ____

DECHLORINATED IN LAB ____

PRESERVED IN LAB ____

	VOAS	O&G	METALS	OTHER
PRESERVATION APPROPRIATE				
CONTAINERS ✓				

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1011683 **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: #WC082765
ProjectNo: #116907; Vic's Automotive

Bill to:
Jeanette Brown
AEI Consultants
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597
jbrown@aeiconsultants.com

Requested TAT: 5 days

Date Received: **11/23/2010**
Date Printed: **11/23/2010**

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
1011683-001	MW-1S	Air	11/23/2010 8:00	☐	A	A										
1011683-002	MW-2S	Air	11/23/2010 8:10	☐	A											
1011683-003	MW-6S	Air	11/23/2010 8:20	☐	A											
1011683-004	MW-7S	Air	11/23/2010 8:30	☐	A											
1011683-005	PRED	Air	11/23/2010 8:40	☐	A											
1011683-006	AS	Air	11/23/2010 8:50	☐	A											
1011683-007	STACK	Air	11/23/2010 9:00	☐	A											

Test Legend:

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

The following SampIDs: 001A, 002A, 003A, 004A, 005A, 006A, 007A contain testgroup.

Prepared by: Maria Venegas

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.

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"When Quality Counts"

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

Sample Receipt Checklist

Client Name: **AEI Consultants**

Date and Time Received: **11/23/2010 11:17:20 AM**

Project Name: **#116907; Vic's Automotive**

Checklist completed and reviewed by: Maria Venegas

WorkOrder N°: **1011683** Matrix Air

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:		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 ☑	

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

Client contacted: Date contacted: Contacted by:

Comments:

McCampbell 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	Client Project ID: #116907; Vic's Automotive	Date Sampled: 11/23/10
		Date Received: 11/23/10
2500 Camino Diablo, Ste. #200	Client Contact: Ricky Bradford	Date Extracted: 11/24/10
Walnut Creek, CA 94597	Client P.O.: #WC082765	Date Analyzed: 11/24/10

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

Extraction method: SW5030B Analytical methods: SW8021B/8015Bm Work Order: 1011683

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comments
001A	MW-1S	A	720	ND<5.0	3.4	16	1.0	15	2	104	d1
002A	MW-2S	A	4600	ND<50	110	260	21	190	20	98	d1
003A	MW-6S	A	3700	ND<10	11	71	11	93	4	105	d1
004A	MW-7S	A	12,000	ND<110	120	180	11	210	20	105	d1
005A	PRED	A	2300	ND<15	24	59	5.5	72	4	98	d1
006A	AS	A	ND	ND	0.30	0.77	ND	1.6	1	107	
007A	STACK	A	ND	ND	ND	0.31	ND	ND	1	108	

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	A	25	2.5	0.25	0.25	0.25	0.25	µg/L
	S	1.0	0.05	0.005	0.005	0.005	0.005	mg/Kg

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

cluttered chromatogram; sample peak coelutes with surrogate peak.

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

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

d1) weakly modified or unmodified gasoline is significant

DHS ELAP Certification 1644

Angela Rydelius, Lab Manager

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AEI Consultants	Client Project ID: #116907; Vic's Automotive	Date Sampled: 11/23/10
		Date Received: 11/23/10
2500 Camino Diablo, Ste. #200	Client Contact: Ricky Bradford	Date Extracted: 11/24/10
Walnut Creek, CA 94597	Client P.O.: #WC082765	Date Analyzed: 11/24/10

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

Extraction method: SW5030B Analytical methods: SW8021B/8015Bm Work Order: 1011683

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comments
001A	MW-1S	A	200	ND<1.4	1.0	4.2	0.24	3.5	2	104	d1
002A	MW-2S	A	1300	ND<14	35	69	4.7	42	20	98	d1
003A	MW-6S	A	1000	ND<2.7	3.5	19	2.4	21	4	105	d1
004A	MW-7S	A	3500	ND<30	38	48	2.4	47	20	105	d1
005A	PRED	A	630	ND<5.0	7.3	15	1.2	16	4	98	d1
006A	AS	A	ND	ND	0.093	0.20	ND	0.37	1	107	
007A	STACK	A	ND	ND	ND	0.080	ND	ND	1	108	

ppm (mg/L) to ppmv (ul/L) conversion for TPH(g) assumes the molecular weight of gasoline to be equal to that of hexane.

