2500 Camino Diablo, Suite 200, Walnut Creek, CA 94597
Phone: (925) 283-6000 Fax: (925) 944-2895

December 14, 2005

Mr. Barney Chan
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502

Subject: **High Vacuum Dual Phase Extraction Event Report**
245 8th Street
Oakland, California 94607
AEI Project No. 9482
ACHCSA Case No. RO0000202 / State ID 263

Dear Mr. Chan:

Enclosed is one electronic copy of the High Vacuum Dual Phase Extraction Event Report for the subject facility.

If you have any questions or comments, please don't hesitate to contact me or Peter McIntyre at (925) 283-6000.

Sincerely,
AEI Consultants

Ricky Bradford
Senior Staff Engineer

December 14, 2005

HIGH VACUUM DUAL PHASE EXTRACTION EVENT REPORT

245 8th Street
Oakland, California

ACHCSA Fuel Leak Case RO0000202
AEI Project No. 9482

Prepared For:

Mr. Victor Lum
Vic's Automotive
245 8th Street
Oakland, CA 94607

Prepared By:

AEI Consultants
2500 Camino Diablo, Suite 200
Walnut Creek, CA 94597
800/801-3224

AEI

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1.0 INTRODUCTION

AEI Consultants (AEI) has prepared this report on behalf of Mr. Victor Lum of Vic's Automotive, owner and operator of the fuel station and auto repair business located at 245 8th Street in the City of Oakland, Alameda County, California (Figure 1). AEI has been retained to provide environmental engineering and consulting services related to the release of petroleum hydrocarbons from the former underground storage tank (UST) system on the property. The investigation and mitigation of the release is being performed under the direction of the Alameda County Health Care Services Agency (ACHCSA).

The report documents the methods and results of the high vacuum dual phase extraction (HVDPE) event conducted at the site between July 11 and July 27, 2005. These activities were proposed to and approved by the ACHCSA. The purpose of these activities was to initiate interim free phase hydrocarbon product recovery and to evaluate the effectiveness of this method for removing petroleum hydrocarbons from the soil and groundwater beneath and around the subject property.

2.0 SITE DESCRIPTION

The subject property (hereafter referred to as the "site" or "property") is located in a mixed commercial and residential area of Oakland, Alameda County, California. The site is a lot on the south corner of Alice Street and 8th Street, and is currently developed with a gasoline 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 used for automotive repair, cashier, and office. The current UST hold and the dispenser island are located to the north of the building, along 8th Street. The remainder of the property is paved with asphalt.

3.0 SITE HISTORY

Between June 1993 and August 1994, AEI removed a total of seven (7) underground storage tanks (USTs) from the property. The tanks consisted of four (4) 1,000-gallon and two (2) 6,000-gallon gasoline tanks and one (1) 250-gallon waste oil tank. The former locations of the tanks are shown on Figure 2. 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.

Two groundwater monitoring wells (MW-1 and MW-2) were installed in July 1995. The first two episodes of monitoring revealed total petroleum hydrocarbons as gasoline (TPH-g) and Benzene up to 210,000 µg/L and 720 µg/L, respectively, in MW-2. LNAPL was discovered in MW-1, which ranged from 1.20 to 4.39 feet thick between December 1995 and March 1996.

Three soil borings (SB-1 through SB-3) were advanced in August 1996. Groundwater samples collected from each of the borings contained TPH-g and Benzene 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 present in all three samples, up to 27,000 μg/L. Although free phase product was not observed in the field, qualitative laboratory observations indicated an immiscible sheen in the samples. Manual bailing and pumping of LNAPL from MW-1, and monitoring of MW-2 occurred intermittently through 1997. Two additional groundwater monitoring wells (MW-3 and MW-4) were installed in May 2001. Refer to Tables 1 to 3 for data collected from these wells. An LNAPL recovery pump was installed in MW-1 in June 2001.

Fourteen (14) additional soil borings were performed on and offsite in 2003, from which soil, groundwater, and soil vapor samples were collected to further characterize the extent of the release. On January 11, 19, and 20, 2005, AEI installed a total of six (6) additional wells; three (3) extraction/monitoring wells on the subject site (MW-5 to MW-7) and three (3) extraction/monitoring wells at 708 Alice Street (MW-10 to MW-12). Note that wells MW-8 and MW-9 were proposed for installation in the public right of way, north of and west of the site. However, due to insurance and permitting limitations imposed by the City of Oakland, these wells were not been installed, and likely cannot be installed in City of Oakland right-of-way. Surveying of the six new wells and the pilot test were postponed temporarily as the permitting and insurance issues were addressed; however when it became apparent that the property owners insurance would not satisfy the City, these activities were performed.

Refer to Figure 2 for locations of monitoring wells, soil borings, and former USTs. Historical analytical data is included in Tables 1 through 6 and Table 8.

4.0 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 Deposits (Qms) (Helley, et al, 1997). Depth to the Franciscan Formation basement underlying the unconsolidated deposits is approximately 400 feet (Norfleet, 1998).

Based on the logs of soil borings advanced at the site, 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 hydrologic system. Sediments have been relatively uniform throughout the investigation area and both sand units appear to represent a single hydrologic system. 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 water levels fluctuate by approximately 3 to 4 feet. Groundwater has consistently flowed to the south-southeast with a hydraulic gradient of approximately 10^{-3} ft/ft.

5.0 SITE CONCEPTUAL MODEL

The release occurred from the former gasoline USTs, located on the western side of the property. During removal of the southern-most 6,000-gallon UST, free phase product was observed in the excavation, floating on the water table. The quantity of fuel released is unknown.

Based on historical depth to water measurements and the former depths of the UST(s), the product was released directly onto or just above the water table. Over time, and with seasonal water table fluctuations, the fuel product has significantly impacted the capillary fringe and has created a smear zone from depths of approximately 14 to 20 feet bgs. Refer to Table 4 for soil sample analytical data. The free phase product has been entrained, or trapped, within the pore space of the fine grained sediments. In addition, a significant mass of mobile, free phase product has been observed in the release area as well as detected as a dissolved phase plume in monitoring wells and soil borings.

Groundwater predominantly flows in a south-southeasterly direction, causing the release spread in this direction. Soil and groundwater data collected approximately 60 to 80 feet to the south in the vacant lot (708 Alice) reveals that significant hydrocarbons have migrated beneath the two apartment buildings. Although LNAPL has not been measured in MW-10, MW-11, or MW-12, the dissolved phase concentrations (essentially at saturation) and soil sample data from these wells and borings SB-2, SB-3, and SB-4 support the conclusion that mobile, free phase hydrocarbons have migrated at least this distance to the south and beneath Alice Street. The extent of dissolved phase hydrocarbon plume has been reasonably well defined with wells MW-3 (up-gradient) and MW-4 (cross-gradient, east) and borings SB-6 and SB-12 (cross-gradient, west) and SB-13 to SB-15 (down-gradient).

No water wells were identified near the site during a well survey of Department of Water Resource (DWR) records. Other potential human exposure pathways include volatilization of contaminants into occupied spaces from soil and/or groundwater as well as direct contact with impacted soil or groundwater, if construction activities were to occur.

6.0 PERMITS

Prior to mobilizing onsite, a water discharge permit was obtained from the East Bay Municipal Utility District (EBMUD) to discharge treated groundwater to the sanity sewer (Special Permit No. 22517851). A copy of the permit is included in Appendix A, which also includes a copy of the analytical report for the sample collected during the initial discharge. CalClean, Inc., owner and operator of the treatment unit, maintains a various locations permit (Plant # 12568) for the unit from the Bay Area Air Quality Management District (BAAQMD). A stack discharge sample [labeled “STACK” (laboratory ID: 0507146-002A), July 11, 2005] was collected during the course of operation. A copy of the analytical report containing the results of analysis of this sample is included in Appendix A.

7.0 HVDPE EVENT ACTIVITIES

The HVDPE event was conducted from July 11 to July 27, 2005. Equipment was mobilized to the site on the morning of July 11. Prior to startup of the equipment, equipment operators and AEI staff reviewed the system operation and emergency shut-off controls and safety features, health and safety plan, and contingency measures. The site operator was briefed on the operating procedures and a work area was established around the system. The mobile treatment unit was provided and operated by CalClean, Inc. The unit consisted of a 25 horsepower liquid ring vacuum pump capable of up to 450 CFM, water knockout tank, thermal oxidizer, diesel generator and propane supply, spray aeration tank, 1,000-gallon water holding tank, and 200-lb carbon canisters for secondary groundwater treatment. CalClean personnel were onsite 24 hours per day monitoring operating parameters and ensuring optimal system uptime. The extraction event was originally scheduled to run for 5 days. However, after several days of extraction, it was evident that hydrocarbon recovery rates were high and the event was extended to 15 days in an effort to maximize hydrocarbon mass removal. The system ran almost continuously through July 27, with the exception of periodic downtime to replace a thermocouple and to refill the diesel generator (the subject site does not sell diesel fuel). Overall, the system uptime was approximately 95%.

7.1 Equipment Setup

Beginning at approximately 11:00 am on July 11, extraction began on wells MW-1, MW-6 and MW-7. The selected wells were connected to the vacuum manifold with 1 ½" diameter flexible vacuum hose. The hose was protected with temporary drive bumps so as to not unnecessary close drive areas of the property. The hose was connected to the wellhead and affixed with a vacuum gauge.

Initially the drop tube, or stinger, was set in the wells at 1 foot below the static water level and the wellhead sealed. Once vacuum was applied to the well and water levels decreased in the wells, the stingers were lowered to draw down the water in the well to a sustainable level. Eventually, each stinger was lowered to a depth of 20 feet bgs, approximately 3 to 5 feet below static water levels.

Prior to beginning discharge, treated water was stored temporarily in the 1,000-gallon holding tank. At approximately 6:00 pm on July 11, the temporary water tank was filled. The stingers were retracted to above static water and vapor only was extracted until the treated water samples were reviewed and discharge could begin. Water samples were collected and analyzed per EBMUD permit conditions on a rush turnaround. Following receipt and review of the data, water discharge to the sewer began.

After beginning discharge on July 12, the stingers in the three wells were again gradually lowered to 20 feet. Wells MW-2 and MW-5 were connected to the extraction system on July 13 at approximately 10:00 am.

7.2 Monitoring and Data Collection

During extraction, the following operating parameters were recorded on a regular basis: unit vacuum (in Hg), wellhead vacuum (in Hg), total vapor flow in standard cubic feet per minute (scfm), thermal oxidizer temperature (deg F), oxidizer influent and individual well hydrocarbon concentrations (ppmv) using a Horiba field organic vapor analyzer (calibrated as hexane), and the stinger depth.

Water levels were manually recorded throughout the event on selected wells, including MW-3, and MW-11, and on wells MW-2 and MW-5 until they were connected to the extraction system. Induced vacuum was monitored on wells MW-3 and MW-11.

In wells MW-4 and MW-10, Mini-Troll™ two-channel, data loggers were installed. The data loggers were equipped with a pressure transducer and temperature sensor. The data loggers were set to record pressure (as feet of water column above the transducer) and temperature at regular time intervals. The data was collected for evaluation of aquifer drawdown in the vicinity of the site. Upon completion of the extraction event, the data was downloaded onto a laptop computer.

Air samples of system influent vapor were collected periodically during extraction test operations. The influent samples were collected into 1-liter Tedlar™ bags from each extraction well. Composite influent vapor samples were also collected. Vapor samples were analyzed at McCampbell Analytical, Inc. (DHS # 1644) of Pacheco, California. The samples were analyzed for total petroleum hydrocarbons as gasoline (TPH-g) by EPA method 8015Cm, MTBE, and benzene, toluene, ethyl-benzene, and xylenes (BTEX) by EPA method 8021B.

On the last day of the event (7/27/05), following shutdown of the system and recovery of water levels, groundwater samples were collected from selected wells to evaluate to conditions following extraction and as a baseline of any rebound in dissolved phase concentrations. Samples were bailed for MW-2, MW-4, MW-5, and MW-11 and analyzed for total petroleum hydrocarbons as gasoline (TPH-g) by EPA method 8015Cm, MTBE, and benzene, toluene, ethyl-benzene, and xylenes (BTEX) by EPA method 8021B.

A summary field report prepared by CalClean in included as Appendix C. This report includes field data sheets, vapor sample analytical data, plots of hydrocarbons recovery rates and estimates of total hydrocarbon recovery. Plots of pressure transducer data from wells MW-4 and MW-10 are included in Appendix B. Sample analytical data from well gas is summarized in Table 7 and laboratory reports are included as Appendix D.

8.0 OBSERVATIONS

8.1 Hydrocarbon Removal Rates

Beginning at approximately 11:00 am on July 11, extraction began on wells MW-1, MW-6. Total influent hydrocarbon concentrations, as measured by the field analyzer ranged from

approximately 6,350 part per million by volume (ppmv) to 18,170 ppmv. In general, the lower concentrations were recorded during times when vapor extraction only was performed, while waiting for water discharge permission. Toward the end of the event, concentrations stabilized in the 8,000 to 9,000 ppmv range. Vapor flow rates, when extracting on the 5 wells ranged from approximately 170 to 190 scfm, under a sustained vacuum at the manifold of 16 to 17 inches of mercury (in Hg). Based on CalClean calculations, a total of approximately 10,600 pounds of hydrocarbons were removed in the vapor phase during the event (Appendix C). Assuming a 95% system uptime, this converts to approximately 697 pounds per day of vapor phase hydrocarbons removed. Based on an average hydrocarbon concentration of 101,333 ug/L (average of wells MW-2, MW-5, and MW-6), and an average flow rate of 4.1 gallon per minute (gpm), approximately 5 lbs/day of dissolved phase hydrocarbons were removed.

Vapor sample analytical data collected from individual wells and composite samples is presented in Table 7; TPH-g concentrations plotted vs. time is presented in Figure 4. Field readings of influent hydrocarbon concentrations is included in the CalClean report (Appendix C).

8.2 Vacuum Response

Induced vacuum was measured on two wells, MW-3 and MW-11, located approximately 35 and 74 feet from the nearest extraction well, respectively. Vacuum response on MW-3 ranged from 0.00 to 0.25 inches of water. This vacuum response was inconsistent, indicating that it may have been barometric pressure changes or very slight subsurface response. No response was measured in MW-11. Based on these vacuum response observations, the effective radius of influence (ROI) for vacuum extraction is less than 35 feet.

8.3 Water Levels

During the extraction event, a total of 80,740 gallons of water was removed. This equates to a flow rate of approximately 4.1 gallons per minute from all wells, considering approximately 95% run time. Water levels were recorded in observation wells to evaluate drawdown around the extraction area. Pressure transducer data is presented in Appendix X for wells MW-4 and MW-10. Based on these measurements, drawdown of approximately 1.7 feet was sustained in MW-4 and 1.6 feet in MW-10. These wells were located approximately 60 and 53 feet away from the nearest extraction well, respectively. Manual water level measurements collected from wells MW-3 and MW-11 reveal an approximate drawdown of 1.7 feet at 35 feet away and 0.6 feet at 74 feet away in these wells, respectively. Although the test was not intended to collect sufficient data for a detail capture zone analysis, these observations indicate that the dissolved phase hydrocarbon plume may be controlled by groundwater extraction from the Lum property.

8.4 Groundwater Data

During the year prior to the extraction event, LNAPL had been present in MW-1 at thickness of 0.12 to 0.24 feet; however in the two monitoring events since the event, LNAPL has been measured at 0.01 feet thick. Dissolved hydrocarbon concentrations decreased significantly in MW-2 in the sample collected on the last day of the event (7/27/05); however have rebounded to historic levels since then. In wells MW-6 and MW-7, free product thickness has increased since the extraction event from sheen to 0.37 feet in MW-6 and from 0.03 to 0.12 feet in MW-7. This suggests that LNAPL may have been pulled back toward these wells during extraction and that hydrocarbons adsorbed to the soils have mobilized to the free and/or dissolved phase. Dissolved hydrocarbon concentrations in MW-10 to MW-12 remain significant (Table 3).

9.0 CONCLUSIONS

The high hydrocarbon recovery rates sustained through the duration of the event demonstrates that dual phase extraction would be effective at removing significant hydrocarbon mass from the subsurface. Both hydrocarbon concentrations and vapor flow rates increased significantly as groundwater was extracted, as compared to data collected on July 12 and 13 when the stingers were lifted above the water table. This confirms that significant mass of hydrocarbons is present within the saturated zone and capillary fringe which is recoverable using this approach. This is strongly supported by soil sample analytical data (Table 4), particularly borings SB-4, SB-7, SB-11 and MW-5 to MW-7 and MW-10 to MW-12 and continued presence of LNAPL in several wells. The high sustained removal rates and the monitoring data since the extraction occurred confirm that a significant mass remains despite the large volume removed during the event.

10.0 RECOMMENDATIONS

AEI recommends that a high vacuum dual phase extraction approach to remediation be implemented at the site. In addition to removal of significant hydrocarbon mass, plume control is expected down-gradient of the site, based on the drawdown measured in observation wells. In addition, vacuum extraction at the southern end of the property (near wells MW-2, MW-6, and MW-7) will reduce the likelihood of volatilization of contaminant vapors into the adjacent residential buildings.

Once free phase hydrocarbon removal has been performed, it is understood that a less aggressive approach may be necessary to mitigate residual hydrocarbons that may remain in the dissolved phase. A formal corrective action plan, evaluating several such methods, should be prepared following implementation of the recommended interim free phase hydrocarbon removal and evaluation of progress. Such secondary treatment methods may include one or more of the following such as air sparging coupled with vapor extraction or bioventing, *in-situ* chemical oxidation (i.e., ORC®, hydrogen peroxide, ozone, etc) of residual hotspots, enhanced aerobic bioremediation (i.e., butane or propane injection), and monitored natural attenuation.

HVPDE can be implemented utilizing fixed base equipment or periodic short-term mobilization of truck-mounted equipment, such as was utilized during this treatment event. Each approach has significant advantages and disadvantages. A summary of these and approximate costs are presented below.

	Mobile Equipment	Fixed
Timing	Can be onsite within weeks, permitting limited	Permitting and installation can take 3 to 6 months
Cost	No or low capital cost (permitting and consulting only). High monthly (event) costs for equipment rental and personnel	High initial capital costs, lower monthly operating expenses
Reliability	Less down-time if system if continuously manned	Telemetry needed to provide shut-down notification.
Flexibility	Well can be changed easily, no trenching, less site disruption	Requires trenching and construction of compound.

Although not the only deciding factor, cost variables are significantly different between the two HVDPE approaches, primarily depending on the length of intended operation. For a fixed base system, capital costs (assuming unit purchase, including permits, utility connection, and a contingency) of upwards of $ 275,000.00 is expected with monthly operation and maintenance (O&M) of $ 12,000.00, including energy (electrical and supplemental fuel). A mobile treatment unit, actively manned, can cost approximately $ 90,000.00 per month long (30 day) event, including consulting fees. Based on these estimated costs, mobile equipment is more cost effective at 3 months or less of operation, but construction of a fixed base unit becomes more cost effective after 4 months. As is commonly employed, mobile equipment can be effective when scheduled periodically, say for 1 continuous month of every 2 months. In this case, mobile equipment would be more cost effective for 3 month long event over 6 months as compared to 6 months of fixed base operation; however if longer extraction is necessary, fixed based equipment would be more cost effective. It should be noted that long-term hydrocarbon recovery rates can be difficult to predict and may increase or decrease significantly as extraction progresses. Based on the significant mass of hydrocarbons estimated to remain at the site, more than several months of extraction are expected necessary to accomplish adequate mass removal, thus supporting the installation of fixed based equipment.

AEI recommends the following steps be implemented for the site to implement HVDPE interim corrective action:

- Engineered design of a fixed dual phase extraction blower system, based on data collected during the event, including liquid and vapor phase contaminant abatement devises
- Establishing O&M plan and sampling program
- Permit system, including BAAQMD and EBMUD based on design parameters
- Construction and startup of equipment

Based on anticipated permitting and equipment procurement times, AEI expects that the system can be operational within 4 to 6 months of approval of the ACHCSA, likely within the 3rd Quarter 2006. Following 6 to 12 months of operation, an evaluation of system effectiveness should be

performed and a formal, risk based corrective action plan prepared to mitigate any residual pollution.

11.0 REFERENCES

Helley, E.J., et al, *Quaternary Geology of Alameda County and Surrounding Areas, California*, 1997

Norfleet Consultants, *Groundwater Study and Water Supply History of the East Bay Plain, Alameda and Contra Costa Counties, CA*, June 19, 1998

12.0 CLOSING STATEMENT AND SIGNATURES

This report, which has been prepared by AEI on behalf of the Vic's Automotive, summarizes pilot test and interim corrective action activities utilizing HVDPE technology to mitigate the release of petroleum hydrocarbons from the UST system on the property located at 245 8th Street in the City of Oakland. The recommendations rendered in this report were based on observations and laboratory testing. The specified work has been performed in accordance with generally accepted practices in geotechnical and environmental engineering and geology and under the direction of appropriate registered professionals.

We look forward to comment regarding this project. Should you need additional information, please contact either of the undersigned.

Sincerely,
AEI Consultants

REGISTERED GEOLOGIST
PETER J. MCINTYRE
Exp 5/31/16
#7702
STATE OF CALIFORNIA

Peter J. McIntyre, PG
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Distribution: Mr. Victor Lum, Vic's Automotive
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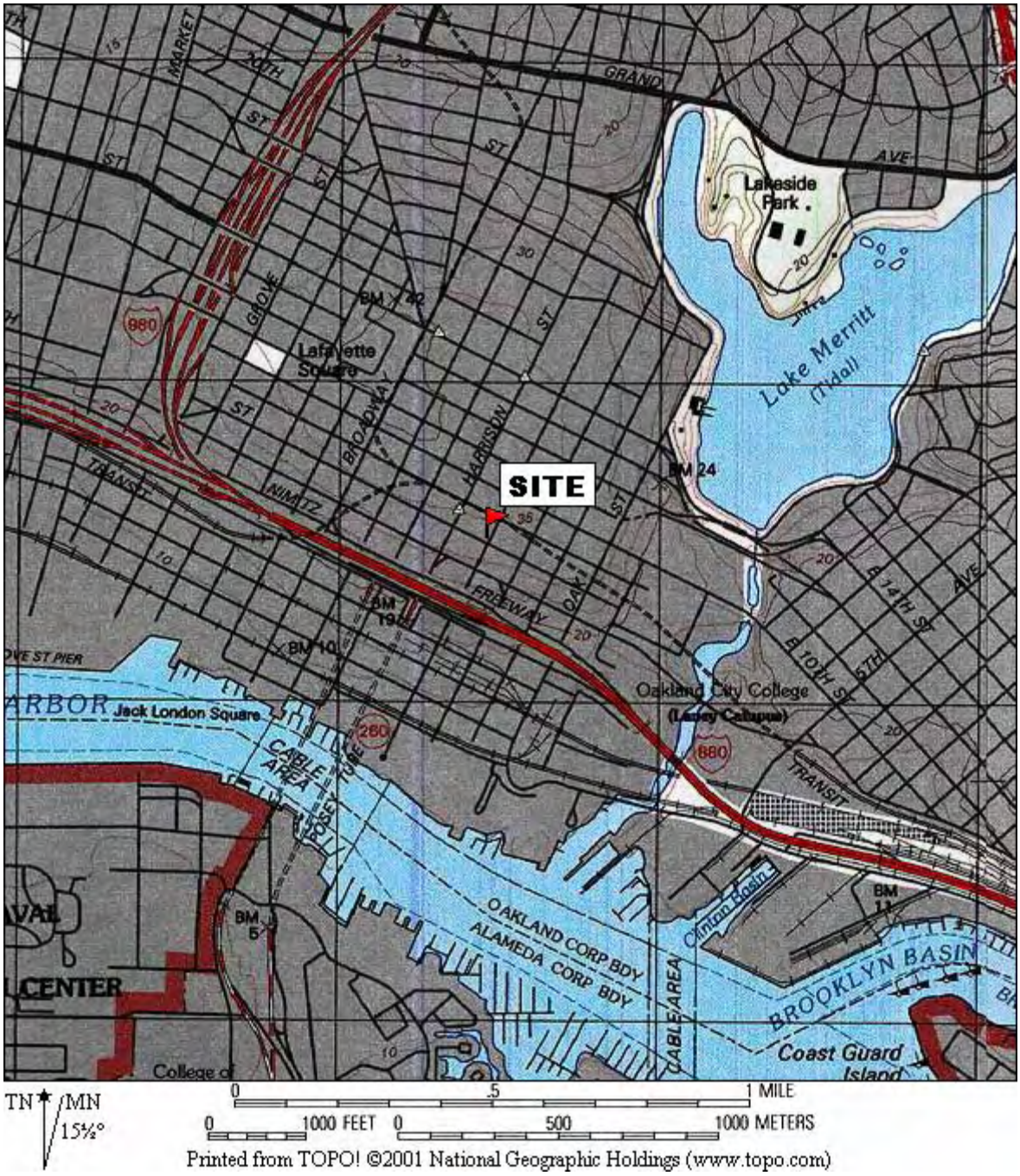
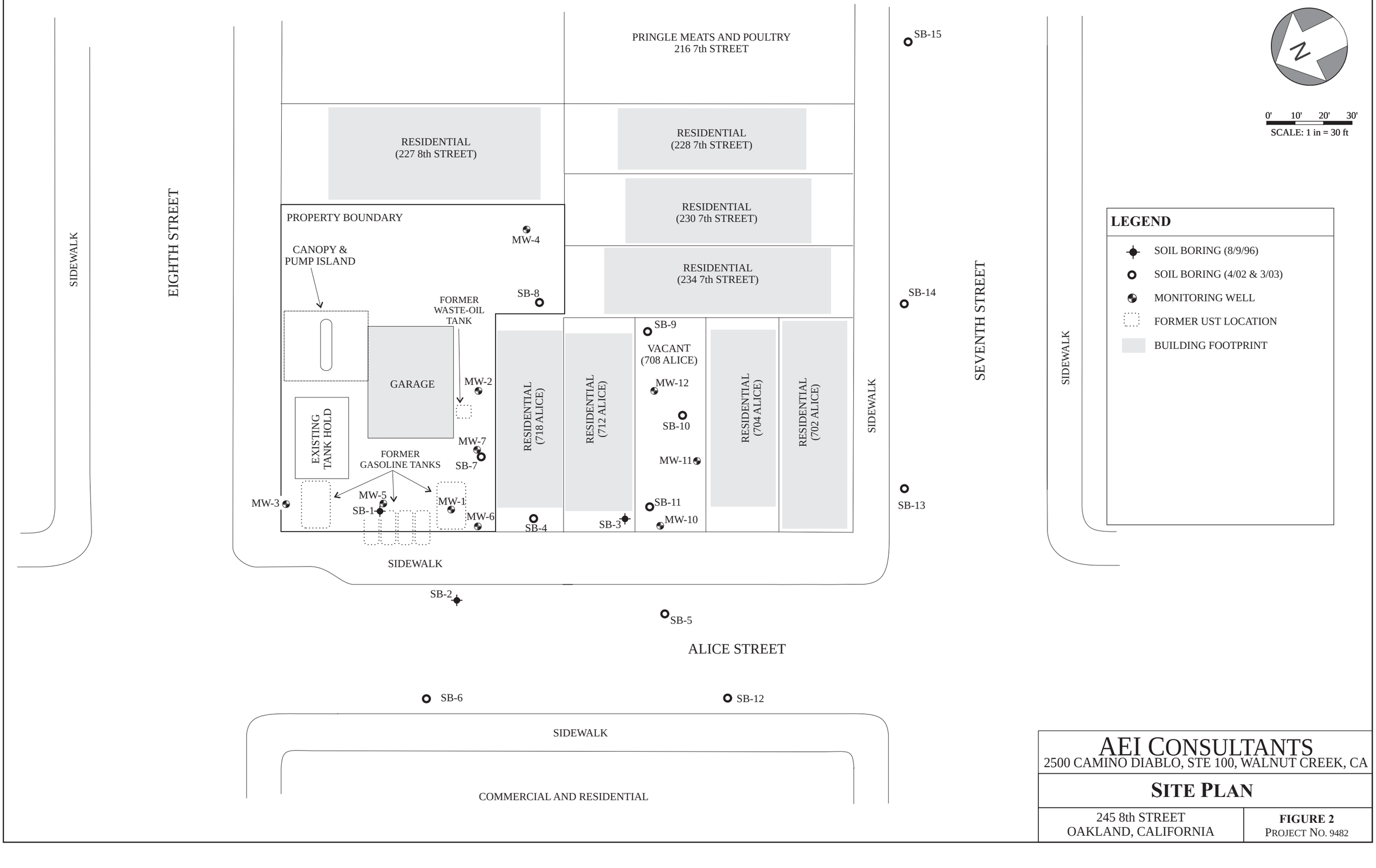
Mr. Sunil Ramdass, UST Cleanup Fund
1001 I Street, Sacramento, CA 94224

FIGURES



AEI CONSULTANTS 2500 CAMINO DIABLO BLVD, STE 100, WALNUT CREEK	
SITE LOCATION MAP	
245 8th STREET OAKLAND, CALIFORNIA	**FIGURE 1** PROJECT NO. 9482



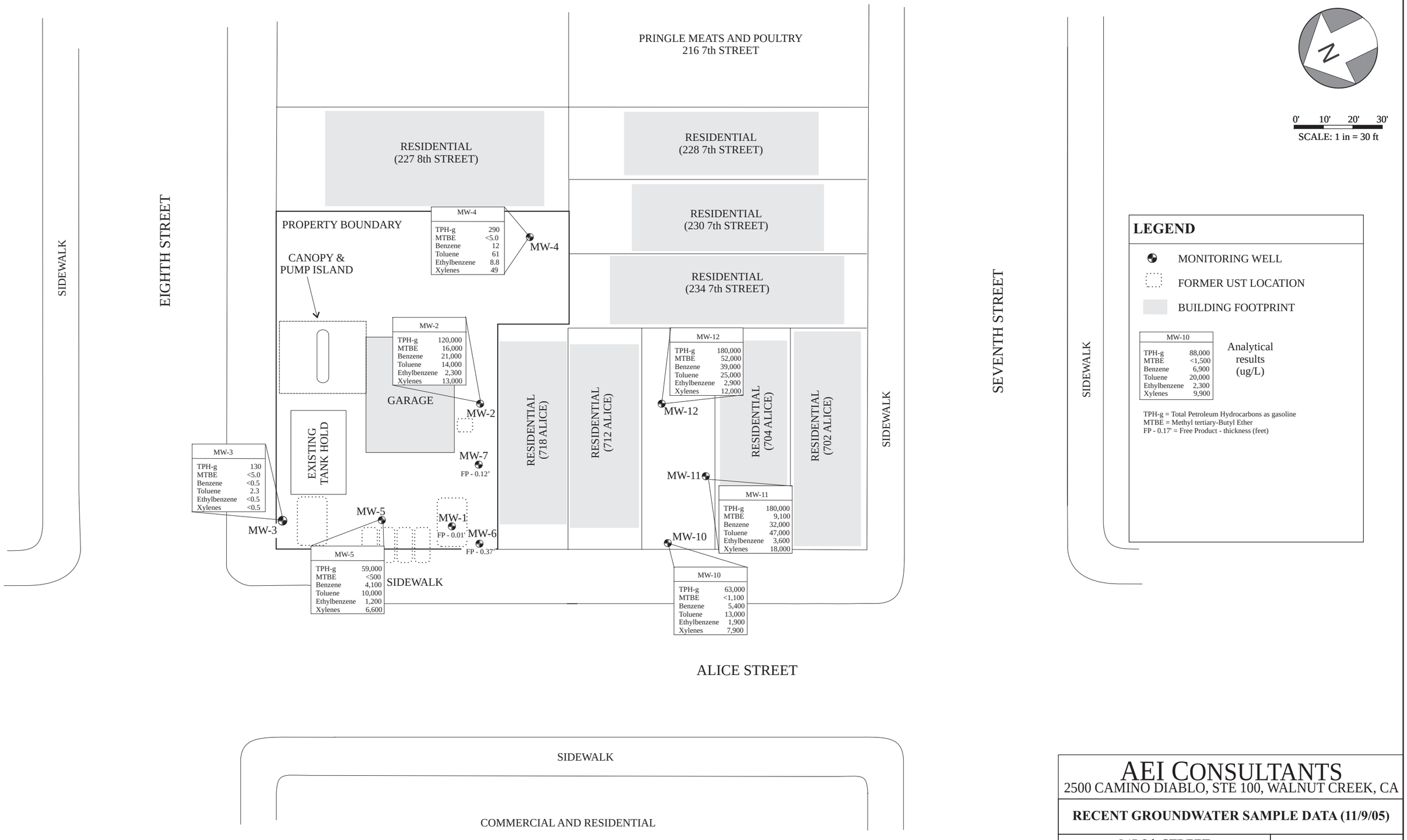
AEI CONSULTANTS

2500 CAMINO DIABLO, STE 100, WALNUT CREEK, CA

SITE PLAN

245 8th STREET
OAKLAND, CALIFORNIA

FIGURE 2
PROJECT NO. 9482



AEI CONSULTANTS

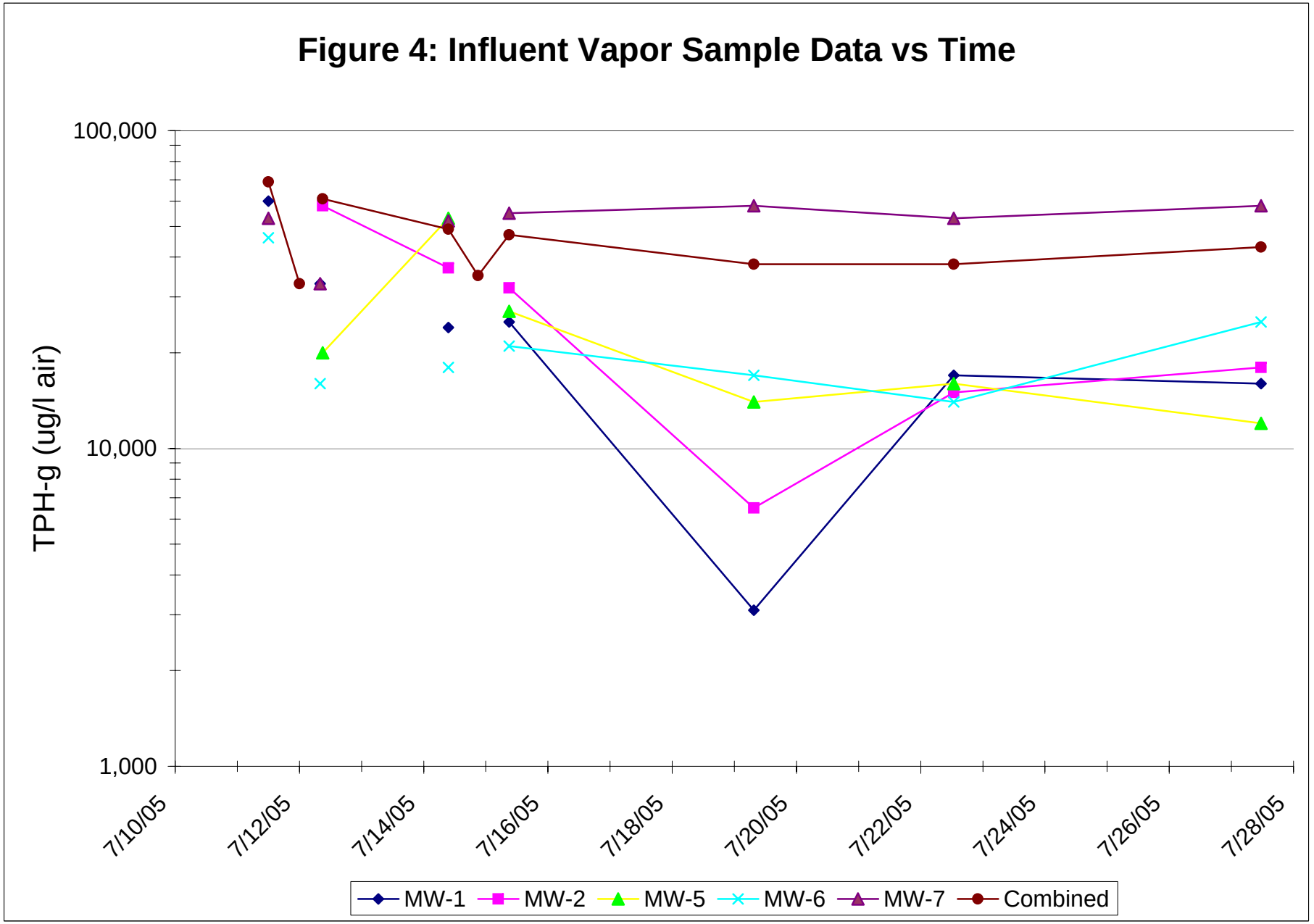
2500 CAMINO DIABLO, STE 100, WALNUT CREEK, CA

