CONESTOGA-ROVERS
& ASSOCIATES

RECEIVED

2:48 pm, Oct 05, 2007

Alameda County
Environmental Health

5900 Hollis Street, Suite A, Emeryville, California 94608
Telephone: 510·420·0700 Facsimile: 510·420·9170
www.CRAworld.com

October 4, 2007

Mr. Jerry Wickham, P.G.
Alameda County Environmental Health Care Services
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Re: **Soil Vapor Sampling Report**
Chiu Property
800 Franklin Street, Oakland, California 94607
Fuel Leak Case No. RO0000196
CRA Project No. 581000

Dear Mr. Wickham:

On behalf of Mr. Tommy Chiu, Conestoga-Rovers & Associates, Inc. (CRA) has prepared the following *Soil Vapor Sampling Report* for the above referenced site.

If you would like to discuss this document or the project, please contact Mark Jonas at 510/420-3307.

Sincerely,

Conestoga-Rovers & Associates, Inc.

Mark Jonas, P.G.
Senior Project Manager

Enclosure

cc: Mr. Tommy Chu, P.O. Box 28194, Oakland, California 94606

CONESTOGA-ROVERS
& ASSOCIATES

SOIL VAPOR SAMPLING REPORT
CHIU PROPERTY
800 FRANKLIN STREET
OAKLAND, CALIFORNIA
FUEL LEAK CASE NO. RO0000196

October 4, 2007

Prepared for:

Mr. Tommy Chiu
P.O. Box 28194
Oakland, California 94604

Prepared by:

Conestoga-Rovers & Associates, Inc.
5900 Hollis Street, Suite A
Emeryville, California 94608

CRA Project No. 581000

Conestoga-Rovers & Associates, Inc. (CRA) prepared this document for use by our client and appropriate regulatory agencies. It is based partially on information available to CRA from outside sources and/or in the public domain, and partially on information supplied by CRA and its subcontractors. CRA makes no warranty or guarantee, expressed or implied, included or intended in this document, with respect to the accuracy of information obtained from these outside sources or the public domain, or any conclusions or recommendations based on information that was not independently verified by CRA. This document represents the best professional judgment of CRA. None of the work performed hereunder constitutes or shall be represented as a legal opinion of any kind or nature.

Written by:

Christina McClelland
Staff Geologist

Reviewed By:

Mark Jonas, P.G.
Senior Project Geologist

PROFESSIONAL GEOLOGIST
MARK L. JONAS
No. 6392
STATE OF CALIFORNIA

TABLE OF CONTENTS

TABLE OF CONTENTS[CON'T]

CONESTOGA-ROVERS
& ASSOCIATES

SOIL VAPOR SAMPLING REPORT
Chiu Property
800 Franklin Street, Oakland, California
Fuel Leak Case No. RO0000196

October 4, 2007

1.0 INTRODUCTION

On behalf of Mr. Tommy Chiu, Conestoga-Rovers & Associates, Inc. (CRA) has prepared the following *Soil Vapor Sampling Report* for the site located at 800 Franklin Street in Oakland, California. The site is referenced under Alameda County Environmental Health's (ACEH) Fuel Leak Case No. RO0000196. This document compiles soil gas sampling results presented in the February 23, 2007 *Site Assessment Report*, April 18, 2007 *Site Assessment Report*, and from the latest July 25, 2007 soil vapor sampling event. Regulatory correspondence is presented in Appendix A.

The scope of work includes soil vapor and soil assessment. Following is a brief discussion of the site background, environmental setting, previous studies, sampling procedures and results, a discussion of the results, conclusions, and recommendation.

2.0 SITE BACKGROUND

2.1. Site Description

The site is located in a commercial area at the eastern corner of the intersection of 8th and Franklin Streets in Oakland, California (Figure 1). Its elevation is approximately 35 feet above mean sea level (msl). The site presently has a two story commercial building that occupies the entire lot (Figure 2). Retail stores currently operate on the ground floor: Cathay Chinese Herb's Company, Pacific Seafood Inc., Kim Van Jewelry, and Phoung Jewelry. Commercial offices currently operate on the second floor: Express Tax Service, Trident Financial, Mekong Reality & Mortgage Inc., and Evergreen Travel. The site is bound by commercial properties to the northeast and southeast, 8th Street to the southwest, and Franklin Street to the northwest.