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	A	7.0	0.68	0.077	0.065	0.057	0.057	1	uL/L
	S	NA	NA	NA	NA	NA	NA	1	mg/Kg

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

cluttered chromatogram; sample peak coelutes with surrogate peak.

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

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

d1) weakly modified or unmodified gasoline is significant

DHS ELAP Certification 1644

Angela Rydelius, Lab Manager

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QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Air QC Matrix: Water BatchID: 54585 WorkOrder 1011683

EPA Method SW8021B/8015Bm **Extraction SW5030B** **Spiked Sample ID: 1011624-009A**

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
TPH(btex)£	ND	60	92.8	99	6.40	94.6	95.5	0.953	70 - 130	20	70 - 130	20
MTBE	ND	10	116	113	3.03	123	125	1.66	70 - 130	20	70 - 130	20
Benzene	ND	10	106	107	1.44	110	113	2.85	70 - 130	20	70 - 130	20
Toluene	ND	10	95.3	96.4	1.15	96.3	99.5	3.32	70 - 130	20	70 - 130	20
Ethylbenzene	ND	10	94.2	96.2	2.14	95.5	98.4	2.99	70 - 130	20	70 - 130	20
Xylenes	ND	30	106	109	2.57	108	111	3.25	70 - 130	20	70 - 130	20
%SS:	103	10	99	98	1.20	100	103	2.75	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 54585 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1011683-001A	11/23/10 8:00 AM	11/24/10	11/24/10 1:59 PM	1011683-001A	11/23/10 8:00 AM	11/24/10	11/24/10 1:59 PM
1011683-002A	11/23/10 8:10 AM	11/24/10	11/24/10 12:29 PM	1011683-002A	11/23/10 8:10 AM	11/24/10	11/24/10 12:29 PM
1011683-003A	11/23/10 8:20 AM	11/24/10	11/24/10 1:02 PM	1011683-003A	11/23/10 8:20 AM	11/24/10	11/24/10 1:02 PM
1011683-004A	11/23/10 8:30 AM	11/24/10	11/24/10 1:35 PM	1011683-004A	11/23/10 8:30 AM	11/24/10	11/24/10 1:35 PM
1011683-005A	11/23/10 8:40 AM	11/24/10	11/24/10 2:08 PM	1011683-005A	11/23/10 8:40 AM	11/24/10	11/24/10 2:08 PM
1011683-006A	11/23/10 8:50 AM	11/24/10	11/24/10 5:53 PM	1011683-006A	11/23/10 8:50 AM	11/24/10	11/24/10 5:53 PM
1011683-007A	11/23/10 9:00 AM	11/24/10	11/24/10 6:24 PM	1011683-007A	11/23/10 9:00 AM	11/24/10	11/24/10 6:24 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 = 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.

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AEI Consultants	Client Project ID: #116907; Vic's Automotive	Date Sampled: 12/10/10
		Date Received: 12/13/10
2500 Camino Diablo, Ste. #200	Client Contact: Ricky Bradford	Date Reported: 12/17/10
Walnut Creek, CA 94597	Client P.O.: #WC082796	Date Completed: 12/14/10

WorkOrder: 1012422

December 17, 2010

Dear Ricky:

Enclosed within are:

1) The results of the **6** analyzed samples from your project: **#116907; Vic's Automotive,**
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

McCampbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
Laboratory Manager
McCampbell Analytical, Inc.