RECENT GROUNDWATER SAMPLE DATA (11/9/05)

245 8th STREET
OAKLAND, CALIFORNIA

FIGURE 3
PROJECT NO. 9482

Figure 4: Influent Vapor Sample Data vs Time



TABLES

Table 1: Groundwater Elevation Data

Vic's Automotive, 245 8th Ave., Oakland, CA

Well ID (screen interval)	Date Collected	TOC Well[1,2] Elevation (ft amsl)	Depth to Water (ft)	Groundwater[3] Elevation (ft amsl)	Depth to LNAPL (ft)	Apparent LNAPL Thickness (ft)
MW-1	6/29/2001	27.73	16.52	11.21	14.89	1.63
(8-28)	10/10/2001	27.73	15.45	12.28	15.37	0.08
	1/9/2002	27.73	12.61	15.12	-	<0.01
	4/24/2002	27.73	13.35	14.38	-	<0.01
	7/24/2002	27.73	14.19	13.54	-	<0.01
	11/5/2002	27.73	14.85	12.88	-	<0.01
	2/4/2003	27.73	14.91	12.82	-	<0.01
	5/2/2003	27.73	14.43	13.30	-	0.08
	8/4/2003	27.73	15.24	12.49	15.01	0.23
	11/3/2003	27.73	16.94	10.79	15.67	1.27
	2/9/2004	27.73	14.61	13.12	14.43	0.18
	5/10/2004	27.73	Inaccessible	-	-	-
	8/9/2004	27.73	15.24	12.49	15.03	0.21
	11/9/2004	27.73	15.95	11.78	15.71	0.24
	2/3/2005	32.55	13.75	18.80	13.58	0.17
	5/9/2005	32.55	13.93	18.62	13.81	0.12
	8/5/2005	**32.55**	**15.40**	**17.15**	**15.39**	**0.01**
	11/9/2005	**32.55**	**15.76**	**16.79**	**15.75**	**0.01**
MW-2	6/29/2001	28.16	16.14	12.02	-	-
(8-28)	10/10/2001	28.16	16.43	11.73	-	-
	1/9/2002	28.16	13.50	14.66	-	-
	4/24/2002	28.16	14.40	13.76	-	-
	7/24/2002	28.16	14.91	13.25	-	-
	11/5/2002	28.16	16.96	11.20	-	-
	2/4/2003	28.16	15.42	12.74	-	-
	5/2/2003	28.16	15.24	12.92	-	-
	8/4/2003	28.16	15.98	12.18	-	-
	11/3/2003	28.16	16.60	11.56	-	Sheen
	2/9/2004	28.16	15.22	12.94	-	Sheen
	5/10/2004	28.16	15.34	12.82	-	Sheen
	8/9/2004	28.16	15.92	12.24	-	Sheen
	11/9/2004	28.16	16.51	11.65	-	Sheen
	2/3/2005	33.24	14.44	18.80	-	Sheen
	5/9/2005	33.24	14.67	18.57	-	Sheen
	8/5/2005	**33.24**	**16.27**	**16.97**	**-**	**Sheen**
	11/9/2005	**33.24**	**16.53**	**16.71**	**-**	**Sheen**
MW-3	6/29/2001	29.21	16.60	12.61	-	-
(10-25)	10/10/2001	29.21	16.92	12.29	-	-
	1/9/2002	29.21	14.20	15.01	-	-
	4/24/2002	29.21	15.07	14.14	-	-
	7/24/2002	29.21	16.40	12.81	-	-
	11/5/2002	29.21	16.47	12.74	-	-
	2/4/2003	29.21	16.92	12.29	-	-
	5/2/2003	29.21	15.45	13.76	-	-
	8/4/2003	29.21	16.46	12.75	-	-
	11/3/2003	29.21	17.15	12.06	-	-
	2/9/2004	29.21	15.78	13.43	-	-
	5/10/2004	29.21	15.77	13.44	-	-
	8/9/2004	29.21	16.45	12.76	-	-
	11/9/2004	29.21	17.26	11.95	-	-
	2/3/2005	34.25	15.92	18.33	-	-
	5/9/2005	34.25	15.03	19.22	-	-
	8/5/2005	**34.25**	**16.59**	**17.66**	**-**	**-**
	11/9/2005	**34.25**	**16.82**	**17.43**	**-**	**-**

Table 1: Groundwater Elevation Data

Vic's Automotive, 245 8th Ave., Oakland, CA

Well ID (screen interval)	Date Collected	TOC Well[1,2] Elevation (ft amsl)	Depth to Water (ft)	Groundwater[3] Elevation (ft amsl)	Depth to LNAPL (ft)	Apparent LNAPL Thickness (ft)
MW-4	6/29/2001	29.38	17.71	11.67	-	-
(10-25)	10/10/2001	29.38	18.00	11.38	-	-
	1/9/2002	29.38	15.02	14.36	-	-
	4/24/2002	29.38	15.74	13.64	-	-
	7/24/2002	29.38	16.69	12.69	-	-
	11/5/2002	29.38	17.64	11.74	-	-
	2/4/2003	29.38	16.02	13.36	-	-
	5/2/2003	29.38	16.72	12.66	-	-
	8/4/2003	29.38	17.51	11.87	-	-
	11/3/2003	29.38	18.09	11.29	-	-
	2/9/2004	29.38	16.67	12.71	-	-
	5/10/2004	29.38	16.89	12.49	-	-
	8/9/2004	29.38	17.44	11.94	-	-
	11/9/2004	29.38	17.89	11.49	-	-
	2/3/2005	34.42	14.98	19.44	-	-
	5/9/2005	34.42	16.20	18.22	-	-
	8/5/2005	**34.42**	**17.73**	**16.69**	**-**	**-**
	11/9/2005	**34.42**	**17.91**	**16.51**	**-**	**-**
MW-5	2/3/2005	33.33	14.23	19.10	-	-
(12-22)	5/9/2005	33.33	14.33	19.00	-	-
	8/5/2005	**33.33**	**15.89**	**17.44**	**-**	**-**
	11/9/2005	**33.33**	**16.18**	**17.15**	**-**	**-**
MW-6	2/3/2005	32.82	13.99	18.83	-	-
(12-22)	5/9/2005	32.82	13.61	19.21	-	-
	8/5/2005	**32.82**	**15.50**	**17.32**	**15.13**	**0.37**
	11/9/2005	**32.82**	**15.87**	**16.95**	**15.50**	**0.37**
MW-7	2/3/2005	33.07	14.17	18.90	-	-
(12-22)	5/9/2005	33.07	14.47	18.60	14.44	0.03
	8/5/2005	**33.07**	**16.07**	**17.00**	**16.02**	**0.05**
	11/9/2005	**33.07**	**16.47**	**16.60**	**16.35**	**0.12**
MW-10	2/3/2005	31.17	12.65	18.52	-	-
(12-22)	5/9/2005	31.17	13.09	18.08	-	-
	8/5/2005	**31.17**	**14.68**	**16.49**	**-**	**-**
	11/9/2005	**31.17**	**14.94**	**16.23**	**-**	**-**
MW-11	2/3/2005	31.78	13.39	18.39	-	-
(12-22)	5/9/2005	31.78	13.89	17.89	-	-
	8/5/2005	**31.78**	**15.47**	**16.31**	**-**	**-**
	11/9/2005	**31.78**	**15.73**	**16.05**	**-**	**-**
MW-12	2/3/2005	32.05	13.70	18.35	-	-
(12-22)	5/9/2005	32.05	14.17	17.88	-	-
	8/5/2005	**32.05**	**15.69**	**16.36**	**-**	**-**
	11/9/2005	**32.05**	**15.93**	**16.12**	**-**	**-**

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

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

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

All well elevations are measured from the top of the casing (TOC) - = not applicable

LNAPL = light non-aqueous phase liquid (floating free product) ft amsl = feet above mean sea level

Table 2: Groundwater Flow Summary

Vic's Automotive, 245 8th Ave., Oakland, CA

Episode #	Date	Average Groundwater Elevation[1] (ft amsl)	Change from Previous Episode (ft)	Flow direction (gradient)
1	6/29/2001	12.10	-	SSE (0.0074)
2	10/10/2001	11.80	-0.30	SSE (0.0071)
3	1/9/2002	14.68	2.88	SE (0.0054)
4	4/24/2002	13.85	-0.83	SSW (0.005)
5	7/24/2002	12.92	-0.93	NE (0.021)
6	11/5/2002	11.89	-1.02	SW (0.019)
7	2/4/2003	12.80	0.90	NNW (0.01)
8	5/2/2003	13.11	0.32	SSE (0.01)
9	8/4/2003	12.27	-0.85	SSE(0.007)
10	11/3/2003	11.64	-0.63	SSE (0.006)
11	2/9/2004	13.03	1.39	SSE (0.006)
12	5/10/2004	12.92	-0.11	SSE (0.008)
13	8/9/2004	12.31	-0.60	SSE (0.006)
14	11/9/2004	11.70	-0.62	SSE (0.004)
15	2/3/2005	18.75	-	W (0.007)
16	5/9/2005	18.53	-0.22	S (0.010)
17	**8/5/2005**	16.94	**-1.59**	**S (0.010)**
18	**11/9/2005**	16.65	**-0.28**	**S (0.010)**

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

- = not applicable

ft amsl = feet above mean sea level

Table 3: Groundwater Sample Analytical Data

Vic's Automotive, 245 8th Ave., Oakland, CA

Well/Sample ID	Date Collected	Apparent LNAPL thickness (ft)	TPH-g µg/L *EPA Method 8015Cm*	MTBE µg/L	Benzene µg/L	Toluene µg/L	Ethylbenzene µg/L	Xylenes µg/L
				EPA Method 8021B				
MW-1	6/29/2001	1.63	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp
	10/10/2001	0.08	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp
	1/9/2002	<0.01	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp
	4/24/2002	<0.01	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp
	7/24/2002	~0.01	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp
	11/5/2002	~0.01	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp
	2/4/2003	~0.01	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp
	5/2/2003	0.08	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp
	8/4/2003	0.23	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp
	11/3/2003	1.27	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp
	2/9/2004	0.18	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp
	5/10/2004	Inaccessible	-	-	-	-	-	-
	8/9/2004	0.21	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp
	11/9/2004	0.24	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp
	2/3/2005	0.17	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp
	5/9/2005	0.12	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp
	8/5/2005	**0.01**	**ns/fp**	**ns/fp**	**ns/fp**	**ns/fp**	**ns/fp**	**ns/fp**
	11/9/2005	**0.01**	**ns/fp**	**ns/fp**	**ns/fp**	**ns/fp**	**ns/fp**	**ns/fp**
MW-2	6/29/2001	0.0	69,000	4100/4400*	7,200	6,100	1,500	7,000
	10/10/2001	0.0	87,000	14,000	22,000	12,000	2,700	9,100
	1/9/2002	0.0	130,000	11,000	30,000	19,000	3,800	14,000
	4/24/2002	Sheen	210,000	32,000	38,000	23,000	4,600	19,000
	7/24/2002	Sheen	170,000	36,000	48,000	12,000	3,700	8,600
	11/5/2002	Sheen	190,000	36,000	45,000	25,000	4,600	16,000
	2/4/2003	Sheen	150,000	27,000	51,000	24,000	4,200	14,000
	5/2/2003	Sheen	150,000	35,000	39,000	11,000	3,800	9,900
	8/4/2003	Sheen	120,000	29,000	32,000	5,000	3,200	7,200
	11/3/2003	Sheen	120,000	24,000	33,000	4,300	3,200	5,400
	2/9/2004	Sheen	130,000	19,000	27,000	7,700	3,100	7,600
	5/10/2004	Sheen	67,000	13,000	20,000	3,000	2,300	4,100
	8/9/2004	Sheen	100,000	22,000	27,000	7,100	2,800	6,600
	11/9/2004	Sheen	100,000	23,000	27,000	6,100	3,000	5,600
	2/3/2005	Sheen	84,000	11,000	23,000	5,000	3,000	5,500
	5/9/2005	Sheen	74,000	14,000	21,000	4,200	2,300	3,300
	7/27/2005	Sheen	9,500	910	1,400	1,000	180	960
	8/5/2005	**Sheen**	**74,000**	**4,000**	**8,800**	**11,000**	**1,300**	**7,600**
	11/9/2005	**Sheen**	**120,000**	**16,000**	**21,000**	**14,000**	**2,300**	**13,000**
MW-3	6/29/2001	0.0	550	<5.0	<0.5	3.1	3.2	1.2
	10/10/2001	0.0	470	<5.0	0.77	5.3	3.3	5.9
	1/9/2002	0.0	1,000	<5.0	0.90	7.6	7.8	25
	4/24/2002	0.0	1,500	<5.0	0.64	7.2	12	14
	7/24/2002	0.0	1,200	<5.0	10	17.0	11	25
	11/5/2002	0.0	1,800	<25	33	43.0	18	31
	2/4/2003	0.0	450	<5.0	<0.5	5.0	<0.5	0.77
	5/2/2003	0.0	340	<5.0	7.3	10.0	2.5	7.3
	8/4/2003	0.0	170	<5.0	5.8	5.9	1.5	4.9
	11/3/2003	0.0	54	<5.0	<0.5	<0.5	<0.5	<0.5
	2/9/2004	0.0	190	<5.0	<0.5	3.6	<0.5	<0.5
	5/10/2004	0.0	280	<5.0	<0.5	3.4	<0.5	<0.5
	8/9/2004	0.0	290	<5.0	<0.5	3.8	<0.5	<0.5
	11/9/2004	0.0	220	<5.0	<0.5	4.0	<0.5	<0.5
	2/3/2005	0.0	160	<5.0	13	30	3.0	21
	5/9/2005	0.0	200	<5.0	<0.5	3.9	<0.5	<0.5
	8/5/2005	**0.0**	**<50**	**<5.0**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
	11/9/2005	**0.0**	**130**	**<5.0**	**<0.5**	**2.3**	**<0.5**	**<0.5**

Table 3: Groundwater Sample Analytical Data

Vic's Automotive, 245 8th Ave., Oakland, CA

Well/Sample ID	Date Collected	Apparent LNAPL thickness (ft)	TPH-g µg/L	MTBE µg/L	Benzene µg/L	Toluene µg/L	Ethylbenzene µg/L	Xylenes µg/L
			EPA Method 8015Cm	*EPA Method 8021B*				
MW-4	6/29/2001	0.0	<50	<5.0	<0.5	<0.5	<0.5	<0.5
	10/10/2001	0.0	<50	<5.0	<0.5	<0.5	<0.5	<0.5
	1/9/2002	0.0	<50	<5.0	<0.5	<0.5	<0.5	<0.5
	4/24/2002	0.0	<50	<5.0	<0.5	<0.5	<0.5	<0.5
	7/24/2002	0.0	<50	<5.0	<0.5	<0.5	<0.5	<0.5
	11/5/2002	0.0	<50	<5.0	<0.5	<0.5	<0.5	<0.5
	2/4/2003	0.0	<50	<5.0	<0.5	<0.5	<0.5	<0.5
	5/2/2003	0.0	500	10	68	71	18	65
	8/4/2003	0.0	270	<5.0	30	29	9.2	32
	11/3/2003	0.0	<50	<5.0	<0.5	<0.5	<0.5	<0.5
	2/9/2004	0.0	<50	<5.0	<0.5	<0.5	<0.5	<0.5
	5/10/2004	0.0	<50	<5.0	<0.5	<0.5	<0.5	<0.5
	8/9/2004	0.0	130	<5.0	14	13	5.3	17
	11/9/2004	0.0	<50	<5.0	<0.5	<0.5	<0.5	<0.5
	2/3/2005	0.0	370	<5.0	<0.5	4.1	<0.5	0.64
	5/9/2005	0.0	840	<5.0	50	180	21	110
	7/27/2005	0.0	<50	<5.0	<0.5	<0.5	<0.5	<0.5
	8/5/2005	**0.0**	**310**	**<5.0**	**7.5**	**57**	**10**	**53**
	11/9/2005	**0.0**	**290**	**<5.0**	**12**	**61**	**8.8**	**49**
MW-5	2/3/2005	0.0	78,000	<1,000	7,600	13,000	2,200	9,600
	5/9/2005	0.0	60,000	<900	6,100	9,900	1,600	6,600
	7/27/2005	nm	120,000	1,100	10,000	19,000	2,100	13,000
	8/5/2005	**0.0**	**59,000**	**<500**	**4,100**	**10,000**	**1,200**	**6,600**
	11/9/2005	**0.0**	**44,000**	**<500**	**3,300**	**7,400**	**1,100**	**4,900**
MW-6	2/3/2005	Sheen	130,000	<1,000	2,400	33,000	2,400	15,000
	5/9/2005	Sheen	170,000	<4,000	11,000	43,000	3,100	16,000
	8/5/2005	**0.37**	**ns/fp**	**ns/fp**	**ns/fp**	**ns/fp**	**ns/fp**	**ns/fp**
	11/9/2005	**0.37**	**ns/fp**	**ns/fp**	**ns/fp**	**ns/fp**	**ns/fp**	**ns/fp**
MW-7	2/3/2005	Sheen	220,000	18,000	45,000	44,000	3,500	18,000
	5/9/2005	0.03	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp	ns/fp
	8/5/2005	**0.05**	**ns/fp**	**ns/fp**	**ns/fp**	**ns/fp**	**ns/fp**	**ns/fp**
	11/9/2005	**0.12**	**ns/fp**	**ns/fp**	**ns/fp**	**ns/fp**	**ns/fp**	**ns/fp**
MW-10	2/3/2005	0.0	36,000	<500	4,700	7,200	660	3,400
	5/9/2005	0.0	88,000	<1,500	6,900	20,000	2,300	9,900
	8/5/2005	**0.0**	**88,000**	**<1,100**	**10,000**	**21,000**	**1,900**	**9,800**
	11/9/2005	**0.0**	**63,000**	**<1,100**	**5,400**	**13,000**	**1,900**	**7,900**
MW-11	2/3/2005	Sheen	170,000	<3,000	23,000	35,000	3,100	16,000
	5/9/2005	Sheen	210,000	3,500	29,000	40,000	3,400	16,000
	7/27/2005	Sheen	220,000	2,500	26,000	37,000	3,200	18,000
	8/5/2005	**Sheen**	**210,000**	**<2,500**	**35,000**	**42,000**	**3,300**	**16,000**
	11/9/2005	**Sheen**	**180,000**	**9,100**	**32,000**	**47,000**	**3,600**	**18,000**
MW-12	2/3/2005	Sheen	250,000	100,000	52,000	41,000	3,400	15,000
	5/9/2005	Sheen	210,000	91,000	44,000	28,000	3,300	13,000
	8/5/2005	**Sheen**	**170,000**	**52,000**	**38,000**	**28,000**	**3,000**	**12,000**
	11/9/2005	**Sheen**	**180,000**	**52,000**	**39,000**	**25,000**	**2,900**	**12,000**

µg/L = micrograms per liter (ppb)

TPH-g = total petroleum hydrocarbons as gasoline

MTBE = methyl tertiary-butyl ether

ns/fp = not sampled / free product

LNAPL = Light Non-Aqueous Phase Liquid

* samples re-analyzed by EPA Method 8260 (expressed as EPA 8020 / EPA 8260)

Please refer to Appendix B: Lab Results for further detailed lab information including dilution factors

Table 4: Soil Sample Analytical Data

Vic's Automotive, 245 8th Ave., Oakland, CA

Sample ID	Date Collected	TPHg mg/kg	TOG mg/kg	MTBE mg/kg	Benzene mg/kg	Toluene mg/kg	Ethylbenzene mg/kg	Xylenes mg/kg
MW-1 (6')	7/14/95	390	-	-	0.280	0.290	0.290	0.620
MW-1 (11')	7/14/95	370	-	-	0.240	0.240	0.230	0.610
MW-2 (6')	7/14/95	ND	24	-	ND	ND	ND	ND
MW-2 (11')	7/14/95	300	38	-	0.300	0.230	0.240	0.630
SB-1 (18')	8/18/96	9,100	-	47.0	57	580	190	1,000
SB-1 (24')	8/18/96	30	-	0.20	0.37	1.4	0.52	2.5
SB-2 (24')	8/18/96	1.1	-	0.032	0.11	0.17	0.018	0.099
SB-3 (24')	8/18/96	16	-	4.7	1.6	2.5	0.21	0.95
MW-3 15'	5/25/01	ND<1.0	-	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005
MW-3 20'	5/25/01	ND<1.0	-	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005
MW-4 15'	5/25/01	ND<1.0	-	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005
MW-4 20'	5/25/01	ND<1.0	-	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005
SB-4 12'	4/2/03	25	-	ND<0.5	0.41	1.0	0.2	1.3
SB-4 15'	4/2/03	260	-	ND<1.7	3.5	15	4.5	23
SB-5 11'	4/3/03	ND<1.0	-	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005
SB-6 16'	4/2/03	ND<1.0	-	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005
SB-7 12'	4/2/03	700	-	ND<10	6.0	25	9.3	50
SB-7 18'	4/2/03	4,900	-	ND<25	65	260	77	400
SB-8 17'	4/2/03	ND<1.0	-	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005
SB-9 16'	4/3/03	ND<1.0	-	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005
SB-10 12'	4/3/03	ND<1.0	-	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005
SB-11 12'	4/3/03	1.4	-	ND<0.05	0.12	0.10	0.026	0.066
SB-11 16'	4/3/03	2,700	-	ND<30	29	170	49.0	250
SB-12 15'	4/2/03	ND<1.0	-	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005
SB-13 14'	4/3/03	ND<1.0	-	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005
SB-14 14'	4/3/03	ND<1.0	-	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005
SB-15 14'	4/3/03	ND<1.0	-	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005
MW-5 16'	1/11/2005	100	-	ND<5.0	2.6	6.0	1.5	8.4
MW-5 20'	1/11/2005	37	-	ND<0.50	2.6	5.6	0.91	4.6
MW-7 16'	1/11/2005	19	-	2.9	3.3	3.5	0.4	1.9
MW-7 20.5'	1/11/2005	340	-	ND<5.0	9.6	25	7.0	35
MW-6 20'	1/19/2005	14	-	ND<0.25	0.099	4.1	0.33	1.7
MW-10 15.5'	1/20/2005	840	-	ND<2.0	11	58	16	83
MW-11 15.5'	1/19/2005	3,200	-	ND<10	35	320	85	430
MW-12 15.5'	1/19/2005	13	-	8.5	2.5	2.8	0.22	1.1

ND - not detected

mg/kg - milligrams per kilogram

TPHg - total petroleum hydrocarbons as gasoline

MTBE - methy tertiary butyl ether

TOG - Total Oil and Grease

Table 5: Soil Boring Groundwater Sample Analytical Data

Vic's Automotive, 245 8th Ave., Oakland, CA

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

ND - not detected

µg/L - micrograms per liter

TPHg - total petroleum hydrocarbons as gasoline

MTBE - methyl tertiary butyl ether

BTEX - Benzene, ethylbenzene, toluene, and xylenes

ns/fp - not sampled / free product

Table 6: Groundwater Sample Analytical Data: Fuel Additives

Vic's Automotive, 245 8th Ave., Oakland, CA

Well/Sample ID	Date Collected	DIPE µg/L	ETBE µg/L	MTBE µg/L	TAME µg/L	TBA µg/L	EDB µg/L	1,2-DCA µg/L
MW-2	7/24/02	ND<1,000	ND<1,000	43,000	ND<1,000	ND<10,000	ND<1,000	ND<1,000
MW-3	7/24/02	ND<0.5	ND<0.5	1.3	ND<0.5	ND<5.0	ND<0.5	ND<0.5
MW-4	7/24/02	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	ND<0.5	ND<0.5
SB-4 W	4/2/03	ND<500	ND<500	14,000	ND<500	ND<5000	ND<500	ND<500
SB-5 W	4/3/03	ND<5.0	ND<5.0	6.5	ND<5.0	790	ND<5.0	ND<5.0
SB-6 W	4/2/03	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	ND<0.5	ND<0.5
SB-7 W	4/2/03	ND<1,200	ND>1,200	52,000	ND<1,200	ND<12,000	ND<1,200	ND<1,200
SB-8 W	4/2/03	ND<10	ND<10	480	14	ND<100	ND<10	ND<10
SB-9 W	4/3/03	ND<5.0	ND<5.0	41	ND<5.0	68	ND<5.0	ND<5.0
SB-10 W	4/3/03	ND<50	ND<50	2,800	110	ND<500	ND<50	ND<50
SB-11 W	4/3/03	ND<50	ND<50	74	ND<50	ND<500	ND<50	ND<50
SB-12 W	4/2/03	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	ND<0.5	ND<0.5
SB-13 W	4/3/03	ND<0.5	ND<0.5	3.7	ND<0.5	ND<5.0	ND<0.5	ND<0.5
SB-14 W	4/3/03	ND<2.5	ND<2.5	180	ND<2.5	ND<25	ND<2.5	ND<2.5
SB-15 W	4/3/03	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	ND<0.5	ND<0.5

Analysis for fuel additives by EPA Method 8260

µg/L - micrograms per liter

ns/fp - not sampled / free product

DIPE - Diisopropyl ether

ETBE - Ethyl tert-butyl ether

MTBE - Methyl tert-butyl ether

TAME - tert-Amyl methyl ether

TBA - t-Butyl Alcohol

EDB - 1,2-Dibromomethane

1,2-DCA - 1,2-Dichloroethane

All by EPA method 8260

Table 7: Extraction Event Vapor Sample Data (TPH-g)

Vic's Automotive, 245 8th Ave., Oakland, CA

Date & Time	MW-1	MW-2	MW-5	MW-6	MW-7	Combined
7/11/05 12:00	60,000	-	-	46,000	53,000	69,000
7/12/05 0:00	-	-	-	-	-	33,000
7/12/05 8:00	33,000	-	-	16,000	33,000	-
7/12/05 9:00	-	58,000	20,000	-	-	61,000
7/14/05 9:30	24,000	37,000	53,000	18,000	52,000	49,000
7/14/05 21:00	-	-	-	-	-	35,000
7/15/05 9:00	25,000	32,000	27,000	21,000	55,000	47,000
7/19/05 7:30	3,100	6,500	14,000	17,000	58,000	38,000
7/22/05 12:45	17,000	15,000	16,000	14,000	53,000	38,000
7/27/05 11:30	16,000	18,000	12,000	25,000	58,000	43,000

All data in micrograms per liter of air (µg/L)

Refer to anlaytical reports for BTEX & MTBE data

Table 8: Groundwater Sample Analytical Data: General Chemistry

Vic's Automotive, 245 8th Ave., Oakland, CA

Sample ID	Date	Calcium mg/L	Iron mg/L	Magnesium mg/L E200.1	Potassium mg/L	Sodium mg/L	BOD mg/L SM5210B	COD mg/L SM5220D	TOC mg/L E415.3
MW-3	02/03/05	26,000	2,300	23,000	42000	760	1.5	5	2.1
MW-4	02/03/05	10,000	1,500	11,000	360	1,100	1.5	5	1.3
MW-7	02/03/05	62,000	58,000	60,000	14000	1,100	19	510	210
MW-12	02/03/05	39,000	3,400	37,000	3600	1,100	29	680	220

APPENDIX A

GROUNDWATER DISCHARGE PERMIT DOCUMENTATION

EAST BAY
MUNICIPAL UTILITY DISTRICT

DAVID R. WILLIAMS
DIRECTOR OF WASTEWATER

CERTIFIED MAIL
(Return Receipt Requested)
Certified Mail No. 7000 1670 0005 9621 4859

July 8, 2005

Mr. Peter McIntyre
AEI Consultants
2500 Camino Diablo, Suite 200
Walnut Creek, CA 94597

Dear Mr. McIntyre:

Re: Wastewater Discharge Permit No. 2251785 1

Enclosed is the Special Discharge Permit (Permit) for Vic's Automotive, 245 8th Street, Oakland, Ca 94607, effective July 11, 2005 to October 10, 2005, for your information and records. Please read the Permit Terms and Conditions and the enclosed Special Discharge Permit Standard Terms and Conditions, April 2005 Edition. As a Permit holder, you are legally responsible for complying with all Permit conditions and requirements.

On July 1, 2005, AEI Consultants agreed to collect a sample of the treated groundwater and have it analyzed, by a State certified laboratory, for benzene, ethylbenzene, toluene, and total xylenes. AEI Consultants is required to submit the analytical results by facsimile (510) 287-0621 to obtain approval to discharge the treated groundwater to the sanitary sewer.

AEI Consultants shall report to the Environmental Services Division any changes, permanent or temporary, to the premises or operations that significantly affect the quality or volume of permitted discharge or deviate from the terms and conditions under which the Permit was granted.

If you have any questions regarding this Permit, please contact Deirdre Mena of the Environmental Services Division at (510) 287-1559.

Sincerely,

BENNETT K. HORENSTEIN
Manager of Environmental Services

W:\NAB\IDS\Permits\Special Discharge\Permits\Vic's Automotive\Permit Cover Letter.doc

BKH:DMM:dmm

Enclosures

EBMUD

PERMIT NUMBER 22512851 COPY

SPECIAL DISCHARGE PERMIT
Terms and Conditions
APPLICANT INFORMATION

APPLICANT BUSINESS NAME	SIC CODE
Vic's Automotive	5541

ADDRESS OF SITE DISCHARGING WASTEWATER	APPLICANT MAILING ADDRESS
245 8th Street (STREET ADDRESS)	245 8th Street (STREET ADDRESS)
Oakland (CITY) 94607 (ZIP CODE)	Oakland (CITY) 94607 (ZIP CODE)

CONTACT PERSONS

	NAME	TITLE	PHONE NUMBER
APPLICANT	Victor Lum	Property Owner	(510) 832-9014
CONSULTANT	Peter McIntyre	Program Director	(925) 944-2899
CONTRACTOR	Noel Shenoi	Cal Clean, Inc. Owner	(714) 936-2706

CERTIFICATION

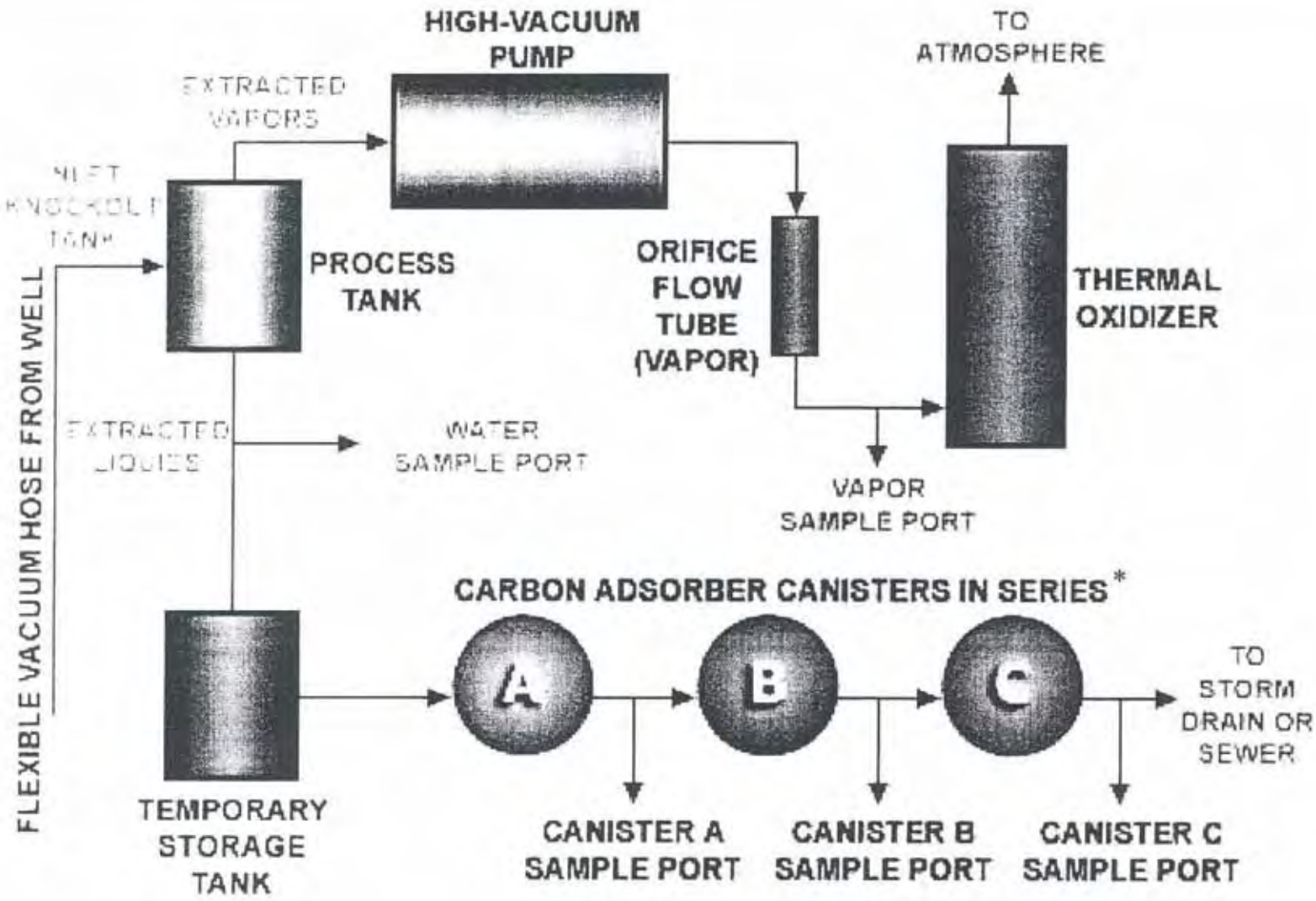
I understand that issuance of a Special Discharge Permit does not exempt or preclude the facility from being issued a Discharge Minimization or Pollution Prevention Permit.

