



ENVIRONMENTAL & ENGINEERING SERVICES

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February 9, 2010

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

RECEIVED

8:48 am, Feb 16, 2010

Alameda County
Environmental Health

Subject: Source Zone Delineation & Remediation System Optimization Workplan

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

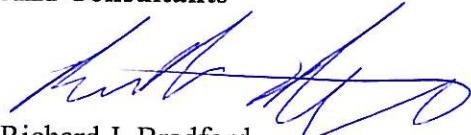
Dear Mr. Wickham:

Enclosed is a copy of the recently completed "Source Zone Delineation & Remediation System Optimization Workplan" prepared for the subject property.

As required, an electronic version of this report has been uploaded to the State Water Resources Control Board's GeoTracker information system and the Alameda County Environmental Health ftp site.

We look forward to your remarks regarding this workplan. Should you have any questions or comments, or need any additional information, you may reach me at (925) 746-6000, ext. 148.

Sincerely,
AEI Consultants


Richard J. Bradford
Project Engineer

RB/

Enclosure

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

February 9, 2010

**SOURCE ZONE DELINEATION &
REMEDIATION SYSTEM
OPTIMIZATION WORKPLAN**

245 8th Street
Oakland, California

AEI Project No. 281405
ACEH RO #00000202

Prepared For

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

Prepared By

AEI Consultants
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AEI

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1.0 INTRODUCTION

AEI Consultants (AEI) has prepared this workplan on behalf of Mr. Victor Lum for the property 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 mitigation 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. This workplan has been prepared to further investigate and define the vertical extent of hydrocarbon contamination in the source zone and to evaluate and optimize the performance of the HVDPE.

The proposed scope of work includes the following:

- Installation of four (4) continuously cored soil borings (SB-16 through SB-19) to approximately 28-feet below ground surface (bgs) using direct push technology for vertical source zone delineation.
- Tentative installation of up to four (4) air sparging wells if a significant hydrocarbon source is detected in the source zone below the water table.
- Continue operation, evaluation, and optimization of the HVDPE system, including monthly operations and maintenance (O&M) and process monitoring.
- Perform a tentative air sparging pilot test to evaluate the increased effectiveness of this technology in conjunction with HVDPE. The HVDPE system will be operated for at least one (1) month, or until hydrocarbon removal stabilizes or reaches an asymptote, prior to the air sparge pilot test.
- Preparation and submittal of technical report to ACEH summarizing the field activities and evaluating results of the source zone delineation, HVDPE system optimization, and effectiveness of air sparging in conjunction with HVDPE. The report and associated electronic data files will be uploaded to GeoTracker as required.

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 of 1993 and August of 1994, AEI removed seven (7) underground storage tanks (USTs) from the property. The tanks consisted of four (4) 1,000-gallon gasoline tanks located in the sidewalk along Alice Street, two (2) 6,000-gallon gasoline tanks and one (1) 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 of 1995, two (2) 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 of 1996, AEI advanced three (3) soil borings (i.e., 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 of 2001, two (2) 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 of 2003, AEI advanced twelve (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 of 2005, AEI installed six (6) 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 pressure (i.e., vacuum) response was observed in 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. Based on the encouraging results of this pilot test, 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 of 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 of 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 of 2006, trenching and installation of the conveyance piping for HVDPE system was conducted. The system completion and delivery was scheduled for 1st Quarter 2007; however, the system was delivered 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 (2) 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 of 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 of 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 (3) horizontal HVDPE conveyance piping laterals were installed to MW-10, 11, and 12 so that these wells could continue to be used for dual phase extraction while the 708 Alice Street property was being developed.
- In July of 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. The monitoring well locations are shown on Figure 2.
- On December 2, 2009, the property owner and AEI held a meeting with the ACEH to discuss the HVDPE remediation system status, results of the first rebound evaluation, and recommendations regarding future activities for the site.

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 SOIL BORING & TENTATIVE AIR SPARGE WELL INSTALLATION

Source zone delineation will be completed by continuously coring four (4) soil borings (SB-16 to SB-19) to approximately 28-feet bgs using direct push technology. If a significant hydrocarbon source is detected below the water table, up to four (4) air sparge wells (AS-1 to AS-4) will be installed during a subsequent mobilization. The field screening and analytical results will be communicated to ACEH for concurrence prior to installing the air sparging wells. All drilling work will be performed by a California C-57 licensed drilling contractor working under the direction of AEI professional staff. The proposed soil boring / air sparge well locations are shown on Figure 2.

4.1 Permits & Utility Clearances

Soil boring and well installation permits will be obtained from the Alameda County Public Works Agency (ACPWA). The work area will be clearly identified with white marking paint and Underground Service Alert North (USAN) will be notified at least three (3) days prior to drilling. A private utility locator will be hired as needed to clear the boring locations. An annular seal or grout inspection will be scheduled with an ACPWA inspector as required. Copies of the drilling permits will be included with the final report.

4.2 Health & Safety Meeting

Prior to drilling, a site safety meeting will be held at a designated command post near the working area to review the Health and Safety Plan (HASP). Working hazards and emergency procedures will be discussed at this meeting, including an explanation of the hazards of the known or suspected chemicals of interest as well as the location and route to the nearest hospital. All site personnel will be required to wear modified Level D personal protection equipment. A work area or “exclusion zone” will be established with orange cones and/or barricades and warning tape to delineate the zone where hard hats and steel-toed shoes were required and where unauthorized personnel were not allowed. A site safety plan conforming to Part 1910.120 (i) (2) of 29 CFR will be available onsite at all times during the project.

4.3 Soil Sampling, Description, & Analyses

A dual-tube or equivalent soil sampling system will be used to collect continuous soil cores samples. The sampler will be lined with a plastic sample liner and driven in 4-foot pushes until reaching a target depth of approximately 28-feet bgs. After each push, the sampler will be retrieved, core barrel disassembled, and sample liner transferred to an AEI geologist or engineer. Soil core samples will be characterized according to the Unified Soil Classification System (USCS) using the “visual-manual procedure” (ASTM D2488) by noting color, moisture content, texture, and grain-size and distribution. A description of product smearing and depths due to water table fluctuation will be documented and photographed.

Soil samples collected for laboratory analyses will be sealed with Teflon® tape and plastic end

caps, labeled with unique identifiers, and entered onto the chain of custody record. The samples will be placed in a pre-chilled cooler on wet ice pending transportation to the laboratory. A sub-sample of each sample collected for analytical testing will be placed into durable, 0.5-liter zipper locking bag. After waiting at least 30 minutes, the sub-samples will be screened for the presence of organic vapors with a photo-ionization detector. The soil samples will be transported under proper chain of custody protocol and within hold time to McCampbell Analytical, Inc. of Pittsburg, California (DHS Certification #1644) for analyses. Selected soil samples will be analyzed for TPH-g by EPA Method SW8015Cm and MBTEX by EPA Method SW8021B. A copy of the soil analytical report with chain of custody documentation will be included with the final report.

4.4 Air Sparge Well Installation

The sparge wells will be drilled with 8-inch nominal diameter hollow stem augers to a target depth of 5 to 10 feet below the deepest observed soil contamination. The wells will be built with 2-inch diameter flush-threaded polyvinyl chloride (PVC) well casing and stainless steel sparge points. The sparge points will be 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 will be filled with #0/30 or appropriately-sized Monterey Sand to approximately 1-foot above the top of the well screen. At least 2-feet of hydrated bentonite chips will be installed above the filter pack. The remainder of the borehole will be sealed to approximately 0.5-feet bgs with Type II through IV Portland cement grout. The tops of the well casings will be secured with expanding well plugs and the wellheads will be completed flush to grade with 12-inch diameter traffic-rated well boxes.

4.5 Boring Destruction

The temporary soil borings will be backfilled with cement grout using the tremi-pipe method. The grout will be mixed at a ratio of one (1) 94-pound bag of Type II - IV Portland cement to 5 gallons of water. The grout will be tremied into the borehole under the direction of an ACPWA inspector.

4.6 Equipment Decontamination, Waste Storage, & Disposal

The probe rods, soil samplers, and other tooling will be scrubbed and cleaned with an Alconox® or equivalent detergent and rinsed with clean water between borings to minimize the potential for cross-contamination. Soil cuttings, rinsate, and other investigation-derived wastes (IDWs) will be temporarily stored in 55-gallon drums. The drums will be sealed and labeled pending the results of the analyses and arrangements for off-site disposal. The IDWs will be manifested and transported to an appropriate waste disposal or recycling facility in accordance with all applicable local, state, and federal hazardous waste regulations.

5.0 HVDPE SYSTEM EVALUATION & OPTIMIZATION

The evaluation and optimization of the HVDPE system performance has been ongoing since the system was started-up in June of 2007. System optimization has been achieved by manipulating (turning on or off) extraction wells to increase hydrocarbon recovery. The extraction well and total system off-gas has been monitored on nearly a monthly basis, except for times when the system was shutdown for maintenance, none-routine repairs, or rebound evaluation. The concentration of hydrocarbon in the combined off-gas and total system flow rate has been used to estimate the mass

removal rate and total mass removed from the subsurface. As the concentrations of hydrocarbons decrease at the extraction wells, the conveyance piping and wellheads were inspected for vacuum leaks, then turned off and allowed to rebound. The hydrocarbon mass removal rates have ranged from as high as 368 pound per day (lbs/day) during the first month of operation to as low as 2 lbs/day prior to shutting down the system in May of 2009 due to declining hydrocarbon removal.

In August of 2009, the HVDPE system was restarted after being shutdown for approximately three (3) months. The concentrations of hydrocarbons in the extraction well and total system off-gas were monitored on a weekly basis for the next four (4) weeks. Mass removal rates started at 24 lbs/day and increased to 50 lbs/day after the first week. Mass removal rates increased to 67 lbs/day after the second week and 106 lbs/day after the third week. By the fourth week the mass removal rate decreased to 54 lbs/day. System operation continued through late-December with monthly mass removal rates in excess of 50 lbs/day. The total mass of volatile hydrocarbons removed from the subsurface as of December 16, 2009 was approximately 31,890 pounds or 5,315 gallons.

The HVDPE system performance will continue to evaluated and optimized on a monthly basis. If hydrocarbon mass removal rates are significant (e.g., greater than 10 lbs/day), the system will be operated continuously. If the mass removal rates are low or reach an asymptote, the system will be shutdown and operated intermittently. Intermittent operation will maximize hydrocarbon removal while minimizing O&M costs. In addition, an air sparging pilot test will be conducted to evaluate the effectiveness of this technology in conjunction with the HVDPE.

6.0 TENTATIVE AIR SPARGING PILOT TEST

An air sparging pilot test will be performed if a significant source of hydrocarbon contamination is detected below the water table. The air sparging pilot testing activities will take about 1 to 2 days to complete; however, the test may be extended for up to one (1) week if the initial results are favorable. The air sparging pilot test will be conducted according to the recommendations, methods, and procedures outlined in Chapter 5 of the “Air Sparging Design Paradigm” (Leeson, et al. 2002). The air sparging pilot test has been designed primarily to evaluate the effectiveness of this technology in conjunction with HVDPE.

6.1 Equipment & Materials

The following equipment and materials will be used for the pilot test:

- Hardwired power source or diesel generator.
- Air supply compressor capable of at least 20 cubic feet per minute (cfm) per well at 10 to 15 pound per square inches (psi) above the calculated hydrostatic pressure.
- An air distribution manifold, vent valve, and total flow meter.
- Air injection (sparge) wells equipped with pressure gauges, flow control valves, and well flow meters.

- Soil gas probes (GP-1 and GP-2) and dual-phase extraction wells (MW-1, 2, 5, 6, and 7).
- Diaphragm sampling pump (1 cfm), variable speed peristaltic pump, and RKI Eagle total volatile hydrocarbon (TVH), methane, oxygen, and carbon dioxide detector.
- Water separator trap, vinyl tubing, nylon connectors, and 1-liter Tedlar® bags.

6.2 Baseline Data Collection

Baseline sampling will be used to determine the initial saturated zone and vadose zone conditions prior to the air sparging pilot test. Baseline data for the saturated zone will correspond with the next quarterly groundwater monitoring event (First Quarter, 2010).

Baseline sampling will include the collection of the following data:

- Concentrations of TPH-g and BTEX in the groundwater prior to restarting the HVDPE system.
- Concentrations of TVH, oxygen, carbon dioxide, TPH-g, and BTEX in the off-gas upon restarting the HVDPE system and one (1) month later or until hydrocarbon removal stabilizes or reaches an asymptote.
- Concentrations of TVH, oxygen, and carbon dioxide in the soil gas and soil gas pressure just prior to the pilot test.

6.3 Injection Pressure / Flow Rate Test

Prior to the pilot test, the air sparging system operating pressures will be estimated and used to size the equipment. The minimum injection pressure will be the sum of hydrostatic pressure and the air entry pressures of the sand-pack and the formation. The fracture pressure of the formation will be the weight of the soil column plus the weight of water above the sparge point. The maximum injection pressure will be 75% of the fracture pressure to prevent pneumatic fracturing of the formation. A vent valve will be used to initiate flow and maintain the desired system operating pressure and flow rate. The initial breakthrough pressure will be recorded and the flow rate and pressure will be record every 5 to 10 minutes until the pressure and flow stabilize. The injection pressure / flow rate test will take approximately 2 to 4 hours to complete.

6.4 Soil Gas & Off-gas Sampling

Soil gas and off-gas sampling will be the primary performance indicator and used to estimate volatilization rates from the saturated zone. Baseline soil gas and off-gas samples will be collected just prior to and 30 to 60 minutes after starting the injection pressure / flow rate test. A third round of samples will be collected once the air injection pressures and flow rates have stabilized. Off-gas samples will be collected on a daily basis thereafter until completion of the test. Soil gas probes will be monitored periodically for positive pressure and vapor migration.