1012422

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

PO# WC082796

E-Mail: rbradford@aeiconsultatns.com

Telephone: (925) 746-6048 Fax: (925) 746-6099

AEI Project No. 116907 Project Name: Vic's Automotive

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

Sampler Signature: John Boggs

SAMPLE ID	FIELD POINT NAME	SAMPLING Date	SAMPLING Time	# of Containers	Type Containers	MATRIX Water	Soil	Air	Sludge	Other	METHOD PRESERVED Ice	HCl	HNO_3	Other
MW-1S	MW-1S	12-10-10	1320	1	TB			X						
MW-2S	MW-2S		1325	1	TB			X						
MW-5S	MW-5S		1330	1	TB			X						
MW-6S	MW-6S		1335	1	TB			X						
MW-7S	MW-7S		1340	1	TB			X						
PRED	PRED		1315	1	TB			X						

Analysis Request																	Other				Comments
BTEX & TPH as Gas (602/8020 + 8015C)/MTBE	TPH as Diesel (8015)	Total Petroleum Oil & Grease (5520 E&F/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 601 / 8010	BTEX ONLY (EPA 602 / 8020)	EPA 608 / 8080	EPA 608 / 8080 PCB's ONLY	EPA 624 / 8240 / 8260	EPA 625 / 8270	PAH's / PNA's by EPA 625 / 8270 / 8310	CAM-17 Metals	LUFT 5 Metals	Lead (7240/7421/239.2/6010)	RCI	HVOCs – (8010 target list) by EPA 8260B	MTBE Only by EPA 8260B				*Please report analytical data in both µg/L and ppmv
X																				X
X																				X
X																				X
X																				X
X																				X
X																				X

Relinquished By:	Date:	Time:	Received By:
John Boggs	12-13-10	1341	Mike Vall
Relinquished By:	Date:	Time:	Received By:
Relinquished By:	Date:	Time:	Received By:

ICE/t°_____ VOAS | O&G | METALS | OTHER

GOOD CONDITION_____ PRESERVATION_____

HEAD SPACE ABSENT_____ APPROPRIATE

DECHLORINATED IN LAB_____ CONTAINERS_____

PERSERVED IN LAB_____

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1012422 **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: #WC082796
ProjectNo: #116907; Vic's Automotive

Bill to:
Jeanette Brown
AEI Consultants
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597
jbrown@aeiconsultants.com

Requested TAT: 5 days

Date Received: **12/13/2010**
Date Printed: **12/17/2010**

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
1012422-001	MW-1S	Air	12/10/2010 13:20	☐	A	A										
1012422-002	MW-2S	Air	12/10/2010 13:25	☐	A											
1012422-003	MW-5S	Air	12/10/2010 13:30	☐	A											
1012422-004	MW-6S	Air	12/10/2010 13:35	☐	A											
1012422-005	MW-7S	Air	12/10/2010 13:40	☐	A											
1012422-006	PRED	Air	12/10/2010 13:15	☐	A											

Test Legend:

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

The following SampIDs: 001A, 002A, 003A, 004A, 005A, 006A contain testgroup.

Prepared by: Ana Venegas

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.

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Sample Receipt Checklist

Client Name: **AEI Consultants**

Date and Time Received: **12/13/2010 1:43:27 PM**

Project Name: **#116907; Vic's Automotive**

Checklist completed and reviewed by: Ana Venegas

WorkOrder N°: **1012422** Matrix Air

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:		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 ☑	

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

Client contacted: Date contacted: Contacted by:

Comments:

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AEI Consultants	Client Project ID: #116907; Vic's Automotive	Date Sampled: 12/10/10
		Date Received: 12/13/10
2500 Camino Diablo, Ste. #200	Client Contact: Ricky Bradford	Date Extracted: 12/13/10
Walnut Creek, CA 94597	Client P.O.: #WC082796	Date Analyzed: 12/13/10

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

Extraction method: SW5030B Analytical methods: SW8021B/8015Bm Work Order: 1012422

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comments
001A	MW-1S	A	400	ND	3.0	15	1.6	13	1	108	d1
002A	MW-2S	A	5200	ND<25	100	250	25	250	4	114	d1
003A	MW-5S	A	1100	ND<10	7.4	35	3.6	100	4	106	d1
004A	MW-6S	A	2100	ND<17	15	69	23	130	6.7	100	d1
005A	MW-7S	A	9800	ND<90	140	180	15	190	4	102	d1
006A	PRED	A	1300	ND<10	15	39	4.7	51	4	103	d1

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	A	25	2.5	0.25	0.25	0.25	0.25	µg/L
	S	1.0	0.05	0.005	0.005	0.005	0.005	mg/Kg

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

cluttered chromatogram; sample peak coelutes with surrogate peak.