I understand that I am legally responsible for discharge of wastewater from the facility and for complying with the Terms and Conditions of this Special Discharge Permit.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that the qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Peter McIntyre P.G. (NAME) — Program Director (TITLE)

(SIGNATURE (SEE CERTIFICATION REQUIREMENTS ON REVERSE)) — 6/20/05 (DATE)



* DPE SYSTEM WILL UTILIZE A MINIMUM OF TWO 500-lb CARBON ADSORBER CANISTERS IN SERIES

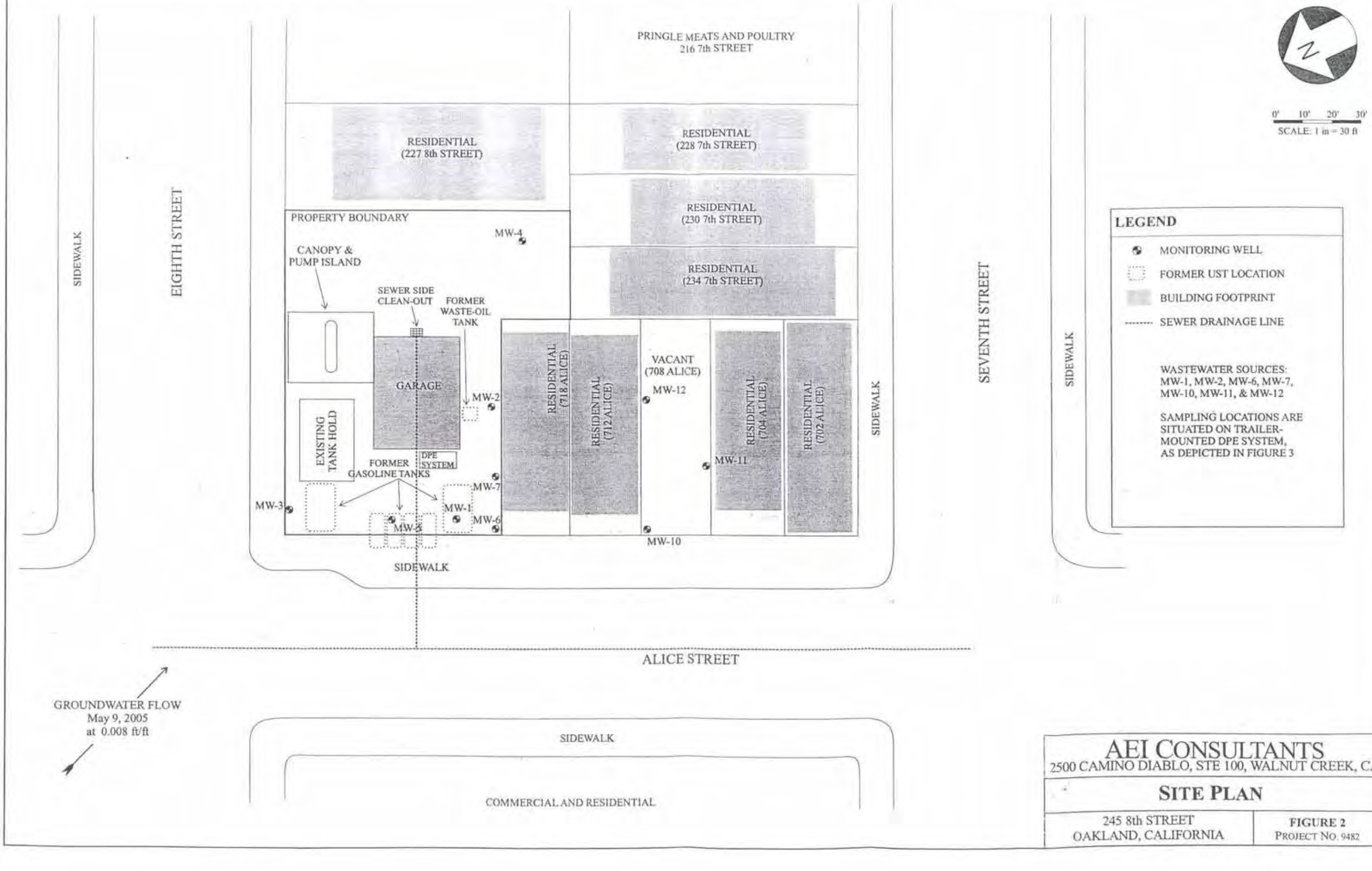
AEI CONSULTANTS
2500 Camino Diablo, Suite 200, Walnut Creek, CA 94597

PROCESS FLOW DIAGRAM

245 8th STREET
OAKLAND, CALIFORNIA

FIGURE 3
Project No: 9482

Permit No. 2251785 1



AEI CONSULTANTS
2500 CAMINO DIABLO, STE 100, WALNUT CREEK, CA

SITE PLAN

245 8th STREET
OAKLAND, CALIFORNIA

FIGURE 2
PROJECT NO. 9482

EBMUD

SPECIAL DISCHARGE PERMIT

TERMS AND CONDITIONS CRITERIA AND FEES

PERMIT NUMBER 22517 PS1

Purpose: This information demonstrates the wastewater meets established criteria for a Special Discharge Permit. Check each statement that applies and supply required information.

☑ *Reasonable and cost effective means of recycling and reuse of the wastewater are unavailable.* Provide information describing what means were considered, and why they were not implemented.
On-site treatment & discharge is much more cost effective.

☑ *The wastewater is unsuitable for discharge to the storm sewer.* Provide explanation.

☑ *The wastewater is generated only within the SD-1 wastewater service area.*

☑ *The wastewater meets source criteria.* Describe the source and operations generating the wastewater. Include the Wastewater Source Category from Special Discharge Permit Standard Terms and Conditions, Section A, II.

☑ *The wastewater is discharged during a limited period of time, not exceeding 90 days.*
Maximum Discharge Duration: 15 days Start Date: 7-11-05 Hours of Discharge: 24/day

☑ *Wastewater volume and flow do not cause a capacity problem for the sanitary sewer system.*
Total Discharge Volume: <50K gallons

☑ *The side sewer through which the wastewater is discharged has been identified, and approved if required.*
Attach a site diagram. Show facility location, property lines, wastewater source, drainage plumbing, the side sewer, and sampling location. Figure 2

☑ *Known and potential pollutants present in the wastewater are characterized.*
Attach a summarized list of all pollutant concentrations present in the wastewater. Also include the complete certified laboratory analytical report. Gasoline - Table 1

☑ *Treatment technology or best management practices have been identified that will result in the wastewater meeting discharge limits.*

1) For EBMUD metered sources, describe pretreatment or best management practices that will be used to ensure the wastewater discharge complies with Ordinance No. 311 wastewater discharge limits.
Provide EBMUD account number: _____

OR

For unmetered sources, including construction dewatering or groundwater, describe pretreatment or best management practices that will be used to ensure pollutant concentrations do not exceed SD-1 annual average influent concentrations.
DPE System: Stripping & activated carbon (minimum of two (2) 500-pound canisters will be utilized.

2) Attach a schematic flow diagram of the pretreatment system. The diagram must accurately depict the pretreatment system as constructed. Field deviation from the diagram is not allowed, unless pretreatment system modifications are approved and the permit revised prior to the discharge. Figure 3

*This Section for EBMUD Use Only – **All fees will be applied to the account established for this permit***

❑ *Permit application fee - $650*

❑ *Volatile Organics Testing - $127* ❑ *Heavy Metals Testing - $115* ❑ *Oil and Grease Testing - $62* ❑ *pH Testing - $15*

❑ *Additional Wastewater Treatment/Disposal Charges - $0.05/gallon*

Total: $_____

EBMUD

PERMIT NUMBER 2251785 1

SPECIAL DISCHARGE PERMIT
Terms and Conditions

GENERAL CONDITIONS

I. Vic's Automotive shall comply with all items of the attached *Special Discharge Permit Standard Terms and Conditions.*

II. Vic's Automotive shall discharge Special Discharge Wastewater only from the specific source described in the *Special Discharge Permit Terms & Conditions, Criteria and Fees* form. The discharge of all other wastewater must comply with EBMUD Ordinance No. 311A-03.

III. Vic's Automotive shall immediately cease discharge of treated or managed Special Discharge Wastewater if not in compliance with any of the terms and conditions of this Special Discharge Permit.

IV. Vic's Automotive shall comply with EBMUD Ordinance No. 311A-03, Title I, Section 5, which prohibits the discharge of storm water, drainage water, and groundwater to the community sewer.

☒ This Special Discharge Permit is considered a waiver of the prohibition.

V. Vic's Automotive shall comply with EBMUD Ordinance No. 311A-03, Title II, Section 2d, which prohibits discharge of wastewater directly into a manhole or other opening into the community sewer system.

VI. Vic's Automotive shall not discharge Special Discharge Wastewater authorized by this Special Discharge Permit after the expiration date.

COMPLIANCE REQUIREMENTS

I. Vic's Automotive shall pretreat or manage all Special Discharge Wastewater prior to discharge to the side sewer. Pretreatment or management shall be sufficient to achieve compliance with the limits established in this Special Discharge Permit.

II. Vic's Automotive shall post a sign in the work area stating "All Wastewater Discharge must comply with the Special Discharge Permit."

WASTEWATER DISCHARGE LIMITS

Vic's Automotive shall not discharge Special Discharge Wastewater into the community sewer if the strength of the wastewater exceeds:

☒ Benzene = 5 µg/L; Toluene = 5 µg/L; Ethylbenzene = 5 µg/L; Total Xylenes = 5 µg/L

☒ EBMUD Ordinance No. 311A-03 Wastewater Discharge Limits

MONITORING REQUIREMENTS

Vic's Automotive shall monitor wastewater discharge operations to ensure compliance with the terms and conditions of this Special Discharge Permit. Monitoring may include sampling and analysis of the discharge. The sampling location shall be as shown on the site diagram.

INSPECTIONS

The District may conduct random, unannounced inspections to verify compliance with the terms and conditions of this Special Discharge Permit. Vic's Automotive shall grant District personnel access to the facility to conduct inspections and collect Special Discharge Wastewater samples.

ENFORCEMENT AND PENALTIES

Failure to comply with the terms and conditions of this Special Discharge Permit and *Special Discharge Permit Standard Terms and Conditions* may result in enforcement actions, including violation follow-up fees, civil enforcement penalties, and administrative fines of up to $5,000 per day.

RATES AND CHARGES

This Special Discharge Permit may be amended to include changes to rates and charges that may be established by the District during the term of this Special Discharge Permit.

AUTHORIZATION

Special Discharge Permit Holder is hereby authorized to discharge Special Discharge Wastewater to the community sewer, subject to compliance with EBMUD Ordinance No. 311A-03, Special Discharge Permit Terms and Conditions, and billing conditions.

Effective: 7/11/2005

Expiration: 10/10/2005

Director, Wastewater Department

7/11/05
Date

EBMUD

SPECIAL DISCHARGE PERMIT
STANDARD TERMS AND CONDITIONS

TABLE OF CONTENTS

EBMUD

SPECIAL DISCHARGE PERMIT STANDARD TERMS AND CONDITIONS

INTRODUCTION

This document contains criteria, general stipulations, reporting requirements, and sampling requirements pertaining to Special Discharge Permits issued by the District. Special Discharge Permits are issued pursuant to EBMUD Ordinance No. 311A-03 (Ordinance No. 311A-03) and may waive certain Ordinance No. 311A-03 requirements or prohibitions.

Issuance of a Special Discharge Permit is subject to preliminary, source, and administrative criteria described in Section A of this document. Special Discharge Permit Standard Terms and Conditions are enforceable terms and conditions of Special Discharge Permits.

Special Discharge Permits may include rates and charges for discharge volume, wastewater strength, system capacity, and monitoring. These rates are established by EBMUD resolution.

SECTION A. SPECIAL DISCHARGE CRITERIA

The District established the following three sets of criteria under the Special Discharge Permit Program. Wastewater proposed for discharge must meet Preliminary, Source, and Administrative Criteria prior to the issuance of a Special Discharge Permit.

I. Preliminary Criteria

a) *Reasonable and cost effective means of recycling and reuse of the wastewater are unavailable.* The applicant shall investigate and document alternatives for wastewater recycling and reuse.

b) *Wastewater is not suitable for discharge to the storm sewer.* The applicant shall provide documentation regarding alternative disposal methods.

c) *Wastewater is generated within the EBMUD SD-1 wastewater service area.* The applicant shall determine if the location is within the service area.

d) *The side sewer through which the wastewater is discharged has been identified.* Upon District approval of the discharge location, the applicant may be required to provide documentation demonstrating that the applicable public agency authorized its use.

e) *Known and potential pollutants present in the wastewater are characterized.* The applicant shall submit both a complete certified laboratory analytical report, and a summary of the results.

f) *Treatment technology or Best Management Practices (BMPs) have been identified which will result in achieving compliance with the wastewater discharge limits.* Depending on the source of the wastewater, the applicant may be required to demonstrate that pollutant concentrations will not exceed Ordinance No. 311A-03 Wastewater Discharge Limits. Any treatment employed must be a proven and conventional technology.

II. Source Criteria

The following describes the source criteria for Special Discharge Wastewater requiring special regulation (Ordinance No. 311A-03, Title IV, Section I, a, 4 and 5).

a) *Boiler and/or Cooling Tower Maintenance* – Wastewater generated by nonroutine system flushing or discharge of spent boiler/cooling water.

b) *Construction Dewatering (Short Term Discharge)* – Groundwater or stormwater generated from trenching or excavation operations.

c) *Infrastructure Maintenance* – Any wastewater generated by nonroutine cleaning or maintenance activities. This may include wastewater generated during line flushing and equipment cleaning.

d) *Monitoring Well Groundwater* – Groundwater collected from monitoring wells for the purpose of characterization, study, or review. Discharge volume not to exceed 550 gallons.

e) *Nonroutine Tank Cleaning* – Wastewater originating from cleaning or descaling of product, process, or waste storage tanks. Discharge volume not to exceed 1,000 gallons.

f) *Other Sources* – Wastewater generated from other temporary sources may require a Special Discharge Permit.

g) *Sewage Spill* – Wastewater generated from the clean up of any uncontrolled sewage spill. This may include collected raw sewage from a sewer line backup and/or clean-up water posing a potential environmental/public health concern.

h) *Spill* – An accidental discharge of a substance that may pose an environmental or public health concern.

i) *Spill Cleanup* – Wastewater generated from the clean up of spilled product or process wastes (excluding sewage) at a facility not otherwise required to have a wastewater discharge permit.

j) *Sump Discharge/Flooded Basement* – Wastewater generated during a single event and collected into sumps, basements, and loading docks, etc. not connected to the sanitary sewer.

k) *Surface Cleaning* – Any wastewater generated from flat surface cleaning activities that is not suitable for discharge to the storm sewer and is not regulated by other wastewater controls.

l) *Treated Bilge Water* – Wastewater collected in the bilge of a ship that has subsequently been treated for pollutants that may be present.

III. Administrative Criteria

Ordinance No. 311A-03 applies to all discharges within SD-1 Service Area. Unless specifically waived by the Special Discharge Permit, the following wastewater criteria apply. Waivers of Ordinance No. 311A-03 are granted by the authority of Ordinance No. 311, Title I, Section 6.

a) *The wastewater must not contain storm water, drainage water, or groundwater (Ordinance No. 311A-03, Title I, Section 5*). Special Discharge Permits issued for Construction Dewatering, Sump Discharge/Flooded Basement, and Monitoring Well Groundwater may waive this prohibition.

b) *The wastewater must not originate from an unpolluted source (Ordinance No. 311A-03, Title II, Section 2, c)*. Wastewater that meets requirements for discharge to storm sewers or receiving waters of the State will not be considered for a Special Discharge Permit.

c) *The wastewater must be discharged through a side sewer (Ordinance No. 311A-03, Title II, Section 2, d)*. The discharge of wastewater directly into a manhole or other opening in the community sewer system is prohibited, except for sewer construction and maintenance by public agencies. Special Discharge Permits may authorize direct discharge into a manhole or other opening if alternative means of discharge are unavailable.

d) *The wastewater does not pose significant concerns under this Special Discharge Permit Program.* The District will determine if the wastewater poses a significant concern based on the information provided in the Special Discharge Permit Application.

SECTION B. GENERAL PROVISIONS

I. Duty to Comply

Special Discharge Permit Holders shall comply with Ordinance No. 311A-03, Special Discharge Permit Terms and Conditions, and this document.

II. Terms and Conditions of Special Discharge Permit

A Special Discharge Permit is issued for discharges only from the location and specific wastewater source described therein. Applications for a Special Discharge Permit shall be submitted to EBMUD a minimum of ten working days prior to the date of the discharge. No discharge shall proceed prior to issuance of the Special Discharge Permit, completion of any required site inspections, and approval by EBMUD staff. Issuance of a Special Discharge Permit does not exempt or preclude a facility from being issued an EBMUD Discharge Minimization or Pollution Prevention Permit.

III. Disposal of Hazardous Waste

The Special Discharge Permit Holder shall handle and dispose of hazardous waste in accordance with all local, state, and federal laws and regulations.

IV. Dilution Prohibition

The Special Discharge Permit Holder shall not in any way dilute the wastewater discharge as a substitute for treatment to achieve compliance with the Special Discharge Permit Terms and Conditions.

V. Bypass of Treatment Facilities

The Special Discharge Permit Holder shall not bypass treatment facilities unless:

a) The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage. (Severe property damage means substantial physical damage to property, damage to the treatment facilities that causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production).

b) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgement to prevent a bypass that occurred during normal periods of equipment downtime or preventative maintenance.

c) The Special Discharge Permit Holder submitted advance notice of the need for a bypass to the District. If the Special Discharge Permit Holder knows in advance of the need for a bypass, it shall submit prior notice, if possible at least 10 days before the date of the bypass.

The Special Discharge Permit Holder shall notify the District of an unanticipated bypass within 24 hours. The Special Discharge Permit Holder shall also submit a written report explaining the circumstances of the bypass.

VI. Calibration and Maintenance of Equipment

The Special Discharge Permit Holder shall calibrate, inspect, and maintain all flow measuring, discharge sampling, monitoring, and pretreatment equipment to ensure the equipment accuracy and reliability.

VII. Availability of Special Discharge Permit

A copy of the Special Discharge Permit shall be maintained by the Special Discharge Permit Holder and be available to both facility and EBMUD staff at all times.

VIII. Payment of Special Discharge Permit Fees and Charges

The applicant shall pay all Special Discharge Permit fees, monitoring and testing charges, and wastewater treatment/disposal charges.

The Special Discharge Permit Fee of $650 includes wastewater treatment/disposal charges and District inspections. Additional wastewater treatment/disposal charges may apply depending on the source of the wastewater. Laboratory fees may also apply, depending on the source of the wastewater, e.g., groundwater.

IX. Special Discharge Permit Termination

The District may terminate the Special Discharge Permit for violation of the Special Discharge Permit Terms and Conditions or for violation of Ordinance No. 311A-03 provisions.

X. Transfer of Special Discharge Permit Prohibition

The Special Discharge Permit Holder shall not assign or transfer the Special Discharge Permit.

XI. Severability

If any provision of the Special Discharge Permit, Ordinance No. 311A-03, or the application thereof to any person or circumstance, is held invalid, the remainder of the Special Discharge Permit or Ordinance No. 311A-03, or the application of such provision to other persons or circumstances, shall not be affected thereby.

XII. Property Rights

The issuance of the Special Discharge Permit does not convey to the Special Discharge Permit Holder any property rights of any sort or any exclusive privileges. Nor does such issuance authorize any injury to private property, any invasion of property rights, or any violation of federal, state or local laws.

SECTION C. REPORTING AND RECORD KEEPING

I. Spill or Slug Discharge Notification

Immediately upon discovering any spill or slug discharge to the sanitary sewer, the Special Discharge Permit Holder shall notify EBMUD Source Control Division at (510) 287-1651 during business hours or (510) 287-1458 during non-business hours.

The Special Discharge Permit Holder shall submit to the District within five days of the occurrence a formal written notification describing:

a) circumstances of the discharge

b) what was discharged

c) volume of the discharge

d) duration of the discharge including beginning and end times, and dates

e) corrective actions to prevent recurrence

f) if discharge violates the terms and conditions of the Special Discharge Permit

II. Twenty-Four Hour Violation Reporting

a) The Special Discharge Permit Holder shall notify the District within 24 hours of becoming aware of any of the following violations:

1. discharges prohibited by Ordinance No. 311A-03, Title II, except where authorized by the Special Discharge Permit
2. exceedence of wastewater discharge limits as established in the Special Discharge Permit
3. failure to perform any BMPs included in the Special Discharge Permit
4. bypass of any part of a required pretreatment system

b) The Special Discharge Permit Holder shall submit a written report to the District within five days after becoming aware of the violation. The report shall include the following information:

1. description of the violation, including the cause, date and time of the violation
2. date and time the discharge was stopped
3. measures taken to correct the violation
4. measures taken to prevent future violations

Prior to receiving District authorization to resume discharge, the Special Discharge Permit Holder may be required to demonstrate compliance with the Special Discharge Permit Terms and Conditions.

III. Changes in Quantity and Quality of Wastewater

The Special Discharge Permit Holder shall immediately report to the District any significant change to the quality or volume of the wastewater discharge or any deviation from the terms and conditions of the Special Discharge Permit.

IV. Hazardous Waste Notification

The Special Discharge Permit Holder shall submit to the District a written notification in accordance with 40 CFR 403.12(p) of any discharge, which, if otherwise disposed of, would be a hazardous waste under 40 CFR 261.

V. Signatory Requirements

The Permit Holder shall submit in accordance with the signatory requirements of 40 CFR 403.12 (l) all applications, self-monitoring reports, violation response reports, compliance reports, and other reports or documents required by the District. The submittal shall include the following certification statement and shall be signed by the duly authorized representative:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

VI. Retention of Records

a) The Special Discharge Permit Holder shall retain all of the following documents:

1. all records used to complete the Special Discharge Permit Application
2. copies of reports required by the Special Discharge Permit
3. all records of monitoring information, including calibration and maintenance records, and original strip chart recordings of continuous monitoring instrumentation

b) The Special Discharge Permit Holder shall retain all reports and records for a period of at least three years from the date of the application, report, or monitoring event. The District may extend the document retention period. The Special Discharge Permit Holder shall provide all retained records and documents when requested by the District.

c) The Special Discharge Permit Holder shall retain and preserve all records pertaining to special orders or any other enforcement or litigation activities brought by the District until all enforcement activities have concluded and all periods of limitation with respect to any appeals have expired.

SECTION D. MONITORING AND SAMPLING

I. Representative Sampling

Samples and measurements taken, as required in the Special Discharge Permit or those submitted with the application, shall be representative of the volume and nature of the monitored discharge. The Special Discharge Permit may require that a sample be representative of certain discharge periods.

Analytical method detection limits shall be sufficient to determine compliance with the Special Discharge Permit Terms and Conditions.

II. Chain of Custody

a) The Special Discharge Permit Holder shall submit a Chain of Custody Record that documents the following for each sample:

1. sampling location and facility name
2. type of sample, i.e., grab or composite

3. date, time or span of time the sample was collected
4. number of containers and type, e.g., glass, plastic, vial, etc.
5. preservation techniques, e.g., ice, refrigeration at 4°C, chemicals added, etc.
6. sample collector's name legibly written
7. sample identification number that corresponds to the sample identification number on the analytical report
8. printed name and signature of all persons handling the sample, and date and time the sample was relinquished and accepted

b) The Special Discharge Permit Holder shall ensure that a sample transported or handled by a courier, delivery service (public or private) or shipper, shall include the company or individual's name and the method of packaging the sample, on the Chain of Custody Record.

c) The Special Discharge Permit Holder shall show all sample analyses performed in the field on the Chain of Custody Record, e.g. pH - field test.

d) The District may require resampling of the wastewater if an incomplete or incorrect Chain of Custody Record is submitted.

III. Sample Preservation and Analytical Methods

Unless the Special Discharge Permit requires otherwise, the Special Discharge Permit Holder shall use sampling methods, sample preservation, and analytical methods for each parameter in accordance with applicable sections of:

a) *EBMUD Table of Approved Test Methods*

b) *Standard Methods of Water and Wastewater Analysis*, edition used in the EBMUD Table of Approved Test Methods

c) EPA 40 CFR Part 136, *Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act*, latest edition

IV. Laboratory Report

The Special Discharge Permit requires that each sample analysis be performed by a laboratory certified by the State Department of Health Services for that analysis. The laboratory report for each sample shall include:

a) name and address of the laboratory performing the analyses

b) sample identification number that corresponds to the sample identification number on the Chain of Custody Record

c) analytical result(s)

d) date of sampling, the date the sample was received at the laboratory, and the date of analysis

e) *Standard Methods of Water and Wastewater Analysis* method or EPA method used for analysis

f) method detection limit

g) signature and title of an authorized representative of the laboratory, who reviewed the laboratory results

V. Flow Measurements

The Special Discharge Permit Holder shall use appropriate flow measurement devices and methods when required by the District. Flow measurement devices and methods are subject to approval by the District.

VI. Tampering with Equipment

The Special Discharge Permit Holder shall not tamper with monitoring equipment or pretreatment units.

VII. Access to Facilities

The District may inspect a facility to determine compliance with the Special Discharge Permit Terms and Conditions and Ordinance No. 311A-03. The Special Discharge Permit Holder shall provide access for this purpose.

SECTION E. ENFORCEMENT AND PENALTIES

I. Violations of Special Discharge Permit Terms and Conditions

The Special Discharge Permit Holder shall be subject to District actions for failure to comply with the terms and conditions of the Special Discharge Permit. The actions may include violation follow-up inspections and fees, issuance of Cease and Desist Orders, Administrative Civil Liability penalties, and other actions as authorized by Ordinance No. 311A-03, Title VI.

SECTION F. DEFINITIONS

BMPs – Best Management Practices (also known as Pollution Prevention Practices) are guidelines and procedures that include maintenance procedures, management practices and prohibition of practices that focus on the reduction or elimination of pollutants or wastes at the source.

Bypass – A bypass is a diversion of wastestreams from any portion of a pretreatment unit.

Chain of Custody – A Chain of Custody is a legal record of each person who had possession of a sample. A Chain of Custody record must be included with an analytical report.

Director – Director refers to the term "Manager", as defined in EBMUD Ordinance No. 311A-03, the Director of the District's Wastewater Department, or his/her designated representative.

Discharge Minimization Permit – A Discharge Minimization Permit is a permit regulating wastewater discharge to the sanitary sewer. Discharge Minimization Permits generally include monitoring and reporting requirements and District inspections.

District – District refers to East Bay Municipal Utility District (EBMUD). EBMUD is a publicly owned water district formed in 1923 under the Municipal Utility District Act of 1921.

EBMUD Ordinance No. 311A-03 – EBMUD Ordinance No. 311A-03 is the EBMUD ordinance that regulates the interception, treatment and disposal of wastewater and industrial wastes.

Hazardous Waste – Hazardous Wastes are listed and characterized under Section 3001 of the Resource Conservation and Recovery Act, as described in the Code of Federal Regulations (40 CFR Part 261) or as defined in California Health and Safety Code Section 25117.

Pollution Prevention Permits – Pollution Prevention Permits are permits issued to businesses in specific commercial categories. Pollution Prevention Permits are based on pollution prevention or waste minimization at sources, and the implementation of specific BMPs.

POTW – POTW refers to Publicly Owned Treatment Works, e.g., EBMUD SD-1

Pretreatment Program – A Pretreatment Program is administered by a POTW that meets the criteria established in EPA 40 CFR Part 403.8, 403.9 and 403.11.

Prohibition – Prohibition refers to prohibited discharges of wastewater as defined in EPA 40 CFR Part 403.5 or EBMUD Ordinance No. 311A-03, Title I, Section 5, and Title II, Section 2.

Regional Water Quality Control Board – The California Regional Water Quality Control Board, San Francisco Bay Region, is the approval authority for the District's Pretreatment Program.

Sample – Sample refers to a portion of wastewater that is representative of a larger volume of wastewater being discharged. The two types of samples are:

a) Grab - an individual sample collected in a short period of time not exceeding fifteen minutes
b) Composite - a sample consisting of a number of discrete aliquots combined into a single sample, representative of a period of time

SD-1 – SD-1 refers to EBMUD Special District No. 1, a district established to provide treatment of wastewater from the following East Bay Communities: Alameda, Albany, Berkeley, Emeryville, Oakland, Piedmont, and the Stege Sanitary District that includes the City of El Cerrito, the Richmond Annex, and the Kensington area. [Ref. MUD Act, Division 6, Chapter 8, Section 13451].

Short Term Discharge – Short Term Discharge refers to a wastewater discharge not exceeding 90 days.

Slug Discharge – Slug Discharge is any non-routine batch discharge that may cause problems to the POTW including interference [40 CFR 403.3(i)] or pass-through [40 CFR 403.3(n)], or that may result in the Special Discharge Permit Holder violating the General Prohibitions or Specific Prohibitions contained in 40 CFR 403.5.

Special Discharge Permit – A Special Discharge Permit is a mandatory permit issued for short term or unique discharges determined by the Director to require special regulations or source control (Ordinance No. 311A-03, Title IV, Section 1a.).

Special Discharge Permit Holder – A Special Discharge Permit Holder is any individual, partnership, firm, association, corporation, or public agency issued a Special Discharge Permit.

Special Discharge Wastewater – Special Discharge Wastewater is wastewater described under Section A. Special Discharge Criteria, Paragraph II. Source Criteria.

Spill – A spill is an accidental discharge of a substance that may pose an environmental, public health, or wastewater quality concern.

Wastewater Discharge Limit – A wastewater discharge limit is the maximum concentration of a pollutant allowed to be discharged at any time, as determined from the analysis of a grab or composite sample.

w:\ids\permits\special discharge\special discharge permit standard terms and conditions.doc

EBMUD

ALL WASTEWATER DISCHARGED MUST COMPLY WITH THE SPECIAL DISCHARGE PERMIT

PREVENT POLLUTION

Help Us Keep the Bay Clean

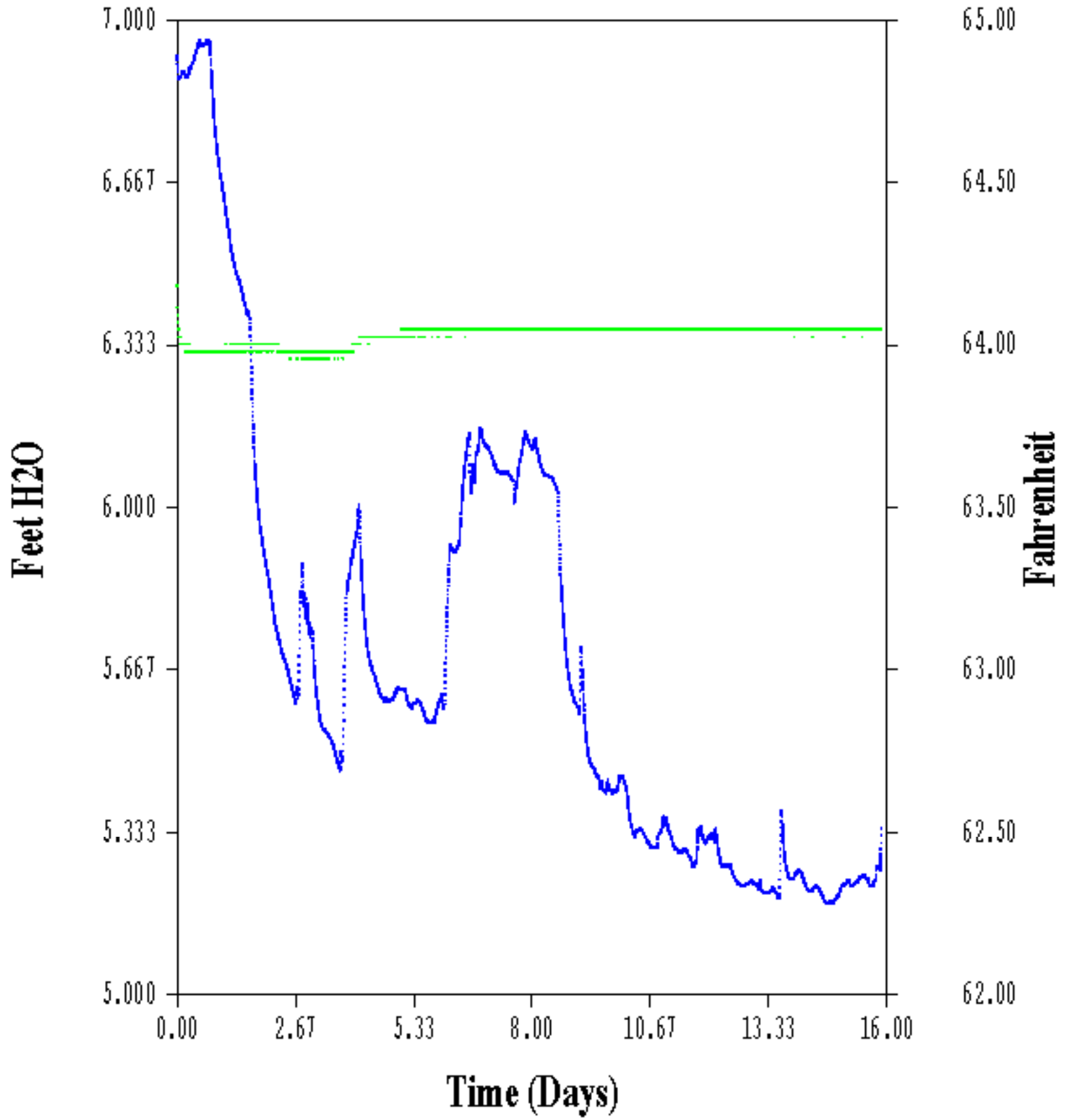
In Case of Spill **call 287-1458**

PROTECTING THE BAY

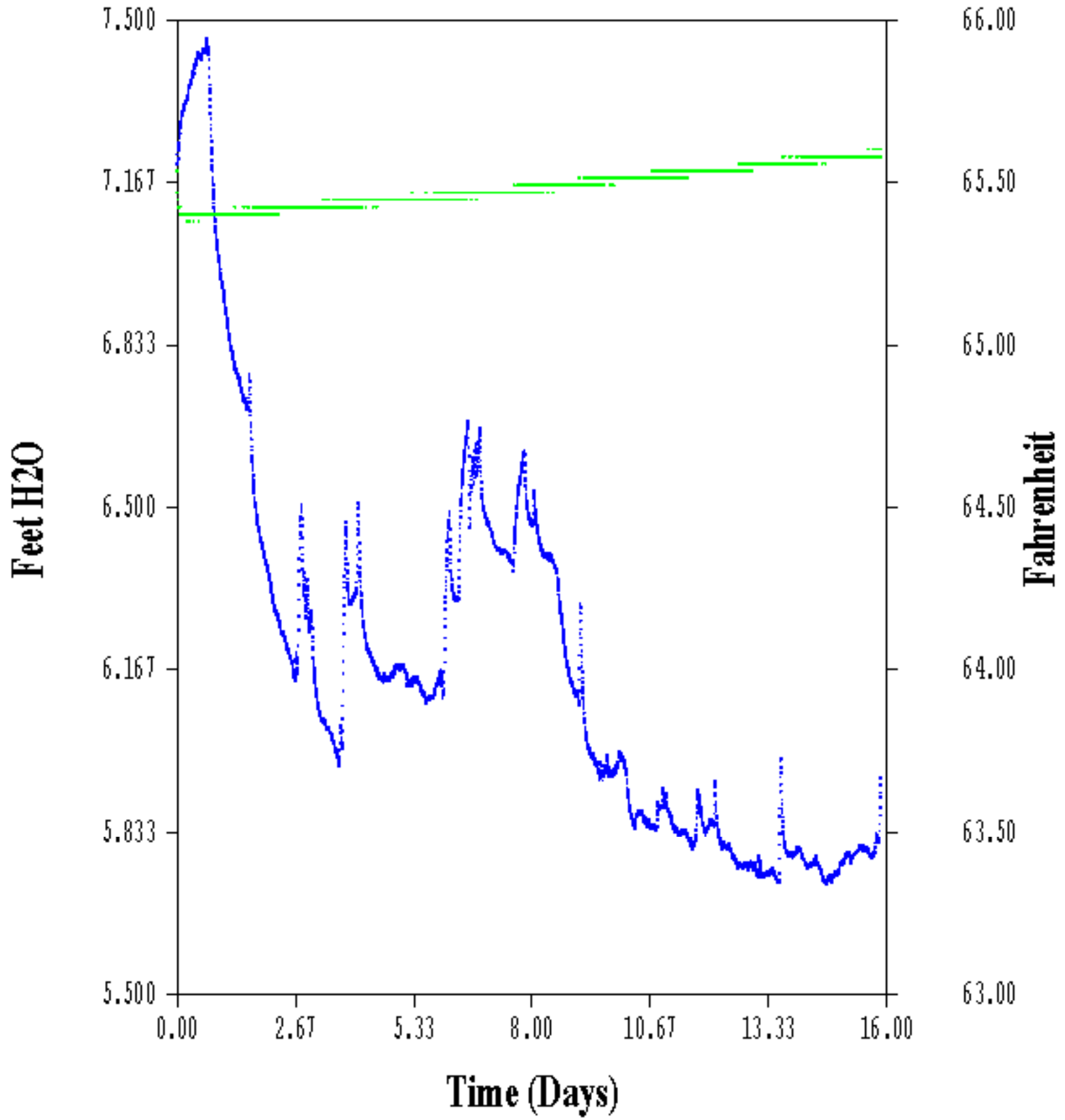
APPENDIX B

OBSERVATION WELL
DRAWDOWN DATA PLOTS

MW-4


7.000
6.667
6.333
6.000
5.667
5.333
5.000
Feet H2O
65.00
64.50
64.00
63.50
63.00
62.50
62.00
Fahrenheit
0.00
2.67
5.33
8.00
10.67
13.33
16.00
Time (Days)
[2] -
[1] -