7.0 SCHEDULE & REPORTING

Field work will be scheduled and a soil boring permit application will be submitted to the ACPWA upon approval of this workplan. The soil borings are planned for one (1) day of fieldwork. The soil analytical results will be compiled into a data summary table and forwarded to ACEH within 1 to 2 weeks of drilling. Upon concurrence from ACEH, field work will be scheduled and the air sparge well permit applications will be submitted to the ACPWA. Installation of the air sparge wells are planned for up to two (2) days of field work. The sparge wells will be developed within one (1) week of installation. Depending on equipment availability, the pilot test will be conducted within 30 days of installing the air sparge wells. AEI will prepare and issue a final report within sixty 60 days of completing the air sparging pilot test and receiving all laboratory analytical reports. The report will include tables, figures of drilling and sampling locations, borings logs, and copies of all laboratory analytical reports. A written discussion of the field activities and evaluation of the results will be presented. The project will be overseen and the reports signed by an AEI California registered professional geologist or professional civil engineer.

8.0 REFERENCES

- Fields, K. 2002. Air Sparging – A Project Manager’s Guide. Battelle Press. Columbus, OH.
- Graymer, R.W., 2000. Geologic Map and Map Database of the Oakland Metropolitan Area, Alameda, Contra Costa, and San Francisco Counties, California. U.S. Geologic Survey Miscellaneous Field Studies MF2342, Online Version 1.0., includes 1 geologic map and 33 page pamphlet.
- Holley, E.J. and Graymer, R.W., 1997. Quaternary Geology of Alameda County, and parts of Contra Costa, Santa Clara, San Mateo, San Francisco, Stanislaus, and San Joaquin counties, California: A Digital Database. U.S. Geological Survey, Open-File Report 97-97, includes 1 geologic map, 1 map explanation sheet, and 9 page discussion booklet.
- Hinchee, R.E. 1994. Air Sparging for Site Remediation. CRC Press. Boca Raton, FL.
- Leeson, A. et al. 2002. Air Sparging Design Paradigm. Battelle. Columbus, OH.
- Norfleet Consultants, 1998. Groundwater Study and Water Supply History of the East Bay Plain, Alameda and Contra Costa Counties, California. Prepared for the Friends of the San Francisco Estuary, P.O. Box 791, Oakland, California, and dated June 15, 1998.
- United States Army Core of Engineers (USACE), 1999. Multi-Phase Extraction Engineer Manual: EM 1110-1-4010. Washington, DC.
- USACE, 1997. In-Situ Air Sparging. Engineer Manual: EM 1110-1-4005. Washington, D.C.
- USACE, 2008. In-Situ Air Sparging. Engineer Manual: EM 1110-1-4005. Washington, D.C.

9.0 CLOSING STATEMENT & SIGNATURES

AEI has prepared this workplan on behalf of Mr. Victor Lum for the property located at 245 8th Street in the City of Oakland, Alameda County, California (Figure 1). The number and location of samples have been chosen to provide requested information, but it cannot be assumed that they are entirely representative of all areas not sampled. All conclusions and recommendations will be based on the analyses, observations, and the governing regulations. Conclusions beyond those stated in the final report should not be inferred from this document. These services will be performed in accordance with generally accepted practices in the environmental engineering and geology fields that exist at the time and location of the work.

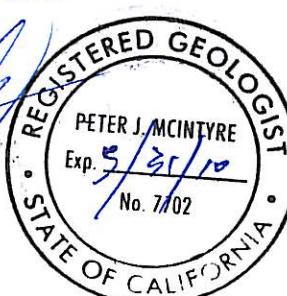
We look forward to your remarks regarding this workplan. Should you have any questions or comments, or need any additional information, please contact either of the undersigned at (925) 746-6000.

Sincerely,
AEI Consultants



Richard Bradford
Project Engineer

Peter McIntyre, PG
Senior Project Manager



Distribution:

Mr. Victor Lum (1 copy)

Vic's Automotive

245 8th Street

Oakland, California 94607

Mr. Jerry Wickham (electronic-ftp)

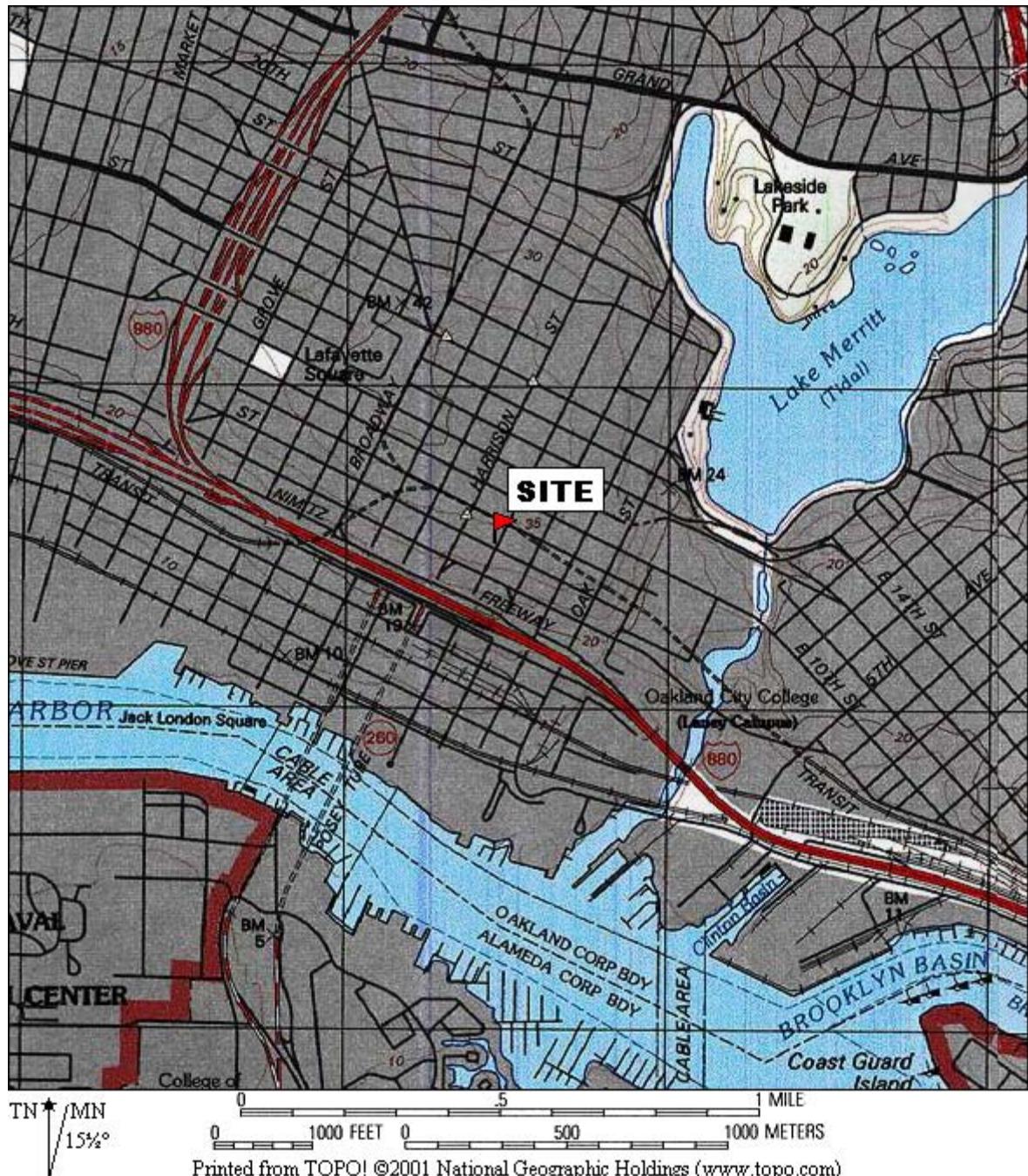
Alameda County Environmental Health

1131 Harbor Bay Parkway, Suite 250

Alameda, California 94502-6577

GeoTracker (electronic)

FIGURES



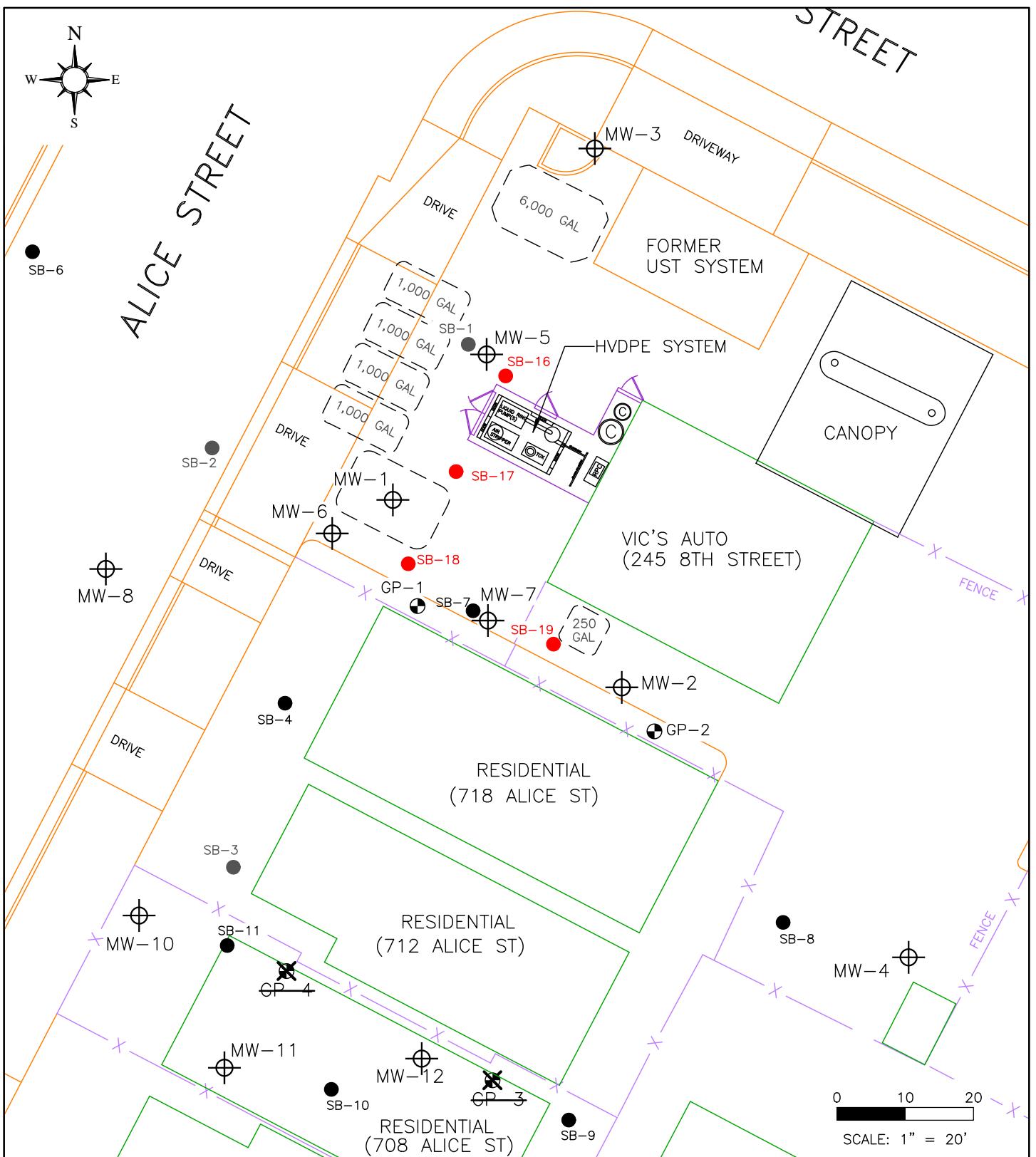
AEI CONSULTANTS

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

SITE LOCATION MAP

245 8th STREET
OAKLAND, CALIFORNIA

FIGURE 1
PROJECT NO. 116907



LEGEND

- ⊕ MONITORING WELL
- SOIL BORING (1996)
- SOIL BORING (2002 / 2003)
- ⊕ SOIL GAS PROBE
- ☒ ABANDONED SOIL GAS PROBE
- PROPOSED SOIL BORING