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

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

d1) weakly modified or unmodified gasoline is significant

DHS ELAP Certification 1644

Angela Rydelius, Lab Manager

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AEI Consultants	Client Project ID: #116907; Vic's Automotive	Date Sampled: 12/10/10
		Date Received: 12/13/10
2500 Camino Diablo, Ste. #200	Client Contact: Ricky Bradford	Date Extracted: 12/13/10
Walnut Creek, CA 94597	Client P.O.: #WC082796	Date Analyzed: 12/13/10

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

Extraction method: SW5030B Analytical methods: SW8021B/8015Bm Work Order: 1012422

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comments
001A	MW-1S	A	110	ND	0.92	3.9	0.37	3.0	1	108	d1
002A	MW-2S	A	1500	ND<10	31	66	5.6	57	4	114	d1
003A	MW-5S	A	310	ND<2.7	2.3	9.2	0.81	23	4	106	d1
004A	MW-6S	A	580	ND<4.5	4.5	18	5.3	29	6.7	100	d1
005A	MW-7S	A	2700	ND<25	42	46	3.3	44	4	102	d1
006A	PRED	A	350	ND<2.7	4.7	10	1.1	12	4	103	d1

ppm (mg/L) to ppmv (ul/L) conversion for TPH(g) assumes the molecular weight of gasoline to be equal to that of hexane.

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	A	7.0	0.68	0.077	0.065	0.057	0.057	1	uL/L
	S	NA	NA	NA	NA	NA	NA	1	mg/Kg

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

cluttered chromatogram; sample peak coelutes with surrogate peak.

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

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

d1) weakly modified or unmodified gasoline is significant

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QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Air QC Matrix: Water BatchID: 54997 WorkOrder 1012422

EPA Method SW8021B/8015Bm **Extraction SW5030B** **Spiked Sample ID: 1012413-001A**

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
TPH(btex)£	ND	60	98.4	94	4.64	96.4	88.3	8.74	70 - 130	20	70 - 130	20
MTBE	ND	10	103	110	6.80	110	112	1.42	70 - 130	20	70 - 130	20
Benzene	ND	10	101	105	4.16	108	104	3.25	70 - 130	20	70 - 130	20
Toluene	ND	10	92.9	95.3	2.61	97.8	94	3.96	70 - 130	20	70 - 130	20
Ethylbenzene	ND	10	89.7	94.2	4.84	94.3	93.5	0.842	70 - 130	20	70 - 130	20
Xylenes	ND	30	103	107	3.64	108	106	1.89	70 - 130	20	70 - 130	20
%SS:	98	10	99	102	3.34	108	103	4.36	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 54997 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1012422-001A	12/10/10 1:20 PM	12/13/10	12/13/10 6:22 PM	1012422-002A	12/10/10 1:25 PM	12/13/10	12/13/10 6:55 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 = 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.

DHS ELAP Certification 1644

QA/QC Officer

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QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Air QC Matrix: Water BatchID: 55002 WorkOrder 1012422

EPA Method SW8021B/8015Bm **Extraction SW5030B** **Spiked Sample ID: 1012417-002A**