MW-10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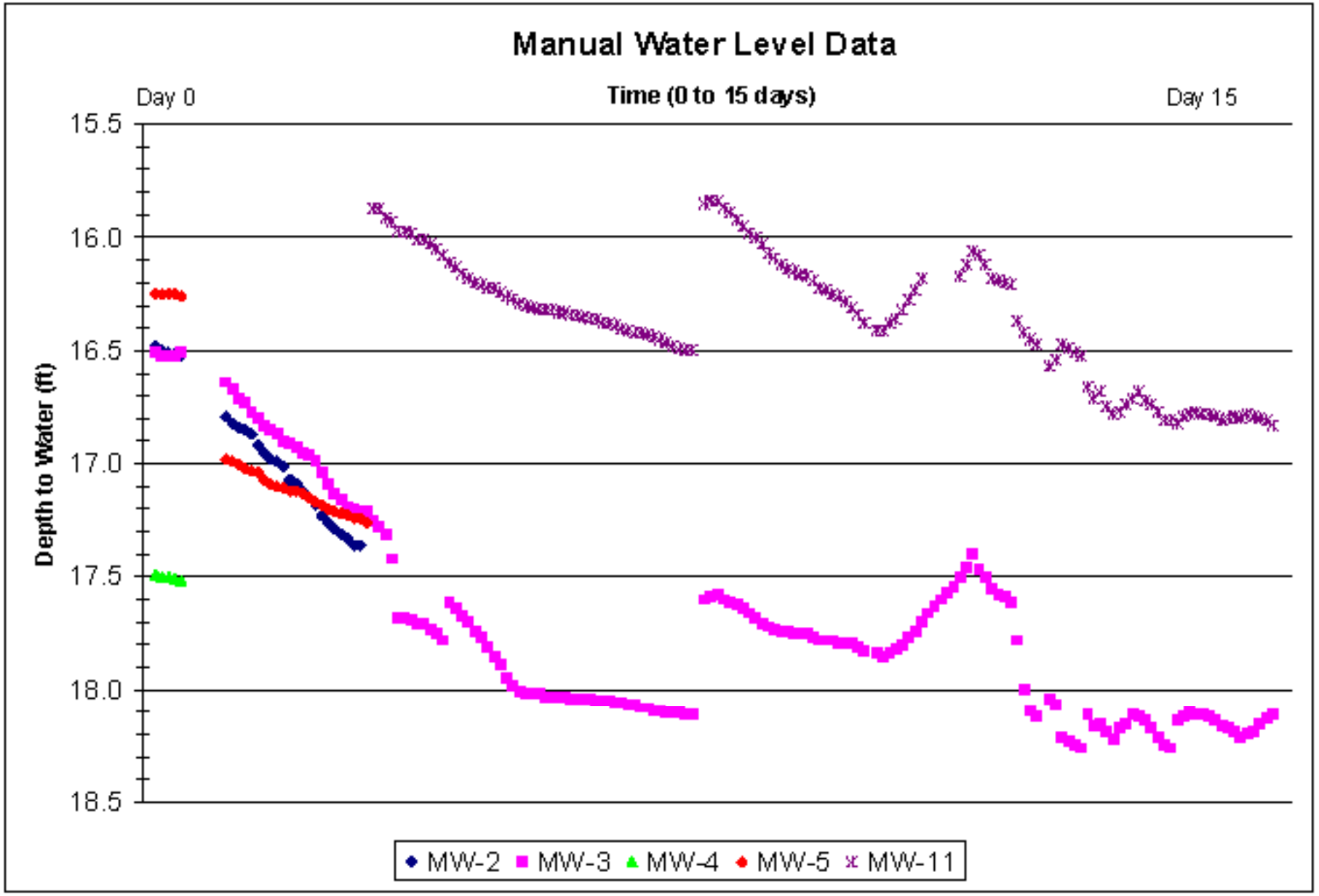
7.167
6.833
6.500
6.167
5.833
5.500
Feet H2O
66.00
65.50
65.00
64.50
64.00
63.50
63.00
Fahrenheit
0.00
2.67
5.33
8.00
10.67
13.33
16.00
Time (Days)
[2] -
[1] -


Manual Water Level Data
Day 0
Time (0 to 15 days)
Day 15
15.5
16.0
16.5
17.0
17.5
18.0
18.5
Depth to Water (ft)
MW-2
MW-3
MW-4
MW-5
MW-11

APPENDIX C

CALCLEAN DATA REPORT

CALCLEAN INC.

"A Partner in Protecting California's Waters"

August 10, 2005

AEI Consultants, Inc.
2500 Camino Diablo, Suite 200
Walnut Creek, CA 94597-3940

ATTN: MR. PETER McINTYRE

SITE: VIC'S AUTOMOTIVE
245 8TH STREET
OAKLAND, CALIFORNIA

RE: HIGH VACUUM DUAL PHASE VACUUM EXTRACTION AND TREATMENT REPORT

Dear Mr. McIntyre:

CalClean Inc. is submitting this remedial action report for the High Vacuum Dual Phase Vacuum Extraction and Treatment at the above referenced site. This report includes all activities performed during the dates of July 11-27, 2005.

From July 11-27, 2005, CalClean performed a 16-day high vacuum dual phase vacuum extraction and treatment event (24-hours per day) on several wells onsite using a low-noise, truck-mounted 450-CFM high-vacuum liquid ring blower along with a Bay Area Air Quality Management District (BAAQMD) various locations permitted propane-fired thermal oxidizer (Plant#12568). This technology allows hydrocarbons to be simultaneously removed from the vadose zone, capillary fringe, and saturated soil zone. A high vacuum was applied for vapor extraction and drawdown of the groundwater table around the extraction wells, while vacuum and vapor flow rates were modified to optimize recovery of vapor, free-product and dissolved-phase hydrocarbons.

Vapor samples were collected in Tedlar bags from each extraction well when first connected, during the pilot testing, and then again at the end of the event. Combined influent samples were also collected during the event. The laboratory results, listed in Table 1 and laboratory reports included in Attachment 1, indicate the following:

- The starting Total Petroleum Hydrocarbons as Gasoline (TPH-G) vapor concentrations for wells MW-1, MW-2, MW-5, MW-6 and MW-7 were 16,980 ppmv, 16,414 ppmv, 5,660 ppmv, 13,018 ppmv, and 14,999 ppmv, respectively. The ending TPH-G vapor concentrations were 4,528 ppmv, 5,094 ppmv, 3,396 ppmv, 7,075 ppmv, and 16,414 ppmv, respectively.

- The starting Benzene vapor concentrations for wells MW-1, MW-2, MW-5, MW-6 and MW-7 were 532 ppmv, 344 ppmv, 225 ppmv, 438 ppmv, and 470 ppmv, respectively. The ending Benzene vapor concentrations were 113 ppmv, 166 ppmv, 85 ppmv, 128 ppmv, and 407 ppmv, respectively

- The starting and ending Methyl tert-Butyl Ether (MtBE) vapor concentrations for wells MW-1, MW-2, MW-5, MW-6 and MW-7 were Non Detect above the laboratory detection limits.

The total equivalent amount of hydrocarbons recovered through vapor extraction during the 16-day event was 10,719.08 pounds (based on laboratory data), and 10,531.48 pounds (based on the Horiba field organic vapor analyzer data) with an average of 10,625.28 pounds. The cumulative tabulation of recovered hydrocarbons (based on laboratory data) is provided in Table 2. The cumulative tabulation of recovered hydrocarbons (based on the field organic vapor analyzer data) is provided in Table 3. These results indicate that dual phase vacuum extraction using a mobile high-vacuum system is acting as an effective remedial technology at this site in removing Total Petroleum Hydrocarbons as Gasoline and BTEX constituent concentrations in the vadose and saturated zone.

The total volume of hydrocarbon-affected groundwater recovered from the extraction wells was approximately **80,740 gallons.** The extracted water was treated through CalClean's primary treatment system within the dual phase extraction system and then polished in activated carbon canisters before discharge to the onsite sewer system in accordance with Permit Number 22517851 obtained from the East Bay Municipal Utility District.

Groundwater samples were collected several hours after the HVDPE event had concluded. The laboratory results, listed in Table 4 and laboratory reports included in Attachment 1, indicate the following:

- The Total Petroleum Hydrocarbons as Gasoline (TPH-G) vapor concentrations for wells MW-1, MW-2, MW-4 and MW-5 were 220,000 ug/L, 9,500 ug/L, ND<50 ug/L, and 120,000 ug/L, respectively

- The Benzene vapor concentrations for wells MW-1, MW-2, MW-4 and MW-5 were 26,000 ug/L, 1,400 ug/L, ND<0.5 ug/L, and 10,000 ug/L, respectively

- The Methyl tert-Butyl Ether (MtBE) vapor concentrations for wells MW-1, MW-2, MW-4 and MW-5 were 2,500 ug/L, 910 ug/L, ND<5 ug/L, and 1,100 ug/L, respectively

---

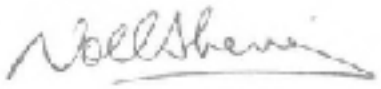
The following attachments are included to document the HVDPE event at the site:

Table 1	Results of Laboratory Analysis of Influent Vapor Samples
Table 2	High Vacuum Dual Phase Extraction Spreadsheet (using Lab Data)
Figure 1	Total Inlet HC Concentrations versus Time (16-Days, Using Lab Data)
Figure 2	Cumulative HC Recovered over 16 Days (using Lab Data)
Table 3	High Vacuum Dual Phase Extraction Data Spreadsheet (using Horiba Data)
Figure 3	Total Inlet HC Concentrations versus Time (16-Days, Using Horiba Data)
Figure 4	Cumulative HC Recovered over 16 Days (using Horiba Data)
Table 4	Results of Laboratory Analysis of Groundwater Samples
Attachment 1	Laboratory Reports
Attachment 2	High Vacuum Dual Phase Extraction Field Data Sheets

If you have any questions regarding this report, please contact us at (714) 734-9137 or via cell phone at (714) 936-2706.

Sincerely,

CALCLEAN INC.



Noel Shenoi
Principal Engineer

Attachments

CalClean Inc.

Table 1

RESULTS OF LABORATORY ANALYSIS OF VAPOR SAMPLES
Vic's Automotive
Oakland, California

Sample ID/ Date	Date/Time Sampled	TPH-g (ppmv)	Benzene (ppmv)	Toluene (ppmv)	Ethylbenzene (ppmv)	Total Xylenes (ppmv)	MTBE (ppmv)
MW-1	7/11/2005 1210	16,980	532	398	69	276	ND<157
MW-1	7/13/2005 0810	9,339	257	265	32	120	ND<81
MW-1	7/14/2005 0910	6,792	191	262	30	113	ND<49
MW-1	7/15/2005 0905	7,075	207	318	46	168	ND<81
MW-1	7/19/2005 0723	877	12	64	19	87	ND<5
MW-1	7/22/2005 1245	4,811	147	244	23	106	ND<27
MW-1	7/27/2005 1125	4,528	113	265	32	131	ND<41
MW-2	7/13/2005 0910	16,414	344	530	41	168	ND<81
MW-2	7/14/2005 0920	10,471	294	345	30	127	ND<108
MW-2	7/15/2005 0910	9,056	288	371	28	108	ND<162
MW-2	7/19/2005 0725	1,840	72	122	15	64	ND<14
MW-2	7/22/2005 1250	4,245	182	262	20	87	ND<27
MW-2	7/27/2005 1130	5,094	166	318	28	110	ND<49

(Contd.)

CalClean Inc.

Table 1

RESULTS OF LABORATORY ANALYSIS OF VAPOR SAMPLES
Vic's Automotive
Oakland, California

Sample ID/ Date	Date/Time Sampled	TPH-g (ppmv)	Benzene (ppmv)	Toluene (ppmv)	Ethylbenzene (ppmv)	Total Xylenes (ppmv)	MTBE (ppmv)
MW-5	7/13/2005 0900	5,660	226	164	15	65	ND<81
MW-5	7/14/2005 0930	14,999	288	636	64	253	ND<41
MW-5	7/15/2005 0915	7,641	163	451	62	225	ND<41
MW-5	7/19/2005 0730	3,962	78	199	32	145	ND<14
MW-5	7/22/2005 1255	4,528	119	262	44	212	ND<14
MW-5	7/27/2005 1137	3,396	85	207	30	127	ND<14
MW-6	7/11/2005 1220	13,018	438	451	35	147	ND<162
MW-6	7/13/2005 0800	4,528	91	164	14	62	ND<41
MW-6	7/14/2005 0940	5,094	119	265	32	143	ND<30
MW-6	7/15/2005 0920	5,943	122	292	35	136	ND<57
MW-6	7/19/2005 0735	4,811	100	231	25	115	ND<27
MW-6	7/22/2005 1255	3,962	94	231	32	138	ND<36
MW-6	7/27/2005 1140	7,075	128	477	69	276	ND<41

(Contd.)

CalClean Inc.

Table 1

RESULTS OF LABORATORY ANALYSIS OF VAPOR SAMPLES
Vic's Automotive
Oakland, California

Sample ID/ Date	Date/Time Sampled	TPH-g (ppmv)	Benzene (ppmv)	Toluene (ppmv)	Ethylbenzene (ppmv)	Total Xylenes (ppmv)	MTBE (ppmv)
MW-7	7/11/2005 1230	14,999	470	504	39	152	ND<189
MW-7	7/13/2005 0820	9,339	275	265	22	83	ND<95
MW-7	7/14/2005 0950	14,716	407	424	35	145	ND<135
MW-7	7/15/2005 0925	15,565	438	504	39	143	ND<14
MW-7	7/19/2005 0740	16,414	438	530	44	184	ND<135
MW-7	7/22/2005 1300	14,999	438	716	74	276	ND<216
MW-7	7/27/2005 1145	16,414	407	636	71	276	ND<243
COMBINED	7/11/2005 1200	19,527	595	530	62	230	ND<216
COMBINED	7/12/2005 2400	9,339	285	231	19	69	ND<108
COMBINED	7/13/2005 0830	48	1	2	1	4	ND<0.7
COMBINED	7/13/2005 0920	17,263	438	451	39	147	ND<162
COMBINED	7/14/2005 0900	13,867	376	424	30	113	ND<108
COMBINED	7/14/2005 2100	9,905	266	345	25	81	ND<162
COMBINED	7/15/2005 0900	13,301	376	504	39	133	ND<216

(Contd.)

CalClean Inc.

Table 1

RESULTS OF LABORATORY ANALYSIS OF VAPOR SAMPLES
Vic's Automotive
Oakland, California

Sample ID/ Date	Date/Time Sampled	TPH-g (ppmv)	Benzene (ppmv)	Toluene (ppmv)	Ethylbenzene (ppmv)	Total Xylenes (ppmv)	MTBE (ppmv)
COMBINED	7/19/2005 0720	10,754	276	398	39	152	ND<81
COMBINED	7/22/2005 1240	10,754	376	530	62	230	ND<81
COMBINED	7/27/2005 1120	12,169	269	610	76	299	ND<108
STACK	7/11/2005 1205	ND<7	ND<0.07	ND<0.07	ND<0.07	ND<0.07	ND<0.7

Notes:

ppmv = parts per billion by volume

TPH - g = total petroleum hydrocarbons - gasoline

All Samples Analyzed by Modified EPA Methods 8015/8021

MTBE = methyl tertiary butyl ether

CalClean Inc.

Table 2

HIGH VACUUM DUAL PHASE EXTRACTION SPREADSHEET (Using Lab Data)

Vic's Automotive, Oakland, CA

TIME	SYSTEM PARAMETERS			Hydrocarbon Recovery		
	Average System Vacuum (in of Hg)	Average Total System Inlet Flow (scfm)	Influent Concentrations Post-dilution* (ppmv)	(lbs)	(gal)	(Cumul. lbs)
7/11/2005 12:00	24	92	19,527	0.00	0.00	0
7/12/2005 0:00	23	175	9,339	314.80	50.39	314.80
7/13/2005 8:30	24	80	48	264.79	42.38	579.60
7/13/2005 9:20	23	170	17,263	12.28	1.96	591.87
7/14/2005 9:00	22	177	13,867	870.17	139.28	1,462.04
7/14/2005 21:00	22	177	9,905	343.72	55.02	1,805.76
7/15/2005 9:00	22	172	13,301	330.80	52.95	2,136.56
7/19/2005 7:20	17	194	10,754	2,826.89	452.46	4,963.45
7/22/2005 12:40	17	193	10,754	2,190.96	350.69	7,154.41
7/27/2005 11:20	17	192	12,169	3,564.66	570.57	10,719.08
	TOTAL HC RECOVERED* - LAB DATA			**10,719.08**	**1715.74**	
	TOTAL HC RECOVERED** - FIELD ANALYZER DATA			**10,531.48**	**1685.71**	
	Average HC Recovered*** (Field Analyzer/Lab Data)			**10,625.28**	**1700.72**	

in of Hg = inches of mercury ppmv = parts per million by volume gal = gallons lbs = pounds

scfm = standard cubic feet per minute * Concentration data based on laboratory data.

** Based on Horiba field analyzer data.

*** Average HC Recovered using Laboratory and Horiba data

Figure 1

Total Inlet HC Concentrations vs Time (16 Days)

Vic's Automotive, Oakland, CA - 7/11-27/05

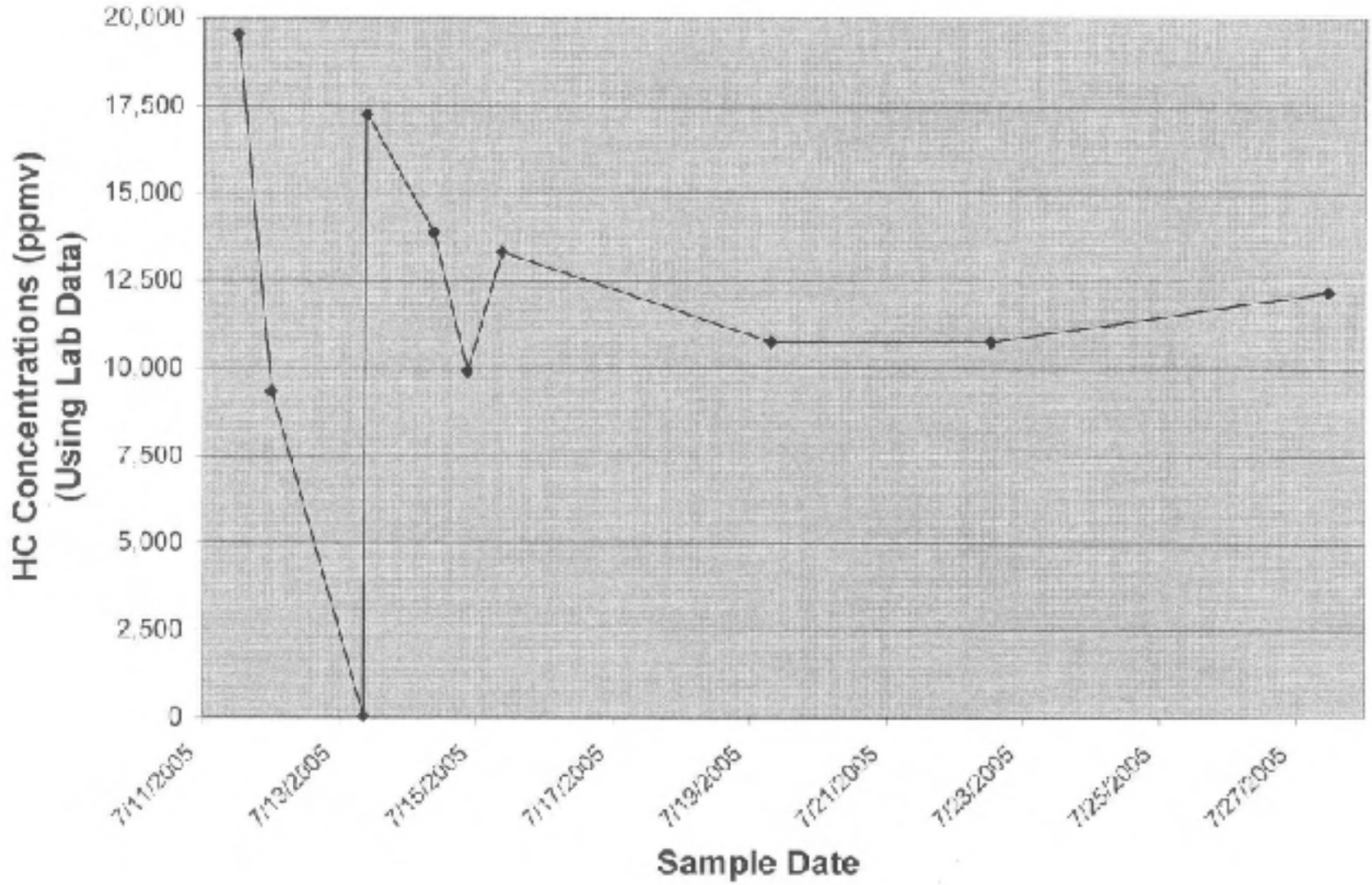
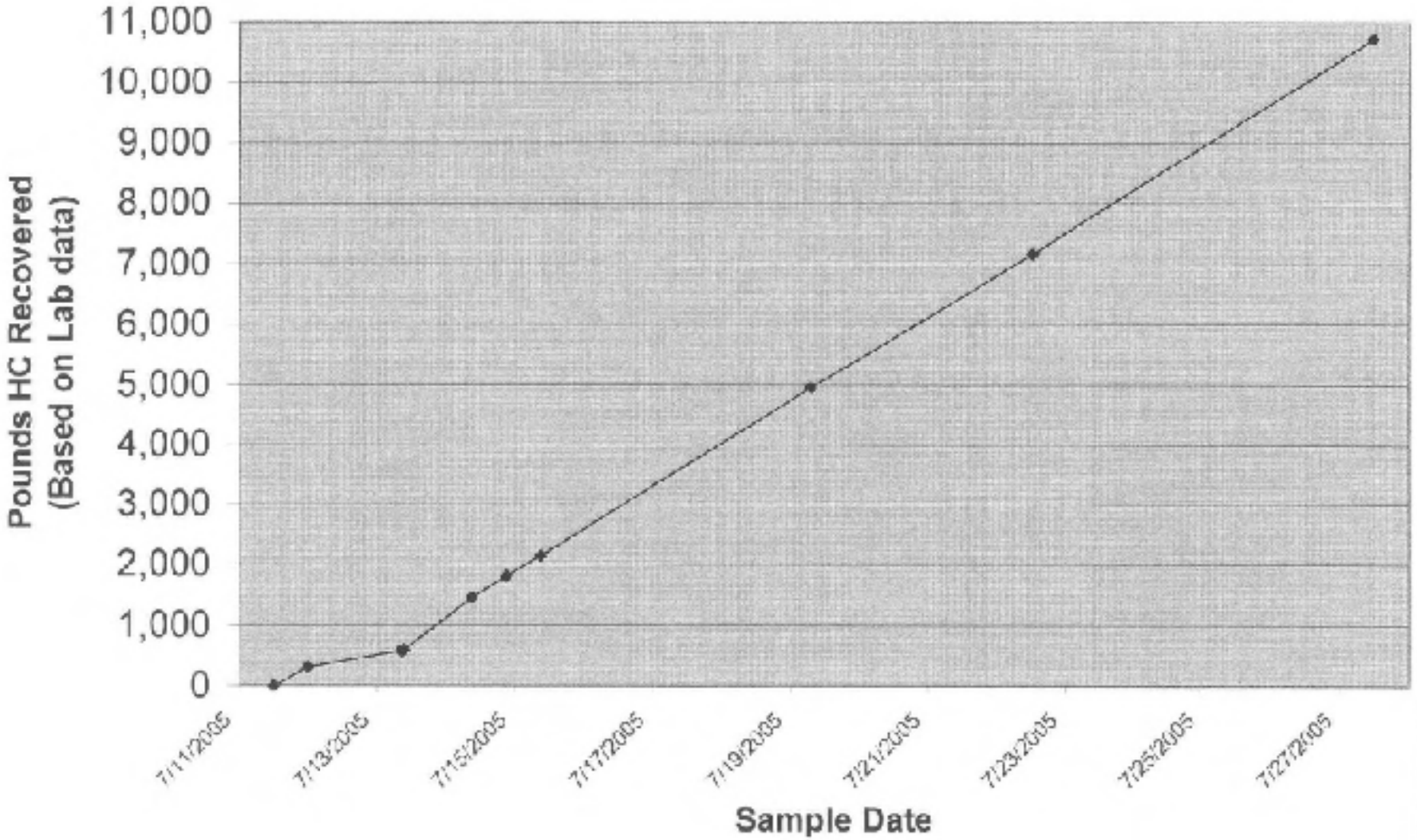


Figure 2

Cumulative HC Recovered Over 16 Days

Vic's Automotive, Oakland, CA - 7/11-27/05



CalClean Inc.

Table 3

HIGH VACUUM DUAL PHASE EXTRACTION DATA SPREADSHEET (Using Field Analyzer Data)

Vic's Automotive, Oakland, CA

TIME	Extraction Well # MW-1 (Stinger Depth)	Extraction Well # MW-6 Stinger Depth)	Extraction Well # MW-7 (Stinger Depth)	Extraction Well # MW-5 (Stinger Depth)	Extraction Well # MW-2 (Stinger Depth)	SYSTEM PARAMETERS				Hydrocarbon Recovery (using Horiba Data)		
						System Vacuum (in of Hg)	Total System Inlet Flow (scfm)**	Influent Concentrations* (ppmv)	Effluent Concentrations (ppmv)*	(lbs)	(gal)	(Cumul. lbs)
7/11/2005 11:00	20'	20'	20'			24	97	17,930	22	0.00	0.00	0
7/11/2005 12:00	20'	20'	20'			24	92	16,210		21.95	3.52	21.95
7/11/2005 13:00	20'	20'	20'			24	86	15,170		19.92	3.14	41.55
7/11/2005 14:00	20'	20'	20'			24	89	15,930		19.12	3.06	60.70
7/11/2005 15:00	20'	20'	20'			24	81	13,210		16.86	2.70	77.56
7/11/2005 16:00	20'	20'	20'			24	82	14,120		15.16	2.43	92.73
7/11/2005 17:00	20'	20'	20'			24	87	13,760		16.04	2.57	108.76
7/11/2005 18:00	20'	20'	20'			24	79	13,440		15.37	2.46	124.13
7/11/2005 19:00	20'	20'	20'			24	74	8,370		11.36	1.82	135.49
7/11/2005 20:00	20'	20	20'			24	86	7,940		8.58	1.42	144.37
7/11/2005 21:00	20'	20	20'			24	82	7,470		8.81	1.41	153.18
7/11/2005 22:00	20'	20	20'			24	80	7,130		8.05	1.29	161.23
7/11/2005 23:00	20'	20	20'			24	77	6,940		7.52	1.20	168.75
7/12/2005 0:00	20'	20	20'			24	79	6,720		7.28	1.16	176.01
7/12/2005 1:00	20'	20	20'			24	74	6,710		6.99	1.12	183.00
7/12/2005 2:00	20'	20	20'			24	77	6,680		6.88	1.10	189.88
7/12/2005 3:00	20'	20	20'			24	75	6,640		6.89	1.10	196.77
7/12/2005 4:00	20'	20	20'			24	82	6,570		7.06	1.13	203.83
7/12/2005 5:00	20'	20	20'			24	80	6,510		7.01	1.15	211.05
7/12/2005 6:00	20'	20	20'			24	77	6,450		6.93	1.11	217.97
7/12/2005 7:00	20'	20	20'			24	83	6,420		7.01	1.12	224.98
7/12/2005 8:00	20'	20	20'			24	86	6,350		7.35	1.18	232.33
7/12/2005 9:00	20'	20	20'	20	20'	24	81	6,430		7.26	1.16	239.59
7/12/2005 10:00	20'	20	20'	20	20'	24	75	14,720		11.23	1.80	250.82
7/12/2005 11:00	20'	20	20'	20	20'	24	79	16,360		16.77	2.62	266.59
7/12/2005 12:00	20'	20	20'	20	20'	24	84	16,430		17.08	2.73	283.67
7/12/2005 13:00	20'	20	20'	20	20'	24	82	16,020		17.54	2.81	301.21
7/12/2005 14:00	20'	20	20'	20	20'	24	76	16,840		16.92	2.71	318.13
7/12/2005 15:00	20'	20	20'	20	20'	24	73	16,990		16.14	2.58	334.28

CalClean Inc.

Table 3

HIGH VACUUM DUAL PHASE EXTRACTION DATA SPREADSHEET (Using Field Analyzer Data)

Vic's Automotive, Oakland, CA

TIME	Extraction Well # MW-1 (Stinger Depth)	Extraction Well # MW-6 (Stinger Depth)	Extraction Well # MW-7 (Stinger Depth)	Extraction Well # MW-5 (Stinger Depth)	Extraction Well # MW-2 (Stinger Depth)	SYSTEM PARAMETERS				Hydrocarbon Recovery (using Horiba Data)		
						System Vacuum (in of Hg)	Total System Inlet Flow (scfm)**	Influent Concentrations* (ppmv)	Effluent Concentrations (ppmv) *	(lbs)	(gal)	(Dumul. lbs)
7/12/2005 16:00	20'	20'	20'	20'	20'	24	77	16,270		18.47	2.64	350.75
7/12/2005 17:00	20'	20'	20'	20'	20'	24	82	16,340		17.65	2.82	368.40
7/12/2005 18:00	20'	20'	20'	20'	20'	24	84	16,450		18.53	2.97	386.92
7/12/2005 19:00	20'	20'	20'	20'	20'	24	73	16,210		17.45	2.79	404.38
7/12/2005 20:00	20'	20'	20'	20'	20'	24	79	16,120		16.73	2.69	421.10
7/12/2005 21:00	20'	20'	20'	20'	20'	24	83	15,990		17.71	2.83	438.81
7/12/2005 22:00	20'	20'	20'	20'	20'	24	80	15,910		17.70	2.83	456.51
7/12/2005 23:00	20'	20'	20'	20'	20'	24	74	15,850		16.65	2.67	473.16
7/13/2005 0:00	20'	20'	20'	20'	20'	24	79	15,720		16.34	2.62	489.50
7/13/2005 1:00	20'	20'	20'	20'	20'	24	74	15,630		16.22	2.60	505.72
7/13/2005 2:00	20'	20'	20'	20'	20'	24	80	15,420		16.28	2.61	521.99
7/13/2005 3:00	20'	20'	20'	20'	20'	24	78	15,040		16.39	2.62	538.37
7/13/2005 4:00	20'	20'	20'	20'	20'	24	74	14,890		15.48	2.48	553.86
7/13/2005 5:00	20'	20'	20'	20'	20'	24	78	14,740		15.33	2.45	569.19
7/13/2005 6:00	20'	20'	20'	20'	20'	24	78	14,550		15.61	2.50	584.79
7/13/2005 7:00	20'	20'	20'	20'	20'	24	79	14,530		15.65	2.50	600.44
7/13/2005 8:00	20'	20'	20'	20'	20'	24	80	14,720		15.88	2.54	616.33
7/13/2005 9:00	20'	20'	20'	20'	20'	23	170	18,170		27.99	4.48	644.31
7/13/2005 10:00	20'	20'	20'	20'	20'	23	175	17,960		42.31	6.77	686.62
7/13/2005 11:00	20'	20'	20'	20'	20'	23	173	17,340		41.69	6.67	728.32
7/13/2005 12:00	20'	20'	20'	20'	20'	23	175	17,190		40.90	6.55	769.22
7/13/2005 13:00	20'	20'	20'	20'	20'	23	173	17,160		40.60	6.51	809.91
7/13/2005 14:00	20'	20'	20'	20'	20'	23	173	15,970		40.19	6.43	850.10
7/13/2005 15:00	20'	20'	20'	20'	20'	23	175	16,470		39.61	6.34	889.71
7/13/2005 16:00	20'	20'	20'	20'	20'	23	171	16,240		38.52	6.17	928.23
7/13/2005 17:00	20'	20'	20'	20'	20'	23	174	15,090		37.73	6.04	965.95
7/13/2005 18:00	20'	20'	20'	20'	20'	23	172	15,910		37.46	5.99	1,003.41
7/13/2005 19:00	20'	20'	20'	20'	20'	23	170	15,750		36.85	5.90	1,040.27
7/13/2005 20:00	20'	20'	20'	20'	20'	23	175	15,470		36.66	5.87	1,076.93

CalClean Inc.