2.2. Historical Background Information

Prior to 1989 the site operated as a gasoline service station. It has been reported that up to five underground storage tanks (USTs) previously existed on site. One of these tanks is said to have been removed prior to 1988 near the vicinity of existing well MW-1. However, no UST removal

documentation has been discovered regarding this UST. The other four USTs were reported to have been installed circa 1970 (MES, 1989a). In 1989, these four USTs were removed.

3.0 ENVIRONMENTAL SETTING

The site is located within the Coast Range geomorphic province of California. In general, the Coast Range province consists of Jurassic eugeosynclinal basement rocks and Cretaceous and Cenozoic sedimentary and volcanic rocks that have been faulted and folded with a northwest-southeast trend. The site lies within the East Bay Plain Subbasin. Sediments beneath the site consist of coalescing alluvial deposits from the Oakland-Berkeley Hills. According to the United States Geologic Survey (USGS) Professional Paper 943, the site is located on quaternary age alluvial deposits consisting of medium-grained, unconsolidated, moderately sorted, and permeable, fine sand, silt, and clayey silt with thin beds of coarse sand.

3.1. Geology

Subsurface soil consists of light brown to yellowish brown sand-silt mixture and a poorly grade sand to approximately 36 ft, the total depth explored. Some sand-clay mixtures were encountered beneath the building from approximately 2 to 6 ft bgs, and 15 to 18 ft bgs northwest of the site in boring MW-6.

Previous investigations for this site and boring logs obtained from Bay Area Rapid Transit District (BART) predominantly identified fine to medium grained sand beneath the site. These sand deposits occasionally have a clay component. Three borings were drilled for BART proximal to the site, to a maximum depth of 70 feet below ground surface (bgs). These boring logs consistently describe a low permeability, hard, silty clay from approximately 40 feet bgs to total depth explored. Appendix C presents the boring logs for soil vapor probe borings VP-1 and VP-2. Previous boring logs are provided in the July 24, 2006 *Work Plan.*

3.2. Hydrogeology

The site is located in the East Bay Plain Subbasin, Groundwater Basin No. 2-9.04 (DWR 2003). The East Bay Plain Subbasin is a northwest trending alluvial basin, bounded on the north by San Pablo Bay, on the east by the contact with Franciscan basement rock, and on the south by the Nile Cone Groundwater Basin. The East Bay Plain Subbasin extends beneath the San Francisco Bay to the west. The East Bay Plain Subbasin aquifer system consists of unconsolidated sediments of Quaternary age. In the project area most rainfall occurs between November and March. The average annual rainfall is approximately 23 inches.

Throughout most of the East Bay Plain in the region of the site, water level contours show that the direction of groundwater flow is east to west, towards San Francisco Bay. Groundwater flow direction typically correlates to topography.

From 1860 to 1930 groundwater from the East Bay Plain was the major water supply of the East Bay, before Sierra water was imported into the area. By the late 1920's the groundwater supply was too small to meet the growing population and the wells often became contaminated by seepage or saltwater intrusion. By 1929, East Bay Municipal Utility District (EBMUD) provided imported water to East Bay communities via the Mokelumne Aqueduct. This high-quality, reliable supply soon eliminated the need for local groundwater wells. In 1996, the Regional Board reviewed General Plans for Oakland and other communities. They found that Oakland and most other cities did not have any plans to develop local groundwater resources for drinking water, due to existing or potential saltwater intrusion, contamination, or poor or limited quality (Regional Board 1999).

A water-bearing zone has been observed beneath the site within the maximum explored depth of 70 feet bgs. This water-bearing zone exists from the apparent water table to approximately 40 feet bgs. Since 1989, the depth to groundwater beneath the site typically fluctuates from approximately 20 to 24 feet bgs. The expected natural groundwater flow direction is towards the Bay to the southwest. However since groundwater monitoring at the site began in 1989 the groundwater flow direction has been predominantly towards the northwest with very little fluctuation. The observed flow direction may be influenced by the BART KBL/KBR Tunnels that run east-west and may be acting as a barrier to groundwater flow. Additionally, nearby groundwater pumping for remediation purposes may also be contributing to the anomalous flow direction.