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
TPH(btex)£	ND	60	97.6	98.1	0.504	94.5	98.4	4.02	70 - 130	20	70 - 130	20
MTBE	ND	10	101	104	3.01	105	104	0.595	70 - 130	20	70 - 130	20
Benzene	ND	10	93.4	97.1	3.91	98	97.8	0.141	70 - 130	20	70 - 130	20
Toluene	ND	10	94.3	97.7	3.55	98.2	98.5	0.311	70 - 130	20	70 - 130	20
Ethylbenzene	ND	10	94	96.9	3.01	96.8	97.8	1.02	70 - 130	20	70 - 130	20
Xylenes	ND	30	97	99.6	2.64	99.4	101	1.31	70 - 130	20	70 - 130	20
%SS:	97	10	96	96	0	98	97	0.406	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 55002 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1012422-003A	12/10/10 1:30 PM	12/13/10	12/13/10 7:28 PM	1012422-004A	12/10/10 1:35 PM	12/13/10	12/13/10 8:00 PM
1012422-005A	12/10/10 1:40 PM	12/13/10	12/13/10 8:33 PM	1012422-006A	12/10/10 1:15 PM	12/13/10	12/13/10 9:05 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 = 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.

DHS ELAP Certification 1644

QA/QC Officer

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"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	Client Project ID: #116907; Vic's Automotive	Date Sampled: 12/30/10
		Date Received: 12/30/10
2500 Camino Diablo, Ste. #200	Client Contact: Ricky Bradford	Date Reported: 01/05/11
Walnut Creek, CA 94597	Client P.O.: #WC082833	Date Completed: 01/03/11

WorkOrder: 1012943

January 05, 2011

Dear Ricky:

Enclosed within are:

1) The results of the **2** analyzed samples from your project: **#116907; Vic's Automotive,**
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

McCampbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
Laboratory Manager
McCampbell Analytical, Inc.

1012943

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

PO#WC082833 Global ID: T0600101143

E-Mail: rbradford@aeiconsultatns.com

Telephone: (925) 746-6000 Fax: (925) 746-6099

AEI Project No. 116907 Project Name: Vic's Automotive

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

Sampler Signature: John Stiggs

SAMPLE ID	FIELD POINT NAME	SAMPLING Date	SAMPLING Time	# of Containers	Type Containers	MATRIX Water	MATRIX Soil	MATRIX Air	MATRIX Sludge	MATRIX Other	METHOD PRESERVED Ice	METHOD PRESERVED HCl	METHOD PRESERVED HNO_3	METHOD PRESERVED Other	Analysis Request: BTEX & TPH as Gas (602/8020 + 8015C)/MTBE	TPH as Diesel (8015)	Total Petroleum Oil & Grease (5520 E&F/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 601 / 8010	BTEX ONLY (EPA 602 / 8020)	EPA 608 / 8080	EPA 608 / 8080 PCB's ONLY	EPA 624 / 8240 / 8260	EPA 625 / 8270	PAH's / PNA's by EPA 625 / 8270 / 8310	CAM-17 Metals	LUFT 5 Metals	Lead (7240/7421/239.2/6010)	RCI	Other: HVOCs – (8010 target list) by EPA 8260B	Other: MTBE Only by EPA 8260B	Comments: *Please report analytical data in both µg/L and ppmv
PRED	PRED	12-30-10	0800	1	TB			X							X																	X
STACK	STACK	12-30-10	0745	1	TB			X							X																	X

Relinquished By:	Date:	Time:	Received By:
John Stiggs	12-30-10	1102	Mike Vale
Relinquished By:	Date:	Time:	Received By:
Relinquished By:	Date:	Time:	Received By:

	VOAS	O&G	METALS	OTHER
ICE/t° n/a				
GOOD CONDITION ✓				
HEAD SPACE ABSENT				
DECHLORINATED IN LAB				
PRESERVATION APPROPRIATE ✓				
CONTAINERS				
PERSERVED IN LAB				

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1012943 **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: #WC082833
ProjectNo: #116907; Vic's Automotive

Bill to:
Jeanette Brown
AEI Consultants
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597
jbrown@aeiconsultants.com

Requested TAT: 5 days

Date Received: **12/30/2010**
Date Printed: **12/30/2010**

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
1012943-001	PRED	Air	12/30/2010 8:00	☐	A	A										
1012943-002	STACK	Air	12/30/2010 7:45	☐	A											

Test Legend:

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

The following SampIDs: 001A, 002A contain testgroup.