Table 3

HIGH VACUUM DUAL PHASE EXTRACTION DATA SPREADSHEET (Using Field Analyzer Data)

Vic's Automotive, Oakland, CA

TIME	Extraction Well # MW-1 (Stinger Depth)	Extraction Well # MW-6 (Stinger Depth)	Extraction Well # MW-7 (Stinger Depth)	Extraction Well # MW-5 (Stinger Depth)	Extraction Well # MW-2 (Stinger Depth)	SYSTEM PARAMETERS				Hydrocarbon Recovery (using Horiba Data)		
						System Vacuum (in of Hg)	Total System Inlet Flow (scfm)**	Influent Concentrations* (ppmv)	Effluent Concentrations (ppmv) *	(lbs)	(gal)	(Cumul. lbs)
7/13/2005 21:00	20'	20'	20'	20'	20'	23	172	15,360		36.41	5.83	1,113.34
7/13/2005 22:00	20'	20'	20'	20'	20'	23	173	15,280		35.90	5.79	1,149.32
7/13/2005 23:00	20'	20'	20'	20'	20'	23	175	15,130		36.02	5.77	1,185.34
7/14/2005 0:00	20'	20'	20'	20'	20'	23	171	15,010		35.50	5.68	1,220.84
7/14/2005 1:00	20'	20'	20'	20'	20'	23	172	14,870		34.88	5.58	1,255.73
7/14/2005 2:00	20'	20'	20'	20'	20'	23	176	14,690		35.01	5.60	1,290.74
7/14/2005 3:00	20'	20'	20'	20'	20'	23	174	14,530		34.81	5.57	1,325.55
7/14/2005 4:00	20'	20'	20'	20'	20'	23	170	14,350		33.82	5.41	1,359.36
7/14/2005 5:00	20'	20'	20'	20'	20'	23	173	14,210		33.34	5.34	1,392.71
7/14/2005 6:00	20'	20'	20'	20'	20'	23	174	14,040		33.37	5.34	1,426.07
7/14/2005 7:00	20'	20'	20'	20'	20'	23	171	13,790		32.68	5.23	1,458.75
7/14/2005 8:00	20'	20'	20'	20'	20'	23	173	13,450		31.93	5.11	1,490.68
7/14/2005 9:00	20'	20'	20'	20'	20'	23	175	14,140		32.72	5.24	1,523.40
7/14/2005 10:00	20'	20'	20'	20'	20'	22	169	14,800		33.76	5.40	1,557.16
7/14/2005 11:00	20'	20'	20'	20'	20'	22	167	15,080		34.06	5.45	1,591.22
7/14/2005 12:00	20'	20'	20'	20'	20'	22	191	15,350		34.00	5.44	1,625.21
7/14/2005 13:00	20'	20'	20'	20'	20'	22	150	15,240		33.43	5.35	1,658.64
7/14/2005 14:00	20'	20'	20'	20'	20'	22	183	15,120		33.38	5.34	1,692.02
7/14/2005 15:00	20'	20'	20'	20'	20'	22	180	15,150		34.24	5.48	1,726.26
7/14/2005 16:00	20'	20'	20'	20'	20'	22	171	15,050		34.98	5.60	1,761.25
7/14/2005 17:00	20'	20'	20'	20'	20'	22	177	15,010		35.01	5.70	1,796.85
7/14/2005 18:00	20'	20'	20'	20'	20'	22	169	14,990		35.33	5.66	1,832.18
7/14/2005 19:00	20'	20'	20'	20'	20'	22	176	14,740		34.91	5.58	1,867.10
7/14/2005 20:00	20'	20'	20'	20'	20'	22	170	14,980		34.62	5.54	1,901.72
7/14/2005 21:00	20'	20'	20'	20'	20'	22	177	14,820		34.58	5.54	1,936.30
7/14/2005 22:00	20'	20'	20'	20'	20'	22	171	14,570		34.58	5.53	1,970.88
7/14/2005 23:00	20'	20'	20'	20'	20'	22	173	14,570		34.24	5.48	2,005.12
7/15/2005 0:00	20'	20'	20'	20'	20'	22	172	14,540		34.65	5.55	2,039.77
7/15/2005 1:00	20'	20'	20'	20'	20'	22	174	14,710		34.80	5.57	2,074.57

CalClean Inc.

Table 3

HIGH VACUUM DUAL PHASE EXTRACTION DATA SPREADSHEET (Using Field Analyzer Data)

Vic's Automotive, Oakland, CA

TIME	Extraction Well # MW-1 (Stinger Depth)	Extraction Well # MW-6 (Stinger Depth)	Extraction Well # MW-7 (Stinger Depth)	Extraction Well # MW-5 (Stinger Depth)	Extraction Well # MW-2 (Stinger Depth)	SYSTEM PARAMETERS				Hydrocarbon Recovery (using Horiba Data)		
						System Vacuum (in of Hg)	Total System Inlet Flow (scfm)**	Influent Concentrations* (ppmv)	Effluent Concentrations (ppmv) *	(lbs)	(gal)	(Cumul. lbs)
7/15/2005 2:00	20'	20'	20'	20'	20'	22	171	14,880		34.51	5.52	2,109.08
7/15/2005 3:00	20'	20'	20'	20'	20'	22	172	14,530		34.22	5.48	2,143.30
7/15/2005 4:00	20'	20'	20'	20'	20'	22	174	14,590		34.77	5.56	2,178.07
7/15/2005 5:00	20'	20'	20'	20'	20'	22	173	14,400		34.59	5.54	2,212.66
7/15/2005 6:00	20'	20'	20'	20'	20'	22	171	14,250		33.55	5.37	2,246.21
7/15/2005 7:00	20'	20'	20'	20'	20'	22	173	13,980		33.05	5.29	2,279.26
7/15/2005 8:00	20'	20'	20'	20'	20'	22	170	13,680		32.29	5.17	2,311.55
7/15/2005 9:00	20'	20'	20'	20'	20'	22	172	13,240		31.34	5.02	2,342.89
7/15/2005 10:00	20'	20'	20'	20'	20'	22	174	13,460		31.44	5.03	2,374.34
7/15/2005 11:00	20'	20'	20'	20'	20'	22	170	13,310		31.34	5.02	2,405.68
7/15/2005 13:00	20'	20'	20'	20'	20'	20	179	14,850		0.00	0.00	2,405.68
7/15/2005 14:00	20'	20'	20'	20'	20'	20	177	14,230		35.24	5.64	2,440.92
7/15/2005 15:00	20'	20'	20'	20'	20'	20	178	14,490		34.80	5.57	2,475.72
7/15/2005 16:00	20'	20'	20'	20'	20'	20	181	14,640		35.57	5.69	2,511.29
7/15/2005 17:00	20'	20'	20'	20	20'	16	186	14,370		37.10	5.94	2,548.39
7/15/2005 18:00	20'	20'	20'	20	20'	16	191	14,310		37.78	6.05	2,586.17
7/15/2005 19:00	20'	20'	20'	20	20'	16	184	14,180		37.33	5.98	2,623.50
7/15/2005 20:00	20'	20	20'	20	20'	16	198	13,960		37.66	6.01	2,661.05
7/15/2005 21:00	20'	20	20'	20	20'	16	197	13,770		37.26	5.97	2,698.33
7/15/2005 22:00	20'	20	20'	20	20'	18	195	13,840		36.64	5.90	2,735.17
7/15/2005 23:00	20'	20	20'	20	20'	16	192	13,790		36.40	5.83	2,771.57
7/16/2005 0:00	20'	20	20'	20	20'	16	198	13,680		36.26	5.81	2,807.54
7/16/2005 1:00	20'	20	20'	20	20'	16	197	13,580		36.46	5.84	2,844.31
7/16/2005 2:00	20'	20	20'	20	20'	16	195	13,610		36.26	5.81	2,880.58
7/16/2005 3:00	20'	20	20'	20	20'	16	198	13,690		36.52	5.85	2,917.11
7/16/2005 4:00	20'	20	20'	20	20'	16	197	13,450		36.49	5.84	2,953.60
7/16/2005 5:00	20'	20	20'	20	20'	16	196	13,300		35.78	5.73	2,989.38
7/16/2005 6:00	20'	20	20'	20	20'	16	193	13,380		35.33	5.66	3,024.70
7/16/2005 7:00	20'	20	20'	20	20'	16	197	13,240		35.34	5.66	3,060.04

CalClean Inc.

Table 3

HIGH VACUUM DUAL PHASE EXTRACTION DATA SPREADSHEET (Using Field Analyzer Data)

Vic's Automotive, Oakland, CA

TIME	Extraction Well # MW-1 (Stinger Depth)	Extraction Well # MW-6 Stinger Depth)	Extraction Well # MW-7 (Stinger Depth)	Extraction Well # MW-6 (Stinger Depth)	Extraction Well # MW-2 (Stinger Depth)	SYSTEM PARAMETERS				Hydrocarbon Recovery (using Horiba Data)		
						System Vacuum (in of Hg)	Total System Inlet Flow (scfm)**	Influent Concentrations* (ppmv)	Effluent Concentrations (ppmv) *	(lbs)	(gal)	(Cumul. lbs)
7/15/2005 8:00	20'	20'	20'	20'	20'	15	195	13,120		35.17	5.53	3,095.21
7/16/2005 9:00	20'	20'	20'	20'	20'	16	199	13,270		35.39	5.58	3,130.60
7/16/2005 10:00	20'	20'	20'	20'	20'	16	196	13,070		35.41	5.57	3,166.02
7/16/2005 11:00	20'	20'	20'	20'	20'	16	198	13,140		35.15	5.53	3,201.17
7/16/2005 12:00	20'	20'	20'	20'	20'	17	191	13,850		35.47	5.55	3,236.64
7/16/2005 16:00	20'	20'	20'	20'	20'	17	190	13,360		140.11	22.43	3,376.75
7/16/2005 20:00	20'	20'	20'	20'	20'	17	194	13,280		139.28	22.29	3,516.03
7/17/2005 0:00	20'	20'	20'	20'	20'	17	191	13,410		139.90	22.39	3,655.93
7/17/2005 4:00	20'	20'	20'	20'	20'	17	193	13,590		141.16	22.59	3,797.09
7/17/2005 8:00	20'	20'	20'	20'	20'	17	191	13,820		142.26	22.77	3,939.35
7/17/2005 12:00	20'	20'	20'	20'	20'	17	194	13,470		142.00	22.72	4,081.35
7/17/2005 16:00	20'	20'	20'	20'	20'	17	192	13,350		140.95	22.56	4,222.30
7/17/2005 20:00	20'	20'	20'	20'	20'	17	190	13,210		138.14	22.11	4,360.43
7/18/2005 0:00	20'	20'	20'	20'	20'	17	191	12,990		135.91	21.75	4,496.34
7/18/2005 4:00	20'	20'	20'	20'	20'	17	190	12,850		133.94	21.44	4,630.28
7/18/2005 8:00	20'	20'	20'	20'	20'	17	192	12,550		132.16	21.15	4,762.43
7/18/2005 12:00	20'	20'	20'	20'	20'	17	191	12,360		130.05	20.82	4,892.48
7/18/2005 16:00	20'	20'	20'	20'	20'	17	193	12,210		128.46	20.56	5,020.94
7/18/2005 20:00	20'	20'	20'	20'	20'	17	194	12,020		127.67	20.44	5,148.61
7/19/2005 0:00	20'	20'	20'	20'	20'	17	190	11,780		124.43	19.92	5,273.04
7/19/2005 4:00	20'	20'	20'	20'	20'	17	192	11,540		121.29	19.41	5,394.32
7/19/2005 8:00	20'	20'	20'	20'	20'	17	194	11,370		120.40	19.27	5,514.72
7/19/2005 12:00	20'	20'	20'	20'	20'	17	190	11,160		117.79	18.85	5,632.51
7/19/2005 16:00	20'	20'	20'	20'	20'	17	193	11,310		117.17	18.75	5,749.68
7/19/2005 20:00	20'	20'	20'	20'	20'	17	192	11,450		119.30	19.10	5,868.99
7/20/2005 0:00	20'	20'	20'	20'	20'	17	191	11,300		118.63	18.99	5,987.62
7/20/2005 4:00	20'	20'	20'	20'	20'	17	192	11,210		117.38	18.78	6,105.00
7/20/2005 8:00	20'	20'	20'	20'	20'	17	190	10,950		115.41	18.47	6,220.41
7/20/2005 12:00	20'	20'	20'	20'	20'	17	191	10,840		112.15	17.95	6,332.56

CalClean Inc.

Table 3

HIGH VACUUM DUAL PHASE EXTRACTION DATA SPREADSHEET (Using Field Analyzer Data)

Vic's Automotive, Oakland, CA

TIME	Extraction Well # MW-1 (Stinger Depth)	Extraction Well # MW-6 Stinger Depth)	Extraction Well # MW-7 (Stinger Depth)	Extraction Well # MW-5 (Stinger Depth)	Extraction Well # MW-2 (Stinger Depth)	SYSTEM PARAMETERS				Hydrocarbon Recovery (using Horiba Data)		
						System Vacuum (in of Hg)	Total System Inlet Flow (scfm)**	Influent Concentrations* (ppmv)	Effluent Concentrations (ppmv) *	(lbs)	(gal.)	(Cumul. lbs)
7/20/2005 16:00	20'	20'	20'	20'	20'	17	193	10,280		109.37	17.51	6,441.03
7/20/2005 20:00	20'	20'	20'	20'	20'	17	191	10,160		109.38	17.51	6,551.31
7/21/2005 0:00	20'	20'	20'	20'	20'	17	190	9,700		107.15	17.15	6,658.47
7/21/2005 4:00	20'	20'	20'	20'	20'	17	193	9,530		101.85	16.30	6,760.31
7/21/2005 8:00	20'	20'	20'	20'	20'	17	190	9,570		100.12	16.03	6,860.43
7/21/2005 12:00	20'	20'	20'	20'	20'	17	194	9,310		101.84	16.30	6,962.28
7/21/2005 16:00	20	20'	20	20'	20'	17	192	10,230		105.32	16.86	7,067.59
7/21/2005 20:00	20	20'	20	20'	20'	17	193	9,980		105.94	16.96	7,173.53
7/22/2005 0:00	20	20'	20	20'	20'	17	194	9,310		101.64	16.27	7,275.17
7/22/2005 4:00	20	20'	20	20'	20'	17	193	9,680		100.06	16.02	7,375.23
7/22/2005 8:00	20	20'	20	20'	20'	17	194	9,470		100.90	16.15	7,476.13
7/22/2005 12:00	20	20'	20	20'	20'	17	193	9,280		98.79	15.81	7,574.92
7/22/2005 16:00	20	20'	20	20'	20	17	194	10,380		103.59	16.58	7,678.51
7/22/2005 20:00	20	20'	20	20'	20	17	193	10,520		110.12	17.63	7,788.63
7/23/2005 0:00	20	20'	20	20'	20	17	195	10,700		112.41	17.99	7,901.05
7/23/2005 4:00	20	20'	20	20'	20	17	190	10,610		112.02	17.93	8,013.06
7/23/2005 8:00	20	20'	20	20'	20	17	194	10,400		109.04	17.58	8,122.91
7/23/2005 12:00	20	20'	20	20'	20	17	191	9,460		104.10	16.66	8,227.01
7/23/2005 16:00	20	20'	20	20'	20	17	190	9,500		98.82	15.82	8,325.83
7/23/2005 20:00	20	20'	20	20'	20	17	192	9,830		101.00	16.17	8,426.83
7/24/2005 0:00	20	20'	20	20'	20	17	194	10,060		104.45	16.72	8,531.28
7/24/2005 4:00	20	20'	20	20'	20	17	193	10,190		106.64	17.07	8,637.95
7/24/2005 8:00	20	20'	20	20'	20	17	191	9,940		105.24	16.85	8,743.19
7/24/2005 12:00	20	20'	20	20'	20	17	194	9,500		102.21	16.36	8,845.41
7/24/2005 16:00	20	20'	20	20'	20	17	195	9,110		99.64	15.95	8,945.05
7/24/2005 20:00	20	20'	20	20'	20	17	195	9,040		96.83	15.50	9,041.88
7/25/2005 0:00	20	20'	20	20'	20	17	195	9,870		100.13	16.03	9,142.01
7/25/2005 4:00	20	20'	20	20'	20	17	192	9,150		100.11	16.02	9,242.12
7/25/2005 8:00	20	20'	20	20'	20	17	193	8,870		94.35	15.10	9,336.48

CalClean Inc.

Table 3

HIGH VACUUM DUAL PHASE EXTRACTION DATA SPREADSHEET (Using Field Analyzer Data)

Vic's Automotive, Oakland, CA

TIME	Extraction Well # MW-1 (Stinger Depth)	Extraction Well # MW-6 Stinger Depth)	Extraction Well # MW-7 (Stinger Depth)	Extraction Well # MW-5 (Stinger Depth)	Extraction Well # MW-2 (Stinger Depth)	SYSTEM PARAMETERS: System Vacuum (in of Hg)	SYSTEM PARAMETERS: Total System Inlet Flow (scfm)**	SYSTEM PARAMETERS: Influent Concentrations* (ppmv)	SYSTEM PARAMETERS: Effluent Concentrations (ppmv) *	Hydrocarbon Recovery (using Horiba Data): (lbs)	Hydrocarbon Recovery (using Horiba Data): (gal)	Hydrocarbon Recovery (using Horiba Data): (Cumul. lbs)
7/25/2005 12:00	20'	20'	20'	20'	20'	17	193	9,090		92.73	14.65	9,429.24
7/25/2005 16.00	20'	20'	20'	20'	20'	17	194	8,770		92.47	14.60	9,521.71
7/26/2005 20:00	20'	20	20'	20'	20'	17	191	8,640		91.26	14.41	9,612.97
7/26/2005 0.00	20'	20	20'	20	20'	17	193	8,510		89.66	14.35	9,702.63
7/26/2005 4:00	20'	20	20'	20	20'	17	190	8,610		89.27	14.29	9,791.91
7/26/2005 8.00	20'	20	20'	20	20'	17	193	8,570		89.59	14.34	9,881.49
7/26/2005 12:00	20'	20	20'	20	20'	17	191	8,450		88.98	14.24	9,970.47
7/26/2005 16.00	20'	20	20'	20	20'	17	190	8,240		86.58	13.86	10,057.05
7/26/2005 20:00	20'	20	20'	20	20'	17	192	8,100		84.98	13.60	10,142.03
7/27/2005 0.00	20'	20	20'	20	20'	17	195	8,220		85.99	13.76	10,228.02
7/27/2005 4:00	20'	20'	20'	20	20'	17	193	8,230		86.90	13.91	10,314.92
7/27/2005 8.00	20'	20'	20'	20	20'	17	194	8,360		87.41	13.99	10,402.34
7/27/2005 12:00	20'	20'	20'	20	20'	17	191	8,130		85.44	13.84	10,488.77
7/27/2005 14:00	20'	20'	20'	20	20'	17	192	8,250		42.71	6.84	10,531.48
								TOTAL HC RECOVERED		10,531.48	1685.71	
								TOTAL LIQUID RECOVERED		-	80,740	

in of Hg = inches of mercury
scfm = standard cubic feet per minute
gal = gallons
oz = ounce
* Concentrations based on Horiba MEXA 324-JU field organic vapor analyzer, calibrated as hexane
** Inlet flow measured through orifice tube and converted from acfm to reported scfm

Figure 3

Total Inlet HC Concentrations vs Time (16 Days)

Vic's Automotive, Oakland, CA - 7/11-27/05

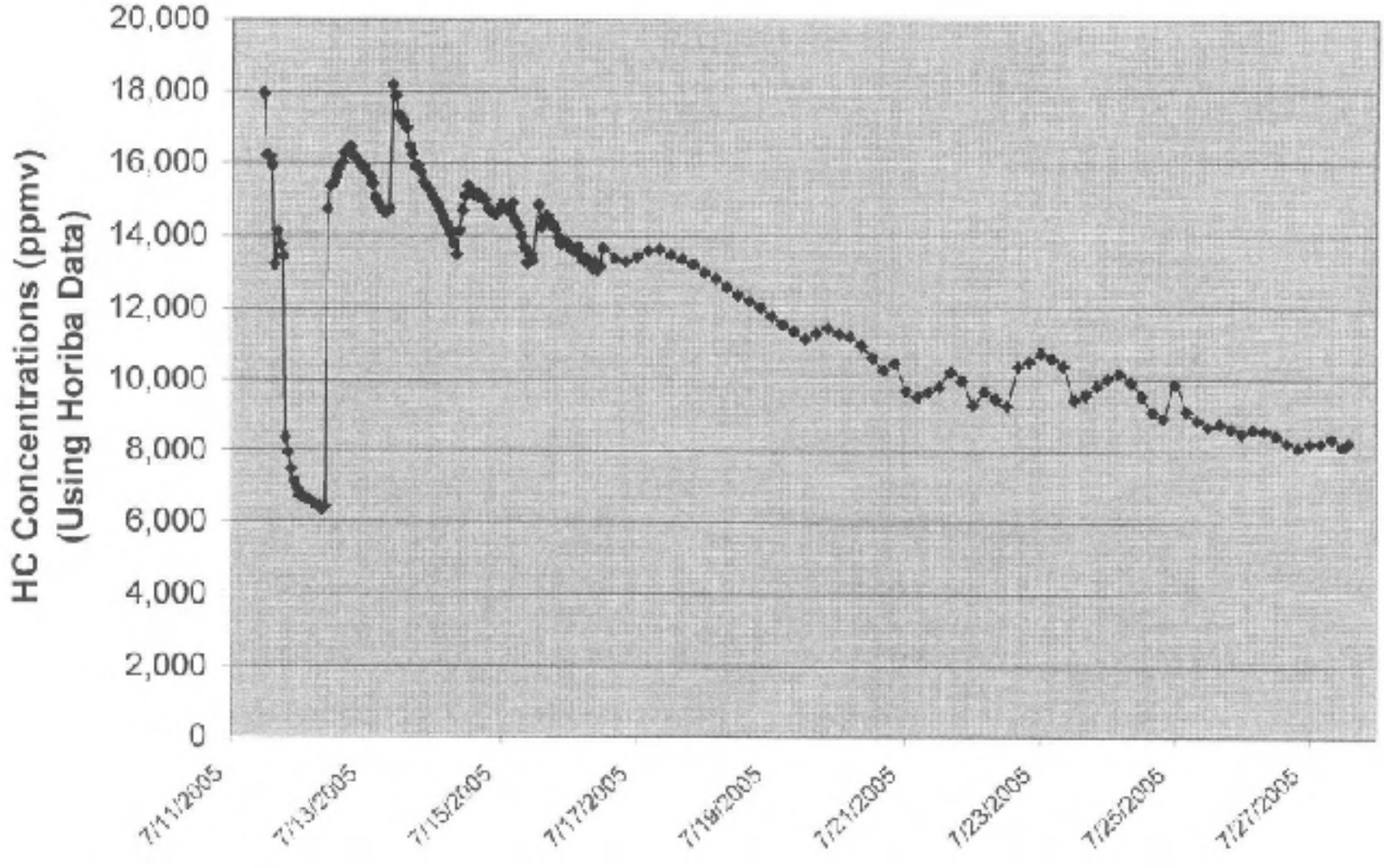


Figure 4

Cumulative HC Recovered Over 16 Days

Vic's Automotive, Oakland, CA - 7/11-27/05

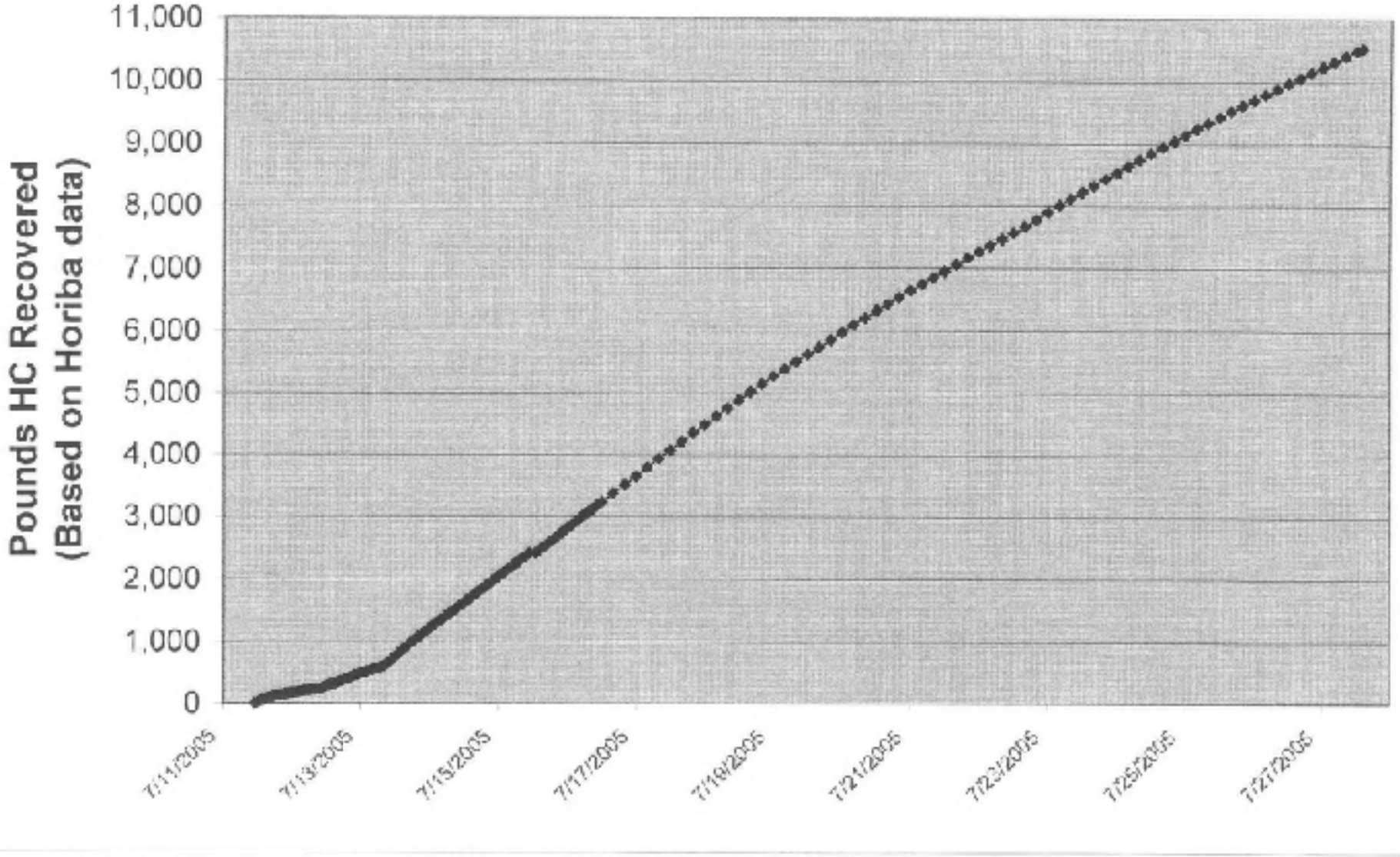


Table 4

RESULTS OF LABORATORY ANALYSIS OF GROUNDWATER SAMPLES
Vic's Automotive
Oakland, California

Sample ID/ Date	Date/Time Sampled	TPH-g (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	MTBE (ug/L)
MW-1	7/27/2004	220,000	26,000	37,000	3,200	18,000	2,500
MW-2	7/27/2004	9,500	1,400	1,000	180	960	910
MW-4	7/27/2004	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5
MW-5	7/27/2004	120,000	10,000	19,000	2,100	13,000	1,100

Notes:

ug/L = parts per billion by volume

TPH - g = total petroleum hydrocarbons - gasoline

All Influent Samples Analyzed by EPA Method 8020/8260B

MTBE = methyl tertiary butyl ether

ATTACHMENT 1

LABORATORY REPORTS

Laboratory Reports Removed
(See Appendix D of AEI Report for all lab reports)

ATTACHMENT 2

HIGH VACUUM DUAL PHASE EXTRACTION SYSTEM
FIELD DATA SHEETS

HIGH VACUUM DUAL PHASE EXTRACTION SYSTEM FIELD DATA SHEET

CALCLEAN INC.
(714) 734-9137

Project Location: 245 8TH STREET City: OAKLAND Site #: LUM PROPERTY Date: 7/11/2005 Page 1 of 10

Client: AEI (925-283-6000). Peter M. Cell: 925-285-8286 Operator (s): VAL/DAVIS

					Well#: MW-1		Well#2: MW-6		Well #3: MW-7		Well #4: MW-5		Well #5: MW-4		Well #6: MW-10		Well #7: MW-2		Well #8: MW-3	
Initial Depth to Groundwater					15.08	14.93	14.75	14.74	15.63	15.55	13.46		17.29		14.11				16.17	
Screen Interval																				
Time	Unit Vacuum ("Hg.)	Total Flowrate (scfm)	TOX Temp. (degF)	TOX Inlet Conc (ppmv)		Stinger Depth (feet)									Vacuum "H2O	DTW (ft)	Vacuum "H2O	DTW (ft)	Vacuum "H2O	DTW (ft)
					OPEN	20'	OPEN	20'	OPEN	20'										
1100	24	97	1575	17930																
1200	24	92	1577	16210	15860	PPMV	17130	PPMV	18760	PPMV										
1300	24	86	1579	16170																
1400	24	89	1566	15930								16.25		17.49				16.48		16.51
1500	24	81	1572	13210								16.26		17.50				16.50		16.52
1600	24	82	1591	14120								16.25		17.50				16.51		16.52
1700	24	87	1589	13760								16.25		17.51				16.51		16.52
1800	24	79	1560	13440	OPEN	1'	OPEN	1'	OPEN	1'		16.26		17.52				16.52		16.51
1900	24	74	1557	8370																
2000	24	86	1562	7940																
2100	24	82	1554	7470																
2200	24	80	1547	7130																
2300	24	77	1541	6940																
2400	24	79	1542	6720																

Comments: 7/11/05 - TOOK ALL START VAPOR SAMPLE (COMBINED @ 1200 (15860 PPMV), STACK @ 1205, MW-1 @ 1210 (15860 PPMV), MW-6 @ 1220 (17130 PPMV) AND MW-7 @ 1230 (18760 PPMV.) PULLED UP STINGERS TO 1' @ 1800 DO TO LACK OF WATER CAPACITY.

HIGH VACUUM DUAL PHASE EXTRACTION SYSTEM FIELD DATA SHEET

CALCLEAN INC.
(714) 734-8137

Project Location: 245 8TH STREET City: OAKLAND Site #: LUM PROPERTY Date: 7/12/2005 Page 2 of 10

Client: AEI (925-283-6000). Peter M. Cell: 925-285-8286 Operator (s): VAL / DAVIS

					Well #1: MW-1		Well #2: MW-6		Well #3: MW-7		Well #4: MW-5		Well #5: MW-4		Well #6: MW-1		Well #7: MW-2		Well #8: MW-3	
Initial Depth to Groundwater																				
Screen Interval																				
Time	Unit Vacuum ("Hg.)	Total Flowrate (scfm)	TOX Temp (degF)	TOX Inlet Conc. (ppmv)		Stinger Depth (feet)									Vacuum "H_2O	DTW (ft)	Vacuum "H_2O	DTW (ft)	Vacuum "H_2O	DTW (ft)
0100	24	74	1552	6710	OPEN	1'	OPEN	1'	OPEN	1'										
0200	24	77	1519	6680																
0300	24	75	1523	6640																
0400	24	82	1527	6570																
0500	24	80	1513	6510																
0600	24	77	1515	6450																
0700	24	83	1510	6420																
0800	24	80	1519	6350																
0900	24	81	1514	6430																
1000	24	75	1519	14720	OPEN	20'	OPEN	20'	OPEN	20'	16.98							16.79	16.64	
1100	24	79	1517	15360							16.99							16.82	16.67	
1200	24	84	1510	15430							17.00							16.84	16.71	
1300	24	82	1507	15620							17.02							16.85	16.73	
1400	24	76	1509	15840							17.03							16.87	16.77	
1500	24	13	1513	15990							17.04							16.92	16.80	
1600	24	77	1507	16270							17.07							16.95	16.83	
1700	24	82	1511	16340							17.09							16.98	16.85	
1800	24	84	1504	16450							17.10							16.99	16.87	
1900	24	73	1509	16210							17.11							17.01	16.90	
2000	24	79	1513	16120							17.12							17.07	16.91	
2100	24	83	1507	15990							17.12							17.09	16.93	
2200	24	80	1501	15910							17.13							17.12	16.95	
2300	24	74	1511	15860							17.15							17.15	16.96	
2400	24	78	1504	15720							17.17							17.18	16.99	

Comments:

HIGH VACUUM DUAL PHASE EXTRACTION SYSTEM FIELD DATA SHEET

CALCLEAN INC.
(714) 734-5137

Project Location: 245 8TH STREET City,. OAKLAND Site #: LUM PROPERTY Date: 7 /13/ 2005 Page 3 of 10

Client: AEI (925-283-6000). Peter M. Cell: 925-285-8285 Operator (s): DAVIS / VAL

					Well#1: MW-1		Well#2: MW-6		Well #3: MW-7		Well #4: MW-5		Well #5: MW-4		Well #6: MW-11		Well #7: MW-2		Well #8: MW-3	
Initial Depth to Groundwater																				
Screen Interval																				
Time	Unit Vacuum ("Hg.)	Total Flowrate (scfm)	TOX Temp (degF)	TOX Inlet Conc (ppmv)		Stinger Depth (feet)									Vacuum "H2O	DTW (ft)	Vacuum "H2O	DTW (ft)	Vacuum "H2O	DTW (ft)
0100	24	74	1527	15630	OPEN	20'	OPEN	20'	OPEN	20'	17.18							17.23	17.04	
0200	24	80	1530	15420							17.20							17.26	17.09	
0300	24	78	1528	15040							17.21							17.29	17.13	
0400	24	74	1532	14890							17.22							17.31	17.16	
0500	24	78	1530	14790							17.23							17.33	17.19	
0600	24	78	1530	14650							17.24							17.36	17.20	
0700	24	79	1530	14630							17.24							17.36	17.21	
0800	24	80	1532	14720							17.26								17.21	
0900	23	170	1530	18170	9340	PPMV	5260	PPMV	15600	PPMV	OPEN	20'			0.00	15.81	OPEN	20'	17.35	
1000	23	175	1530	17860							11,290	PPMV			0.00	15.81	6940	PPMV	17.28	
1100	23	173	1532	17340											0.00	15.91			17.31	
1200	23	175	1530	17190											0.00	15.93			17.42	
1300	23	173	1532	17160											0.00	15.97			0.00	17.68
1400	23	173	1530	16970											0.00	15.97			0.00	17.68
1500	23	175	1530	16470											0.00	15.98			0.00	17.69
1600	23	171	1498	16240											0.00	16.01			0.00	17.71
1700	23	174	1495	15890											0.00	16.01			0.00	17.71
1800	23	172	1478	15910											0.00	16.03			0.00	17.73
1900	23	170	1448	15750											0.00	16.05			0.00	17.75
2000	23	175	1437	15470											0.00	16.08			0.00	17.78
2100	23	172	1429	15360											0.00	16.11			0.00	17.81
2200	23	173	1420	15280											0.00	16.13			0.00	17.84
2300	23	175	1417	15130											0.00	16.16			0.00	17.87
2400	23	171	1412	15010											0.00	16.18			0.00	17.90

Comments:

HIGH VACUUM DUAL PHASE EXTRACTION SYSTEM FIELD DATA SHEET

CALCLEAN INC.
(714) 734-9137

Project Location: 245 8TH STREET
Client: AEI (925-283-6000). Peter M. Cell: 925-285-8286

City: OAKLAND Site #: LUM PROPERTY Date: 7 / 14 / 2005 Page 4 of 10
Operator (s): DAVIS R. / BRANDON P

Initial Depth to Groundwater					Well #1: MW-1		Well #2: MW-6		Well #3: MW-7		Well #4: MW-5		Well #5: MW-4		Well #6: MW-11		Well #7: MW-2		Well #8: MW-3	
Screen Interval																				
Time	Unit Vacuum ("Hg.)	Total Flowrate (scfm)	TOX Temp. (degF)	TOX Inlet Conc. (ppmv)		Stinger Depth (feet)									Vacuum "H2O	DTW (ft)	Vacuum "H2O	DTW (ft)	Vacuum "H2O	DTW (ft)
0100	23	172	1407	14870	OPEN	20'	OPEN	20'	OPEN	20'	OPEN	20'			0.00	16.20	OPEN	20'	0.00	17.70
0200	23	176	1410	14690											0.00	16.21			0.00	17.77
0300	23	174	1412	14530											0.00	16.22			0.00	17.81
0400	23	170	1410	14350											0.00	16.22			0.00	17.85
0500	23	173	1428	14210											0.00	16.24			0.00	17.89
0600	23	174	1432	14040											0.00	16.26			0.00	17.91
0700	23	171	1417	13790											0.00	16.27			0.00	17.98
0800	23	173	1468	13480											0.00	16.29			0.00	18.01
0900	23	175	1455	14140	7380	PPMV	9370	PPMV	18300	PPMV	9150	PPMV			0.00	16.30	11210	PPMV	0.00	18.02
1000	22	169	1445	14660											0.00	16.31			0.00	18.02
1100	22	167	1438	15090											0.00	16.32			0.00	18.02
1200	22	161	1430	15360											0.00	16.32			0.00	18.03
1300	22	160	1424	15240											0.00	16.32			0.00	18.03
1400	22	163	1457	15120											0.00	16.33			0.00	18.03
1500	22	169	1462	5,180											0.00	16.33			0.00	18.03
1600	22	171	1459	15 050											0.00	16.34			0.00	18.04
1700	22	177	1456	15.010											0.00	16.34			0.00	18.04
1800	22	169	1459	14.990											0.00	16.35			0.00	18.04
1900	22	176	1461	14,740											0.00	16.36			0.00	18.04
2000	22	170	1465	14.660											0.00	16.36			0.00	18.05
2100	22	177	1474	14630											0.00	16.38			0.00	18.05
2200	22	171	1469	14570											0.00	16.38			0.00	18.05
2300	22	173	1461	14670											0.00	16.39			0.00	18.06
2400	22	172	1457	14840											0.00	16.40			0.00	18.06

Comments: 7/14 - TOOK VAPOR SAMPLES; COMBINED @ 0900, MW-1 @ 0910, MW-2 @ 0920, MW-5 @ 0930, MW-6 @ 0940 AND MW-7 @ 0950. • TOOK A COMBINED VAPOR SAMPLE @ 2100.