Groundwater monitoring of site wells was conducted from October 1989 through at least 2000 and then again on a quarterly basis between September 2004 and October 2006. Prior to Cambria becoming the consultant for the subject site (2004), it is known that several documents were prepared but are missing from the client, Cambria, and ACEH's files. Therefore the entire historic monitoring and sampling frequency is currently unknown and some data is likely missing. Free product has been observed from 1/8 to 1/4 inch thickness in well MW-2. As approved by ACEH's letter dated April 7, 2006 groundwater monitoring is performed on a semi-annual schedule during the first and second quarters beginning in 2006.

The nearest surface water bodies to the site are Oakland Inner Harbor located 2,500 feet to the southwest and Lake Merritt approximately 3,000 feet to the east.

4.0 PREVIOUS INVESTIGATIONS

Several phases of soil and groundwater assessments have been conducted at the site since the USTs were removed in 1989. Boring and well locations are presented on Figure 2.

May 1988: Frank Lee & Associates performed a soil and foundation investigation for the subject site. The purpose of this investigation was to determine the strength characteristics of the soil as a basis for making site grading and foundation design recommendations for a proposed three story commercial building. Soil beneath the site was observed to consist of generally moist, medium dense, brown silty fine sand to the total explored depth of 28.5 feet bgs. Tank backfill soil was observed to approximately 15.5 feet bgs in B-3 and to a minimum depth of 6 feet bgs in B-4. Frank Lee & Associates recommended excavating the then existing surficial material "to a minimum depth of 2 feet...and recompacted before placement of engineered fill or construction." Soil samples were collected from 1 to 4 feet bgs for analysis for volatile organic compounds (VOCs); low to medium boiling point hydrocarbons; benzene, toluene, ethylbenzene, xylenes (BTEX); and total oil and grease (TOG). None of these analytes were detected above laboratory detection limits (Frank Lee & Associates, 1988). Soil analytical data is summarized in Table 2. See Appendix B for copies of the boring logs.

August 1988: LW Environmental Services, Inc. performed a soil investigation. Gasoline hydrocarbon concentrations were detected in the vicinity of the then existing USTs (MEC, 1989b).

June 1989: The Robert J. Miller Company removed four USTs: two 6,000 gallon gasoline tanks, one 550 gallon waste oil tank, and one 1,000 gallon solvent tank. The Traverse Group Inc. (TGI) collected soil samples from beneath each tank and visually inspected the condition of each tank upon removal. No obvious pitting or corrosion was reported. The two gasoline USTs were removed from one excavation area in the northern corner of the site. The waste oil and solvent USTs were removed from one excavation area in the sidewalk south of the site, along 8th Street. Approximately 10 cubic yards of soil was deemed contaminated by TGI and stockpiled on site. Soil that TGI determined to be clean or only slightly impacted was stockpiled on site. Soil samples from the excavations and stockpiles were analyzed for total petroleum hydrocarbons (TPH) as gasoline (TPHg), as diesel (TPHd), as waste oil (TPHwo), and BTEX. Additionally, samples from the waste oil and solvent UST's excavation were analyzed for purgeable organics and semi-volatile organic compounds (SVOCs). High levels of fuel hydrocarbon contamination were detected in the northeast corner of the northeastern excavation and in the waste oil/solvent UST's excavation. Trace concentrations (less than 1.0 milligrams per kilogram [mg/kg]) of bis(2-ethylhexyl) phthalate, napthalene, and 2-methyl-napthalene were detected. The bis(2-ethylhexyl) phthalate was thought to be a result of cross contamination at the laboratory. The

napthalene concentrations were assumed to be an additive of the fuels stored on site (MEC, 1989c).