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REVISED BY RJB 02-09-10

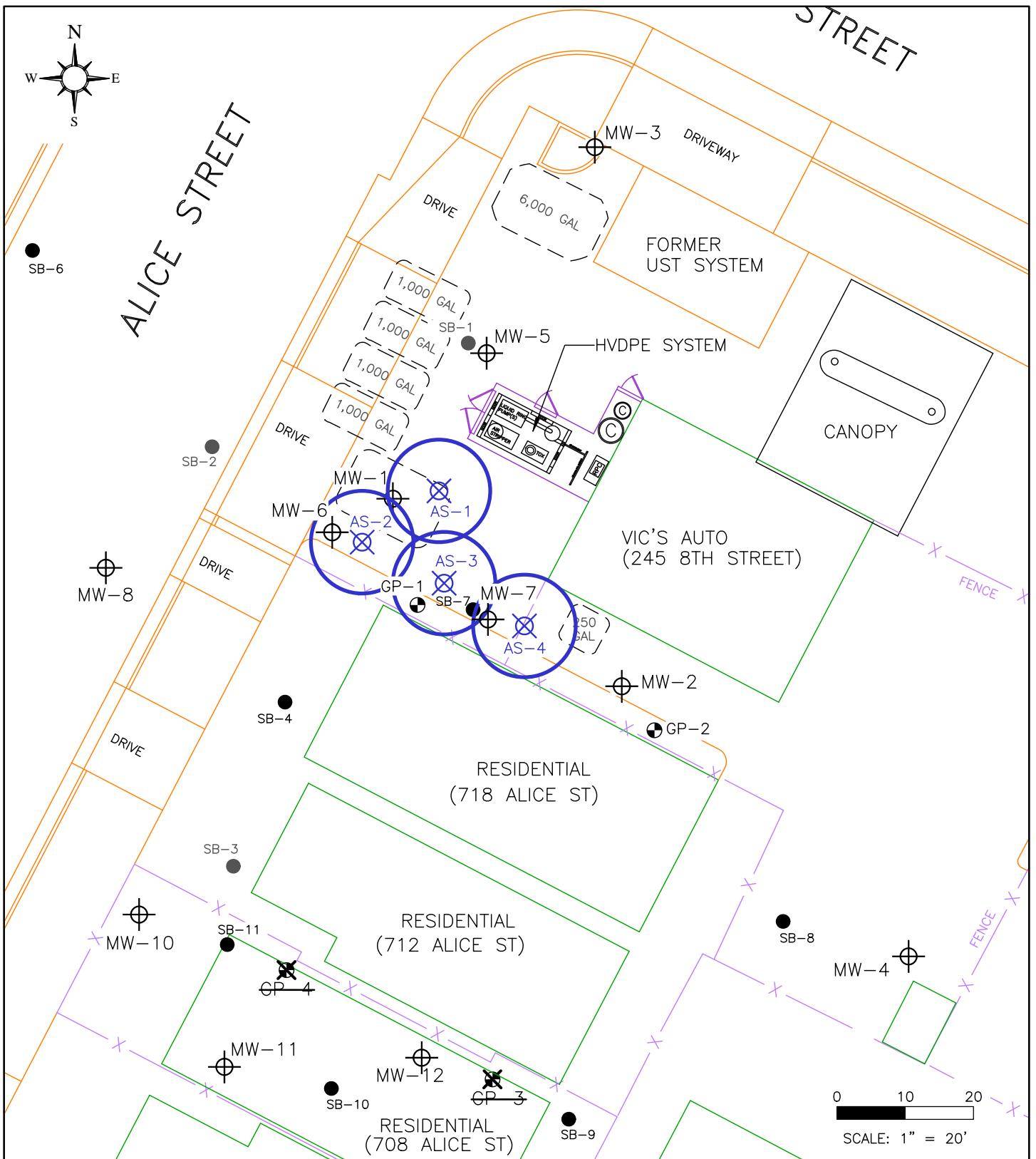
AEI CONSULTANTS

2500 CAMINO DIABLO, SUITE 200, WALNUT CREEK

PROPOSED SOIL BORING LOCATIONS

245 8TH STREET
OAKLAND, CALIFORNIA

FIGURE 2
PROJECT NO. 116907



LEGEND

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



AIR SPARGE WELL
SPACING ~15 FEET
WITH OVERLAP

DRAFTED BY RJB 01-15-10
REVISED BY RJB 02-09-10

AEI CONSULTANTS

2500 CAMINO DIABLO, SUITE 200, WALNUT CREEK

TENTATIVE AIR SPARGE
WELL LOCATIONS

245 8TH STREET
OAKLAND, CALIFORNIA

FIGURE 3
PROJECT NO. 116907

TABLES

TABLE 1: GROUNDWATER ELEVATION DATA SUMMARY

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

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

TABLE 1: GROUNDWATER ELEVATION DATA SUMMARY

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

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

TABLE 1: GROUNDWATER ELEVATION DATA SUMMARY

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

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

TABLE 1: GROUNDWATER ELEVATION DATA SUMMARY

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

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

TABLE 1: GROUNDWATER ELEVATION DATA SUMMARY

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

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

TABLE 1: GROUNDWATER ELEVATION DATA SUMMARY

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

Well ID (screen interval)	Date Collected	Well ^{1,2,5} Elevation (ft amsl)	Depth to ³ Water (ft)	Groundwater ⁴ Elevation (ft amsl)	Depth to LNAPL (ft)	Apparent LNAPL Thickness (ft)
MW-7 (12-22)	02/03/05	33.07	14.17	18.90	-	Sheen
	05/09/05	33.07	14.47	18.60	14.44	0.03
	08/05/05	33.07	16.07	17.00	16.02	0.05
	11/09/05	33.07	16.47	16.60	16.35	0.12
	02/09/06	33.07	14.18	18.89	14.11	0.07
	05/04/06	33.07	13.12	19.95	13.11	0.01
	08/04/06	33.07	15.74	17.33	-	Sheen
	11/08/06	33.07	16.59	16.48	-	Sheen
	02/08/07	33.07	16.23	16.84	-	Sheen
	05/29/07	33.07	16.13	16.94	-	Sheen
	09/05/07	33.07	16.40	16.67	-	Sheen
	12/12/07	33.07	18.02	15.05	-	Sheen
	02/13/08	33.07	16.27	16.80	-	Sheen
	05/15/08	33.07	17.01	16.06	-	-
	08/05/08	33.07	17.23	15.84	-	-
	11/07/08	33.07	18.18	14.89	-	-
	02/05/09	33.07	17.26	15.81	-	-
	05/05/09	33.07	16.13	16.94	-	-
	08/21/09	33.07	17.39	15.68	-	-
	11/23/09	33.07	17.33	15.74	-	-
MW-8 (12-22)	05/15/08	31.73	16.47	15.26	-	-
	08/05/08	31.73	16.88	14.85	-	-
	11/07/08	31.73	17.28	14.45	-	-
	02/05/09	31.73	16.78	14.95	-	-
	05/05/09	31.73	16.05	15.68	-	-
	08/21/09	31.73	17.05	14.68	-	-
	11/23/09	31.73	16.72	15.01	-	-
MW-9 (12-22)	05/15/08	29.02	15.16	13.86	-	-
	08/05/08	29.02	15.38	13.64	-	-
	11/07/08	29.02	15.84	13.18	-	-
	02/05/09	29.02	15.38	13.64	-	-
	05/05/09	29.02	14.38	14.64	-	-
	08/21/09	29.02	15.41	13.61	-	-
	11/23/09	29.02	15.36	13.66	-	-

TABLE 1: GROUNDWATER ELEVATION DATA SUMMARY

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

Well ID (screen interval)	Date Collected	Well ^{1,2,5} Elevation (ft amsl)	Depth to ³ Water (ft)	Groundwater ⁴ Elevation (ft amsl)	Depth to LNAPL (ft)	Apparent LNAPL Thickness (ft)
MW-10 (12-22)	02/03/05	31.17	12.65	18.52	-	-
	05/09/05	31.17	13.09	18.08	-	-
	08/05/05	31.17	14.68	16.49	-	-
	11/09/05	31.17	14.94	16.23	-	-
	02/09/06	31.17	12.82	18.35	-	-
	05/04/06	31.17	12.11	19.06	-	-
	08/04/06	31.17	14.38	16.79	-	-
	11/08/06	31.17	15.32	15.85	-	-
	02/08/07	31.17	15.59	15.58	-	-
	05/29/07	31.17	15.27	15.90	-	-
	09/05/07	31.17	16.25	14.92	-	-
	12/12/07	31.17	17.75	13.42	-	Sheen
	02/13/08	31.17	15.59	15.58	-	-
	05/15/08	31.17	16.40	14.77	-	-
	08/05/08	31.17	16.67	14.50	-	-
	11/07/08	31.17	nm	-	-	-
	02/05/09	31.17	nm	-	-	-
	05/05/09	31.17	nm	-	-	-
	08/21/09	31.17	nm	-	-	-
	11/23/09	31.17	nm	-	-	-
MW-11 (12-22)	02/03/05	31.78	13.39	18.39	-	Sheen
	05/09/05	31.78	13.89	17.89	-	Sheen
	08/05/05	31.78	15.47	16.31	-	Sheen
	11/09/05	31.78	15.73	16.05	-	Sheen
	02/09/06	31.78	13.53	18.25	-	Sheen
	05/04/06	31.78	12.73	19.05	-	Sheen
	08/04/06	31.78	15.17	16.61	-	Sheen
	11/08/06	31.78	16.15	15.63	-	-
	02/08/07	31.78	16.36	15.42	-	Sheen
	05/29/07	31.78	16.06	15.72	-	Sheen
	09/05/07	31.78	17.03	14.75	-	Sheen
	12/12/07	31.78	18.68	13.10	-	-
	02/13/08	31.78	16.28	15.50	-	-
	05/15/08	31.78	17.12	14.66	-	-
	08/05/08	31.78	17.33	14.45	-	-
	11/07/08	31.78	nm	-	-	-
	02/05/09	31.78	nm	-	-	-
	05/05/09	31.78	nm	-	-	-
	08/21/09	31.78	nm	-	-	-
	11/23/09	31.78	nm	-	-	-

TABLE 1: GROUNDWATER ELEVATION DATA SUMMARY

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

Well ID (screen interval)	Date Collected	Well ^{1,2,5} Elevation (ft amsl)	Depth to ³ Water (ft)	Groundwater ⁴ Elevation (ft amsl)	Depth to LNAPL (ft)	Apparent LNAPL Thickness (ft)
MW-12 (12-22)	02/03/05	32.05	13.70	18.35	-	Sheen
	05/09/05	32.05	14.17	17.88	-	Sheen
	08/05/05	32.05	15.69	16.36	-	Sheen
	11/09/05	32.05	15.93	16.12	-	Sheen
	02/09/06	32.05	13.78	18.27	-	Sheen
	05/04/06	32.05	12.98	19.07	-	Sheen
	08/04/06	32.05	15.39	16.66	-	Sheen
	11/08/06	32.05	16.29	15.76	-	-
	02/08/07	32.05	16.54	15.51	-	-
	05/29/07	32.05	16.27	15.78	-	-
	09/05/07	32.05	17.24	14.81	-	-
	12/12/07	32.05	18.65	13.40	-	-
	02/14/08	32.05	16.50	15.55	-	-
	05/15/08	32.05	17.34	14.71	-	-
	08/05/08	32.05	17.61	14.41	-	-
MW-13 (12-22)	11/07/08	32.05	nm	-	-	-
	02/05/09	32.05	nm	-	-	-
	05/05/09	32.05	nm	-	-	-
	08/21/09	32.05	nm	-	-	-
	11/23/09	32.05	nm	-	-	-
	05/15/08	28.84	14.87	13.97	-	-
	08/05/08	28.84	15.10	13.74	-	-
MW-14 (12-22)	11/07/08	28.84	15.61	13.23	-	-
	02/05/09	28.84	15.09	13.75	-	-
MW-15 (12-22)	05/05/09	28.84	14.09	14.75	-	-
	08/21/09	28.84	15.11	13.73	-	-
MW-16 (12-22)	11/23/09	28.84	15.11	13.73	-	-
	08/21/09	29.53	15.66	13.87	-	-
	11/23/09	29.53	15.53	14.00	-	-
	08/21/09	29.22	16.03	13.19	-	-
	11/23/09	29.22	15.95	13.27	-	-
	08/21/09	28.87	15.61	13.26	-	-
	11/23/09	28.87	15.61	13.26	-	-

TABLE 1: GROUNDWATER ELEVATION DATA SUMMARY

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

Well ID (screen interval)	Date Collected	Well ^{1,2,5} Elevation (ft amsl)	Depth to ³ Water (ft)	Groundwater ⁴ Elevation (ft amsl)	Depth to LNAPL (ft)	Apparent LNAPL Thickness (ft)
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NOTES:

- not applicable

ft = feet

ft amsl = feet above mean sea level

nm = not measured

LNAPL = light non-aqueous phase liquid

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

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

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

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

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

TABLE 2: GROUNDWATER FLOW SUMMARY

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

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

NOTES:

- not applicable

ft = feet

ft amsl = feet above mean sea level

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

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

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

TABLE 3: GROUNDWATER ANALYTICAL DATA SUMMARY

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

Well ID (screen interval)	Date Collected	Apparent LNAPL Thickness (ft)	TPH-g (µg/L)	MTBE (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl- benzene (µg/L)	Xylenes (µg/L)	HVOC (µg/L)
MW-1 (8-28)	06/29/01	1.63	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	-
	10/10/01	0.08	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	-
	01/09/02	<0.01	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	-
	04/24/02	<0.01	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	-
	07/24/02	~0.01	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	-
	11/05/02	~0.01	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	-
	02/04/03	~0.01	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	-
	05/02/03	0.08	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	-
	08/04/03	0.23	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	-
	11/03/03	1.27	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	-
	02/09/04	0.18	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	-
	05/10/04	Obstructed	-	-	-	-	-	-	-
	08/09/04	0.21	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	-
	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	-