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.

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Sample Receipt Checklist

Client Name: **AEI Consultants**

Date and Time Received: **12/30/2010 11:21:39 AM**

Project Name: **#116907; Vic's Automotive**

Checklist completed and reviewed by: Melissa Valles

WorkOrder N°: **1012943** Matrix Air

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:		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 ☑	

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

Client contacted: Date contacted: Contacted by:

Comments:

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AEI Consultants	Client Project ID: #116907; Vic's Automotive	Date Sampled: 12/30/10
		Date Received: 12/30/10
2500 Camino Diablo, Ste. #200	Client Contact: Ricky Bradford	Date Extracted: 12/30/10
Walnut Creek, CA 94597	Client P.O.: #WC082833	Date Analyzed: 12/30/10

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

Extraction method: SW5030B Analytical methods: SW8021B/8015Bm Work Order: 1012943

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comments
001A	PRED	A	230	ND	6.7	9.9	1.5	8.9	1	116	d1
002A	STACK	A	ND	ND	0.72	ND	ND	ND	1	108	

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	A	25	2.5	0.25	0.25	0.25	0.25	µg/L
	S	1.0	0.05	0.005	0.005	0.005	0.005	mg/Kg

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

cluttered chromatogram; sample peak coelutes with surrogate peak.

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

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

d1) weakly modified or unmodified gasoline is significant

DHS ELAP Certification 1644

Angela Rydelius, Lab Manager

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AEI Consultants	Client Project ID: #116907; Vic's Automotive	Date Sampled: 12/30/10
		Date Received: 12/30/10
2500 Camino Diablo, Ste. #200	Client Contact: Ricky Bradford	Date Extracted: 12/30/10
Walnut Creek, CA 94597	Client P.O.: #WC082833	Date Analyzed: 12/30/10

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

Extraction method: SW5030B Analytical methods: SW8021B/8015Bm Work Order: 1012943

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comments
001A	PRED	A	64	ND	2.1	2.6	0.34	2.0	1	116	d1
002A	STACK	A	ND	ND	0.22	ND	ND	ND	1	108	

ppm (mg/L) to ppmv (ul/L) conversion for TPH(g) assumes the molecular weight of gasoline to be equal to that of hexane.

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	A	7.0	0.68	0.077	0.065	0.057	0.057	1	uL/L
	S	NA	NA	NA	NA	NA	NA	1	mg/Kg

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

cluttered chromatogram; sample peak coelutes with surrogate peak.

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

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

d1) weakly modified or unmodified gasoline is significant

DHS ELAP Certification 1644

Angela Rydelius, Lab Manager

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QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Air QC Matrix: Water BatchID: 55360 WorkOrder 1012943

EPA Method SW8021B/8015Bm **Extraction SW5030B** **Spiked Sample ID: 1012917-001A**

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
TPH(btex)£	ND	60	78.9	92.7	16.0	95	92.1	3.09	70 - 130	20	70 - 130	20
MTBE	ND	10	123	121	2.11	115	111	2.90	70 - 130	20	70 - 130	20
Benzene	ND	10	105	115	9.14	110	112	2.34	70 - 130	20	70 - 130	20
Toluene	ND	10	92.9	101	8.44	97.9	99.2	1.30	70 - 130	20	70 - 130	20
Ethylbenzene	ND	10	82.5	97.8	16.9	97.1	96.4	0.715	70 - 130	20	70 - 130	20
Xylenes	ND	30	91.9	110	18.0	111	111	0	70 - 130	20	70 - 130	20
%SS:	104	10	100	100	0	100	101	0.701	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 55360 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1012943-001A	12/30/10 8:00 AM	12/30/10	12/30/10 9:17 PM	1012943-001A	12/30/10 8:00 AM	12/30/10	12/30/10 9:17 PM
1012943-002A	12/30/10 7:45 AM	12/30/10	12/30/10 4:40 PM	1012943-002A	12/30/10 7:45 AM	12/30/10	12/30/10 4:40 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 = 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.

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QA/QC Officer