September – October 1989: Miller Environmental Company (MEC) performed a preliminary investigation to determine whether fuel detected in soil during UST excavation activities impacted groundwater. Two excavation pits were re-excavated to approximately 15 feet bgs and approximately 25 cubic yards of additional contaminated soil was removed. Confirmation soil samples were collected from the overexcavation sidewalls and bottoms. The highest levels detected in the northwestern overexcavated pit were 2.3 mg/kg TPHg, 80 mg/kg TPHwo, 0.05 mg/kg toluene, and 0.14 mg/kg xylenes. TPHd, benzene, and ethylbenzene were not detected above laboratory detection limits in samples collected from the northwestern pit. The highest levels detected in the waste oil/solvent overexcavated pit were 10,000 mg/kg TPHg, 250 mg/kg TPHd, 400 mg/kg TPHwo, 50 mg/kg benzene, 210 mg/kg toluene, 54 mg/kg ethylbenzene, and 270 mg/kg xylenes. Further overexcavation in the waste oil/solvent pit was not possible due to the proximity of 8th Street and interfering utilities along the southern edge of this excavation. An estimated 32 cubic yards of contaminated soil was hauled to a Class I disposal facility. The northwestern pit was backfilled with a combination of clean fill and re-used "uncontaminated soil" from the initial excavation of the two gasoline USTs. This re-used fill was intended to be temporary and to be removed when construction took place on the property. The waste oil/solvent pit was backfilled with clean fill. In addition, three monitoring wells (MW-1, MW-2, and MW-3) were installed as part of this investigation. Analytical results from these borings and wells indicated soil and groundwater from boring MW-1 was not impacted by hydrocarbons. Impacted soil was detected in offsite borings MW-2 and MW-3, between 20 to 25 feet bgs. Groundwater was first encountered in all boreholes at approximately 25 feet bgs. The groundwater gradient and flow direction were calculated to be 0.006 feet per foot and to the west-northwest, respectively.

MEC also researched underground fuel leak cases within a ½ mile radius of the site. MEC reported that there were 16 petroleum hydrocarbon fuel leak cases with in this radius and half of these were classified as groundwater problems. Only four of these sites had reported groundwater flow directions. Of these cases groundwater flow directions were reported as towards the north at a Shell Service Station site (461 8th Street), northwest at two sites, and north-northeast at one site. However, later in the same report MEC states that the Shell Service Station, which is the closest in proximity to the site, has a groundwater flow direction to the west, away from the site. Groundwater studies in the area by others were found to be inconsistent. MEC reported that a northeasterly flow direction was observed one block away at the intersection of 9th and Webster, but it was anticipated to return to the "natural westerly flow pattern" when their dewatering pumps were shut off (MEC, 1989c).

Early 1991: Construction of the existing building on site began in early 1991. It is reported that the ACEH concurred with MEC's conclusion that soil excavation in the interior portion of the site was successful in removing all but minor residual hydrocarbon contamination. As a result no objections were raised to construction activities on site. Monitoring well MW-1 was preserved in the construction process and remains accessible (MEC, 1992).

September – October 1991: MEC conducted a subsurface investigation to further define the lateral extent of offsite hydrocarbon contamination. On September 11, 1991, one borehole (B-1) was advanced and soil samples were collected. On October 2 and 3, 1991, three boreholes (B-2, MW-4, and MW-5) were advanced, soil samples were collected, and two monitoring wells were constructed (see Table 1). Groundwater was first encountered in all boreholes at approximately 25 feet bgs. No hydrocarbons were detected in soil samples collected to a depth of 20 feet bgs. However, soil samples from 25 feet bgs in boreholes B-1 and B-2 contained TPHg, Total Recoverable Petroleum Hydrocarbons (TRPH), TPHd range hydrocarbons, and toluene (see Table 2). On October 31, 1992, groundwater was sampled from wells MW-1 through MW-5. Approximately 1/8 inches of floating product was observed in well MW-2. Groundwater analytical results indicated very low to moderate concentrations of TPHg, TPHd, BTEX, and 1,2-dichloroethane (1,2-DCA) in monitoring wells MW-1, MW-2, and MW-3. No TOG was detected above laboratory detection limits in any of the wells. Also detected in well MW-3 were 1,2-dichloropropane at 0.0007 parts per million (ppm) and 1,1,1-trichoroethane (1,1,1-TCE) at 0.0014 ppm. No hydrocarbons were detected in groundwater from off site wells MW-4 and MW-5. However, very low levels of chloroform were detected in off site wells MW-4 and MW-5. See Table 3 for historic groundwater analytical results. The groundwater gradient and flow direction were calculated to be 0.008 feet per foot and to the southwest, respectively (MEC, 1992).