TABLE 3: GROUNDWATER ANALYTICAL DATA SUMMARY

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

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

TABLE 3: GROUNDWATER ANALYTICAL DATA SUMMARY

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

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

TABLE 3: GROUNDWATER ANALYTICAL DATA SUMMARY

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

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

TABLE 3: GROUNDWATER ANALYTICAL DATA SUMMARY

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

Well ID (screen interval)	Date Collected	Apparent LNAPL Thickness (ft)	TPH-g ($\mu\text{g}/\text{L}$)	MTBE ($\mu\text{g}/\text{L}$)	Benzene ($\mu\text{g}/\text{L}$)	Toluene ($\mu\text{g}/\text{L}$)	Ethyl- benzene ($\mu\text{g}/\text{L}$)	Xylenes ($\mu\text{g}/\text{L}$)	HVOC ($\mu\text{g}/\text{L}$)
MW-5 (12-22)	02/03/05	0.00	78,000	<1,000	7,600	13,000	2,200	9,600	-
	05/09/05	0.00	60,000	<900	6,100	9,900	1,600	6,600	-
	07/27/05	nm	120,000	1,100	10,000	19,000	2,100	13,000	-
	08/05/05	0.00	59,000	<500	4,100	10,000	1,200	6,600	-
	11/09/05	0.00	44,000	<500	3,300	7,400	1,100	4,900	-
	02/09/06	0.00	110,000	<500	10,000	22,000	2,400	13,000	-
	05/04/06	0.00	110,000	<250	11,000	22,000	2,900	15,000	-
	08/04/06	0.00	73,000	<500	4,700	8,600	1,700	7,600	-
	11/08/06	0.00	51,000	<500	3,700	7,200	1,400	6,700	<DL
	02/08/07	0.00	67,000	<800	5,100	10,000	1,800	10,000	-
	05/29/07	0.00	86,000	<1000	6,200	12,000	2,000	11,000	-
	09/05/07	0.00	36,000	<350	2,100	4,000	560	4,600	-
	12/12/07	0.00	8,200	<100	160	56	290	1,200	-
	02/13/08	0.00	4,600	<50	77	440	41	1,300	-
	05/15/08	0.00	3,000	<10	59	330	47	670	-
	08/05/08	0.00	4,500	<50	64	490	46	1,100	-
	11/07/08	0.00	5,000	<17	66	400	29	1,200	-
	02/05/09	0.00	2,800	<0.5*	49	120	22	570	-
	05/05/09	0.00	12,000	<5.0*	360	1,300	250	2,000	-
	08/21/09	0.00	11,000	<1.0*	450	610	400	2,300	-
	11/23/09	0.00	1,700	<0.5*	47	100	29	240	-
MW-6 (12-22)	02/03/05	Sheen	130,000	<1,000	2,400	33,000	2,400	15,000	-
	05/09/05	Sheen	170,000	<4,000	11,000	43,000	3,100	16,000	-
	08/05/05	0.37	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	-
	11/09/05	0.37	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	-
	02/09/06	0.71	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	-
	05/04/06	0.75	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	-
	08/04/06	0.41	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	-
	11/08/06	0.38	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	-
	02/08/07	0.34	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	-
	05/29/07	0.31	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	-
	09/05/07	0.00	74,000	<750	870	7,000	2,400	12,000	-
	12/12/07	Sheen	12,000	<10	556	560	550	1,800	-
	02/13/08	Sheen	27,000	<250	700	4,900	620	5,300	<DL
	05/15/08	0.00	25,000	<150	410	2,500	1,000	3,700	-
	08/05/08	0.00	33,000	<350	480	5,500	1,400	6,800	-
	11/07/08 ²	0.00	54,000	<5.0	610	7,000	1,700	8,900	-
	02/05/09	0.00	92,000	<50*	1,100	8,600	2,800	14,000	-
	05/05/09	0.00	58,000	<50*	560	4,300	2,400	13,000	-
	08/21/09	0.00	53,000	<5.0*	1,800	8,100	1,200	12,000	-
	11/23/09	0.00	28,000	<10*	270	710	1,200	5,500	-

TABLE 3: GROUNDWATER ANALYTICAL DATA SUMMARY

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

Well ID (screen interval)	Date Collected	Apparent LNAPL Thickness (ft)	TPH-g ($\mu\text{g}/\text{L}$)	MTBE ($\mu\text{g}/\text{L}$)	Benzene ($\mu\text{g}/\text{L}$)	Toluene ($\mu\text{g}/\text{L}$)	Ethyl- benzene ($\mu\text{g}/\text{L}$)	Xylenes ($\mu\text{g}/\text{L}$)	HVOCS ($\mu\text{g}/\text{L}$)
MW-7 (12-22)	02/03/05	Sheen	220,000	18,000	45,000	44,000	3,500	18,000	-
	05/09/05	0.03	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	-
	08/05/05	0.05	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	-
	11/09/05	0.12	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	-
	02/09/06	0.07	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	-
	05/04/06	0.01	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	-
	08/04/06	Sheen	230,000	19,000	37,000	37,000	3,100	14,000	-
	11/08/06	Sheen	240,000	13,000	41,000	39,000	3,000	14,000	<DL
	02/08/07	Sheen	230,000	15,000	41,000	37,000	3,700	20,000	-
	05/29/07	Sheen	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	-
	09/05/07	Sheen	14,000	<450	41	210	99	1,600	-
	12/12/07	Sheen	9,200	<500	1,100	870	66	1,100	-
	02/13/08	0.00	17,000	590	2,800	2,700	300	1,900	-
	05/15/08	0.00	10,000	230	1,700	1,900	200	950	-
	08/05/08	0.00	6,100	<150	1,100	1,100	120	740	-
	11/07/08	0.00	4,200	<50	580	570	44	400	-
	02/05/09	0.00	7,800	26*	1,100	810	190	690	-
	05/05/09	0.00	7,200	77*	1,200	1,200	150	860	-
	08/21/09	0.00	28,000	390*	6,200	3,200	450	3,100	-
	11/23/09	0.00	17,000	32*	430	1,600	730	2,800	-
MW-8 (12-22)	05/15/08	0.00	90	<5.0	0.62	2.4	<0.5	1.0	-
	08/05/08	0.00	81	<5.0	0.66	7.2	1.2	9.1	-
	11/07/08	0.00	430	<5.0	2.9	26	6.1	86	-
	02/05/09	0.00	<50	<5.0	0.98	1.3	<0.5	<0.5	-
	05/05/09	0.00	94	<5.0	0.91	7.1	2.2	17	-
	08/21/09	0.00	480	<5.0	30	100	17	130	-
	11/23/09	0.00	62	<5.0	5.3	2.0	2.4	3.3	-
MW-9 (12-22)	05/15/08	0.00	60,000	960	14,000	410	1,500	3,500	-
	08/05/08	0.00	42,000	<1,200	13,000	400	1,800	4,800	-
	11/07/08 ²	0.00	53,000	400	13,000	350	1,800	3,100	-
	02/05/09	0.00	32,000	360*	11,000	310	1,600	2,700	-
	05/05/09	0.00	44,000	730*	14,000	520	1,900	3,400	-
	08/21/09	0.00	48,000	900*	15,000	550	2,000	3,300	-
	11/23/09	0.00	39,000	750	11,000	390	1,800	2,400	-

TABLE 3: GROUNDWATER ANALYTICAL DATA SUMMARY

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

Well ID (screen interval)	Date Collected	Apparent LNAPL Thickness (ft)	TPH-g (µg/L)	MTBE (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl- benzene (µg/L)	Xylenes (µg/L)	HVOC (µg/L)
MW-10 (12-22)	02/03/05	0.00	36,000	<500	4,700	7,200	660	3,400	-
	05/09/05	0.00	88,000	<1,500	6,900	20,000	2,300	9,900	-
	08/05/05	0.00	88,000	<1,100	10,000	21,000	1,900	9,800	-
	11/09/05	0.00	63,000	<1,100	5,400	13,000	1,900	7,900	-
	02/09/06	0.00	100,000	<500	6,600	19,000	2,900	13,000	-
	05/04/06	0.00	100,000	<500	8,500	25,000	3,000	13,000	-
	08/04/06	0.00	190,000	<2,200	17,000	35,000	2,800	13,000	-
	11/08/06	0.00	57,000	<500	2,500	7,600	1,600	5,700	<DL
	02/08/07	0.00	69,000	<1,000	4,400	14,000	2,200	8,800	-
	05/29/07	0.00	100,000	<1,000	5,300	19,000	2,600	12,000	-
	09/05/07	0.00	87,000	<1,000	6,100	20,000	2,400	12,000	-
	12/12/07	Sheen	4,700	<50	95	280	110	730	-
	02/13/08	0.00	4,500	<250	190	370	65	880	-
	05/15/08	0.00	4,800	<50	130	320	110	710	-
	08/05/08	0.00	3,500	<120	230	180	74	190	-
	11/07/08 ³	-	-	-	-	-	-	-	-
	02/05/09	-	-	-	-	-	-	-	-
	05/05/09	-	-	-	-	-	-	-	-
	08/21/09	-	-	-	-	-	-	-	-
	11/23/09	-	-	-	-	-	-	-	-
MW-11 (12-22)	02/03/05	Sheen	170,000	<3,000	23,000	35,000	3,100	16,000	-
	05/09/05	Sheen	210,000	3,500	29,000	40,000	3,400	16,000	-
	07/27/05	Sheen	220,000	2,500	26,000	37,000	3,200	18,000	-
	08/05/05	Sheen	210,000	<2,500	35,000	42,000	3,300	16,000	-
	11/09/05	Sheen	180,000	9,100	32,000	47,000	3,600	18,000	-
	02/09/06	Sheen	210,000	10,000	33,000	39,000	3,800	20,000	-
	05/04/06	Sheen	190,000	12,000	34,000	41,000	3,500	17,000	-
	08/04/06	Sheen	290,000	11,000	33,000	43,000	3,300	15,000	-
	11/08/06	0.00	240,000	14,000	34,000	44,000	3,300	16,000	<DL
	02/08/07	0.00	230,000	19,000	43,000	44,000	3,900	20,000	-
	05/29/07	0.00	230,000	19,000	35,000	39,000	3,600	20,000	-
	09/05/07	0.00	200,000	19,000	34,000	36,000	3,700	23,000	-
	12/12/07	0.00	81,000	4,000	9,400	9,500	1,700	9,700	-
	02/13/08	0.00	36,000	4,200	5,700	4,000	560	5,300	-
	05/15/08	0.00	15,000	2,300	2,800	1,400	120	1,900	-
	08/05/08	0.00	12,000	1,100	1,800	760	98	630	-
	11/07/08 ³	-	-	-	-	-	-	-	-
	02/05/09	-	-	-	-	-	-	-	-
	05/05/09	-	-	-	-	-	-	-	-
	08/21/09	-	-	-	-	-	-	-	-
	11/23/09	-	-	-	-	-	-	-	-

TABLE 3: GROUNDWATER ANALYTICAL DATA SUMMARY

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

Well ID (screen interval)	Date Collected	Apparent LNAPL Thickness (ft)	TPH-g (µg/L)	MTBE (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl- benzene (µg/L)	Xylenes (µg/L)	HVOC (µg/L)
MW-12 (12-22)	02/03/05	Sheen	250,000	100,000	52,000	41,000	3,400	15,000	-
	05/09/05	Sheen	210,000	91,000	44,000	28,000	3,300	13,000	-
	08/05/05	Sheen	170,000	52,000	38,000	28,000	3,000	12,000	-
	11/09/05	Sheen	180,000	52,000	39,000	25,000	2,900	12,000	-
	02/09/06	Sheen	170,000	34,000	40,000	23,000	3,500	15,000	-
	05/04/06	Sheen	160,000	47,000	33,000	28,000	2,800	10,000	-
	08/04/06	Sheen	240,000	55,000	40,000	24,000	3,200	12,000	-
	11/08/06	0.00	190,000	33,000	40,000	23,000	2,700	13,000	<DL
	02/08/07	0.00	150,000	34,000	38,000	19,000	3,300	12,000	-
	05/29/07	0.00	150,000	30,000	30,000	15,000	3,100	13,000	-
	09/05/07	0.00	160,000	38,000	33,000	21,000	3,200	14,000	-
	12/12/07	0.00	58,000	6,700	10,000	7,100	1,200	4,900	-
	02/13/08	0.00	17,000	3,000	3,600	2,300	440	1,800	-
	05/15/08	0.00	7,800	1,900	2,000	500	130	640	-
	08/05/08	0.00	3,900	800	730	130	61	200	-
	11/07/08 ³	-	-	-	-	-	-	-	-
	02/05/09	-	-	-	-	-	-	-	-
	05/05/09	-	-	-	-	-	-	-	-
	08/21/09	-	-	-	-	-	-	-	-
	11/23/09	-	-	-	-	-	-	-	-
MW-13 (12-22)	05/15/08	0.00	<250	6,700	18	<2.5	<2.5	<2.5	-
	08/05/08	0.00	<250	3,400	<2.5	5.7	<2.5	4.3	-
	11/07/08	0.00	61	380	2.8	1.4	0.55	0.87	-
	02/05/09	0.00	<50	14	<0.5	<0.5	<0.5	<0.5	-
	05/05/09	0.00	<50	<5.0	0.53	3.2	1.1	7.5	-
	08/21/09	0.00	85	<5.0	2.0	10	2.2	13	-
	11/23/09	0.00	<50	<5.0	<0.5	<0.5	<0.5	<0.5	-
MW-14 (12 - 22)	08/21/09	0.00	3,000	<1.0*	11	41	92	40	-
	11/23/09	0.00	1,600	<5.0	6.1	16	33	4.9	-
MW-15 (12 - 22)	08/21/09	0.00	190	23	23	15	6.6	25	-
	11/23/09	0.00	280	19	65	4.6	20	28	-
MW-16 (12 - 22)	08/21/09	0.00	860	20	80	110	26	130	-
	11/23/09	0.00	870	31	280	13	46	63	-

TABLE 3: GROUNDWATER ANALYTICAL DATA SUMMARY

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

Well ID (screen interval)	Date Collected	Apparent LNAPL Thickness (ft)	TPH-g ($\mu\text{g}/\text{L}$)	MTBE ($\mu\text{g}/\text{L}$)	Benzene ($\mu\text{g}/\text{L}$)	Toluene ($\mu\text{g}/\text{L}$)	Ethyl- benzene ($\mu\text{g}/\text{L}$)	Xylenes ($\mu\text{g}/\text{L}$)	HVOCS ($\mu\text{g}/\text{L}$)
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NOTES:

- not sampled/analyzed

ft = feet

ns/fp = not sampled / free product present

 $\mu\text{g}/\text{L}$ = 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

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

DL = detection limit

* = MTBE by EPA Method 8260

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

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

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

TABLE 4: SOIL ANALYTICAL DATA SUMMARY

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

Sample ID	Date Collected	Depth (ft bgs)	TPHg (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
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

TABLE 4: SOIL ANALYTICAL DATA SUMMARY

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

Sample ID	Date Collected	Depth (ft bgs)	TPHg (mg/kg)	TOG (mg/kg)	MTBE (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)
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

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

ESL - DW = Environmental Screening Levels for Residential Land Use

For Shallow Soil \leq 10 feet bgs, Groundwater Is Current or Potential Drinking Water Resource