HIGH VACUUM DUAL PHASE EXTRACTION SYSTEM FIELD DATA SHEET

CALCLEAN INC.
(714) 754-9137

Project Location: 245 8TH STREET City: OAKLAND Site #: LUM PROPERTY Date: 7/15/2005 Page 5 of 10

Client: AEI (925-283-6000). Peter M. Cell: 925-285-8286 Operator (s): DAVIS / BRANDON

					Well#1: MW-1		Well#2: MW-6		Well #3: MW-7		Well #4: MW-5		Well #5: MW-4		Well #6: MW-11		Well #7: MW-2		Well #8: MW-3	
Initial Depth to Groundwater																				
Screen Interval																				
Time	Unit Vacuum ("Hg.)	Total Flowrate (scfm)	TOX Temp (degF)	TOX Inlet Conc. (ppmv)		Slinger Depth (feet)									Vacuum "H_2O	DTW (ft)	Vacuum "H_2O	DTW (ft)	Vacuum "H_2O	DTW (ft)
0100	22	174	1470	14710	OPEN	20'	OPEN	20'	OPEN	20'	OPEN	20'			0.00	16.41	OPEN	20'	0.00	18.07
0200	22	171	1464	14680											0.00	16.42			0.00	18.07
0300	22	172	1468	14630											0.00	16.42			0.00	18.08
0400	22	174	1471	14890											0.00	16.43			0.00	18.09
0500	22	173	1465	14400											0.00	16.44			0.00	18.09
0600	22	171	1460	14250											0.00	16.45			0.00	18.09
0700	22	173	1462	13980											0.00	16.46			0.00	18.10
0800	22	170	1455	13680											0.00	16.48			0.00	18.10
0900	22	172	1447	13240	5250	PPMV	5130	PPMV	19470	PPMV	4590	PPMV			0.00	16.49	8510	PPMV	0.00	18.10
1000	22	174	1465	13460											0.00	16.50			0.00	18.11
1100	22	170	1471	13310											0.00	16.50			0.00	18.11
1130	UNIT	SHUT	DOWN																	
1300	20	179	1488	14850											0.00	15.96			0.00	17.60
1400	20	177	1493	14230											0.00	15.94			0.00	17.59
1500	20	179	1540	14490											0.00	15.96			0.00	17.58
1600	20	181	1547	14540											0.00	15.97			0.00	17.60
1700	16	196	1560	14370											0.00	15.89				17.61
1800	16	191	1537	14310											0.00	15.92				17.62
1900	16	194	1540	14180											0.00	15.95				17.64
2000	16	198	1546	13960											0.00	15.98				17.66
2100	16	197	1541	13770											0.00	16.00				17.68
2200	16	195	1538	13840											0.00	16.03				17.71
2300	16	192	1537	13790											0.00	16.07				17.72
2400	16	196	1545	13680											0.00	16.09				17.73

Comments: 7/15 - TOOK AIR VAPOR SAMPLES : COMPOSITE @ 0900, MW-1 @ 0905, MW-2 @ 0910, MW-5 @ 0915, MW-6 @ 0920 AND MW-7 @ 0925.

• UNIT SHUT DOWN @ 1130 DUE TO MAINTENANCE. - UNIT RESTARTED AND OPERATIONS CONTINUED AT 1300. • OPENED DILUTION @ 1700.

HIGH VACUUM DUAL PHASE EXTRACTION SYSTEM FIELD DATA SHEET

CALCLEAN INC.
(714) 734-9137

Project Location: 245 8TH STREET City: OAKLAND Site #: LUM PROPERTY Date: 7 / 16 / 2005 Page 6 of 10

Client: AEI (925-283-6000). Peter M. Cell: 925-285-8286 Operator (s): BRANDON P.

					Well#1: MW-1		Well#2: MW-6		Well #3: MW-7		Well #4: MW-5		Well #5: MW-4		Well #6: MW-11		Well #7: MW-2		Well #8: MW-3	
Initial Depth to Groundwater																				
Screen Interval																				
Time	Unit Vacuum ("Hg.)	Total Flowrate (scfm)	TOX Temp (degF)	TOX Inlet Conc. (ppmv)		Stinger Depth (feet)									Vacuum "H2O	DTW (ft)	Vacuum "H2O	DTW (ft)	Vacuum "H2O	DTW (ft)
0100	16	197	1563	13580	OPEN	20'	OPEN	20'	OPEN	20'	OPEN	20'			0.00	16.12	OPEN	20'	0.00	17.74
0200	16	195	1557	13610											0.00	16.14			0.00	17.74
0300	16	198	1561	13690											0.00	16.15			0.00	17.75
0400	16	197	1555	13450											0.00	16.16			0.00	17.75
0500	16	196	1554	13300											0.00	16.17			0	17.75
0600	16	193	1546	13350											0.00	16.19			0.10	17.77
0700	16	197	1551	13240											0.00	16.22			0.10	17.78
0800	16	195	1558	13120											0.00	16.23			0.10	17.78
0900	16	199	1560	13270	4950	PPMV	5090	PPMV	16941	PPMV	4980	PPMV			0.00	16.25	8210	PPMV	0.10	17.78
1000	16	196	1552	13070											0.00	16.26			0.10	17.79
1100	16	198	1548	13140											0.00	16.28			0.10	17.79
1200	17	191	1537	13650											0.00	16.31			0.10	17.79
1600	17	190	1535	13360											0.00	16.34			0.10	17.81
2000	17	194	1532	13280											0.00	16.38			0.10	17.83
2400	17	191	1536	13410																

Comments:

HIGH VACUUM DUAL PHASE EXTRACTION SYSTEM FIELD DATA SHEET

CALCLEAN INC.
(714) 734-3137

Project Location: 245 8TH STREET City: OAKLAND Site #: LUM PROPERTY Date: 7/19/2005 Page 7 of 10

Client: AEI (926-283-6000). Peter M. Cell: 925-285-8286 Operator (s): BRANDON P.

					Well#1: MW-1		Well#2: MW-6		Well#3: MW-7		Well#4: MW-5		Well#5: MW-4		Well#6: MW-11		Well#7: MW-2		Well#8: MW-3	
Initial Depth to Groundwater																				
Screen Interval																				
Time	Unit Vacuum ("Hg)	Total Flowrate (scfm)	TOX Temp. (degF)	TOX Inlet Conc. (ppmv)		Stinger Depth (feet)									Vacuum "H2O	DTW (ft)	Vacuum "H2O	DTW (ft)	Vacuum "H2O	DTW (ft)
7/17					OPEN	20'	OPEN	20'	OPEN	20	OPEN	20'					OPEN	20'		
0400	17	193	1521	13590											0.00	16.41			0.15	17.89
0800	17	191	1529	13620	4670	PPMV	5140	PPMV	17490	PPMV	3060	PPMV			0.00	16.41	5430	PPMV	0.15	17.85
1200	17	194	1526	13470											0.00	16.38			0.00	17.84
1600	17	192	1518	13350											0.00	16.36			0.00	17.82
2000	17	190	1510	13210											0.00	16.32			0.00	17.80
2400	17	191	1507	12990											0.00	16.27			0.00	17.77
7/18																				
0400	17	190	1442	12830											0.00	16.23			0.00	17.74
0800	17	192	1487	12580	4400	PPMV	4270	PPMV	16910	PPMV	3790	PPMV			0.00	16.18	4640	PPMV	0.00	17.70
1200	17	191	1494	12360											0.00				0.00	17.66
1600	17	193	1509	12210											0.00				0.00	17.63
2000	17	194	1518	12020											0.00				0.00	17.60
2400	17	190	1532	11780											0.00				0.00	17.57
7/19																				
0400	17	192	1541	11540											0.00				0.00	17.54
0800	17	194	1538	11370	4350	PPMV	3590	PPMV	16580	PPMV	2170	PPMV			0.00	16.17	1347	PPMV	0.00	17.50
1200	17	190	1545	11160											0.00	16.12			0.10	17.46
1600	17	193	1552	11310											0.00	16.06			0.10	17.40
2000	17	192	1549	11450											0.00	16.08			0.10	17.47
2400	17	191	1546	11300											0.00	16.12			0.10	17.50

Comments: 7/19 - TOX AIR VAPOR SAMPLES: COMBINED @ 0720, MW-1 @ 0725, MW-2 @ 0730, MW-5 @ 0735, MW-6 @ 0740 AND MW-7 @ 0745.

HIGH VACUUM DUAL PHASE EXTRACTION SYSTEM FIELD DATA SHEET

CALCLEAN INC.
(714) 734-9137

Project Location: **245 8TH STREET** City: **OAKLAND** Site #: **LUM PROPERTY** Date: 7 / 20 / 2005 Page 8 of 10

Client: **AEI (925-283-6000). Peter M. Cell: 925-285-8286** Operator (s): BRANDON P. / FAUSTINO

					Well #1: MW-1		Well #2: MW-6		Well #3: MW-7		Well #4: MW-5		Well #5: MW-4		Well #6: MW-11		Well #7: MW-2		Well #8: MW-3	
Initial Depth to Groundwater																				
Screen Interval																				
Time	Unit Vacuum ("Hg)	Total Flowrate (scfm)	TOX Temp. (degF)	TOX Inlet Conc. (ppmv)		Stinger Depth (feet)									Vacuum "H_2O	DTW (ft)	Vacuum "H_2O	DTW (ft)	Vacuum "H_2O	DTW (ft)
7/20					OPEN	20'	OPEN	20'	OPEN	20'	OPEN	20'								
0400	17	192	1538	11210													OPEN	20'		
0800	17	190	1541	10950	4070	PPMV	3120	PPMV	16130	PPMV	1835	PPMV			0.00	16.18			0.10	17.55
1200	17	191	1554	10640											0.00	16.19	1145	PPMV	0.10	17.58
1600	17	193	1567	10280											0.00	16.20			0.10	17.59
2000	17	194	1563	10980											0.00	16.21			0.10	17.61
2400	17	196	1555	9700											0.00	16.37			0.25	17.78
															0.00	16.42			0.02	18.05
7/21																				
0400	17	193	1567	9530																
0800	17	190	1575	9670	3930	PPMV	2980	PPMV	15600	PPMV	1172	PPMV			0.00	16.45			0.20	18.09
1200	17	194	1561	9910											0.00	16.47	1358	PPMV	0.25	18.12
1600	17	192	1554	10230																
2000	17	193	1562	9980											0.00	16.57			0.25	18.04
2400	17	194	1547	9310											0.00	16.54			0.10	18.07
															0.00	16.47			0.00	18.21
7/22																				
0400	17	193	1540	9680																
0800	17	194	1545	9470	3660	PPMV	2750	PPMV	15190	PPMV	1847	PPMV			0.00	16.44			0.10	18.23
1200	17	193	1552	9280											0.00	16.51	2160	PPMV	0.00	18.25
1600	17	194	1547	10380											0.00	16.52			0.00	18.26
2000	17	193	1542	10520											0.00	16.66			0.00	18.11
2400	17	195	1550	10760											0.00	16.71			0.15	18.16
															0.00	16.68			0.15	18.15

Comments: 7/22 - TOOK AIR VAPOR SAMPLES : COMBINED @ 1245 (9470 PPMV), MW-1 @ 1250 (3690 PPMV), MW-2 @ 1255 (2510 PPMV), MW-5 @ 1300 (1939 PPMV), MW-6 @ 1305 (2770 PPMV) AND MW-7 @ 1310 (15460 PPMV)
TOOK WATER SAMPLES : EFFL - 7/22 @ 1500.

HIGH VACUUM DUAL PHASE EXTRACTION SYSTEM FIELD DATA SHEET

CALCLEAN INC.
(714) 734-0137

Project Location: 245 8TH STREET City: OAKLAND Site #: LUM PROPERTY Date: 7/23/2025 Page 9 of 10

Client: AEI (925-283-6000), Peter M. Cell: 925-285-8286 Operator (s): BERNARD / FAUSTINO

					Well #1: MW-1		Well #2: MW-6		Well #3: MW-7		Well #4: MW-5		Well #5: MW-4		Well #6: MW-1		Well #7: MW-2		Well #8: MW-3	
Initial Depth to Groundwater																				
Screen Interval																				
Time	Unit Vacuum ("Hg)	Total Flowrate (scfm)	TOX Temp. (degF)	TOX Inlet Conc. (ppmv)		Stinger Depth (feet)									Vacuum "H2O	DTW (ft)	Vacuum "H2O	DTW (ft)	Vacuum "H2O	DTW (ft)
7/23					OPEN	20'	OPEN	20'	OPEN	20'	OPEN	20'					OPEN	20'		
0400	17	190	1549	10610											0.00	16.75			0.00	18.19
0800	17	194	1547	10400	3140	PPMV	4450	PPMV	1590	PPMV	2010	PPMV			0.00	16.78	3440	PPMV	0.00	18.22
1200	17	191	1546	9460											0.00	16.77			0.10	18.17
1600	17	190	1551	9520											0.00	16.74			0.15	18.15
2000	17	192	1548	9820											0.00	16.71			0.15	18.11
2400	17	194	1545	10050											0.00	16.68			0.00	18.12
7/24																				
0400	17	193	1538	10190											0.00	16.72			0.00	18.14
0800	17	191	1535	9940	3310	PPMV	4060	PPMV	1530	PPMV	2270	PPMV			0.00	16.74	3620	PPMV	0.00	18.17
1200	17	194	1533	9560											0.00	16.77			0.00	18.21
1600	17	198	1525	9110											0.00	16.81			0.00	18.25
2000	17	196	1532	8740											0.00	16.81			0.35	18.26
2400	17	193	1536	9170											0.00	16.82			0.00	18.24
7/25																				
0400	17	192	1539	9135											0.00	16.79			0.00	18.12
0800	17	193	1522	8870	3480	PPMV	3810	PPMV	1520	PPMV	2040	PPMV			0.00	16.76	3270	PPMV	0.00	18.10
1200	17	195	1517	8690											0.00	16.77				18.11
1600	17	194	1511	8770											0.00	16.78				18.11
2000	17	191	1524	8640											0.00	16.76				18.12
2400	17	193	1532	8510											0.00	16.79				18.14

Comments:

HIGH VACUUM DUAL PHASE EXTRACTION SYSTEM FIELD DATA SHEET

CALCLEAN INC.
(714) 734-9137

Project Location: 245 8TH STREET City: OAKLAND Site #: LUM PROPERTY Date: 7/26/2006 Page 10 of 10

Client: AEI (925-283-6000). Peter M. Cell: 925-285-8286 Operator (s): BRANDON / JOHN

					Well#1: MW-1		Well#2: MW-6		Well #3: MW-7		Well #4: MW-5		Well #5: MW-4		Well #6: MW-11		Well #7: MW-2		Well #8: MW-3	
Initial Depth to Groundwater																				
Screen Interval																				
Time	Unit Vacuum ("Hg.)	Total Flowrate (scfm)	TOX Temp (degF)	TOX Inlet Conc. (ppmv)		Stinger Depth (feet)									Vacuum "H2O	DTW (ft)	Vacuum "H2O	DTW (ft)	Vacuum "H2O	DTW (ft)
7/26					OPEN	20'	OPEN	20'	OPEN	20'	OPEN	20'					OPEN	20'		
0400	17	195	1547	8610											0.00	16.81			0.20	16.16
0800	17	193	1545	8570	3710	PPMV	3640	PPMV	14970	PPMV	1885	PPMV			0.00	16.80	2130	PPMV	0.10	18.17
1200	17	191	1541	8450											0.00	16.79			0.00	18.19
1600	17	190	1538	8240											0.00	16.80			0.00	18.21
2000	17	192	1540	8100											0.00	16.78			0.00	18.20
2400	17	195	1539	8220											0.00	16.79			0.00	18.19
7/27																				
0400	17	193	1533	8230											0.00	16.80			0.00	16.15
0800	17	194	1537	8360	3350	PPMV	3590	PPMV	14510	PPMV	2070	PPMV			0.00	16.81	2980	PPMV	0.00	18.13
1200	17	191	1540	8130											0.00	16.83			0.00	18.11
1400	17	192	1538	8250																

Comments: 7/27 - TOOK MW VAPOR SAMPLES : COMBINED END @ 1120 (8210 PPMV), MW-1 END @ 1125 (3060 PPMV) MW-2 END @ 1130 (390 PPMV), MW-5 END @ 1135 (280 PPMV), MW-6 END @ 1140 (3620 PPMV) AND MW-7 END @ 1145 (11270 PPMV).

* TOTAL GALLONS TREATED = 50,740

HIGH VACUUM DUAL PHASE EXTRACTION - ***WATER METER FIELD DATA SHEET***

CALCLEAN INC.
(714) 734-9137

Project Location: 245 8TH STREET City: OAKLAND Site #: LUM PROPERY Date: 7/12/2005 Page 1 of 1
Client: AEI Operator (s): VAL/DAVIS/BRANDON/FAUSTINO

Date	Time	Water Meter Reading	Cumulative Amount
7/12	1000	158670	Ø
7/12	0700	161020	2350
7/13	0700	163370	4700
	1900	167390	8720
7/14	0700	171030	12360
	1900	174400	15730
7/15	0700	176980	18310
7/16	0700	181390	22720
7/17	0800	186880	28210
7/18	0800	190010	31340
7/19	0800	193520	34850
7/20	0800	196220	37550
	2000	198740	40070
7/21	0800	201260	42590
	2000	204250	45580

Date	Time	Water Meter Reading	Cumulative Amount
7/22	0800	206890	48,220
	2000	211850	53,180
7/23	0800	214450	55780
	2000	217320	58650
7/24	0800	219940	61270
	2000	222450	63780
7/25	0800	225300	66 630
	2000	227950	69,280
7/26	0800	230590	71920
		233030	74360
7/27	1400	239410	80740

APPENDIX D

LABORATORY ANALYTICAL REPORTS

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #9485; Vic's Automotive	Date Sampled: 07/27/05
		Date Received: 07/27/05
	Client Contact: Peter McIntyre	Date Reported: 08/02/05
	Client P.O.:	Date Completed: 08/02/05

WorkOrder: 0507468

August 02, 2005

Dear Peter:

Enclosed are:

1). the results of **4** analyzed samples from your **#9485; Vic's Automotive project,**

2). a QC report for the above samples

3). a copy of the chain of custody, and

4). a bill for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits. If you have any questions please contact me. McCampbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Yours truly,

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #9485; Vic's Automotive	Date Sampled: 07/27/05
		Date Received: 07/27/05
	Client Contact: Peter McIntyre	Date Extracted: 07/30/05
	Client P.O.:	Date Analyzed: 07/30/05

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

Extraction method: SW5030B Analytical methods: SW8021B/8015Cm Work Order: 0507468

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	MW-2	W	9500,a	910	1400	1000	180	960	10	96
002A	MW-4	W	ND	ND	ND	ND	ND	ND	1	113
003A	MW-5	W	120,000,a	1100	10,000	19,000	2100	13,000	100	94
004A	MW-11	W	220,000,a	2500	26,000	37,000	3200	18,000	100	92
Reporting Limit for DF =1; ND means not detected at or above the reporting limit		W	50	5.0	0.5	0.5	0.5	0.5	1	µg/L
		S	NA	NA	NA	NA	NA	NA	1	mg/Kg

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

cluttered chromatogram; sample peak coelutes with surrogate peak.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (stoddard solvent / mineral spirit?); f) one to a few isolated non-target peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high MTBE content; k) TPH pattern that does not appear to be derived from gasoline (aviation gas). m) no recognizable pattern; n) TPH(g) range non-target isolated peaks subtracted out of the TPH(g) concentration at the client's request.

DHS Certification No. 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder: 0507468

EPA Method: SW8021B/8015Cm Extraction: SW5030B BatchID: 17354 Spiked Sample ID: 0507468-002A

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	LCS / LCSD
TPH(btex)£	ND	60	112	103	9.05	105	105	0	70 - 130	70 - 130
MTBE	ND	10	109	106	2.53	96.7	109	11.6	70 - 130	70 - 130
Benzene	ND	10	119	112	5.78	110	117	6.32	70 - 130	70 - 130
Toluene	ND	10	114	105	8.61	107	111	2.98	70 - 130	70 - 130
Ethylbenzene	ND	10	115	110	4.05	111	113	2.23	70 - 130	70 - 130
Xylenes	ND	30	100	96.3	3.74	96.7	100	3.39	70 - 130	70 - 130
%SS:	113	10	115	109	5.78	110	114	2.83	70 - 130	70 - 130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 17354 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0507468-001A	7/27/05	7/30/05	7/30/05 10:34 PM	0507468-002A	7/27/05	7/30/05	7/30/05 10:22 PM
0507468-003A	7/27/05	7/30/05	7/30/05 11:05 PM	0507468-004A	7/27/05	7/30/05	7/30/05 11:35 PM

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

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

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

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

cluttered chromatogram; sample peak coelutes with surrogate peak.

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

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

DHS Certification No. 1644

QA/QC Officer

aei 0307468

McCAMPBELL ANALYTICAL INC.

110 2nd AVENUE SOUTH, #D7
PACHECO, CA 94553-5560
Telephone: (925) 798-1620 Fax: (925) 798-1622

CHAIN OF CUSTODY RECORD

TURN AROUND TIME ☐ RUSH ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAY
EDF Required? ☐ Yes ☐ No

Report To: Peter McIntyre **Bill To:** same
Company: AEI Consultants
2500 Camino Diablo, Suite 200
Walnut Creek, CA 94597 **E-Mail:** pmcintyre@aeiconsultants.com
Tele: (925) 944-2899 **Fax:** (925) 944-2895
Project #: 9482 **Project Name:** Vic's Automotine
Project Location: 245 8th Street, Oakland
Sampler Signature: Adrian Noerpel

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING Date	SAMPLING Time	# Containers	Type Containers	MATRIX Water	Soil	Air	Sludge	Other	METHOD PRESERVED Ice	HCl	HNO_3	Other	Analysis Request: BTEX & TPH as Gas (602/8020 + 8015)/MTBE	TPH as Diesel (8015)	Total Petroleum Oil & Grease (5520 E&F/B&F)	7 Fuel Oxygenates by EPA method 8260	MTBE only by EPA method 8260	Dissolved Lead	Other	Comments
(+) MW-2		7/27/05		3	VOA	X					X	X			X							
✓ MW-4		↓		↓	↓	X					X	X			X							
+ MW-5						X					X	X			X							
(+) MW-11						X					X	X			X							

Relinquished By:	Date:	Time:	Received By:
Adrian Noerpel	7/27/05	5:15pm	Mike Vallee
Relinquished By:	Date:	Time:	Received By:
Relinquished By:	Date:	Time:	Received By:

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

McCampbell Analytical, Inc.
110 Second Avenue South, #D7
Pacheco, CA 94553-5560
(925) 798-1620

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0507468 **ClientID: AEL** **EDF: NO**

Report to:
Peter McIntyre
AEI Consultants
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597
TEL: (925) 283-6000
FAX: (925) 283-6121
ProjectNo: #9485; Vic's Automotive
PO:

Bill to:
Diane
All Environmental, Inc.
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597

Requested TAT: 5 days
Date Received: 07/27/2005
Date Printed: 07/27/2005

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)														
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0507468-001	MW-2	Water	7/27/05	☐	A														
0507468-002	MW-4	Water	7/27/05	☐	A														
0507468-003	MW-5	Water	7/27/05	☐	A														
0507468-004	MW-11	Water	7/27/05	☐	A														

Test Legend:

1	G-MBTEX_W	2		3		4		5	
6		7		8		9		10	
11		12		13		14		15	

Prepared by: Rosa Venegas

Comments:

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

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #9482; Vic's Automotine	Date Sampled: 07/11/05
		Date Received: 07/11/05
	Client Contact: Peter McIntyre	Date Reported: 07/11/05
	Client P.O.:	Date Completed: 07/11/05

WorkOrder: 0507124

July 11, 2005

Dear Peter:

Enclosed are:

1). the results of **1** analyzed sample from your **#9482; Vic's Automotine project,**

2). a QC report for the above sample

3). a copy of the chain of custody, and

4). a bill for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits. If you have any questions please contact me. McCampbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Yours truly,

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

AEI Consultants	Client Project ID: #9482; Vic's Automotine	Date Sampled: 07/11/05
		Date Received: 07/11/05
2500 Camino Diablo, Ste. #200	Client Contact: Peter McIntyre	Date Extracted: 07/11/05
Walnut Creek, CA 94597	Client P.O.:	Date Analyzed: 07/11/05

Volatile Organics by P&T and GC/MS (Basic Target List)*

Extraction Method: SW5030B Analytical Method: SW8260B Work Order: 0507124

Lab ID	0507124-001A
Client ID	Dis #1
Matrix	Water

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	5.0	Acrolein (Propenal)	ND	1.0	5.0
Acrylonitrile	ND	1.0	2.0	tert-Amyl methyl ether (TAME)	ND	1.0	0.5
Benzene	ND	1.0	0.5	Bromobenzene	ND	1.0	0.5
Bromochloromethane	ND	1.0	0.5	Bromodichloromethane	ND	1.0	0.5
Bromoform	ND	1.0	0.5	Bromomethane	ND	1.0	0.5
2-Butanone (MEK)	5.1	1.0	2.0	t-Butyl alcohol (TBA)	ND	1.0	5.0
n-Butyl benzene	ND	1.0	0.5	sec-Butyl benzene	ND	1.0	0.5
tert-Butyl benzene	ND	1.0	0.5	Carbon Disulfide	ND	1.0	0.5
Carbon Tetrachloride	ND	1.0	0.5	Chlorobenzene	ND	1.0	0.5
Chloroethane	ND	1.0	0.5	2-Chloroethyl Vinyl Ether	ND	1.0	1.0
Chloroform	ND	1.0	0.5	Chloromethane	ND	1.0	0.5
2-Chlorotoluene	ND	1.0	0.5	4-Chlorotoluene	ND	1.0	0.5
Dibromochloromethane	ND	1.0	0.5	1,2-Dibromo-3-chloropropane	ND	1.0	0.5
1,2-Dibromoethane (EDB)	ND	1.0	0.5	Dibromomethane	ND	1.0	0.5
1,2-Dichlorobenzene	ND	1.0	0.5	1,3-Dichlorobenzene	ND	1.0	0.5
1,4-Dichlorobenzene	ND	1.0	0.5	Dichlorodifluoromethane	ND	1.0	0.5
1,1-Dichloroethane	ND	1.0	0.5	1,2-Dichloroethane (1,2-DCA)	ND	1.0	0.5
1,1-Dichloroethene	ND	1.0	0.5	cis-1,2-Dichloroethene	ND	1.0	0.5
trans-1,2-Dichloroethene	ND	1.0	0.5	1,2-Dichloropropane	ND	1.0	0.5
1,3-Dichloropropane	ND	1.0	0.5	2,2-Dichloropropane	ND	1.0	0.5
1,1-Dichloropropene	ND	1.0	0.5	cis-1,3-Dichloropropene	ND	1.0	0.5
trans-1,3-Dichloropropene	ND	1.0	0.5	Diisopropyl ether (DIPE)	ND	1.0	0.5
Ethylbenzene	ND	1.0	0.5	Ethyl tert-butyl ether (ETBE)	ND	1.0	0.5
Freon 113	ND	1.0	10	Hexachlorobutadiene	ND	1.0	0.5
Hexachloroethane	ND	1.0	0.5	2-Hexanone	ND	1.0	0.5
Isopropylbenzene	ND	1.0	0.5	4-Isopropyl toluene	ND	1.0	0.5
Methyl-t-butyl ether (MTBE)	ND	1.0	0.5	Methylene chloride	ND	1.0	0.5
4-Methyl-2-pentanone (MIBK)	ND	1.0	0.5	Naphthalene	ND	1.0	0.5
Nitrobenzene	ND	1.0	10	n-Propyl benzene	ND	1.0	0.5
Styrene	ND	1.0	0.5	1,1,1,2-Tetrachloroethane	ND	1.0	0.5
1,1,2,2-Tetrachloroethane	ND	1.0	0.5	Tetrachloroethene	ND	1.0	0.5
Toluene	ND	1.0	0.5	1,2,3-Trichlorobenzene	ND	1.0	0.5
1,2,4-Trichlorobenzene	ND	1.0	0.5	1,1,1-Trichloroethane	ND	1.0	0.5
1,1,2-Trichloroethane	ND	1.0	0.5	Trichloroethene	ND	1.0	0.5
Trichlorofluoromethane	ND	1.0	0.5	1,2,3-Trichloropropane	ND	1.0	0.5
1,2,4-Trimethylbenzene	ND	1.0	0.5	1,3,5-Trimethylbenzene	ND	1.0	0.5
Vinyl Chloride	ND	1.0	0.5	Xylenes	ND	1.0	0.5

Surrogate Recoveries (%)			
%SS1:	108	%SS2:	99
%SS3:	108		

Comments:

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

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.

DHS Certification No. 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder: 0507124

EPA Method: SW8260B	Extraction: SW5030B	BatchID: 17073	Spiked Sample ID: 0507131-011B

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	LCS / LCSD
tert-Amyl methyl ether (TAME)	ND	10	109	115	5.82	112	107	4.45	70 - 130	70 - 130
Benzene	ND	10	105	106	0.881	104	104	0	70 - 130	70 - 130
t-Butyl alcohol (TBA)	ND	50	118	115	2.18	99.7	101	1.34	70 - 130	70 - 130
Chlorobenzene	ND	10	112	115	2.37	107	109	1.61	70 - 130	70 - 130
1,2-Dibromoethane (EDB)	ND	10	108	110	1.81	105	106	1.05	70 - 130	70 - 130
1,2-Dichloroethane (1,2-DCA)	ND	10	116	119	2.41	116	118	1.29	70 - 130	70 - 130
1,1-Dichloroethene	ND	10	92.5	93.8	1.34	94.9	94.7	0.202	70 - 130	70 - 130
Diisopropyl ether (DIPE)	ND	10	119	119	0	119	119	0	70 - 130	70 - 130
Ethyl tert-butyl ether (ETBE)	ND	10	108	112	3.13	110	109	0.969	70 - 130	70 - 130
Methyl-t-butyl ether (MTBE)	ND	10	106	109	3.21	104	104	0	70 - 130	70 - 130
Toluene	ND	10	103	103	0	99.2	100	1.24	70 - 130	70 - 130
Trichloroethene	ND	10	80.1	80.7	0.800	81.2	80.4	0.976	70 - 130	70 - 130
%SS1:	100	10	93	92	2.01	100	98	2.68	70 - 130	70 - 130
%SS2:	116	10	99	97	2.53	99	98	1.04	70 - 130	70 - 130
%SS3:	115	10	110	115	4.21	109	108	1.30	70 - 130	70 - 130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 17073 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0507124-001A	7/11/05	7/11/05	7/11/05 1:39 PM				

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

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

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

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

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

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

DHS Certification No. 1644

QA/QC Officer

0507124

Same Day Rush

McCAMPBELL ANALYTICAL INC.