May 1997: On May 15, 1997, Associated Terra Consultants, Inc. (ATC) installed monitoring well MW-6. Soil samples were collected and analyzed. Soil samples had detectable concentrations of TPHd, BTEX, and methyl tertiary butyl ether (MTBE). TPHd was detected in soil at 10 feet bgs. BTEX were detected in soil at 25 feet bgs. MTBE was detected in soil at 30 feet bgs. See Table 2 for soil analytical results. Groundwater was first encountered at approximately 22.5 feet bgs. Boring logs are included in Appendix B. On May 21, 1997 ATC performed groundwater monitoring and sampling activities for all six of the site's monitoring wells.

November 2006: On November 17, 2006, Vironex installed soil vapor probes VP-1 and VP-2, under the supervision of Cambria, in the city sidewalk along Franklin and 8th Streets. Vapor probes VP-1 and VP-2 were constructed using 6-inch long sections of 1-inch diameter, schedule

40 PVC well casing with 0.010 inch screen size. Cambria logged the soil cuttings in each boring. Soil samples were collected dur ing the installation of soil vapor probes VP-1 and VP-2 at approximately 5 feet below ground surface (ft bgs). Soil samples were analyzed for total petroleum hydrocarbons as gasoline (TPHg), diesel (TPHd), and motor oil (TPHmo) by EPA Method 8015C; benzene, toluene, ethylbenzene, and xylenes (BTEX), and methyl tertiary butyl ether (MTBE) by EPA Method 8021B; and 1,2-dichloroethane (1,2-DCA) and chloroform by EPA Method 8260B. Low levels of TPHd and TPHmo concentrations were detected in soil sample VP-1.5.5 at 4.0 and 6.9 milligrams per kilogram (mg/kg), respectively (Table 3). The TPHd result flagged significant oil range compounds. No other compounds were detected above laboratory reporting limits.

December 2006: On December 28, 2006, CRA collected soil vapor samples from probes VP-1 and VP-2. The samples were analyzed, in accordance with the approved July 24, 2006 *Work Plan,* for benzene and tracer compounds isobutene, butane and propane by modified EPA method TO-15. No benzene or tracer compounds were detected.

Groundwater Monitoring: Groundwater monitoring has been performed at the site since October 1989. Groundwater is currently monitored on a semi-annual basis.

5.0 SOIL VAPOR PROBES - INSTALLATION AND SAMPLING PROCEDURES

This section of the report presents preparations and procedures for the installation and sampling of soil vapor probes VP-1 and VP-2. These soil vapor probes were installed on November 17, 2006. They were subsequently sampled December 28, 2006 and July 25, 2007. Work was performed in accordance with the approved July 24, 2006 *Work Plan* and ACEH correspondence dated August 8, 2006, April 3, 2007, and May 4, 2007. Regulatory correspondences are provided in Appendix A.

5.1. Summary of Soil Vapor Probe Installation and Sampling

The objective of the soil vapor characterization is to evaluate the potential risk from vapor intrusion to occupants in the commercial building at the site and those adjacent to the site. The soil vapor probes were installed near wells MW-2 and MW-3, which have historically had high benzene concentrations. The following activities were performed:

- November 17, 2006: Install Soil Vapor Probes VP-1 and VP-2. Sample and analyze soil.
- December 28, 2006: Sample VP-1 and VP-2, analyze for TO-15 GC/MS Benzene.
- July 25, 2007: Sample VP-1 and VP-2, analyze for TO-15 GC/MS Full Volatile Organic Compound (VOC) Target List.

Soil vapor probes were constructed and sampled following the standard operating procedures in Appendix B, based on the Department of Toxic Substances Control's (DTSC) January 28, 2003 *Advisory-Active Soil Gas Investigation* (DTSC *Advisory*). Construction logs for the soil vapor probes are provided in Appendix C. Applicable permits are presented in Appendix D. Soil vapor sampling field data is provided in Appendix E.