TABLE 5: SOIL GAS ANALYTICAL DATA SUMMARY

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

Well ID	Date Collected	Sample Depth (ft bgs)	TPH-g ($\mu\text{g}/\text{m}^3$)	MTBE ($\mu\text{g}/\text{m}^3$)	Benzene ($\mu\text{g}/\text{m}^3$)	Toluene ($\mu\text{g}/\text{m}^3$)	Ethyl-benzene ($\mu\text{g}/\text{m}^3$)	Xylenes ($\mu\text{g}/\text{m}^3$)	Ethanol ($\mu\text{g}/\text{m}^3$)	PCE ($\mu\text{g}/\text{m}^3$)	2-propanol ($\mu\text{g}/\text{m}^3$)
GP-1-5	08/04/06	5	331	<8.0	<7.1	<8.4	<9.7	<9.7	<17	17	23
GP-1-5D ₁	08/04/06	5	-	<8.0	<7.1	<8.4	<9.7	<9.7	<17	18	23
GP-1-5	11/08/06	5	1,100	<4.6	<4.0	<4.8	<5.5	<5.5	<9.5	12	<12
GP-1-5	03/06/07*	5	-	-	-	-	-	-	-	-	-
GP-1-5	05/17/07	5	457	<3.6	<3.2	<3.8	<4.4	<4.4	<7.6	14	<9.9
GP-1-5D ₁	05/17/07	5	-	<3.6	<3.2	<3.8	<4.4	<4.4	<7.6	14	<9.9
GP-1-5	12/12/07	5	<1,500	<48	<6.5	<7.7	<8.8	<27	<96	<14	<25
GP-1-5	02/14/08	5	<1,800	<48	<6.5	<7.7	<8.8	<27	<96	<14	<10,000
GP-1-5	05/08/08	5	<1,800	<7.3	<6.5	<7.7	<8.8	<27	-	<14	<25
GP-1-5	08/15/08	5	<1800	<7.3	<6.5	<7.7	<8.8	<27	-	<14	<10,000
GP-1-5 ²	11/07/08	5	-	-	-	-	-	-	-	-	-
GP-1-10	08/04/06	10	493	<4.1	<3.6	<4.3	<5.0	<5.0	<8.6	20	<11
GP-1-10	11/08/06	10	950	<4.2	<3.7	<4.4	<5.0	<5.0	<8.8	<7.9	<11
GP-1-10	03/06/07*	10	-	-	-	-	-	-	-	-	-
GP-1-10	05/17/07 [^]	10	-	-	-	-	-	-	-	-	-
GP-1-10	12/12/07	10	<1,500	<48	<6.5	<7.7	<8.8	<27	<96	<14	<25
GP-1-10	02/14/08	10	<1,800	<48	<6.5	<7.7	<8.8	<27	-	<14	<10,000
GP-1-10	05/08/08	10	<1,800	<7.3	<6.5	<7.7	<8.8	<27	-	<14	<25
GP-1-10	08/15/08	10	<1,800	<7.3	<6.5	<7.7	<8.8	<27	-	<14	<10,000
GP-1-10 ²	11/07/08	10	-	-	-	-	-	-	-	-	-
GP-2-5	08/04/06	5	493	<4.4	<3.9	6.9	<5.4	10	<9.3	600	<12
GP-2-5	11/08/06	5	1,100	<4.0	<3.6	<4.2	<4.9	<4.9	<8.4	240	<11
GP-2-5	03/06/07*	5	-	-	-	-	-	-	-	-	-
GP-2-5	05/17/07	5	582	<4.0	<3.5	<4.1	<4.8	<4.8	<8.3	420	<11
GP-2-5	12/12/07	5	<1,500	<48	<6.5	<7.7	<8.8	<27	<96	<14	<25
GP-2-5	02/14/08	5	<1,800	<48	<6.5	<7.7	<8.8	<27	<14	<14	<10,000
GP-2-5	05/08/08	5	<1,800	<7.3	<6.5	<7.7	<8.8	<27	-	<14	<25
GP-2-5	08/15/08	5	<1,800	<7.3	<6.5	<7.7	<8.8	<27	-	39	<10,000
GP-2-5 ²	11/07/08	5	-	-	-	-	-	-	-	-	-
GP-2-10	08/04/06	10	352	<10	<9.0	18	<12	<12	<21	270	<28
GP-2-10	11/08/06	10	910	<3.9	<3.4	<4.1	<4.7	<4.7	<8.1	450	<11
GP-2-10	03/06/07*	10	-	-	-	-	-	-	-	-	-
GP-2-10	05/17/07	10	748	<3.8	<3.3	<3.9	<4.5	<4.5	<7.9	440	<10
GP-2-10	12/12/07	10	<1,500	<48	<6.5	<7.7	<8.8	<27	<96	<14	<25
GP-2-10	02/14/08	10	<1,800	<48	<6.5	<7.7	<8.8	<27	-	<14	<10,000
GP-2-10	05/08/08	10	<1,800	<7.3	<6.5	<7.7	<8.8	<27	-	<14	<25
GP-2-10	08/15/08	10	<1,800	<7.3	<6.5	<7.7	<8.8	<27	-	48	<10,000
GP-2-10 ²	11/07/08	10	-	-	-	-	-	-	-	-	-

TABLE 5: SOIL GAS ANALYTICAL DATA SUMMARY

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

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

TABLE 5: SOIL GAS ANALYTICAL DATA SUMMARY

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

Well ID	Date Collected	Sample Depth (ft bgs)	TPH-g ($\mu\text{g}/\text{m}^3$)	MTBE ($\mu\text{g}/\text{m}^3$)	Benzene ($\mu\text{g}/\text{m}^3$)	Toluene ($\mu\text{g}/\text{m}^3$)	Ethyl-benzene ($\mu\text{g}/\text{m}^3$)	Xylenes ($\mu\text{g}/\text{m}^3$)	Ethanol ($\mu\text{g}/\text{m}^3$)	PCE ($\mu\text{g}/\text{m}^3$)	2-propanol ($\mu\text{g}/\text{m}^3$)
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NOTES:

- not sampled/analyzed

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

ft bgs = feet below ground surface

 $\mu\text{g}/\text{m}^3$ = micrograms per cubic meter

TPH-g = total petroleum hydrocarbons as gasoline

MTBE = methyl tertiary-butyl ether

PCE = tetrachloroethene

ESLs = Environmental Screening Levels - for residential land use

CHHSLs = California Human Health Screening Levels

pp = CHHSL postponed

* = Sampling not possible due to seasonal wet soil conditions

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

D_f = after the probe/sample ID indicates a duplicate sample collected in the fieldD_l = after the probe/sample ID indicates a duplicate sample prepared and analyzed by the lab

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

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

TABLE 6: HVDPE VAPOR ANALYTICAL & FIELD SCREENING DATA SUMMARY

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

Sample Port ID	Sample Date	Notes	Initial Valve Position	Final Valve Position	Manifold Vacuum (in-Hg)	TVH (ppmv)	CH4 (%)	O2 (%)	CO2 (%)	TPH-g (ppmv)	MTBE (ppmv)	Benzene (ppmv)	Toluene (ppmv)	Ethyl-benzene (ppmv)	Xylenes (ppmv)
MW-1S	08/10/07	1,2	100%	OFF	21	-	-	-	-	3,400	ND<14	68	210	30	160
	09/28/07		OFF	OFF	20	-	-	-	-	-	-	-	-	-	-
	10/17/07		OFF	50%	21	0	0.0	20.9	0.0	380	ND<14	26	58	5.7	46
	11/16/07		50%	50%	21	2,800	0.5	20.7	0.5	3,200	ND<14	69	220	20	110
	12/26/07		50%	50%	18	3,000	1.5	20.7	0.4	3,900	ND<27	79	210	41	210
	01/22/08		50%	OFF	18	160	0.0	19.7	0.3	660	ND<14	5.8	23	2.7	28
	02/07/08	4	OFF	OFF	21.5	0	0.0	20.9	0.0	-	-	-	-	-	-
	03/18/08		OFF	OFF	14.5	0	xx	20.9	0.0	140	ND<0.68	1.3	6.9	0.78	6.9
	04/30/08		OFF	OFF	18	50	0.0	20.9	0.1	520	3.3	13	38	6.7	53
	05/29/08		OFF	OFF	19.5	-	-	-	-	-	-	-	-	-	-
	06/26/08		OFF	OFF	23	-	-	-	-	-	-	-	-	-	-
	07/30/08	7	OFF	OFF	17	310	0.0	18.3	1.1	-	-	-	-	-	-
	09/30/08		OFF	100%	16.5	5	0.0	20.9	0.4	65	0.71	0.44	2.2	0.65	12
	11/04/08		100%	100%	13	4,250	1.5	12.6	2.9	3,100	ND<180	63	140	14	120
	12/02/08		100%	100%	10	2,710	0.5	20.3	0.9	3,300	ND<14	57	150	12	110
	01/06/09		100%	100%	12	55	0.0	20.9	0.0	35	ND<0.68	3.6	5.6	0.22	1.8
	02/09/09		100%	100%	12	15	0.0	20.9	0.0	36	ND<0.68	4.7	6.7	0.35	3.1
	03/18/09		100%	100%	10	10	0.0	20.9	0.3	120	ND<1.0	1.8	9.6	0.69	4.2
	04/21/09		100%	100%	11	10	0.0	20.4	0.2	42	ND<0.68	0.56	2.3	0.29	1.9
	05/19/09		100%	100%	11.5	35	0.0	19.8	0.7	54	ND<0.68	1.1	6.2	0.79	4.0
	08/31/09		100%	OFF	12	540	0.0	13.7	3.2	39	ND<0.68	0.54	2.0	0.27	2.8
	09/10/09		OFF	OFF	15	-	-	-	-	-	-	-	-	-	-
	09/17/09		OFF	OFF	14	30	-	20.9	0.2	51	ND<2.7	1.3	8.8	0.59	4.2
	09/25/09		OFF	OFF	13	-	-	-	-	-	-	-	-	-	-
	10/02/09		OFF	OFF	14	-	-	-	-	-	-	-	-	-	-
	10/20/09		OFF	OFF	12	340	0.0	20.9	0.1	130	ND<2.7	5.2	15	1.8	13
	11/03/09		OFF	OFF	-	-	-	-	-	-	-	-	-	-	-
	12/11/09		OFF	OFF	13	250	0.0	20.9	0.0	160	ND<1.4	5.1	12	1.5	14

TABLE 6: HVDPE VAPOR ANALYTICAL & FIELD SCREENING DATA SUMMARY

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

Sample Port ID	Sample Date	Notes	Initial Valve Position	Final Valve Position	Manifold Vacuum (in-Hg)	TVH (ppmv)	CH4 (%)	O2 (%)	CO2 (%)	TPH-g (ppmv)	MTBE (ppmv)	Benzene (ppmv)	Toluene (ppmv)	Ethyl-benzene (ppmv)	Xylenes (ppmv)
MW-2S	08/10/07	1	100%	100%	21	-	-	-	-	11,000	ND<110	280	770	81	360
	09/28/07		100%	100%	20	5,900	2.5	20.6	0.4	5,100	ND<35	110	310	46	260
	10/17/07		100%	100%	21	1,450	1.0	20.9	0.1	1,900	ND<20	59	120	12	73
	11/16/07		100%	100%	21	4,600	2.5	20.7	0.5	5,800	ND<27	120	340	40	200
	12/26/07		100%	100%	18	2,600	1.5	20.9	0.4	3,100	ND<27	84	230	37	190
	01/22/08		100%	100%	18	1,000	0.5	17.7	0.6	3,000	ND<14	61	190	24	180
	02/07/08	5	100%	100%	21.5	1,000	0.5	20.9	0.2	-	-	-	-	-	-
	03/18/08		100%	100%	14.5	100	xx	20.9	0.6	1,400	2.3	17	51	13	81
	04/30/08		100%	OFF	18	190	0.0	20.7	0.5	1,900	ND<6.8	22	75	16	110
	05/29/08		OFF	OFF	19.5	-	-	-	-	-	-	-	-	-	-
	06/26/08	7	OFF	OFF	23	-	-	-	-	-	-	-	-	-	-
	07/30/08		OFF	OFF	17	100	0.0	20.3	0.6	-	-	-	-	-	-
	09/30/08		OFF	100%	16.5	160	0.0	16.7	1.8	220	ND<0.68	0.44	3.1	1.0	17
	11/04/08		100%	100%	13	6,800	1.5	11.8	3.1	3,800	ND<14	78	170	18	150
	12/02/08		100%	100%	10	3,200	0.5	18.3	0.9	3,200	ND<14	66	170	14	130
	01/06/09		100%	100%	11	1,950	0.5	17.7	1.6	3,400	ND<30	69	150	13	95
	02/09/09		100%	100%	12	900	0.0	16.4	1.4	1,100	ND<10	25	53	4.9	49
	03/18/09		100%	100%	10	30	0.0	20.9	0.0	130	ND<0.68	1.1	5.6	0.43	2.6
	04/21/09		100%	100%	11	15	0.0	17.1	1.4	130	ND<0.68	1.3	3.9	0.36	4.9
	05/19/09		100%	100%	11.5	190	0.0	12.6	3.5	460	ND<2.0	4.3	13	2.0	19
	08/31/09		100%	100%	12	980	0.0	8.5	5.1	1,800	ND<20	29	57	8.6	79
	09/10/09		100%	100%	15	1,700	0.5	15.3	3.2	2,000	ND<15	52	100	6.4	74
	09/17/09		100%	100%	14	2,400	0.5	19.8	1.6	2,700	ND<25	80	140	11	100
	09/25/09		100%	100%	13	2,500	0.5	20.0	1.2	2,900	ND<10	67	130	10	77
	10/02/09		100%	100%	14	2,800	0.5	20.2	1.1	2,800	ND<10	63	130	8.5	72
	10/20/09		100%	100%	13	2,900	1.0	19.8	1.3	3,000	ND<35	85	170	9.7	82
	11/03/09		100%	100%	14	2,450	0.5	20.2	1.0	2,500	ND<14	68	130	8.6	69
	12/11/09		100%	100%	13	1,400	0.0	9.2	4.4	1,600	ND<10	39	81	6.6	52