110 2nd AVENUE SOUTH, #D7
PACHECO, CA 94553-5560
Telephone: (925) 798-1620 Fax: (925) 798-1622

CHAIN OF CUSTODY RECORD

RUSH

TURN AROUND TIME ☐ RUSH ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAY

EDF Required? ☐ Yes ☒ No

Report To: Peter McIntyre	Bill To: same
Company: AEI Consultants	
2500 Camino Diablo, Suite 200	
Walnut Creek, CA 94597	E-Mail: pmcintyre@aeiconsultants.com
Tele: (925) 944-2899	Fax: (925) 944-2895
Project #: 9482	Project Name: Vic's Automotine
Project Location: 245 8th Street, Oakland	
Sampler Signature:	

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING Date	SAMPLING Time	# Containers	Type Containers	MATRIX Water	Soil	Air	Sludge	Other	METHOD PRESERVED Ice	HCl	HNO_3	Other	BTEX & TPH as Gas (602/8020 + 8015)/MTBE	TPH as Diesel (8015)	Total Petroleum Oil & Grease (5520 E&F/B&F)	7 Fuel Oxygenates by EPA method 8260	MTBE only by EPA method 8260	Dissolved Lead	Analysis Request: VOCs (8260)	Other	Comments
Dis #1		7/11/05	1115	4	VOA Vials	X					X	X									X		Needed ASAP

Relinquished By:	Date: 7/11/05	Time: 1154	Received By:
Relinquished By:	Date:	Time:	Received By:
Relinquished By:	Date:	Time:	Received By:

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

McCampbell Analytical, Inc.
110 Second Avenue South, #D7
Pacheco, CA 94553-5560
(925) 798-1620

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0507124 **ClientID: AEL**

Report to:
Peter McIntyre
AEI Consultants
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597

TEL: (925) 283-6000
FAX: (925) 283-6121
ProjectNo: #9482; Vic's Automotine
PO:

Bill to:
Diane
All Environmental, Inc.
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597

Requested TAT: 1 day

Date Received: **07/11/2005**
Date Printed: **07/11/2005**

					Requested Tests (See legend below)														
Sample ID	**ClientSampID**	**Matrix**	**Collection Date**	**Hold**	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0507124-001	Dis #1	Water	7/11/05	☐	A														

Test Legend:

1	**8260B_W**	2	3	4	5
6		7	8	9	10
11		12	13	14	15

Prepared by: Maria Venegas

Comments: 24hr Rush

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

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #9482; Vic's Automotive	Date Sampled: 07/22/05
		Date Received: 07/22/05
	Client Contact: Peter McIntyre	Date Reported: 07/25/05
	Client P.O.:	Date Completed: 07/25/05

WorkOrder: 0507387

July 25, 2005

Dear Peter:

Enclosed are:

1). the results of **1** analyzed sample from your **#9482; Vic's Automotive project,**

2). a QC report for the above sample

3). a copy of the chain of custody, and

4). a bill for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits. If you have any questions please contact me. McCampbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Yours truly,

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

AEI Consultants	Client Project ID: #9482; Vic's Automotive	Date Sampled: 07/22/05
		Date Received: 07/22/05
2500 Camino Diablo, Ste. #200	Client Contact: Peter McIntyre	Date Extracted: 07/23/05
Walnut Creek, CA 94597	Client P.O.:	Date Analyzed: 07/23/05

Volatile Organics by P&T and GC/MS (Basic Target List)*

Extraction Method: SW5030B | Analytical Method: SW8260B | Work Order: 0507387

Lab ID	0507387-001A
Client ID	EFFL-7/22
Matrix	Water

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	5.0	Acrolein (Propenal)	ND	1.0	5.0
Acrylonitrile	ND	1.0	2.0	tert-Amyl methyl ether (TAME)	ND	1.0	0.5
Benzene	ND	1.0	0.5	Bromobenzene	ND	1.0	0.5
Bromochloromethane	ND	1.0	0.5	Bromodichloromethane	ND	1.0	0.5
Bromoform	ND	1.0	0.5	Bromomethane	ND	1.0	0.5
2-Butanone (MEK)	ND	1.0	2.0	t-Butyl alcohol (TBA)	27	1.0	5.0
n-Butyl benzene	ND	1.0	0.5	sec-Butyl benzene	ND	1.0	0.5
tert-Butyl benzene	ND	1.0	0.5	Carbon Disulfide	ND	1.0	0.5
Carbon Tetrachloride	ND	1.0	0.5	Chlorobenzene	ND	1.0	0.5
Chloroethane	ND	1.0	0.5	2-Chloroethyl Vinyl Ether	ND	1.0	1.0
Chloroform	ND	1.0	0.5	Chloromethane	ND	1.0	0.5
2-Chlorotoluene	ND	1.0	0.5	4-Chlorotoluene	ND	1.0	0.5
Dibromochloromethane	ND	1.0	0.5	1,2-Dibromo-3-chloropropane	ND	1.0	0.5
1,2-Dibromoethane (EDB)	ND	1.0	0.5	Dibromomethane	ND	1.0	0.5
1,2-Dichlorobenzene	ND	1.0	0.5	1,3-Dichlorobenzene	ND	1.0	0.5
1,4-Dichlorobenzene	ND	1.0	0.5	Dichlorodifluoromethane	ND	1.0	0.5
1,1-Dichloroethane	ND	1.0	0.5	1,2-Dichloroethane (1,2-DCA)	ND	1.0	0.5
1,1-Dichloroethene	ND	1.0	0.5	cis-1,2-Dichloroethene	ND	1.0	0.5
trans-1,2-Dichloroethene	ND	1.0	0.5	1,2-Dichloropropane	ND	1.0	0.5
1,3-Dichloropropane	ND	1.0	0.5	2,2-Dichloropropane	ND	1.0	0.5
1,1-Dichloropropene	ND	1.0	0.5	cis-1,3-Dichloropropene	ND	1.0	0.5
trans-1,3-Dichloropropene	ND	1.0	0.5	Diisopropyl ether (DIPE)	ND	1.0	0.5
Ethylbenzene	ND	1.0	0.5	Ethyl tert-butyl ether (ETBE)	ND	1.0	0.5
Freon 113	ND	1.0	10	Hexachlorobutadiene	ND	1.0	0.5
Hexachloroethane	ND	1.0	0.5	2-Hexanone	ND	1.0	0.5
Isopropylbenzene	ND	1.0	0.5	4-Isopropyl toluene	ND	1.0	0.5
Methyl-t-butyl ether (MTBE)	13	1.0	0.5	Methylene chloride	ND	1.0	0.5
4-Methyl-2-pentanone (MIBK)	ND	1.0	0.5	Naphthalene	ND	1.0	0.5
Nitrobenzene	ND	1.0	10	n-Propyl benzene	ND	1.0	0.5
Styrene	ND	1.0	0.5	1,1,1,2-Tetrachloroethane	ND	1.0	0.5
1,1,2,2-Tetrachloroethane	ND	1.0	0.5	Tetrachloroethene	ND	1.0	0.5
Toluene	ND	1.0	0.5	1,2,3-Trichlorobenzene	ND	1.0	0.5
1,2,4-Trichlorobenzene	ND	1.0	0.5	1,1,1-Trichloroethane	ND	1.0	0.5
1,1,2-Trichloroethane	ND	1.0	0.5	Trichloroethene	ND	1.0	0.5
Trichlorofluoromethane	ND	1.0	0.5	1,2,3-Trichloropropane	ND	1.0	0.5
1,2,4-Trimethylbenzene	ND	1.0	0.5	1,3,5-Trimethylbenzene	ND	1.0	0.5
Vinyl Chloride	ND	1.0	0.5	Xylenes	ND	1.0	0.5

Surrogate Recoveries (%)

%SS1:	105	%SS2:	101
%SS3:	95		

Comments:

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

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.

DHS Certification No. 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder: 0507387

EPA Method: SW8260B	Extraction: SW5030B	BatchID: 17265	Spiked Sample ID: 0507384-003B

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	LCS / LCSD
tert-Amyl methyl ether (TAME)	ND	10	109	105	3.60	98	98.3	0.321	70 - 130	70 - 130
Benzene	ND	10	113	113	0	109	108	0.243	70 - 130	70 - 130
t-Butyl alcohol (TBA)	ND	50	92.4	94.2	1.92	82.8	80.2	3.19	70 - 130	70 - 130
Chlorobenzene	ND	10	115	117	0.967	114	118	3.72	70 - 130	70 - 130
1,2-Dibromoethane (EDB)	ND	10	103	105	2.46	100	102	1.20	70 - 130	70 - 130
1,2-Dichloroethane (1,2-DCA)	ND	10	116	117	0.385	111	112	0.394	70 - 130	70 - 130
1,1-Dichloroethene	ND	10	119	119	0	120	118	1.56	70 - 130	70 - 130
Diisopropyl ether (DIPE)	ND	10	117	118	0.677	114	112	1.73	70 - 130	70 - 130
Ethyl tert-butyl ether (ETBE)	ND	10	116	117	0.516	107	103	3.41	70 - 130	70 - 130
Methyl-t-butyl ether (MTBE)	ND	10	108	112	3.22	101	94.6	6.69	70 - 130	70 - 130
Toluene	ND	10	107	107	0	104	107	3.46	70 - 130	70 - 130
Trichloroethene	ND	10	93.3	94.1	0.815	88.3	89.6	1.47	70 - 130	70 - 130
%SS1:	94	10	105	105	0	101	98	3.33	70 - 130	70 - 130
%SS2:	93	10	101	101	0	101	101	0	70 - 130	70 - 130
%SS3:	89	10	98	98	0	95	94	0.388	70 - 130	70 - 130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 17265 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0507387-001A	7/22/05 3:00 PM	7/23/05	7/23/05 12:03 AM				

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

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

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

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

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

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

DHS Certification No. 1644

QA/QC Officer

dq 050787

RUSH!

McCAMPBELL ANALYTICAL INC.

110 2nd AVENUE SOUTH, #D7
PACHECO, CA 94553-5560
Telephone: (925) 798-1620 Fax: (925) 798-1622

CHAIN OF CUSTODY RECORD

TURN AROUND TIME ☐ RUSH ☒ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAY

EDF Required? ☐ Yes ☒ No

Report To: Peter McIntyre Bill To: same

Company: AEI Consultants

2500 Camino Diablo, Suite 200

Walnut Creek, CA 94597 E-Mail: pmcintyre@aeiconsultants.com

Tele: (925) 944-2899 Fax: (925) 944-2895

Project #: 9482 Project Name: Vic's Automotine

Project Location: 245 8th Street, Oakland

Sampler Signature:

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING Date	SAMPLING Time	# Containers	Type Containers	MATRIX Water	Soil	Air	Sludge	Other	METHOD PRESERVED Ice	HCl	HNO_3	Other
EFFL-7/22		7/22	1500	3	VOAs	X					X	X		

Analysis Request

BTEX & TPH as Gas (602/8020 + 8015)/MTBE	TPH as Diesel (8015)	Total Petroleum Oil & Grease (5520 E&F/B&F)	7 Fuel Oxygenates by EPA method 8260	MTBE only by EPA method 8260	Dissolved Lead	VOC's - 8260
						X

Other | Comments

Relinquished By:	Date:	Time:	Received By:
	7/25/05	610	
Relinquished By:	Date:	Time:	Received By:
Relinquished By:	Date:	Time:	Received By:

ICE/t° ✓ ✓

GOOD CONDITION ✓

HEAD SPACE ABSENT ✓

DECHLORINATED IN LAB _____ PERSERVED IN LAB _____

	VOAS	O&G	METALS	OTHER
PRESERVATION				
APPROPRIATE CONTAINERS	✓			

McCampbell Analytical, Inc.
110 Second Avenue South, #D7
Pacheco, CA 94553-5560
(925) 798-1620

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0507387 **ClientID: AEL** **EDF: NO**

Report to:
Peter McIntyre
AEI Consultants
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597
TEL: (925) 283-6000
FAX: (925) 283-6121
ProjectNo: #9482; Vic's Automotive
PO:

Bill to:
Diane
All Environmental, Inc.
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597

Requested TAT: 1 day
Date Received: 07/22/2005
Date Printed: 07/22/2005

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)														
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0507387-001	EFFL-7/22	Water	07/22/2005	☐	A														

Test Legend:

1	8260B_W	2		3		4		5	
6		7		8		9		10	
11		12		13		14		15	

Prepared by: Rosa Venegas

Comments:

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

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #9482; Vic's Automotive	Date Sampled: 07/11/05
		Date Received: 07/12/05
	Client Contact: Peter McIntyre	Date Reported: 07/15/05
	Client P.O.:	Date Completed: 07/15/05

WorkOrder: 0507146

July 15, 2005

Dear Peter:

Enclosed are:

1). the results of **5** analyzed samples from your **#9482; Vic's Automotive project,**

2). a QC report for the above samples

3). a copy of the chain of custody, and

4). a bill for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits. If you have any questions please contact me. McCampbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Yours truly,

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #9482; Vic's Automotive	Date Sampled: 07/11/05
		Date Received: 07/12/05
	Client Contact: Peter McIntyre	Date Extracted: 07/13/05
	Client P.O.:	Date Analyzed: 07/13/05

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

Extraction method: SW5030B Analytical methods: SW8021B/8015Cm Work Order: 0507146

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	Combined Influent	A	69,000,a	ND<800	1900	2000	270	1000	20	116
002A	STACK	A	ND	ND	ND	ND	ND	ND	1	101
003A	MW-1 (START)	A	60,000,a	ND<500	1700	1500	300	1200	40	96
004A	MW-6 (START)	A	46,000,a	ND<600	1400	1700	150	640	40	110
005A	MW-7 (START)	A	53,000,a	ND<700	1500	1900	170	660	40	93

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

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

cluttered chromatogram; sample peak coelutes with surrogate peak.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (stoddard solvent / mineral spirit?); f) one to a few isolated non-target peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high MTBE content; k) TPH pattern that does not appear to be derived from gasoline (aviation gas). m) no recognizable pattern.

DHS Certification No. 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Air QC Matrix: Water WorkOrder: 0507146

EPA Method: SW8021B/8015Cm **Extraction: SW5030B** **BatchID: 17092** **Spiked Sample ID: 0507140-001A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	LCS / LCSD
TPH(btex)£	ND	60	103	106	2.85	103	105	1.63	70 - 130	70 - 130
MTBE	ND	10	90.3	94.1	4.11	91	92	1.12	70 - 130	70 - 130
Benzene	ND	10	104	111	6.04	105	110	4.36	70 - 130	70 - 130
Toluene	ND	10	106	112	5.34	104	107	2.74	70 - 130	70 - 130
Ethylbenzene	ND	10	112	118	4.85	110	113	2.40	70 - 130	70 - 130
Xylenes	ND	30	93.3	107	13.3	96.3	100	3.74	70 - 130	70 - 130
%SS:	97	10	110	111	0.534	106	108	1.89	70 - 130	70 - 130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 17092 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0507146-001A	7/11/05 12:00 PM	7/13/05	7/13/05 4:02 AM	0507146-002A	7/11/05 12:05 PM	7/13/05	7/13/05 2:26 AM
0507146-003A	7/11/05 12:10 PM	7/13/05	7/13/05 4:34 AM	0507146-004A	7/11/05 12:20 PM	7/13/05	7/13/05 5:06 AM
0507146-005A	7/11/05 12:30 PM	7/13/05	7/13/05 7:15 AM				

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

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

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

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

cluttered chromatogram; sample peak coelutes with surrogate peak.

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

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

DHS Certification No. 1644

QA/QC Officer

ael - 050746

McCAMPBELL ANALYTICAL INC.

110 2nd AVENUE SOUTH, #D7
PACHECO, CA 94553-5560
Telephone: (925) 798-1620 Fax: (925) 798-1622

CHAIN OF CUSTODY RECORD

TURN AROUND TIME ☐ RUSH ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ 5 DAY

EDF Required? ☐ Yes ☒ No

Report To: Peter McIntyre	Bill To: same
Company: AEI Consultants	
2500 Camino Diablo, Suite 200	
Walnut Creek, CA 94597	E-Mail: pmcintyre@aciconsultants.com
Tele: (925) 944-2899	Fax: (925) 944-2895
Project #: 9482	Project Name: Vic's Automotine
Project Location: 245 8th Street, Oakland	
Sampler Signature:	

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING Date	SAMPLING Time	# Containers	Type Containers	MATRIX Water	MATRIX Soil	MATRIX Air	MATRIX Sludge	MATRIX Other	METHOD PRESERVED Ice	METHOD PRESERVED HCl	METHOD PRESERVED HNO_3	METHOD PRESERVED Other	BTEX & TPH as Gas (602/8020 + 8015)/MTBE	TPH as Diesel (8015)	Total Petroleum Oil & Grease (5520 E&F/B&F)	7 Fuel Oxygenates by EPA method 8260	MTBE only by EPA method 8260	Dissolved Lead	Other	Comments
Combined Influent		7/11	1200	1	tedlar			X							X							
Stack			1205	1				X							X							
MW-1 Stack			1210	1				X							X							
MW-6 Stack			1220	1				X							X							
MW-7 Stack			1230	1	↓			X							X							

Relinquished By:	Date:	Time:	Received By:
	7-12-6	1030	
Relinquished By:	Date:	Time:	Received By:
	7/12/6	1315	
Relinquished By:	Date:	Time:	Received By:

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

McCampbell Analytical, Inc.
110 Second Avenue South, #D7
Pacheco, CA 94553-5560
(925) 798-1620

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0507146 **ClientID: AEL** **EDF: NO**

Report to:
Peter McIntyre
AEI Consultants
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597
TEL: (925) 283-6000
FAX: (925) 283-6121
ProjectNo: #9482; Vic's Automotive
PO:

Bill to:
Diane
All Environmental, Inc.
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597

Requested TAT: 5 days
Date Received: 07/12/2005
Date Printed: 07/12/2005

					Requested Tests (See legend below)														
Sample ID	**ClientSampID**	**Matrix**	**Collection Date**	**Hold**	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0507146-001	Combined Influent	Air	7/11/05 12:00:00	☐	A														
0507146-002	STACK	Air	7/11/05 12:05:00	☐	A														
0507146-003	MW-1 (START)	Air	7/11/05 12:10:00	☐	A														
0507146-004	MW-6 (START)	Air	7/11/05 12:20:00	☐	A														
0507146-005	MW-7 (START)	Air	7/11/05 12:30:00	☐	A														

Test Legend:

1	G-MBTEX_AIR	2		3		4		5	
6		7		8		9		10	
11		12		13		14		15	

Prepared by: Rosa Venegas

Comments:

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

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #9482; Vic's Automotive	Date Sampled: 07/12/05
		Date Received: 07/13/05
	Client Contact: Peter McIntyre	Date Reported: 07/18/05
	Client P.O.:	Date Completed: 07/18/05

WorkOrder: 0507183

July 18, 2005

Dear Peter:

Enclosed are:

1). the results of **8** analyzed samples from your **#9482; Vic's Automotive project,**

2). a QC report for the above samples

3). a copy of the chain of custody, and

4). a bill for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits. If you have any questions please contact me. McCampbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Yours truly,

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #9482; Vic's Automotive	Date Sampled: 07/12/05-07/13/05
		Date Received: 07/13/05
	Client Contact: Peter McIntyre	Date Extracted: 07/13/05-07/14/05
	Client P.O.:	Date Analyzed: 07/13/05-07/14/05

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

Extraction method: SW5030B Analytical methods: SW8021B/8015Cm Work Order: 0507183

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	Comb. Inf 7-12	A	33,000,a	ND<400	910	870	84	300	40	114
002A	MW-6	A	16,000,a	ND<150	290	620	63	270	20	110
003A	MW-1	A	33,000,a	ND<300	820	1000	140	520	20	115
004A	MW-7	A	33,000,a	ND<350	880	1000	97	360	20	113
005A	Combined 7-13-1	A	170,a	ND	2.0	8.4	3.4	18	1	99
006A	MW-5 (start)	A	20,000,a	ND<300	720	620	64	240	20	99
007A	MW-2	A	58,000,a	ND<300	1100	2000	180	730	20	115
008A	Comb. MW-7,6,1,2,5	A	61,000,a	ND<600	1400	1700	170	640	20	99

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

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

cluttered chromatogram; sample peak coelutes with surrogate peak.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (stoddard solvent / mineral spirit?); f) one to a few isolated non-target peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high MTBE content; k) TPH pattern that does not appear to be derived from gasoline (aviation gas). m) no recognizable pattern.

DHS Certification No. 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Air QC Matrix: Water WorkOrder: 0507183

EPA Method: SW8021B/8015Cm **Extraction: SW5030B** **BatchID: 17111** **Spiked Sample ID: 0507198-004A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	LCS / LCSD
TPH(btex)£	ND	60	111	108	3.48	105	106	1.73	70 - 130	70 - 130
MTBE	ND	10	92.2	91.2	1.03	94.8	103	8.51	70 - 130	70 - 130
Benzene	ND	10	94.4	94.4	0	102	107	4.92	70 - 130	70 - 130
Toluene	ND	10	101	98.7	2.47	105	109	3.79	70 - 130	70 - 130
Ethylbenzene	ND	10	110	109	0.745	112	115	2.97	70 - 130	70 - 130
Xylenes	ND	30	100	100	0	100	103	3.28	70 - 130	70 - 130
%SS:	116	10	101	102	0.742	108	108	0	70 - 130	70 - 130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 17111 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0507183-001A	7/12/05	7/13/05	7/13/05 10:01 PM	0507183-002A	7/13/05 8:00 AM	7/13/05	7/13/05 10:34 PM
0507183-003A	7/13/05 8:10 AM	7/13/05	7/13/05 11:06 PM	0507183-004A	7/13/05 8:20 AM	7/13/05	7/13/05 11:39 PM
0507183-005A	7/13/05 8:30 AM	7/14/05	7/14/05 7:13 PM	0507183-006A	7/13/05 9:00 AM	7/14/05	7/14/05 12:44 AM
0507183-007A	7/13/05 9:10 AM	7/14/05	7/14/05 1:16 AM	0507183-008A	7/13/05 9:20 AM	7/14/05	7/14/05 1:48 AM

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

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

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

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

cluttered chromatogram; sample peak coelutes with surrogate peak.

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

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

DHS Certification No. 1644

QA/QC Officer

AEI 050 7183

McCAMPBELL ANALYTICAL INC.

110 2nd AVENUE SOUTH, #D7
PACHECO, CA 94553-5560
Telephone: (925) 798-1620 Fax: (925) 798-1622

CHAIN OF CUSTODY RECORD

TURN AROUND TIME ☐ RUSH ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ 5 DAY

EDF Required? ☐ Yes ☐ No

Report To: Peter McIntyre	**Bill To:** same
Company: AEI Consultants	
2500 Camino Diablo, Suite 200	
Walnut Creek, CA 94597	**E-Mail:** pmcintyre@aeiconsultants.com
Tele: (925) 944-2899	**Fax:** (925) 944-2895
Project #: 9482	**Project Name:** Vic's Automotine
Project Location: 245 8th Street, Oakland	
Sampler Signature:	

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING Date	SAMPLING Time	# Containers	Type Containers	MATRIX Water	Soil	Air	Sludge	Other	METHOD PRESERVED Ice	HCl	HNO_3	Other	BTEX & TPH as Gas (602/8020 + 8015)/MTBE	TPH as Diesel (8015)	Total Petroleum Oil & Grease (5520 E&F/B&F)	7 Fuel Oxygenates by EPA method 8260	MTBE only by EPA method 8260	Dissolved Lead	Other	Comments
Combined Inf 7-12		7/12/05	2400	1	ted			X							X							
MW-6		7/13/05	0800	1	ted			X							X							
MW-1		7/13/05	0810	1	ted			X							X							
MW-7		7/13/05	0820	1	ted			X							X							
Combined 7-13-1		7/13/05	0830	1	ted			X							X							
MW-5 (start)		7/13/05	0900	1	ted			X							X							
MW-2		7/13/05	0910	1	ted			X							X							
Combined (start) MW-7, 6, 1, 2, 5		7/13/05	0920	1	ted			X							X							

Relinquished By:	**Date:** 7/13/05	**Time:** 1315	**Received By:**
Relinquished By:	**Date:**	**Time:**	**Received By:**
Relinquished By:	**Date:**	**Time:**	**Received By:**

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

McCampbell Analytical, Inc.
110 Second Avenue South, #D7
Pacheco, CA 94553-5560
(925) 798-1620

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0507183 **ClientID: AEL** **EDF: NO**

Report to:
Peter McIntyre
AEI Consultants
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597
TEL: (925) 283-6000
FAX: (925) 283-6121
ProjectNo: #9482; Vic's Automotive
PO:

Bill to:
Diane
All Environmental, Inc.
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597

Requested TAT: 5 days
Date Received: 07/13/2005
Date Printed: 07/13/2005

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)														
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0507183-001	Comb. Inf 7-12	Air	07/12/2005	☐	A														
0507183-002	MW-6	Air	07/13/2005	☐	A														
0507183-003	MW-1	Air	07/13/2005	☐	A														
0507183-004	MW-7	Air	07/13/2005	☐	A														
0507183-005	Combined 7-13-1	Air	07/13/2005	☐	A														
0507183-006	MW-5 (start)	Air	07/13/2005	☐	A														
0507183-007	MW-2	Air	07/13/2005	☐	A														
0507183-008	Comb. MW-7,6,1,2,5	Air	07/13/2005	☐	A														

Test Legend:

1	G-MBTEX_AIR	2		3		4		5	
6		7		8		9		10	
11		12		13		14		15	

Prepared by: Rosa Venegas

Comments:

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

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #3; Lum's 8th St and Alices St. Oakland	Date Sampled: 07/14/05
		Date Received: 07/14/05
	Client Contact: Peter McIntyre	Date Reported: 07/19/05
	Client P.O.:	Date Completed: 07/19/05

WorkOrder: 0507210

July 19, 2005

Dear Peter:

Enclosed are:

1). the results of **6** analyzed samples from your **#3; Lum's 8th St and Alices St. Oakland project,**

2). a QC report for the above samples

3). a copy of the chain of custody, and

4). a bill for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits. If you have any questions please contact me. McCampbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Yours truly,

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #3; Lum's 8th St and Alices St. Oakland	Date Sampled: 07/14/05
		Date Received: 07/14/05
	Client Contact: Peter McIntyre	Date Extracted: 07/14/05-07/15/05
	Client P.O.:	Date Analyzed: 07/14/05-07/15/05

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

Extraction method: SW5030B Analytical methods: SW8021B/8015Cm Work Order: 0507210

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	MW-1	A	24,000,a	ND<180	610	990	130	490	20	103
002A	MW-2	A	37,000,a	ND<400	940	1300	130	550	20	97
003A	MW-5	A	53,000,a	ND<150	920	2400	280	1100	20	113
004A	MW-6	A	18,000,a	ND<110	380	1000	140	620	20	110
005A	MW-7	A	52,000,a	ND<500	1300	1600	150	630	20	110
006A	Combined	A	49,000,a	ND<400	1200	1600	130	490	20	111
Reporting Limit for DF =1; ND means not detected at or above the reporting limit		A	25	2.5	0.25	0.25	0.25	0.25	1	µg/L
		S	NA	NA	NA	NA	NA	NA	1	mg/Kg

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

cluttered chromatogram; sample peak coelutes with surrogate peak.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (stoddard solvent / mineral spirit?); f) one to a few isolated non-target peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high MTBE content; k) TPH pattern that does not appear to be derived from gasoline (aviation gas). m) no recognizable pattern.

DHS Certification No. 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Air QC Matrix: Water WorkOrder: 0507210

EPA Method: SW8021B/8015Cm Extraction: SW5030B BatchID: 17129 Spiked Sample ID: 0507203-001A

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	LCS / LCSD
TPH(btex)£	ND	60	107	108	0.804	104	105	1.61	70 - 130	70 - 130
MTBE	ND	10	94.7	84.3	11.6	95.9	97.8	1.92	70 - 130	70 - 130
Benzene	ND	10	94.1	90.3	4.15	105	110	4.69	70 - 130	70 - 130
Toluene	ND	10	99	97.1	1.92	107	111	3.83	70 - 130	70 - 130
Ethylbenzene	ND	10	108	109	0.644	114	117	2.62	70 - 130	70 - 130
Xylenes	ND	30	100	100	0	100	100	0	70 - 130	70 - 130
%SS:	100	10	101	97	3.46	109	112	2.46	70 - 130	70 - 130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 17129 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0507210-001A	7/14/05	7/14/05	7/14/05 8:58 PM	0507210-002A	7/14/05 9:10 AM	7/14/05	7/14/05 9:32 PM
0507210-003A	7/14/05 9:30 AM	7/14/05	7/14/05 7:47 PM	0507210-004A	7/14/05 9:40 AM	7/14/05	7/14/05 8:22 PM

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

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

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

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

cluttered chromatogram; sample peak coelutes with surrogate peak.

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

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

DHS Certification No. 1644

QA/QC Officer

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Air QC Matrix: Water WorkOrder: 0507210

EPA Method: SW8021B/8015Cm Extraction: SW5030B BatchID: 17138 Spiked Sample ID: 0507231-004A

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	LCS / LCSD
TPH(btex) £	ND	60	105	105	0	107	104	2.50	70 - 130	70 - 130
MTBE	ND	10	87.3	88.7	1.58	92.8	90.1	2.97	70 - 130	70 - 130
Benzene	ND	10	105	105	0	106	102	4.32	70 - 130	70 - 130
Toluene	ND	10	110	110	0	111	107	3.57	70 - 130	70 - 130
Ethylbenzene	ND	10	118	118	0	119	115	3.39	70 - 130	70 - 130
Xylenes	ND	30	107	107	0	107	100	6.45	70 - 130	70 - 130
%SS:	97	10	109	109	0	111	109	1.41	70 - 130	70 - 130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 17138 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0507210-005A	7/14/05 9:50 AM	7/14/05	7/14/05 11:11 PM	0507210-006A	7/14/05 9:00 AM	7/15/05	7/15/05 1:21 AM

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

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

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

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

cluttered chromatogram; sample peak coelutes with surrogate peak.

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

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

DHS Certification No. 1644

QA/QC Officer

0507210

McCAMPBELL ANALYTICAL INC.

110 2nd AVENUE SOUTH, #D7
PACHECO, CA 94553-5560
Telephone: (925) 798-1620 Fax: (925) 798-1622

CHAIN OF CUSTODY RECORD

TURN AROUND TIME ☐ RUSH ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAY
EDF Required? ☐ Yes ☐ No

Report To: Peter McIntyre Bill To: same
Company: AEI Consultants
2500 Camino Diablo, Suite 200
Walnut Creek, CA 94597 E-Mail: pmcintyre@aeiconsultants.com
Tele: (925) 944-2899 Fax: (925) 944-2895
Project #: 3 Project Name: Lum's
Project Location: 8th st and Alice st Oakland
Sampler Signature: Adrian Nieto

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING Date	SAMPLING Time	# Containers	Type Containers	MATRIX Water	MATRIX Soil	MATRIX Air	MATRIX Sludge	MATRIX Other	METHOD PRESERVED Ice	METHOD PRESERVED HCl	METHOD PRESERVED HNO_3	METHOD PRESERVED Other	BTEX & TPH as Gas (602/8020 + 8015)/MTBE	TPH as Diesel (8015)	Total Petroleum Oil & Grease (5520 E&F/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 601 / 8010	BTEX ONLY (EPA 602 / 8020)	EPA 608 / 8080	EPA 608 / 8080 PCB's ONLY	EPA 624 / 8260	EPA 625 / 8270	PAH's / PNA's by EPA 625 / 8270 / 8310	CAM-17 Metals	LUFT 5 Metals	Lead (7240/7421/239.2/6010)	RCI	Other	Other	Other	Other	Comments
MW-1		0940	7/6/05		tedlar			X							X																	
MW-2		0940						X							X																	
MW-5		0930						X							X																	
MW-6		0940						X							X																	
MW-7		0950						X							X																	
Combined		0900						X							X																	

Relinquished By:	Date:	Time:	Received By:
Adrian Nieto	7/6/05	3:45pm	
Relinquished By:	Date:	Time:	Received By:
Relinquished By:	Date:	Time:	Received By:

ICE/t° 100
GOOD CONDITION ✓
HEAD SPACE ABSENT
DECHLORINATED IN LAB
PRESERVATION ✓ APPROPRIATE
CONTAINERS ✓
PERSERVED IN LAB

VOAS	O&G	METALS	OTHER

McCampbell Analytical, Inc.
110 Second Avenue South, #D7
Pacheco, CA 94553-5560
(925) 798-1620

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0507210 **ClientID: AEL** **EDF: NO**

Report to:
Peter McIntyre
AEI Consultants
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597
TEL: (925) 283-6000
FAX: (925) 283-6121
ProjectNo: #3; Lum's 8th St and Alices St. Oakland
PO:

Bill to:
Diane
All Environmental, Inc.
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597

Requested TAT: 5 days

Date Received: **07/14/2005**
Date Printed: **07/14/2005**

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0507210-001	MW-1	Air	7/14/05	☐	A														
0507210-002	MW-2	Air	7/14/05 9:10:00 AM	☐	A														
0507210-003	MW-5	Air	7/14/05 9:30:00 AM	☐	A														
0507210-004	MW-6	Air	7/14/05 9:40:00 AM	☐	A														
0507210-005	MW-7	Air	7/14/05 9:50:00 AM	☐	A														
0507210-006	Combined	Air	7/14/05 9:00:00 AM	☐	A														

Test Legend:

1	G-MBTEX_AIR	2		3		4		5	
6		7		8		9		10	
11		12		13		14		15	

Prepared by: Maria Venegas

Comments:

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

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #9482; Vic's Automotive	Date Sampled: 07/14/05
		Date Received: 07/15/05
	Client Contact: Peter McIntyre	Date Reported: 07/20/05
	Client P.O.:	Date Completed: 07/20/05

WorkOrder: 0507227

July 20, 2005

Dear Peter:

Enclosed are:

1). the results of 7 analyzed samples from your **#9482; Vic's Automotive project,**

2). a QC report for the above samples

3). a copy of the chain of custody, and

4). a bill for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits. If you have any questions please contact me. McCampbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Yours truly,

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #9482; Vic's Automotive	Date Sampled: 07/14/05-07/15/05
		Date Received: 07/15/05
	Client Contact: Peter McIntyre	Date Extracted: 07/15/05
	Client P.O.:	Date Analyzed: 07/15/05

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

Extraction method: SW5030B Analytical methods: SW8021B/8015Cm Work Order: 0507227

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	7/14/05 Com 2100	A	35,000,a	ND<600	850	1300	110	350	20	94
002A	7/15/05 Com 0900	A	47,000,a	ND<800	1200	1900	170	580	20	118
003A	MW-1	A	25,000,a	ND<300	660	1200	200	730	20	99
004A	MW-2	A	32,000,a	ND<600	920	1400	120	470	20	98
005A	MW-5	A	27,000,a	ND<150	520	1700	270	980	20	108
006A	MW-6	A	21,000,a	ND<210	390	1100	150	590	20	103
007A	MW-7	A	55,000,a	ND<50	1400	1900	170	620	20	96

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

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

cluttered chromatogram; sample peak coelutes with surrogate peak.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (stoddard solvent / mineral spirit?); f) one to a few isolated non-target peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high MTBE content; k) TPH pattern that does not appear to be derived from gasoline (aviation gas). m) no recognizable pattern.

DHS Certification No. 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Air QC Matrix: Water WorkOrder: 0507227

EPA Method: SW8021B/8015Cm **Extraction: SW5030B** **BatchID: 17138** **Spiked Sample ID: 0507231-004A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	LCS / LCSD
TPH(btex)£	ND	60	105	105	0	107	104	2.50	70 - 130	70 - 130
MTBE	ND	10	87.3	88.7	1.58	92.8	90.1	2.97	70 - 130	70 - 130
Benzene	ND	10	105	105	0	106	102	4.32	70 - 130	70 - 130
Toluene	ND	10	110	110	0	111	107	3.57	70 - 130	70 - 130
Ethylbenzene	ND	10	118	118	0	119	115	3.39	70 - 130	70 - 130
Xylenes	ND	30	107	107	0	107	100	6.45	70 - 130	70 - 130
%SS:	97	10	109	109	0	111	109	1.41	70 - 130	70 - 130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 17138 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0507227-001A	7/14/05 9:00 AM	7/15/05	7/15/05 4:02 PM	0507227-002A	7/15/05 9:00 AM	7/15/05	7/15/05 4:32 PM
0507227-003A	7/15/05 9:05 AM	7/15/05	7/15/05 5:03 PM	0507227-004A	7/15/05 9:10 AM	7/15/05	7/15/05 5:33 PM
0507227-005A	7/15/05 9:15 AM	7/15/05	7/15/05 6:33 PM	0507227-006A	7/15/05 9:20 AM	7/15/05	7/15/05 7:03 PM
0507227-007A	7/15/05 9:25 AM	7/15/05	7/15/05 8:03 PM				

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

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

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

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

cluttered chromatogram; sample peak coelutes with surrogate peak.

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

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

DHS Certification No. 1644

QA/QC Officer

0507227

McCAMPBELL ANALYTICAL INC.