5.2. Soil Vapor Probe Installation and Sampling Procedures

Following is information on installation of the soil vapor probes and sampling procedures.

Personnel Present: Installation and sampling were completed by Senior Staff Geologist Celina Hernandez and Christina McClelland, which were overseen by Senior Project Geologist Mark Jonas, a California Professional Geologist No. 6392.

Permits: The Alameda County Public Works Agency (ACPWA) issued the subsurface drilling permit for the soil vapor probes. Also, Cambria obtained an excavation permit on behalf of Vironex to construct the probes in the sidewalk and an obstruction permit to reserve the parking meters from the City of Oakland. Copies of the permits are in Appendix D.

Drilling Company: Vironex (C57 # 705927) of Pacheco, California installed the soil vapor probes using a hand auger.

Vapor Probe Installation Date: On November 17, 2006, Vironex installed soil vapor probes VP-1 and VP-2 in the city sidewalk along Franklin and 8th Streets. Prior to probe installation, boring locations were marked with white paint and underground service alert (USA) was notified a utility survey. An independent utility survey around the probe locations was performed by Cruz Brothers Locators of Scotts Valley, California.

Probe Materials: Vapor probes VP-1 and VP-2 were constructed using 6-inch long sections of 1-inch diameter, schedule 40 PVC well casing with 0.010 inch screen size. These pipe sections were capped on both ends using PVC pipe caps. One cap was drilled and tapped to allow for the installation of a compression fitting. Nylaflow® tubing (¼-inch) was inserted in the compression fitting and the assembly was lowered into the boring to the specified depth (approximately 5 to 5.5 fbg), with the tubing terminating above grade. Sand was added to the borehole around the probes as a filter pack. Granualar bentonite was used as a seal from the top of the filter pack to approximately 1 fbg. A soil vapor probe diagram is presented in the boring logs in Appendix C.

Soil Logging: Each boring was logged, as presented in Appendix C. Soil samples were collected at 5.5 feet below ground surface (bgs). Soil samples are identified as VP-1-5.5 and VP-2-5.5.

Soil Vapor Sampling Events: Soil vapor samples were collected on December 28, 2006 and July 25, 2007. Soil vapor samples are identified as VP-1 and VP-2. Soil vapor sampling and leak testing were performed following Department of Toxic Substances Control's (DTSC) January 28, 2003 *Advisory-Active Soil Gas Investigation* guidelines. Paper towels with shaving cream were place at sample system connections for the leak test.

Purging and sampling were conducted at a rate of approximately 100 milliliters per minute (mL/min). Vapor samples were collected in one liter Summa™ canisters after removing approximately three purge volumes from the screen interval. Each sample was labeled, documented on a chain-of-custody (COC), and submitted to Air Toxics, Ltd. of Folsom, California for analysis. Soil vapor sampling forms are presented in Appendix F.

Soil Vapor Sample Analysis: Each soil vapor probe was sampled and analyzed by EPA Method TO-15 GC/MS for benzene (December 28, 2006 sampling event) and the full VOC target list (July 25, 2007 sampling event). Each sampling event included tracer compounds isobutane, butane and propane for the leak test. Analysis was performed by Air Toxics, Ltd. of Folsom, California. These tracer compounds were identified by EPA method TO-15 as the most abundant compounds of the specific shaving cream analyzed and indicated by distinctive peaks on the petroleum hydrocarbon chromatograph, separate from TPH in the gasoline range.

6.0 SOIL VAPOR SAMPLING RESULTS

No concentrations of benzene or tracer compounds were detected in soil vapor probes VP-1 and VP-2 at a depth of approximately 5 fbg during either sampling event. The only chemicals detected were 2-butanone (Methyl Ethyl Ketone), 2,2,4-Trimethylpentane, Freon 12, Acetone, and Tetrachloroethane. Detections do not exceed Regional Water Quality Control Board – San Francisco Bay Region Environmental Screening Levels (ESLs) for any of the chemicals with an established ESL. Figure 2 presents the locations of probes VP-1 and VP-2. Analytical results are presented in Table 1. Copies of soil vapor sampling forms are presented in Appendix E. Copies of the laboratory analytical reports and COCs are included in Appendix F.