TABLE 6: HVDPE VAPOR ANALYTICAL & FIELD SCREENING DATA SUMMARY

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

Sample Port ID	Sample Date	Notes	Initial Valve Position	Final Valve Position	Manifold Vacuum (in-Hg)	TVH (ppmv)	CH4 (%)	O2 (%)	CO2 (%)	TPH-g (ppmv)	MTBE (ppmv)	Benzene (ppmv)	Toluene (ppmv)	Ethyl-benzene (ppmv)	Xylenes (ppmv)
MW-5S	08/10/07	1	100%	100%	21	-	-	-	-	54	ND<0.68	0.60	2.7	0.60	3.7
	09/28/07		100%	100%	20	8,000	5.5	20.2	0.3	3,800	ND<60	70	150	19	120
	10/17/07		100%	100%	21	880	0.5	20.9	0.1	1,100	ND<14	27	56	5.3	36
	11/16/07		100%	100%	21	4,600	3.0	20.0	0.7	3,800	ND<110	64	170	21	170
	12/26/07		100%	OFF	18	200	0.0	20.9	0.0	140	ND<0.68	0.45	3.7	1.5	14
	01/22/08		OFF	OFF	18	300	0.0	18.0	0.4	760	ND<4.5	3.3	16	2.4	28
	02/07/08		OFF	OFF	21.5	-	-	-	-	-	-	-	-	-	-
	03/18/08		OFF	OFF	14.5	0	xx	19.9	0.3	580	ND<2.7	3.0	24	4.2	39
	04/30/08		OFF	OFF	18	0	0.0	19.4	1.0	2,000	ND<10	18	56	5.7	63
	05/29/08		OFF	OFF	19.5	-	-	-	-	-	-	-	-	-	-
	06/26/08	7	OFF	OFF	23	-	-	-	-	-	-	-	-	-	-
	07/30/08		OFF	50%	17	1,000	0.0	14.0	2.8	-	-	-	-	-	-
	09/30/08		50%	100%	16.5	1,850	0.0	16.0	2.8	2,000	ND<14	27	61	6.2	87
	11/04/08		100%	100%	13	2,450	0.5	14.6	2.3	3,900	ND<27	30	100	6.1	150
	12/02/08		100%	100%	10	1,810	0.0	19.7	0.1	1,900	ND<27	ND<3.1	29	2.9	81
	01/06/09		100%	100%	11	1,350	0.0	17.3	0.3	-	-		-	-	-
	02/09/09		100%	100%	12	260	0.0	19.7	0.3	270	ND<4.5	2.4	7.5	0.90	23
	03/18/09		100%	100%	10	50	0.0	20.8	0.3	99	ND<2.0	2.1	6.0	0.76	6.2
	04/21/09	8	100%	100%	11	20	0.0	20.3	0.3	40	ND<1.0	1.1	4.0	0.51	4.4
	05/19/09		100%	100%	11.5	400	0.0	19.4	0.5	450	ND<3.0	1.7	6.8	0.71	5.6
	08/31/09		100%	100%	-	660	-	13.5	3.3	1,300	ND<10	9.6	21	3.0	54
	09/10/09		100%	100%	15	1,100	0.0	16.8	1.9	1,800	ND<6.8	18	49	4.0	110
	09/17/09		100%	100%	14	1,050	0.0	19.2	1.2	2,200	ND<6.8	19	66	6.6	160
	09/25/09		100%	100%	13	1,100	0.0	19.1	1.3	2,100	ND<2.7	11	44	5.9	110
	10/02/09		100%	100%	14	1,300	0.0	19.2	1.3	2,100	ND<2.7	9.4	35	4.9	100
	10/20/09		100%	100%	13	1,150	0.0	19.4	1.1	1,700	ND<5.0	6.3	28	2.9	88
	11/03/09		100%	100%	14	550	0.0	19.5	1.0	1,300	ND<2.7	4.7	24	2.0	82
	12/11/09		100%	100%	13	350	0.0	18.2	1.0	440	ND<2.7	2.6	9.8	1.8	26

TABLE 6: HVDPE VAPOR ANALYTICAL & FIELD SCREENING DATA SUMMARY

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

Sample Port ID	Sample Date	Notes	Initial Valve Position	Final Valve Position	Manifold Vacuum (in-Hg)	TVH (ppmv)	CH4 (%)	O2 (%)	CO2 (%)	TPH-g (ppmv)	MTBE (ppmv)	Benzene (ppmv)	Toluene (ppmv)	Ethyl-benzene (ppmv)	Xylenes (ppmv)
MW-6S	08/10/07	1	100%	100%	21	-	-	-	-	5,800	ND<30	69	280	24	140
	09/28/07		100%	100%	20	>11,000	8.0	19.7	0.5	6,800	ND<60	100	360	34	190
	10/17/07		100%	100%	21	1,350	0.5	20.9	0.1	1,700	ND<10	24	90	9.7	79
	11/16/07		100%	100%	21	6,300	4.5	19.2	1.0	6,400	ND<27	56	270	40	310
	12/26/07		100%	100%	18	4,600	2.5	18.5	1.3	4,200	ND<27	21	96	14	180
	01/22/08		100%	100%	18	1,050	0.5	15.6	1.0	1,900	ND<14	11	74	13	100
	02/07/08		-	-	21.5	-	-	-	-	-	-	-	-	-	-
	03/18/08		100%	100%	14.5	15	xx	20.5	0.1	230	ND<1.4	1.2	9.2	2.4	16
	04/30/08		100%	OFF	18	140	0.0	20.7	0.7	760	ND<6.8	3.5	18	3.2	36
	05/29/08		OFF	OFF	19.5	-	-	-	-	-	-	-	-	-	-
	06/26/08		OFF	100%	23	210	0.0	19.8	0.4	400	ND<10	2.0	18	3.1	24
	07/30/08	7	100%	100%	17	270	0.0	20.2	0.7	460	ND<4.5	1.7	14	2.2	19
	09/30/08		100%	100%	16.5	570	0.0	17.4	2.0	640	ND<14	7.7	42	3.7	31
	11/04/08		100%	100%	13	580	0.0	17.4	1.2	900	ND<2.7	4.6	21	4.6	46
	12/02/08		100%	100%	10	460	0.0	20.6	0.3	710	ND<14	3.2	13	1.4	30
	01/06/09		100%	100%	11	280	0.0	19.9	0.4	520	ND<14	4.1	17	2.3	32
	02/09/09		100%	100%	12	80	0.0	20.9	0.1	60	ND<0.68	1.4	3.4	0.49	8.2
	03/18/09		100%	100%	10	70	0.0	20.9	0.0	61	ND<3.0	1.3	1.7	0.38	4.0
	04/21/09		100%	100%	11	10	0.0	20.9	0.0	18	0.98	0.41	0.47	0.13	1.4
	05/19/09		100%	100%	11	-	-	-	-	20	ND<0.68	0.59	0.98	0.17	2.1
	08/31/09		100%	OFF	12	170	0.0	18.9	0.9	330	ND<2.7	5.5	27	3.7	26
	09/10/09		OFF	OFF	15	-	-	-	-	-	-	-	-	-	-
	09/17/09		OFF	OFF	14	560	0.0	19.6	0.3	370	ND<3.0	1.9	6.9	1.4	9.2
	09/25/09		OFF	OFF	13	-	-	-	-	-	-	-	-	-	-
	10/02/09		OFF	OFF	14	-	-	-	-	-	-	-	-	-	-
	10/20/09		OFF	OFF	12	80	0.0	20.9	0.0	78	ND<0.68	0.69	2.7	1.7	9.5
	11/03/09		OFF	OFF	-	-	-	-	-	-	-	-	-	-	-
	12/11/09		OFF	OFF	13	50	0.0	20.9	0.0	29	ND<0.68	0.20	1.1	0.30	3.1

TABLE 6: HVDPE VAPOR ANALYTICAL & FIELD SCREENING DATA SUMMARY

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

Sample Port ID	Sample Date	Notes	Initial Valve Position	Final Valve Position	Manifold Vacuum (in-Hg)	TVH (ppmv)	CH4 (%)	O2 (%)	CO2 (%)	TPH-g (ppmv)	MTBE (ppmv)	Benzene (ppmv)	Toluene (ppmv)	Ethyl-benzene (ppmv)	Xylenes (ppmv)
MW-7S	08/10/07	1			21	-	-	-	-	19,000	ND<450	620	590	27	100
	09/28/07		100%	100%	20	11,000	19	20.0	0.5	13,000	ND<150	350	630	69	370
	10/17/07		100%	100%	21	0	0.0	20.9	0.0	390	ND<14	27	60	6.0	51
	11/16/07		100%	50%	21	10,000	8.0	20.5	0.4	7,700	ND<45	170	390	47	280
	12/26/07		50%	100%	18	5,500	3.0	20.4	0.5	4,700	ND<45	100	220	27	190
	01/22/08		100%	100%	18	2,050	1.0	18.2	0.4	3,900	ND<14	69	200	20	210
	02/07/08		-	-	21.5	-	-	-	-	-	-	-	-	-	-
	03/18/08		100%	100%	14.5	390	xx	20.2	0.3	2,000	ND<5.0	25	81	11	78
	04/30/08		100%	OFF	18	600	1.0	19.0	1.2	4,100	ND<14	66	150	15	150
	05/29/08		OFF	OFF	19.5	-	-	-	-	-	-	-	-	-	-
	06/26/08		OFF	100%	23	5,200	1.5	15.8	2.7	4,800	ND<30	56	71	4.0	110
	07/30/08	7	100%	100%	17	2,750	0.5	18.3	1.7	-	-	-	-	-	-
	09/30/08		100%	100%	16.5	4,200	1.0	12.6	5.9	2,800	ND<30	57	72	4.2	110
	11/04/08		100%	100%	13	9,100	1.5	7.5	3.5	4,100	ND<14	53	87	4.3	130
	12/02/08		100%	100%	10	4,350	0.5	19.5	1.1	3,900	ND<27	44	89	4.1	110
	01/06/09		100%	100%	11	3,150	0.5	15.4	2.3	2,000	ND<4.5	19	43	3.0	77
	02/09/09		100%	100%	12	1,050	0.0	13.4	2.5	1,100	ND<10	19	21	1.8	34
	03/18/09		100%	100%	10	440	0.0	15.3	2.7	690	ND<14	28	22	1.9	17
	04/21/09		100%	100%	11	30	0.0	20.4	1.3	53	4.5	2.7	2.2	0.28	3.0
	05/19/09		100%	100%	11.5	490	0.0	9.2	5.2	890	ND<14	29	33	1.8	20
	08/31/09		100%	100%	12	1,450	0.0	9.3	8.2	1,900	ND<30	52	37	3.0	64
	09/10/09		100%	100%	15	3,800	0.0	10.6	4.2	3,100	ND<20	68	71	3.8	130
	09/17/09		100%	100%	14	7,000	2.0	18.8	1.8	5,200	ND<35	120	140	9.0	200
	09/25/09		100%	100%	13	7,600	2.0	18.8	1.6	5,500	ND<25	89	130	8.0	150
	10/02/09		100%	100%	14	8,050	2.0	18.8	1.6	5,300	ND<35	100	160	11	210
	10/20/09		100%	100%	13	5,450	1.5	18.8	1.7	3,800	ND<40	63	110	6.9	120
	11/03/09		100%	100%	14	3,900	1.0	19.0	1.5	3,800	ND<20	42	87	6.3	140
	12/11/09		100%	100%	13	1,250	0.0	9.5	7.0	1,300	ND<5.0	20	50	11	63

TABLE 6: HVDPE VAPOR ANALYTICAL & FIELD SCREENING DATA SUMMARY

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

Sample Port ID	Sample Date	Notes	Initial Valve Position	Final Valve Position	Manifold Vacuum (in-Hg)	TVH (ppmv)	CH4 (%)	O2 (%)	CO2 (%)	TPH-g (ppmv)	MTBE (ppmv)	Benzene (ppmv)	Toluene (ppmv)	Ethyl-benzene (ppmv)	Xylenes (ppmv)
MW-10S	11/21/07	7	100%	100%	19	>44,000	43.0	17.0	2.2	28,000	ND<68	300	800	63	230
	12/26/07		100%	100%	18	3,900	2.5	19.4	0.5	6,300	ND<14	55	350	64	300
	01/22/08		100%	100%	16.5	1,850	0.5	16.1	0.5	4,700	ND<14	38	230	49	310
	02/07/08		-	-	-	-	-	-	-	-	-	-	-	-	-
	03/18/08		100%	100%	14.5	270	xx	19.0	0.9	2,100	ND<14	13	73	31	190
	04/30/08		100%	100%	18	310	0.5	19.6	0.9	2,500	ND<14	11	76	33	230
	05/29/08		100%	100%	18	1,750	0.0	19.6	0.8	1,800	ND<6.8	13	47	17	120
	06/26/08		100%	100%	23	370	0.0	20.7	0.1	780	ND<1.4	4.1	15	4.9	38
	07/30/08		100%	100%	17	1,050	0.0	20.3	0.8	1,600	ND<14	16	50	9.5	95
	09/30/08		100%	OFF	16.5	640	0.0	20.9	0.4	690	ND<4.0	10	29	5.1	53
	11/04/08		OFF	100%	13	1,900	0.5	13.0	2.5	2,300	ND<14	36	89	8.1	120
	12/02/08		100%	100%	10	1,550	0.0	20.3	0.6	1,500	ND<14	26	73	8.4	71
	01/06/09		100%	100%	11	1,150	0.0	18.2	1.2	2,200	ND<15	31	64	6.7	64
	02/09/09		100%	100%	12	310	0.0	17.8	0.7	400	ND<2.7	5.6	12	1.1	21
	03/18/09		100%	100%	10	130	0.0	18.7	0.7	220	ND<10	8.9	7.7	1.4	10
	04/21/09		100%	100%	11	110	0.0	16.9	1.0	240	ND<5.0	4.4	5.7	0.98	9.6
	05/19/09		100%	100%	11.5	75	0.0	12.2	2.3	370	ND<5.0	4.9	7.7	1.2	13
	08/31/09		100%	100%	12	650	-	8.3	0.0	1,700	ND<10	18	22	4.4	67
	09/10/09		100%	100%	15	730	0.0	15.9	2.6	1,600	ND<10	29	63	5.3	75
	09/17/09		100%	100%	14	1,300	0.0	19.4	1.5	1,900	ND<15	40	82	7.2	85
	09/25/09		100%	100%	13	450	0.0	19.7	1.2	2,400	ND<10	37	81	8.1	72
10/02/09	100%	100%	14	2,150	0.0	19.6	1.1	1,700	ND<20	38	79	6.6	76		
10/20/09	100%	100%	13	2,000	0.5	19.4	1.3	2,200	ND<20	47	97	7.2	65		
11/03/09	100%	100%	14	1,400	0.0	19.3	1.3	2,300	ND<10	39	85	6.5	72		
12/11/09	100%	100%	13	1,250	0.0	7.1	4.2	1,500	ND<14	24	40	3.0	37		