110 2nd AVENUE SOUTH, #D7
PACHECO, CA 94553-5560
Telephone: (925) 798-1620 Fax: (925) 798-1622

CHAIN OF CUSTODY RECORD

TURN AROUND TIME ☐ RUSH ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAY

EDF Required? ☐ Yes ☐ No

Report To: Peter McIntyre **Bill To:** same

Company: AEI Consultants

2500 Camino Diablo, Suite 200
Walnut Creek, CA 94597 **E-Mail:** pmcintyre@aeiconsultants.com

Tele: (925) 944-2899 **Fax:** (925) 944-2895

Project #: 9482 **Project Name:** Vic's Automotine

Project Location: 245 8th Street, Oakland

Sampler Signature:

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING Date	SAMPLING Time	# Containers	Type Containers	MATRIX Water	MATRIX Soil	MATRIX Air	MATRIX Sludge	MATRIX Other	METHOD PRESERVED Ice	METHOD PRESERVED HCl	METHOD PRESERVED HNO_3	METHOD PRESERVED Other	Analysis Request: BTEX & TPH as Gas (602/8020 + 8015)/MTBE	TPH as Diesel (8015)	Total Petroleum Oil & Grease (5520 E&F/B&F)	7 Fuel Oxygenates by EPA method 8260	MTBE only by EPA method 8260	Dissolved Lead	Other	Comments
7/14/05 Combined 2100		7/14/05	2100	1	ted			X							X							
7/15/05 Combined 0900		7/15/05	0900	1	ted			X							X							
MW-1		7/15/05	00905	1	ted			X							X							
MW-2		7/15/05	00910	1	ted			X							X			/				
MW-5		7/15/05	0915	1	ted			X							X							
MW-6		7/15/05	0920	1	ted			X							X							
MW-7		7/15/05	0925	1	ted			X							X							

Relinquished By:	Date:	Time:	Received By:
	7/15/05	1320	
Relinquished By:	Date:	Time:	Received By:
Relinquished By:	Date:	Time:	Received By:

ICE/t° 100 VOAS | O&G | METALS | OTHER

GOOD CONDITION ✓ PRESERVATION ✓

HEAD SPACE ABSENT ____ APPROPRIATE

DECHLORINATED IN LAB ____ CONTAINERS ____

PERSERVED IN LAB ____

McCampbell Analytical, Inc.
110 Second Avenue South, #D7
Pacheco, CA 94553-5560
(925) 798-1620

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0507227 **ClientID: AEL** **EDF: NO**

Report to:
Peter McIntyre
AEI Consultants
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597
TEL: (925) 283-6000
FAX: (925) 283-6121
ProjectNo: #9482; Vic's Automotive
PO:

Bill to:
Diane
All Environmental, Inc.
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597

Requested TAT: 5 days
Date Received: 07/15/2005
Date Printed: 07/15/2005

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0507227-001	7/14/05 Com 2100	Air	7/14/05 9:00:00 AM	☐	A														
0507227-002	7/15/05 Com 0900	Air	7/15/05 9:00:00 AM	☐	A														
0507227-003	MW-1	Air	7/15/05 9:05:00 AM	☐	A														
0507227-004	MW-2	Air	7/15/05 9:10:00 AM	☐	A														
0507227-005	MW-5	Air	7/15/05 9:15:00 AM	☐	A														
0507227-006	MW-6	Air	7/15/05 9:20:00 AM	☐	A														
0507227-007	MW-7	Air	7/15/05 9:25:00 AM	☐	A														

Test Legend:

1	G-MBTEX_AIR	2		3		4		5	
6		7		8		9		10	
11		12		13		14		15	

Prepared by: Maria Venegas

Comments:

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

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #9482; Vic's Automotive	Date Sampled: 07/19/05
		Date Received: 07/19/05
	Client Contact: Peter McIntyre	Date Reported: 07/25/05
	Client P.O.:	Date Completed: 07/25/05

WorkOrder: 0507277

July 25, 2005

Dear Peter:

Enclosed are:

1). the results of **6** analyzed samples from your **#9482; Vic's Automotive project,**

2). a QC report for the above samples

3). a copy of the chain of custody, and

4). a bill for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits. If you have any questions please contact me. McCampbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Yours truly,

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #9482; Vic's Automotive	Date Sampled: 07/19/05
		Date Received: 07/19/05
	Client Contact: Peter McIntyre	Date Extracted: 07/19/05-07/20/05
	Client P.O.:	Date Analyzed: 07/19/05-07/20/05

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

Extraction method: SW5030B Analytical methods: SW8021B/8015Cm Work Order: 0507277

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	7/19/05 Com 2100	A	38,000,a	ND<300	880	1500	170	660	20	106
002A	MW-1	A	3100,a	ND<17	37	240	82	380	6.7	110
003A	MW-2	A	6500,a	ND<50	230	460	65	280	20	103
004A	MW-5	A	14,000,a	ND<50	250	750	140	630	20	116
005A	MW-6	A	17,000,a	ND<100	320	870	110	500	20	105
006A	MW-7	A	58,000,a	ND<500	1400	2000	190	800	20	106
Reporting Limit for DF =1; ND means not detected at or above the reporting limit		A	25	2.5	0.25	0.25	0.25	0.25	1	µg/L
		S	NA	NA	NA	NA	NA	NA	1	mg/Kg

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

cluttered chromatogram; sample peak coelutes with surrogate peak.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (stoddard solvent / mineral spirit?); f) one to a few isolated non-target peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high MTBE content; k) TPH pattern that does not appear to be derived from gasoline (aviation gas). m) no recognizable pattern.

DHS Certification No. 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Air QC Matrix: Water WorkOrder: 0507277

EPA Method: SW8021B/8015Cm Extraction: SW5030B BatchID: 17203 Spiked Sample ID: 0507291-001A

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	LCS / LCSD
TPH(btex)£	ND	60	99.3	92.2	7.43	95.9	95.7	0.301	70 - 130	70 - 130
MTBE	ND	10	113	105	7.78	95.6	101	5.03	70 - 130	70 - 130
Benzene	ND	10	92.7	93.1	0.444	92.8	94.7	2.02	70 - 130	70 - 130
Toluene	ND	10	95.3	95.6	0.274	98	99.5	1.51	70 - 130	70 - 130
Ethylbenzene	ND	10	99.9	100	0.320	103	105	1.72	70 - 130	70 - 130
Xylenes	ND	30	103	100	3.28	107	107	0	70 - 130	70 - 130
%SS:	119	10	98	96	2.07	97	97	0	70 - 130	70 - 130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 17203 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0507277-001A	7/19/05 7:20 AM	7/19/05	7/19/05 5:31 PM	0507277-002A	7/19/05 7:23 AM	7/20/05	7/20/05 11:36 AM
0507277-003A	7/19/05 7:25 AM	7/19/05	7/19/05 7:13 PM	0507277-004A	7/19/05 7:30 AM	7/19/05	7/19/05 7:47 PM
0507277-005A	7/19/05 7:35 AM	7/19/05	7/19/05 8:21 PM	0507277-006A	7/19/05 7:40 AM	7/19/05	7/19/05 10:34 PM

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

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

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

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

cluttered chromatogram; sample peak coelutes with surrogate peak.

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

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

DHS Certification No. 1644

QA/QC Officer

0507277

McCAMPBELL ANALYTICAL INC.

110 2nd AVENUE SOUTH, #D7
PACHECO, CA 94553-5560
Telephone: (925) 798-1620 Fax: (925) 798-1622

CHAIN OF CUSTODY RECORD

TURN AROUND TIME ☐ RUSH ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAY

EDF Required? ☐ Yes ☐ No

Report To: Peter McIntyre **Bill To:** same

Company: AEI Consultants

2500 Camino Diablo, Suite 200

Walnut Creek, CA 94597 **E-Mail:** pmcintyre@aeiconsultants.com

Tele: (925) 944-2899 **Fax:** (925) 944-2895

Project #: 9482 **Project Name:** Vic's Automotine

Project Location: 245 8th Street, Oakland

Sampler Signature:

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING Date	SAMPLING Time	# Containers	Type Containers	MATRIX Water	MATRIX Soil	MATRIX Air	MATRIX Sludge	MATRIX Other	METHOD PRESERVED Ice	METHOD PRESERVED HCl	METHOD PRESERVED HNO_3	METHOD PRESERVED Other	Analysis Request: BTEX & TPH as Gas (602/8020 + 8015)/MTBE	Analysis Request: TPH as Diesel (8015)	Analysis Request: Total Petroleum Oil & Grease (5520 E&F/B&F)	Analysis Request: 7 Fuel Oxygenates by EPA method 8260	Analysis Request: MTBE only by EPA method 8260	Analysis Request: Dissolved Lead	Other	Comments
7/19/05 Combined 2100		7/19/05	0720	1	ted			X							X							
MW-1		7/19/05	0723	1	ted			X							X							
MW-2		7/19/05	0725	1	ted			X							X							
MW-5		7/19/05	0730	1	ted			X							X							
MW-6		7/19/05	0735	1	ted			X							X							
MW-7		7/19/05	0740	1	ted			X							X							

Relinquished By:	Date:	Time:	Received By:
	7-19-05	1400	
Relinquished By:	Date:	Time:	Received By:
	7/19/05	235	
Relinquished By:	Date:	Time:	Received By:

ICE/t° NO ✓

GOOD CONDITION ____

HEAD SPACE ABSENT ____

DECHLORINATED IN LAB ____

PRESERVATION ✓ APPROPRIATE

CONTAINERS ✓

PERSERVED IN LAB ____

VOAS	O&G	METALS	OTHER

McCampbell Analytical, Inc.
110 Second Avenue South, #D7
Pacheco, CA 94553-5560
(925) 798-1620

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0507277 **ClientID: AEL** **EDF: NO**

Report to:
Peter McIntyre
AEI Consultants
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597
TEL: (925) 283-6000
FAX: (925) 283-6121
ProjectNo: #9482; Vic's Automotive
PO:

Bill to:
Diane
All Environmental, Inc.
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597

Requested TAT: 5 days
Date Received: **07/19/2005**
Date Printed: **07/19/2005**

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0507277-001	7/19/05 Com 2100	Air	7/19/05 7:20:00 AM	☐	A														
0507277-002	MW-1	Air	7/19/05 7:23:00 AM	☐	A														
0507277-003	MW-2	Air	7/19/05 7:25:00 AM	☐	A														
0507277-004	MW-5	Air	7/19/05 7:30:00 AM	☐	A														
0507277-005	MW-6	Air	7/19/05 7:35:00 AM	☐	A														
0507277-006	MW-7	Air	7/19/05 7:40:00 AM	☐	A														

Test Legend:

1	G-MBTEX_AIR	2		3		4		5	
6		7		8		9		10	
11		12		13		14		15	

Prepared by: Maria Venegas

Comments:

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

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #9482; Vic's Automotive	Date Sampled: 07/22/05
		Date Received: 07/22/05
	Client Contact: Peter McIntyre	Date Reported: 07/28/05
	Client P.O.:	Date Completed: 07/28/05

WorkOrder: 0507386

July 28, 2005

Dear Peter:

Enclosed are:

1). the results of **6** analyzed samples from your **#9482; Vic's Automotive project,**

2). a QC report for the above samples

3). a copy of the chain of custody, and

4). a bill for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits. If you have any questions please contact me. McCampbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Yours truly,

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #9482; Vic's Automotive	Date Sampled: 07/22/05
		Date Received: 07/22/05
	Client Contact: Peter McIntyre	Date Extracted: 07/23/05-07/24/05
	Client P.O.:	Date Analyzed: 07/23/05-07/24/05

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

Extraction method: SW5030B Analytical methods: SW8021B/8015Cm Work Order: 0507386

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	Combined	A	38,000,a	ND<300	1200	2000	270	1000	20	102
002A	MW-1	A	17,000,a	ND<100	470	920	100	460	40	106
003A	MW-2	A	15,000,a	ND<100	580	990	88	380	40	118
004A	MW-5	A	16,000,a	ND<50	380	990	190	920	20	99
005A	MW-6	A	14,000,a	ND<130	300	870	140	600	20	117
006A	MW-7	A	53,000,a	ND<800	1400	2700	320	1200	67	92

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

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

cluttered chromatogram; sample peak coelutes with surrogate peak.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (stoddard solvent / mineral spirit?); f) one to a few isolated non-target peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high MTBE content; k) TPH pattern that does not appear to be derived from gasoline (aviation gas). m) no recognizable pattern.

DHS Certification No. 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Air | QC Matrix: Water | WorkOrder: 0507386

EPA Method: SW8021B/8015Cm	Extraction: SW5030B	BatchID: 17284	Spiked Sample ID: 0507384-003A

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	LCS / LCSD
TPH(btex)£	ND	60	109	114	4.74	114	114	0	70 - 130	70 - 130
MTBE	ND	10	102	113	10.4	116	112	3.29	70 - 130	70 - 130
Benzene	ND	10	104	110	6.25	118	117	0.919	70 - 130	70 - 130
Toluene	ND	10	103	110	5.95	115	115	0	70 - 130	70 - 130
Ethylbenzene	ND	10	107	113	5.49	123	122	0.744	70 - 130	70 - 130
Xylenes	ND	30	96	100	4.08	110	107	3.08	70 - 130	70 - 130
%SS:	98	10	106	107	1.03	114	111	2.91	70 - 130	70 - 130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 17284 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0507386-001A	7/22/05 12:40 PM	7/23/05	7/23/05 1:46 PM	0507386-002A	7/22/05 12:45 PM	7/23/05	7/23/05 5:50 PM
0507386-003A	7/22/05 12:50 PM	7/23/05	7/23/05 7:56 PM	0507386-004A	7/22/05 12:55 PM	7/23/05	7/23/05 3:17 PM
0507386-005A	7/22/05 12:55 PM	7/23/05	7/23/05 1:45 PM	0507386-006A	7/22/05 1:00 PM	7/24/05	7/24/05 7:12 AM

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

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

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

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

cluttered chromatogram; sample peak coelutes with surrogate peak.

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

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

DHS Certification No. 1644

QA/QC Officer

aei 0501386

McCAMPBELL ANALYTICAL INC.

110 2nd AVENUE SOUTH, #D7
PACHECO, CA 94553-5560
Telephone: (925) 798-1620 Fax: (925) 798-1622

CHAIN OF CUSTODY RECORD

TURN AROUND TIME ☐ RUSH ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ 5 DAY

EDF Required? ☐ Yes ☒ No

Report To: Peter McIntyre **Bill To:** same

Company: AEI Consultants
2500 Camino Diablo, Suite 200
Walnut Creek, CA 94597 **E-Mail:** pmcintyre@aeiconsultants.com

Tele: (925) 944-2899 **Fax:** (925) 944-2895

Project #: 9482 **Project Name:** Vic's Automotine

Project Location: 245 8th Street, Oakland

Sampler Signature:

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING Date	SAMPLING Time	# Containers	Type Containers	MATRIX Water	Soil	Air	Sludge	Other	METHOD PRESERVED Ice	HCl	HNO_3	Other	BTEX & TPH as Gas (602/8020 + 8015)/MTBE	TPH as Diesel (8015)	Total Petroleum Oil & Grease (5520 E&F/B&F)	7 Fuel Oxygenates by EPA method 8260	MTBE only by EPA method 8260	Dissolved Lead	Other	Comments
Combined		7/22/05	1240	1	Tedlar			X							X							
MW-1			1245	1				X							X							
MW-2			1250	1				X							X							
MW-5			1255	1				X							X							
MW-6			1255	1				X							X							
MW-7		↓	1300	1	↓			X							X							

Relinquished By:	Date:	Time:	Received By:
	7/22/05	6:10	
Relinquished By:	Date:	Time:	Received By:
Relinquished By:	Date:	Time:	Received By:

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

McCampbell Analytical, Inc.
110 Second Avenue South, #D7
Pacheco, CA 94553-5560
(925) 798-1620

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0507386 **ClientID: AEL** **EDF: NO**

Report to:
Peter McIntyre
AEI Consultants
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597
TEL: (925) 283-6000
FAX: (925) 283-6121
ProjectNo: #9482; Vic's Automotive
PO:

Bill to:
Diane
All Environmental, Inc.
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597

Requested TAT: 5 days
Date Received: 07/22/2005
Date Printed: 07/22/2005

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)														
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0507386-001	Combined	Air	07/22/2005	☐	A														
0507386-002	MW-1	Air	07/22/2005	☐	A														
0507386-003	MW-2	Air	07/22/2005	☐	A														
0507386-004	MW-5	Air	07/22/2005	☐	A														
0507386-005	MW-6	Air	07/22/2005	☐	A														
0507386-006	MW-7	Air	07/22/2005	☐	A														

Test Legend:

1	G-MBTEX_AIR	2		3		4		5	
6		7		8		9		10	
11		12		13		14		15	

Prepared by: Rosa Venegas

Comments:

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

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #9482; Vic's Automotive	Date Sampled: 07/27/05
		Date Received: 07/27/05
	Client Contact: Peter McIntyre	Date Reported: 08/02/05
	Client P.O.:	Date Completed: 08/02/05

WorkOrder: 0507465

August 02, 2005

Dear Peter:

Enclosed are:

1). the results of **6** analyzed samples from your **#9482; Vic's Automotive project,**

2). a QC report for the above samples

3). a copy of the chain of custody, and

4). a bill for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits. If you have any questions please contact me. McCampbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Yours truly,

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #9482; Vic's Automotive	Date Sampled: 07/27/05
		Date Received: 07/27/05
	Client Contact: Peter McIntyre	Date Extracted: 07/28/05
	Client P.O.:	Date Analyzed: 07/28/05

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

Extraction method: SW5030B Analytical methods: SW8021B/8015Cm Work Order: 0507465

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	MW-1 (END)	A	16,000,a	ND<150	360	1000	140	570	20	99
002A	MW-2 (END)	A	18,000,a	ND<180	530	1200	120	480	20	111
003A	MW-5 (END)	A	12,000,a	ND<50	270	780	130	550	20	110
004A	MW-6 (END)	A	25,000,a	ND<150	410	1800	300	1200	20	101
005A	MW-7 (END)	A	58,000,a	ND<900	1300	2400	310	1200	20	101
006A	Combined (END)	A	43,000,a	ND<400	860	2300	330	1300	20	106
Reporting Limit for DF =1; ND means not detected at or above the reporting limit		A	25	2.5	0.25	0.25	0.25	0.25	1	µg/L
		S	NA	NA	NA	NA	NA	NA	1	mg/Kg

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

cluttered chromatogram; sample peak coelutes with surrogate peak.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (stoddard solvent / mineral spirit?); f) one to a few isolated non-target peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high MTBE content; k) TPH pattern that does not appear to be derived from gasoline (aviation gas). m) no recognizable pattern.

DHS Certification No. 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Air QC Matrix: Water WorkOrder: 0507465

EPA Method: SW8021B/8015Cm Extraction: SW5030B BatchID: 17354 Spiked Sample ID: 0507468-002A

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	LCS / LCSD
TPH(btex) £	ND	60	112	103	9.05	105	105	0	70 - 130	70 - 130
MTBE	ND	10	109	106	2.53	96.7	109	11.6	70 - 130	70 - 130
Benzene	ND	10	119	112	5.78	110	117	6.32	70 - 130	70 - 130
Toluene	ND	10	114	105	8.61	107	111	2.98	70 - 130	70 - 130
Ethylbenzene	ND	10	115	110	4.05	111	113	2.23	70 - 130	70 - 130
Xylenes	ND	30	100	96.3	3.74	96.7	100	3.39	70 - 130	70 - 130
%SS:	113	10	115	109	5.78	110	114	2.83	70 - 130	70 - 130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 17354 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0507465-001A	7/27/05 11:25 AM	7/28/05	7/28/05 6:29 AM	0507465-002A	7/27/05 11:30 AM	7/28/05	7/28/05 6:59 AM
0507465-003A	7/27/05 11:39 AM	7/28/05	7/28/05 7:29 AM	0507465-004A	7/27/05 11:40 AM	7/28/05	7/28/05 7:59 AM
0507465-005A	7/27/05 11:45 AM	7/28/05	7/28/05 8:28 AM	0507465-006A	7/27/05 11:20 AM	7/28/05	7/28/05 9:58 AM

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

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

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

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

cluttered chromatogram; sample peak coelutes with surrogate peak.

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

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

DHS Certification No. 1644

QA/QC Officer

AEI 05071465

McCAMPBELL ANALYTICAL INC.

110 2nd AVENUE SOUTH, #D7
PACHECO, CA 94553-5560
Telephone: (925) 798-1620 Fax: (925) 798-1622

CHAIN OF CUSTODY RECORD

TURN AROUND TIME ☐ RUSH ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ 5 DAY

EDF Required? ☐ Yes ☒ No

Report To: Peter McIntyre	**Bill To:** same
Company: AEI Consultants	
2500 Camino Diablo, Suite 200	
Walnut Creek, CA 94597	**E-Mail:** pmcintyre@aeiconsultants.com
Tele: (925) 944-2899	**Fax:** (925) 944-2895
Project #: 9482	**Project Name:** Vic's Automotine
Project Location: 245 8th Street, Oakland	
Sampler Signature:	

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING Date	SAMPLING Time	# Containers	Type Containers	MATRIX Water	Soil	Air	Sludge	Other	METHOD PRESERVED Ice	HCl	HNO_3	Other	BTEX & TPH as Gas (602/8020 + 8015)/MTBE	TPH as Diesel (8015)	Total Petroleum Oil & Grease (5520 E&F/B&F)	7 Fuel Oxygenates by EPA method 8260	MTBE only by EPA method 8260	Dissolved Lead	Other	Comments
MW-1 (end)		7/27/05	1125	1	Tedlar			X							X							
MW-2 (end)			1130	1				X							X							
MW-3 (end)			1139	1				X							X							
MW-6 (end)			1140	1				X							X							
MW-7 (end)			1145	1				X							X							
Combined (end)		7/27/05	1120	1				X							X							

Relinquished By:	Date:	Time:	Received By:
[signature]	7/27/05	5:10	[signature]
Relinquished By:	Date:	Time:	Received By:
Relinquished By:	Date:	Time:	Received By:

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

0507277

McCAMPBELL ANALYTICAL INC.

110 2nd AVENUE SOUTH, #D7
PACHECO, CA 94553-5560
Telephone: (925) 798-1620 Fax: (925) 798-1622

CHAIN OF CUSTODY RECORD

TURN AROUND TIME ☐ RUSH ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAY

EDF Required? ☐ Yes ☐ No

Report To: Peter McIntyre **Bill To:** same

Company: AEI Consultants

2500 Camino Diablo, Suite 200

Walnut Creek, CA 94597 **E-Mail:** pmcintyre@aeiconsultants.com

Tele: (925) 944-2899 **Fax:** (925) 944-2895

Project #: 9482 **Project Name:** Vic's Automotine

Project Location: 245 8th Street, Oakland

Sampler Signature:

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING Date	SAMPLING Time	# Containers	Type Containers	MATRIX Water	MATRIX Soil	MATRIX Air	MATRIX Sludge	MATRIX Other	METHOD PRESERVED Ice	METHOD PRESERVED HCl	METHOD PRESERVED HNO_3	METHOD PRESERVED Other	Analysis Request: BTEX & TPH as Gas (602/8020 + 8015)/MTBE	Analysis Request: TPH as Diesel (8015)	Analysis Request: Total Petroleum Oil & Grease (5520 E&F/B&F)	Analysis Request: 7 Fuel Oxygenates by EPA method 8260	Analysis Request: MTBE only by EPA method 8260	Analysis Request: Dissolved Lead	Other	Comments
7/19/05 Combined 2100		7/19/05	0720	1	ted			X							X							
MW-1		7/19/05	0723	1	ted			X							X							
MW-2		7/19/05	0725	1	ted			X							X							
MW-5		7/19/05	0730	1	ted			X							X							
MW-6		7/19/05	0735	1	ted			X							X							
MW-7		7/19/05	0740	1	ted			X							X							

Relinquished By:	Date:	Time:	Received By:
	7-19-05	1400	
Relinquished By:	Date:	Time:	Received By:
	7/19/05	235	
Relinquished By:	Date:	Time:	Received By:

ICE/t° NO ✓

GOOD CONDITION ____

HEAD SPACE ABSENT ____

DECHLORINATED IN LAB ____

PRESERVATION ✓ APPROPRIATE

CONTAINERS ✓

PERSERVED IN LAB ____

VOAS	O&G	METALS	OTHER

McCampbell Analytical, Inc.
110 Second Avenue South, #D7
Pacheco, CA 94553-5560
(925) 798-1620

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0507277 **ClientID: AEL** **EDF: NO**

Report to:
Peter McIntyre
AEI Consultants
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597
TEL: (925) 283-6000
FAX: (925) 283-6121
ProjectNo: #9482; Vic's Automotive
PO:

Bill to:
Diane
All Environmental, Inc.
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597

Requested TAT: 5 days
Date Received: **07/19/2005**
Date Printed: **07/19/2005**

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0507277-001	7/19/05 Com 2100	Air	7/19/05 7:20:00 AM	☐	A														
0507277-002	MW-1	Air	7/19/05 7:23:00 AM	☐	A														
0507277-003	MW-2	Air	7/19/05 7:25:00 AM	☐	A														
0507277-004	MW-5	Air	7/19/05 7:30:00 AM	☐	A														
0507277-005	MW-6	Air	7/19/05 7:35:00 AM	☐	A														
0507277-006	MW-7	Air	7/19/05 7:40:00 AM	☐	A														

Test Legend:

1	G-MBTEX_AIR	2		3		4		5	
6		7		8		9		10	
11		12		13		14		15	

Prepared by: Maria Venegas

Comments:

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

aei 0501386

McCAMPBELL ANALYTICAL INC.

110 2nd AVENUE SOUTH, #D7
PACHECO, CA 94553-5560
Telephone: (925) 798-1620 Fax: (925) 798-1622

CHAIN OF CUSTODY RECORD

TURN AROUND TIME ☐ RUSH ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ 5 DAY

EDF Required? ☐ Yes ☒ No

Report To: Peter McIntyre **Bill To:** same

Company: AEI Consultants
2500 Camino Diablo, Suite 200
Walnut Creek, CA 94597 **E-Mail:** pmcintyre@aeiconsultants.com

Tele: (925) 944-2899 **Fax:** (925) 944-2895

Project #: 9482 **Project Name:** Vic's Automotine

Project Location: 245 8th Street, Oakland

Sampler Signature:

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING Date	SAMPLING Time	# Containers	Type Containers	MATRIX Water	Soil	Air	Sludge	Other	METHOD PRESERVED Ice	HCl	HNO_3	Other	BTEX & TPH as Gas (602/8020 + 8015)/MTBE	TPH as Diesel (8015)	Total Petroleum Oil & Grease (5520 E&F/B&F)	7 Fuel Oxygenates by EPA method 8260	MTBE only by EPA method 8260	Dissolved Lead	Other	Comments
Combined		7/22/05	1240	1	Tedlar			X							X							
MW-1			1245	1				X							X							
MW-2			1250	1				X							X							
MW-5			1255	1				X							X							
MW-6			1255	1				X							X							
MW-7		↓	1300	1	↓			X							X							

Relinquished By:	Date:	Time:	Received By:
	7/22/05	6:10	
Relinquished By:	Date:	Time:	Received By:
Relinquished By:	Date:	Time:	Received By:

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

McCampbell Analytical, Inc.
110 Second Avenue South, #D7
Pacheco, CA 94553-5560
(925) 798-1620

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0507386 **ClientID: AEL** **EDF: NO**

Report to:
Peter McIntyre
AEI Consultants
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597
TEL: (925) 283-6000
FAX: (925) 283-6121
ProjectNo: #9482; Vic's Automotive
PO:

Bill to:
Diane
All Environmental, Inc.
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597

Requested TAT: 5 days
Date Received: 07/22/2005
Date Printed: 07/22/2005

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)														
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0507386-001	Combined	Air	07/22/2005	☐	A														
0507386-002	MW-1	Air	07/22/2005	☐	A														
0507386-003	MW-2	Air	07/22/2005	☐	A														
0507386-004	MW-5	Air	07/22/2005	☐	A														
0507386-005	MW-6	Air	07/22/2005	☐	A														
0507386-006	MW-7	Air	07/22/2005	☐	A														

Test Legend:

1	G-MBTEX_AIR	2		3		4		5	
6		7		8		9		10	
11		12		13		14		15	

Prepared by: Rosa Venegas

Comments:

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

McCampbell Analytical, Inc.
110 Second Avenue South, #D7
Pacheco, CA 94553-5560
(925) 798-1620

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0507277 **ClientID: AEL** **EDF: NO**

Report to:
Peter McIntyre
AEI Consultants
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597
TEL: (925) 283-6000
FAX: (925) 283-6121
ProjectNo: #9482; Vic's Automotive
PO:

Bill to:
Diane
All Environmental, Inc.
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597

Requested TAT: 5 days
Date Received: **07/19/2005**
Date Printed: **07/19/2005**

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0507277-001	7/19/05 Com 2100	Air	7/19/05 7:20:00 AM	☐	A														
0507277-002	MW-1	Air	7/19/05 7:23:00 AM	☐	A														
0507277-003	MW-2	Air	7/19/05 7:25:00 AM	☐	A														
0507277-004	MW-5	Air	7/19/05 7:30:00 AM	☐	A														
0507277-005	MW-6	Air	7/19/05 7:35:00 AM	☐	A														
0507277-006	MW-7	Air	7/19/05 7:40:00 AM	☐	A														

Test Legend:

1	G-MBTEX_AIR	2		3		4		5	
6		7		8		9		10	
11		12		13		14		15	

Prepared by: Maria Venegas

Comments:

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

aei 0501386

McCAMPBELL ANALYTICAL INC.

110 2nd AVENUE SOUTH, #D7
PACHECO, CA 94553-5560
Telephone: (925) 798-1620 Fax: (925) 798-1622

CHAIN OF CUSTODY RECORD

TURN AROUND TIME ☐ RUSH ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ 5 DAY

EDF Required? ☐ Yes ☒ No

Report To: Peter McIntyre **Bill To:** same

Company: AEI Consultants
2500 Camino Diablo, Suite 200
Walnut Creek, CA 94597 **E-Mail:** pmcintyre@aeiconsultants.com

Tele: (925) 944-2899 **Fax:** (925) 944-2895

Project #: 9482 **Project Name:** Vic's Automotine

Project Location: 245 8th Street, Oakland

Sampler Signature:

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING Date	SAMPLING Time	# Containers	Type Containers	MATRIX Water	Soil	Air	Sludge	Other	METHOD PRESERVED Ice	HCl	HNO_3	Other	BTEX & TPH as Gas (602/8020 + 8015)/MTBE	TPH as Diesel (8015)	Total Petroleum Oil & Grease (5520 E&F/B&F)	7 Fuel Oxygenates by EPA method 8260	MTBE only by EPA method 8260	Dissolved Lead	Other	Comments
Combined		7/22/05	1240	1	Tedlar			X							X							
MW-1			1245	1				X							X							
MW-2			1250	1				X							X							
MW-5			1255	1				X							X							
MW-6			1255	1				X							X							
MW-7		↓	1300	1	↓			X							X							

Relinquished By:	Date:	Time:	Received By:
	7/22/05	6:10	
Relinquished By:	Date:	Time:	Received By:
Relinquished By:	Date:	Time:	Received By:

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

McCampbell Analytical, Inc.
110 Second Avenue South, #D7
Pacheco, CA 94553-5560
(925) 798-1620

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0507386 **ClientID: AEL** **EDF: NO**

Report to:
Peter McIntyre
AEI Consultants
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597
TEL: (925) 283-6000
FAX: (925) 283-6121
ProjectNo: #9482; Vic's Automotive
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All Environmental, Inc.
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597

Requested TAT: 5 days
Date Received: 07/22/2005
Date Printed: 07/22/2005

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)														
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0507386-001	Combined	Air	07/22/2005	☐	A														
0507386-002	MW-1	Air	07/22/2005	☐	A														
0507386-003	MW-2	Air	07/22/2005	☐	A														
0507386-004	MW-5	Air	07/22/2005	☐	A														
0507386-005	MW-6	Air	07/22/2005	☐	A														
0507386-006	MW-7	Air	07/22/2005	☐	A														

Test Legend:

1	G-MBTEX_AIR	2		3		4		5	
6		7		8		9		10	
11		12		13		14		15	

Prepared by: Rosa Venegas

Comments:

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

AEI 05071465

McCAMPBELL ANALYTICAL INC.

110 2nd AVENUE SOUTH, #D7
PACHECO, CA 94553-5560
Telephone: (925) 798-1620 Fax: (925) 798-1622

CHAIN OF CUSTODY RECORD

TURN AROUND TIME ☐ RUSH ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ 5 DAY

EDF Required? ☐ Yes ☒ No

Report To: Peter McIntyre	**Bill To:** same
Company: AEI Consultants	
2500 Camino Diablo, Suite 200	
Walnut Creek, CA 94597	**E-Mail:** pmcintyre@aeiconsultants.com
Tele: (925) 944-2899	**Fax:** (925) 944-2895
Project #: 9482	**Project Name:** Vic's Automotine
Project Location: 245 8th Street, Oakland	
Sampler Signature:	

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING Date	SAMPLING Time	# Containers	Type Containers	MATRIX Water	Soil	Air	Sludge	Other	METHOD PRESERVED Ice	HCl	HNO_3	Other	BTEX & TPH as Gas (602/8020 + 8015)/MTBE	TPH as Diesel (8015)	Total Petroleum Oil & Grease (5520 E&F/B&F)	7 Fuel Oxygenates by EPA method 8260	MTBE only by EPA method 8260	Dissolved Lead	Other	Comments
MW-1 (end)		7/27/05	1125	1	Tedlar			X							X							
MW-2 (end)			1130	1				X							X							
MW-3 (end)			1139	1				X							X							
MW-6 (end)			1140	1				X							X							
MW-7 (end)			1145	1				X							X							
Combined (end)		7/27/05	1120	1				X							X							

Relinquished By:	Date:	Time:	Received By:
[signature]	7/27/05	5:10	[signature]
Relinquished By:	Date:	Time:	Received By:
Relinquished By:	Date:	Time:	Received By:

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

AEI 05071465

McCAMPBELL ANALYTICAL INC.

110 2nd AVENUE SOUTH, #D7
PACHECO, CA 94553-5560
Telephone: (925) 798-1620 Fax: (925) 798-1622

CHAIN OF CUSTODY RECORD

TURN AROUND TIME ☐ RUSH ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ 5 DAY

EDF Required? ☐ Yes ☒ No

Report To: Peter McIntyre	**Bill To:** same
Company: AEI Consultants	
2500 Camino Diablo, Suite 200	
Walnut Creek, CA 94597	**E-Mail:** pmcintyre@aeiconsultants.com
Tele: (925) 944-2899	**Fax:** (925) 944-2895
Project #: 9482	**Project Name:** Vic's Automotine
Project Location: 245 8th Street, Oakland	
Sampler Signature:	

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING Date	SAMPLING Time	# Containers	Type Containers	MATRIX Water	Soil	Air	Sludge	Other	METHOD PRESERVED Ice	HCl	HNO_3	Other	BTEX & TPH as Gas (602/8020 + 8015)/MTBE	TPH as Diesel (8015)	Total Petroleum Oil & Grease (5520 E&F/B&F)	7 Fuel Oxygenates by EPA method 8260	MTBE only by EPA method 8260	Dissolved Lead	Other	Comments
MW-1 (end)		7/27/05	1125	1	Tedlar			X							X							
MW-2 (end)			1130	1				X							X							
MW-3 (end)			1139	1				X							X							
MW-6 (end)			1140	1				X							X							
MW-7 (end)			1145	1				X							X							
Combined (end)		7/27/05	1120	1				X							X							

Relinquished By:	Date:	Time:	Received By:
[signature]	7/27/05	5:10	[signature]
Relinquished By:	Date:	Time:	Received By:
Relinquished By:	Date:	Time:	Received By:

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

McCampbell Analytical, Inc.
110 Second Avenue South, #D7
Pacheco, CA 94553-5560
(925) 798-1620

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0507465 **ClientID: AEL** **EDF: NO**

Report to:
Peter McIntyre
AEI Consultants
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597

TEL: (925) 283-6000
FAX: (925) 283-6121
ProjectNo: #9482; Vic's Automotive
PO:

Bill to:
Diane
All Environmental, Inc.
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597

Requested TAT: 5 days

Date Received: **07/27/2005**
Date Printed: **07/27/2005**

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)														
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0507465-001	MW-1 (END)	Air	7/27/05 11:25:00	☐	A														
0507465-002	MW-2 (END)	Air	7/27/05 11:30:00	☐	A														
0507465-003	MW-5 (END)	Air	7/27/05 11:39:00	☐	A														
0507465-004	MW-6 (END)	Air	7/27/05 11:40:00	☐	A														
0507465-005	MW-7 (END)	Air	7/27/05 11:45:00	☐	A														
0507465-006	Combined (END)	Air	7/27/05 11:20:00	☐	A														

Test Legend:

1	G-MBTEX_AIR	2		3		4		5	
6		7		8		9		10	
11		12		13		14		15	

Prepared by: Rosa Venegas

Comments:

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