The following Table 6-1 presents onsite soil gas results for both (December 28, 2006 & July 25, 2007) sampling events and ESLs for detected analytes.

Table 6-1
Detected Analytes and Soil Gas Environmental Screening Levels

Analytes	Frequency of Detection December 2006 & July 2007	Maximum 5' Soil Gas (ug/m^3)	Vapor Intrusion 5' Soil Gas Residential[1] (ug/m^3)	Vapor Intrusion 5' Soil Gas Commercial/Industrial[1] (ug/m^3)
Benzene	0/4 (0%)	ND<4.0	85	290
2-butanone (Methyl Ethyl Ketone)	1/2 (50%)	9.6	210,000	590,000
2,2,4-Trimethylpentane	1/2 (50%)	12	Not Established	Not Established
m,p-xylene[2]	0/2 (0%)	ND<5.2	150,000	410,000
1,2,4-trimethylbenzene[2]	0/2 (0%)	ND<5.9	Not Established	Not Established
Freon 12	1/2 (50%)	34	Not Established	Not Established
Acetone	1/2 (50%)	27	660,000	1,800,000
Tetrachloroethene	1/2 (50%)	8.9	410	1,400

notes: ESL = Environmental Screening Level
1 = Table E (RWQCB 2005), ESL, Indoor Air and Soil Gas (Vapor Intrusion Concerns)
2 = Only detected in duplicate sample. See Table 1 for values.

No concentrations of benzene, and the tracer compounds (isobutane, butane and propane) were detected in soil vapor collected from probes VP-1 and VP-2, from a depth of approximately 5 fbg. The only chemicals detected were 2-butanone (Methyl Ethyl Ketone), 2,2,4-Trimethylpentane, Freon 12, Acetone, and Tetrachloroethane. No detected concentrations exceed any ESLs for residential or commercial/industrial soil vapor intrusion.

7.0 SOIL SAMPLING PROCEDURES AND RESULTS

During installation of soil vapor probes VP-1 and VP-2, borehole soil samples were collected and analyzed, as presented in this section. Boring locations are presented on Figure 2. Soil analytical results are presented in Table 2 and a copy of the analytical laboratory report and chain-of-custody are provided in Appendix G.

Soil Sampling Procedure: On November 17, 2006, during the installation of soil vapor probes VP-1 and VP-2, two soil samples were collected at approximately 5 feet below ground surface (ft bgs). A hand auger was used to advance the borings to 5 fbg and a slide hammer was driven into the soil from 5 to 5.5 fbg to collect a soil sample in a six-inch brass sleeve. A composite sample, W-1, was collected for waste disposal purposes.

Soil Analyses and Results: Soil samples collected from borings VP-1 and VP-2 were analyzed for total petroleum hydrocarbons as gasoline (TPHg), diesel (TPHd), and motor oil (TPHmo) by EPA Method 8015C; benzene, toluene, ethylbenzene, and xylenes (BTEX), and methyl tertiary butyl ether (MTBE) by EPA Method 8021B; and 1,2-dichloroethane (1,2-DCA) and chloroform by EPA Method 8260B. Low levels of TPHd and TPHmo concentrations were detected in soil. Specifically, sample VP-1.5.5 had detectable concentrations of TPHd and TPHmo at 4.0 and 6.9 milligrams per kilogram (mg/kg), respectively (Table 2). The TPHd result flagged significant oil range compounds. No other compounds were detected above laboratory reporting limits. Therefore, the results of the 5 foot bgs soil samples, at locations VP-1 and VP-2, shows none to minimal soil impact.