TABLE 6: HVDPE VAPOR ANALYTICAL & FIELD SCREENING DATA SUMMARY

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

Sample Port ID	Sample Date	Notes	Initial Valve Position	Final Valve Position	Manifold Vacuum (in-Hg)	TVH (ppmv)	CH4 (%)	O2 (%)	CO2 (%)	TPH-g (ppmv)	MTBE (ppmv)	Benzene (ppmv)	Toluene (ppmv)	Ethyl-benzene (ppmv)	Xylenes (ppmv)
MW-11S	11/21/07	7	100%	50%	19	36,600	26.5	19.2	2.2	20,000	ND<68	240	640	63	240
	12/26/07		50%	100%	18	1,350	0.5	20.9	0.2	3,400	ND<75	50	220	50	230
	01/22/08		100%	100%	16.5	1,000	0.0	19.3	0.2	3,000	ND<30	81	190	39	230
	02/07/08		-	-	-	-	-	-	-	-	-	-	-	-	-
	03/18/08		100%	100%	14.5	130	xx	20.0	0.3	1,700	ND<14	26	66	26	150
	04/30/08		100%	100%	18	120	0.0	20.9	0.2	600	ND<5.0	6.7	23	5.9	49
	05/29/08		100%	100%	18	950	0.0	20.9	0.3	1,800	ND<30	24	47	18	120
	06/26/08		100%	100%	23	480	0.0	20.9	0.1	940	ND<15	12	28	8.4	57
	07/30/08		100%	100%	17	980	0.0	20.9	0.3	1,600	ND<30	22	50	13	100
	09/30/08		100%	OFF	16.5	510	0.0	20.9	0.2	490	ND<10	11	22	3.8	40
	11/04/08		OFF	100%	13	360	0.0	16.5	1.4	820	ND<20	22	21	5.2	57
	12/02/08		100%	100%	10	320	0.0	20.9	0.2	1,400	ND<35	23	57	6.3	73
	01/06/09		100%	100%	11	790	0.0	18.9	0.6	1,200	ND<20	29	53	5.7	56
	02/09/09		100%	100%	12	380	0.0	17.6	0.8	500	ND<6.0	14	18	2.3	28
	03/18/09		100%	100%	10	280	0.0	17.3	1.2	400	ND<3.0	48	18	3.4	20
	04/21/09		100%	100%	11	210	0.0	16.9	1.2	460	ND<20	32	20	3.3	31
	05/19/09		100%	100%	11.5	200	0.0	15.5	1.5	80	ND<3.0	5.1	3.2	0.58	6.7
	08/31/09		100%	100%	12	360	-	9.1	3.5	1,000	ND<20	36	17	3.7	63
	09/10/09		100%	100%	15	420	0.0	17.7	1.5	870	ND<30	38	32	5.7	68
	09/17/09		100%	100%	14	490	0.0	20.6	0.7	890	ND<25	27	39	4.1	63
	09/25/09		100%	100%	13	510	0.0	20.6	0.5	840	ND<30	19	31	2.6	33
10/02/09	100%	100%	14	820	0.0	20.6	0.5	880	ND<15	22	40	3.9	55		
10/20/09	100%	100%	13	750	0.0	20.4	0.6	800	ND<15	20	32	3.4	39		
11/03/09	100%	100%	14	400	0.0	20.7	0.4	820	ND<10	16	30	2.6	42		
12/11/09	100%	100%	13	350	0.0	13.0	2.5	660	ND<6.8	19	19	2.2	28		

TABLE 6: HVDPE VAPOR ANALYTICAL & FIELD SCREENING DATA SUMMARY

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

Sample Port ID	Sample Date	Notes	Initial Valve Position	Final Valve Position	Manifold Vacuum (in-Hg)	TVH (ppmv)	CH4 (%)	O2 (%)	CO2 (%)	TPH-g (ppmv)	MTBE (ppmv)	Benzene (ppmv)	Toluene (ppmv)	Ethyl-benzene (ppmv)	Xylenes (ppmv)
MW-12S	11/21/07	7	50%	50%	19	110	0.0	20.9	0.7	1,400	ND<100	87	51	10	40
	12/26/07		50%	50%	18	720	0.0	20.9	0.1	1,200	ND<45	27	100	13	74
	01/22/08		100%	100%	16.5	630	0.0	19.3	0.2	1,100	ND<45	14	50	8.4	65
	02/07/08		-	-	-	-	-	-	-	-	-	-	-	-	-
	03/18/08		100%	100%	14.5	0	xx	20.9	0.0	460	ND<30	42	32	4.2	36
	04/30/08		100%	100%	18	65	0.0	20.9	0.2	390	5	8.8	17	3.9	30
	05/29/08		100%	100%	18	150	0.0	20.9	0.3	490	ND<10	14	23	4.4	30
	06/26/08		100%	100%	23	140	0.0	20.9	0.1	300	4.1	5.1	14	2.6	22
	07/30/08		100%	100%	17	240	0.0	20.9	0.3	450	ND<5.0	4.5	20	3.8	32
	09/30/08		100%	OFF	16.5	190	0.0	20.9	0.2	230	ND<5.0	3.9	12	2.2	28
	11/04/08		OFF	100%	13	140	0.0	18	0.8	260	ND<5.0	6.5	7.4	1.2	14
	12/02/08		100%	100%	10	150	0.0	20.5	0.6	660	ND<5.0	7.3	29	4.5	66
	01/06/09		100%	100%	11	380	0.0	20.3	0.4	490	ND<6.8	9.1	18	2.2	37
	02/09/09		100%	100%	12	70	0.0	20.1	0.3	110	ND<5.0	4.2	4.0	0.58	8.1
	03/18/09		100%	100%	10	25	0.0	20.9	0.2	98	ND<5.0	7.6	4.2	0.53	2.5
	04/21/09		100%	100%	11	30	0.0	20.6	0.5	40	3.4	6.5	2.1	0.41	2.0
	05/19/09		100%	100%	11.5	20	0.0	19.2	0.7	52	ND<3.0	4.7	1.8	0.47	3.5
	08/31/09		100%	OFF	12	20	-	16.0	1.4	130	ND<3.0	3.9	3.0	0.67	8.0
	09/10/09		OFF	OFF	15	-	-	-	-	-	-	-	-	-	-
	09/17/09		OFF	OFF	14	20	-	20.8	0.4	24	ND<2.0	1.7	1.8	0.18	1.9
	09/25/09		OFF	OFF	13	-	-	-	-	-	-	-	-	-	-
10/02/09	OFF	OFF	14	-	-	-	-	-	-	-	-	-	-	-	-
10/20/09	OFF	OFF	12	20	0.0	20.9	0.2	120	ND<1.4	4.2	7.9	0.70	8.6		
11/03/09	OFF	OFF	-	-	-	-	-	-	-	-	-	-	-	-	-
12/11/09	OFF	OFF	13	35	0.0	17.8	0.6		60	ND<1.0	2.6	4.4	0.45	5.6	

TABLE 6: HVDPE VAPOR ANALYTICAL & FIELD SCREENING DATA SUMMARY

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

Sample Port ID	Sample Date	Notes	Initial Valve Position	Final Valve Position	Manifold Vacuum (in-Hg)	TVH (ppmv)	CH4 (%)	O2 (%)	CO2 (%)	TPH-g (ppmv)	MTBE (ppmv)	Benzene (ppmv)	Toluene (ppmv)	Ethyl-benzene (ppmv)	Xylenes (ppmv)
AS	10/17/07	7	100%	100%	-	0	0.0	20.9	0.0	130	ND<1.4	4.3	11	1.4	12
	11/08/07		100%	100%	-	0	0.0	20.9	0.0	19	ND<0.68	0.60	1.8	0.18	3.2
	01/15/08		100%	100%	-	-	-	-	-	1,100	19	31	100	17	180
	01/31/08		100%	100%	-	-	-	-	-	69	ND<4.5	1.7	5.0	0.81	11
	02/07/08		100%	100%	-	0	0.0	20.9	0.0	31	1.4	0.47	1.5	0.21	4.1
	03/18/08		100%	100%	-	-	-	-	-	31	0.71	0.60	1.8	0.34	3.2
	04/30/08		100%	100%	-	10	0.0	20.9	0.0	37	ND<0.68	0.36	1.4	0.34	4.1
	05/29/08		100%	100%	-	60	0.0	20.9	0.0	ND<7.0	ND<0.68	ND<0.077	ND<0.065	ND<0.057	0.16
	06/26/08		100%	100%	-	10	0.0	20.9	0.0	44	0.97	0.89	2.5	0.54	6.3
	07/30/08		100%	100%	-	0	0.0	20.9	0.0	41	ND<1.4	0.81	2.2	0.20	4.2
	09/30/08		100%	100%	-	0	0.0	20.9	0.0	-	-	-	-	-	-
	11/04/08		100%	100%	-	0	0.0	20.9	0.1	21	ND<0.68	0.38	0.91	0.13	2.6
	12/02/09		100%	100%	-	0	0.0	20.9	0.1	10	ND<0.68	ND<0.077	0.22	ND<0.057	0.79
	01/06/09		100%	100%	-	0	0.0	20.9	0.1	150	ND<1.5	1.9	6.9	1.1	22
	02/09/09		100%	100%	-	15	0.0	20.9	0.0	18	ND<0.68	0.28	0.57	0.078	1.5
	03/18/09		100%	100%	-	0	0.0	20.9	0.0	ND<7.0	ND<0.68	ND<0.077	0.085	ND<0.057	0.15
	04/21/09		100%	100%	-	0	0.0	20.9	0.0	ND<7.0	ND<0.68	ND<0.077	ND<0.065	ND<0.057	ND<0.057
	05/19/09		100%	100%	-	0	0.0	20.9	0.0	ND<7.0	ND<0.68	ND<0.077	ND<0.065	ND<0.057	ND<0.057
	08/31/09		100%	100%	-	0	0.0	20.9	0.0	ND<7.0	ND<0.68	ND<0.077	0.096	ND<0.057	0.24
	09/10/09		100%	100%	-	0	0.0	20.9	0.0	ND<7.0	ND<0.68	ND<0.077	-	-	-
	09/17/09		100%	100%	-	0	0.0	20.9	0.0	-	-	-	-	-	-
	09/25/09		100%	100%	-	0	0.0	20.9	0.0	-	-	-	-	-	-
	10/02/09		100%	100%	-	0	0.0	20.9	0.0	7.3	ND<1.0	0.27	0.57	ND<0.057	0.93
	10/20/09		100%	100%	-	-	-	-	-	-	-	-	-	-	-
	11/03/09		100%	100%	-	0	0.0	20.9	0.0	ND<7.0	ND<0.68	ND<0.077	ND<0.065	ND<0.057	ND<0.057
	12/11/09		100%	100%	-	-	-	-	-	-	-	-	-	-	-

TABLE 6: HVDPE VAPOR ANALYTICAL & FIELD SCREENING DATA SUMMARY

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

Sample Port ID	Sample Date	Notes	Initial Valve Position	Final Valve Position	Manifold Vacuum (in-Hg)	TVH (ppmv)	CH4 (%)	O2 (%)	CO2 (%)	TPH-g (ppmv)	MTBE (ppmv)	Benzene (ppmv)	Toluene (ppmv)	Ethyl-benzene (ppmv)	Xylenes (ppmv)
PRED	06/28/07	1	-	-	18.5	-	-	-	-	-	-	-	-	-	-
	07/11/07		-	-	21.5	10,750	-	-	-	6,600	ND<90	180	340	39	190
	07/27/07		-	-	20	>11,000	-	-	-	11,000	ND<75	170	330	38	160
	08/01/07		-	-	19	6,000	9.1	18.5	1.1	5,500	ND<70	140	250	16	71
	08/10/07		-	-	21	-	-	-	-	7,700	ND<90	210	410	41	190
	09/28/07		-	-	20	5,700	3.5	20.7	0.3	4,000	ND<50	90	170	9.3	42
	10/17/07		-	-	21	9,050	-	-	-	5,100	ND<60	130	210	8.6	51
	11/08/07		-	-	21	0	0.0	20.9	0.0	4,000	ND<0.68	0.35	2.2	0.68	6.6
	11/16/07		-	-	21	3,050	2.0	20.7	0.4	3,700	ND<120	63	170	20	120
	11/16/07		-	-	21	6,100	4.5	20.3	0.7	6,000	ND<27	100	250	27	170
	11/21/07		-	-	19	12,000	13.5	19.4	1.2	2,500	ND<14	39	120	16	79
	12/04/07		-	-	20	10,500	9.5	18.8	0.9	7,900	ND<32	120	340	48	280
	12/26/07		-	-	18	3,650	2.0	20.9	0.5	4,100	ND<27	72	250	42	270
	01/08/08	3	-	-	18	-	-	-	-	-	-	-	-	-	-
	01/15/08		-	-	19	710	0.0	20.0	0.3	1,900	ND<14	29	89	16	100
	01/22/08		-	-	18	800	0.0	17.8	0.5	1,900	ND<14	34	100	13	100
	01/31/08		-	-	21	1,250	0.5	20.9	0.5	2,200	ND<14	36	120	19	160
	02/07/08		-	-	21.5	700	0.0	20.9	0.4	2,000	ND<35	34	110	10	130
	03/18/08		-	-	14.5	160	xx	15.3	0.9	630	ND<3.0	7.0	25	5.6	38
	04/30/08		-	-	18	280	0.5	20.2	0.0	2,100	ND<5.0	20	63	16	120
	05/29/08	7	-	-	19.5	1,500	0.0	19.6	0.8	2,100	ND<10	21	45	18	120
	06/26/08		-	-	23	280	0.5	20.2	0.0	860	ND<5.0	11	27	6.5	50
	07/30/08		-	-	17	1,350	0.0	19.3	1.1	2,200	ND<6.8	24	62	10	90
	09/30/08		-	-	16.5	1,650	0.5	16.1	1.8	1,100	ND<10	20	42	8.2	78
	11/04/08		-	-	13	2,500	0.5	16.1	1.8	2,700	ND<10	31	77	9.3	130
	12/02/08		-	-	10	1,100	0.0	20.5	0.6	2,200	ND<5.0	27	80	8.7	130
	01/06/09		-	-	11	1,300	0.0	18.4	1.2	1,200	ND<80	21	58	5.7	78
	02/09/09	8	-	-	12	880	0.0	15.6	1.5	1,200	ND<10	17	31	3.1	46
	03/18/09		-	-	10	60	0.0	20.8	0.4	130	ND<0.68	5.2	11	1.2	7.1
	04/21/09		-	-	11	35	0.0	19.9	0.3	58	ND<1.4	1.9	3.5	0.44	3.7
	05/19/09		-	-	11.5	100	0.0	19.2	0.8	190	ND<2.7	3.4	7.3	0.95	8.0
	08/31/09		-	-	12	400	-	13.8	26	870	ND<4.5	11	21	3.0	29
	09/10/09		-	-	15	1,650	0.5	15.9	2.5	1,700	ND<20	34	62	5.8	110
	09/17/09		-	-	14	1,950	0.5	19.4	1.4	2,600	ND<20	52	100	7.5	140
	09/17/09	9	-	-	7	520	0.0	20.3	0.5	-	-	-	-	-	-
	09/25/09		-	-	13	2,450	0.5	19.6	1.2	2,700	ND<6.8	36	80	6.6	91
	10/02/09	10	-	-	14	2,200	0.0	19.6	1.1	2,400	ND<20	43	85	8.3	110
	10/20/09		-	-	13	2,200	0.5	19.6	1.2	2,500	ND<20	38	80	6.7	110
	10/20/09	11	-	-	12	930	0.0	20.9	0.3	590	ND<5.0	7.7	19	2.0	30
	11/03/09		-	-	14	1,450	0.5	20.9	1.0	2,000	ND<10	27	58	4.5	71
	12/11/09	12	-	-	13	380	0.0	14.7	2.2	690	ND<2.7	10	20	2.0	25
	12/11/09		-	-	13	1,050	0.0	18.9	1.5	-	-	-	-	-	-
	12/16/09	14	-	-	13	1,200	0.0	20.1	1.2	1,200	ND<14	35	72	5.1	52

TABLE 6: HVDPE VAPOR ANALYTICAL & FIELD SCREENING DATA SUMMARY

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

Sample Port ID	Sample Date	Notes	Initial Valve Position	Final Valve Position	Manifold Vacuum (in-Hg)	TVH (ppmv)	CH4 (%)	O2 (%)	CO2 (%)	TPH-g (ppmv)	MTBE (ppmv)	Benzene (ppmv)	Toluene (ppmv)	Ethylbenzene (ppmv)	Xylenes (ppmv)
POSTD	06/28/07	6,7	-	-	-	10,000	6.5	18.2	1.4	3,800	ND<60	120	160	22	110
	07/11/07		-	-	-	3,550	-	-	-	1,400	ND<14	36	82	12	67
	07/27/07		-	-	-	4,550	-	-	-	3,400	ND<14	56	120	15	70
	08/01/07		-	-	-	5,200	-	-	-	2,500	ND<27	59	140	17	95
	08/10/07		-	-	-	4,800	2.0	19.9	0.5	5,300	ND<45	130	290	37	180
	09/28/07		-	-	-	6,750	4.0	20.7	0.3	4,800	ND<60	100	210	23	120
	10/17/07		-	-	-	4,500	2.5	20.9	0.0	1,800	ND<14	41	110	14	100
	11/08/07		-	-	-	1,300	1.0	20.9	0.4	2,000	ND<15	42	100	12	88
	11/16/07		-	-	-	4,150	2.0	20.5	0.4	3,600	ND<14	58	190	25	180
	11/21/07		-	-	-	8,600	7.5	20.5	0.8	5,500	ND<25	75	210	28	130
	12/04/07		-	-	-	6,500	5.0	19.8	0.6	3,400	ND<16	44	120	22	120
	12/26/07		-	-	-	2,000	1.0	20.9	0.3	1,300	ND<45	26	96	15	100
	01/08/08		-	-	-	1,200	0.5	20.9	0.3	1,700	ND<14	23	79	13	83
	01/15/08		-	-	-	45	0.0	20.7	0.0	620	ND<14	11	39	6.6	44
	01/22/08		-	-	-	280	0.0	20.2	0.0	1,100	ND<14	14	50	8.4	65
	01/31/08		-	-	-	470	0.0	20.9	0.1	770	ND<14	12	38	6.9	62
	02/07/08		-	-	-	120	0.0	20.9	0.0	690	ND<6.8	10	37	6.6	58
	03/18/08		-	-	-	75	xx	20.2	0.4	310	ND<3.5	3.9	12	3.0	20
	04/30/08		-	-	-	55	0.0	20.9	0.2	700	ND<2.0	7.6	23	5.0	42
	05/29/08		-	-	-	630	0.0	20.7	0.2	500	ND<3.5	5.4	12	4.1	29
	06/26/08		-	-	-	55	0.0	20.9	0.2	620	ND<10	7.8	25	5.4	45
	07/30/08		-	-	-	-	-	-	-	-	-	-	-	-	-
	09/30/08		-	-	-	-	-	-	-	-	-	-	-	-	-
	11/04/08		-	-	-	-	-	-	-	-	-	-	-	-	-
	12/02/08		-	-	-	-	-	-	-	-	-	-	-	-	-
	01/06/09		-	-	-	-	-	-	-	-	-	-	-	-	-
	02/09/09		-	-	-	-	-	-	-	-	-	-	-	-	-
	03/18/09		-	-	-	-	-	-	-	-	-	-	-	-	-
	04/21/09		-	-	-	-	-	-	-	-	-	-	-	-	-
	05/19/09		-	-	-	-	-	-	-	-	-	-	-	-	-
	08/31/09		-	-	-	-	-	-	-	-	-	-	-	-	-
	09/10/09		-	-	-	-	-	-	-	-	-	-	-	-	-
	09/17/09		-	-	-	-	-	-	-	-	-	-	-	-	-
	09/25/09		-	-	-	-	-	-	-	-	-	-	-	-	-
	10/02/09		-	-	-	-	-	-	-	-	-	-	-	-	-
	10/20/09		-	-	-	-	-	-	-	-	-	-	-	-	-
	11/03/09		-	-	-	-	-	-	-	-	-	-	-	-	-
	12/11/09		-	-	-	-	-	-	-	-	-	-	-	-	-

TABLE 6: HVDPE VAPOR ANALYTICAL & FIELD SCREENING DATA SUMMARY

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

Sample Port ID	Sample Date	Notes	Initial Valve Position	Final Valve Position	Manifold Vacuum (in-Hg)	TVH (ppmv)	CH4 (%)	O2 (%)	CO2 (%)	TPH-g (ppmv)	MTBE (ppmv)	Benzene (ppmv)	Toluene (ppmv)	Ethyl-benzene (ppmv)	Xylenes (ppmv)
STACK	06/28/07	7	-	-	-	0	0.0	12.3	5.4	ND<7.0	ND<0.68	ND<0.077	ND<0.065	ND<0.057	ND<0.057
	07/27/08		-	-	-	-	-	-	-	-	-	-	-	-	-
	08/10/07		-	-	-	-	-	-	-	ND<7.0	ND<0.68	ND<0.077	ND<0.065	ND<0.057	ND<0.057
	09/28/07		-	-	-	0	0.0	14.0	4.5	ND<7.0	ND<0.68	ND<0.077	ND<0.065	ND<0.057	ND<0.057
	10/17/07		-	-	-	-	-	-	-	ND<7.0	ND<0.68	ND<0.077	ND<0.065	ND<0.057	ND<0.057
	11/08/07		-	-	-	-	-	-	-	-	21	ND<0.68	0.24	1.5	0.29
	11/16/07		-	-	-	0	0.0	14.8	4.8	ND<7.0	ND<0.68	ND<0.077	ND<0.065	ND<0.057	ND<0.057
	12/26/07		-	-	-	-	-	-	-	-	-	-	-	-	-
	01/18/08		-	-	-	-	-	-	-	ND<7.0	ND<0.68	ND<0.077	ND<0.065	ND<0.057	ND<0.057
	02/07/08		-	-	-	0	0.0	19.0	1.7	-	-	-	-	-	-
	03/18/08		-	-	-	0	xx	18.0	1.9	ND<7.0	ND<0.68	ND<0.077	ND<0.065	ND<0.057	ND<0.057
	04/30/08		-	-	-	0	0.0	17.7	2.0	ND<7.0	ND<0.68	ND<0.077	ND<0.065	ND<0.057	ND<0.057
	05/29/08		-	-	-	0	0.0	17.7	2.5	ND<7.0	ND<0.68	ND<0.077	ND<0.065	ND<0.057	ND<0.057
	06/26/08		-	-	-	0	0.0	17.9	1.9	ND<7.0	ND<0.68	ND<0.077	ND<0.065	ND<0.057	ND<0.057
	07/30/08		-	-	-	0	0.0	17.0	1.8	-	27	ND<0.68	0.09	0.64	0.16
	09/30/08		-	-	-	0	0.0	16.1	2.0	ND<7.0	ND<0.68	ND<0.077	ND<0.065	ND<0.057	ND<0.057
	11/04/08		-	-	-	0	0.0	15.7	2.9	ND<7.0	ND<0.68	ND<0.077	ND<0.065	ND<0.057	ND<0.057
	12/02/08		-	-	-	0	0.0	17.7	2.3	-	52	ND<0.68	0.19	1.5	0.34
	01/06/09		-	-	-	0	0.0	17.7	2.3	-	26	ND<0.68	ND<0.077	0.52	0.11
	02/09/09		-	-	-	0	0.0	16.1	2.6	ND<7.0	ND<0.68	ND<0.077	ND<0.065	ND<0.057	ND<0.057
	03/18/09		-	-	-	0	0.0	18.3	2.0	ND<7.0	ND<0.68	ND<0.077	ND<0.065	ND<0.057	ND<0.057
	04/21/09		-	-	-	0	0.0	18.3	2.2	ND<7.0	ND<0.68	ND<0.077	ND<0.065	ND<0.057	ND<0.057
	05/19/09		-	-	-	0	0.0	17.9	2.2	ND<7.0	ND<0.68	ND<0.077	ND<0.065	ND<0.057	ND<0.057
	08/31/09		-	-	-	0	0.0	16.0	3.0	ND<7.0	ND<0.68	ND<0.077	0.069	ND<0.057	0.35
	09/10/09		-	-	-	0	0.0	18.1	2.0	-	-	-	-	-	-
	10/02/09		-	-	-	0	0.0	17.6	2.5	ND<7.0	ND<0.68	ND<0.077	ND<0.065	ND<0.057	ND<0.057
	10/20/09		-	-	-	-	-	-	-	-	-	-	-	-	-
	11/03/09		-	-	-	0	0.0	17.7	2.4	ND<7.0	ND<0.68	ND<0.077	ND<0.065	ND<0.057	ND<0.057
	12/11/09		-	-	-	-	-	-	-	-	-	-	-	-	-
DL	-	-	-	-	-	5.0	0.1	0.1	0.1	7.0	0.68	0.077	0.065	0.057	0.057

TABLE 6: HVDPE VAPOR ANALYTICAL & FIELD SCREENING DATA SUMMARY

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

Sample Port ID	Sample Date	Notes	Initial Valve Position	Final Valve Position	Manifold Vacuum (in-Hg)	TVH (ppmv)	CH4 (%)	O2 (%)	CO2 (%)	TPH-g (ppmv)	MTBE (ppmv)	Benzene (ppmv)	Toluene (ppmv)	Ethyl-benzene (ppmv)	Xylenes (ppmv)
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NOTES:

TPH-g = total petroleum hydrocarbons as gasoline

MTBE = methyl tertiary-butyl ether

in-Hg = inches of mercury

ppmv = parts per million by volume

% = percent concentration by volume

PRED = pre-dilution sample port at combined inlet

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

- not sampled/analyzed

xx = methane sensor damaged; pending replacement

TVH = total volatile hydrocarbons (calibrated w/ hexane)

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

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

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

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

DL = detection limit for dilution factor of 1

TPH-g by EPA Method 8015C

BTEX & MTBE by EPA Method 8021B

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