8.0 CONCLUSIONS AND RECOMMENDATIONS

Following are conclusions and recommendations:

8.1. Conclusions

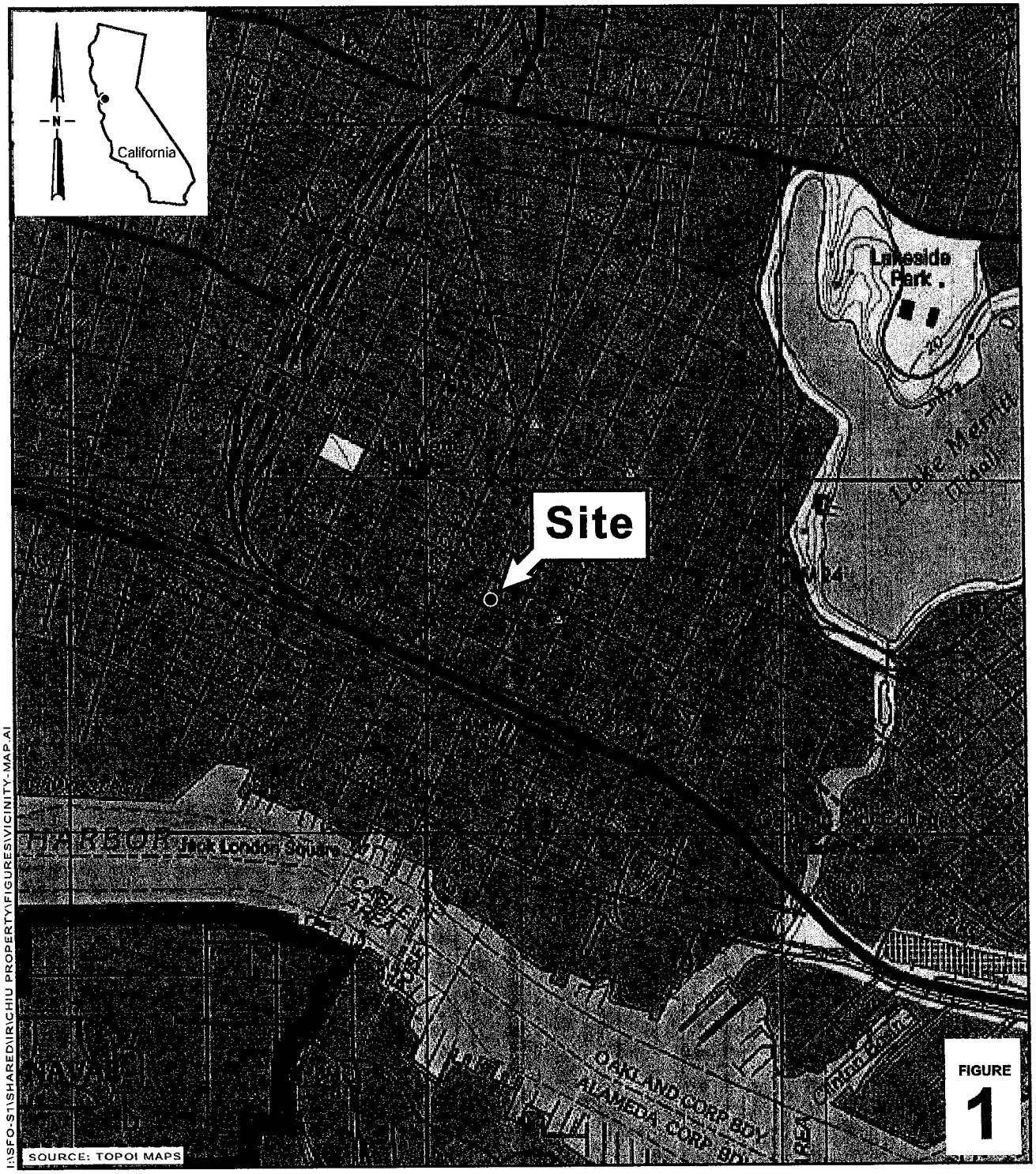
- Based on the soil vapor sampling results, any vapor intrusion is none to de minimis.
- The results of soil samples collected at 5 feet bgs show none to minimal soil impact.

8.2. Recommendation

- Based on the results, no further soil vapor investigation is recommended. CRA recommends abandoning soil vapor probes VP-1 and VP-2.

I:\IR\Chiu - Oakland\Reports\2007 Soil Vapor Sampling Report\Soil Vapor Sampling Report 10-2007 Chiu 589-1000.doc

04/17/07



I:\SFO-S1\SHARED\RICHIU PROPERTY\FIGURES\VICINITY-MAP.AI

FIGURE 1

0 1/8 1/4 1/2 1

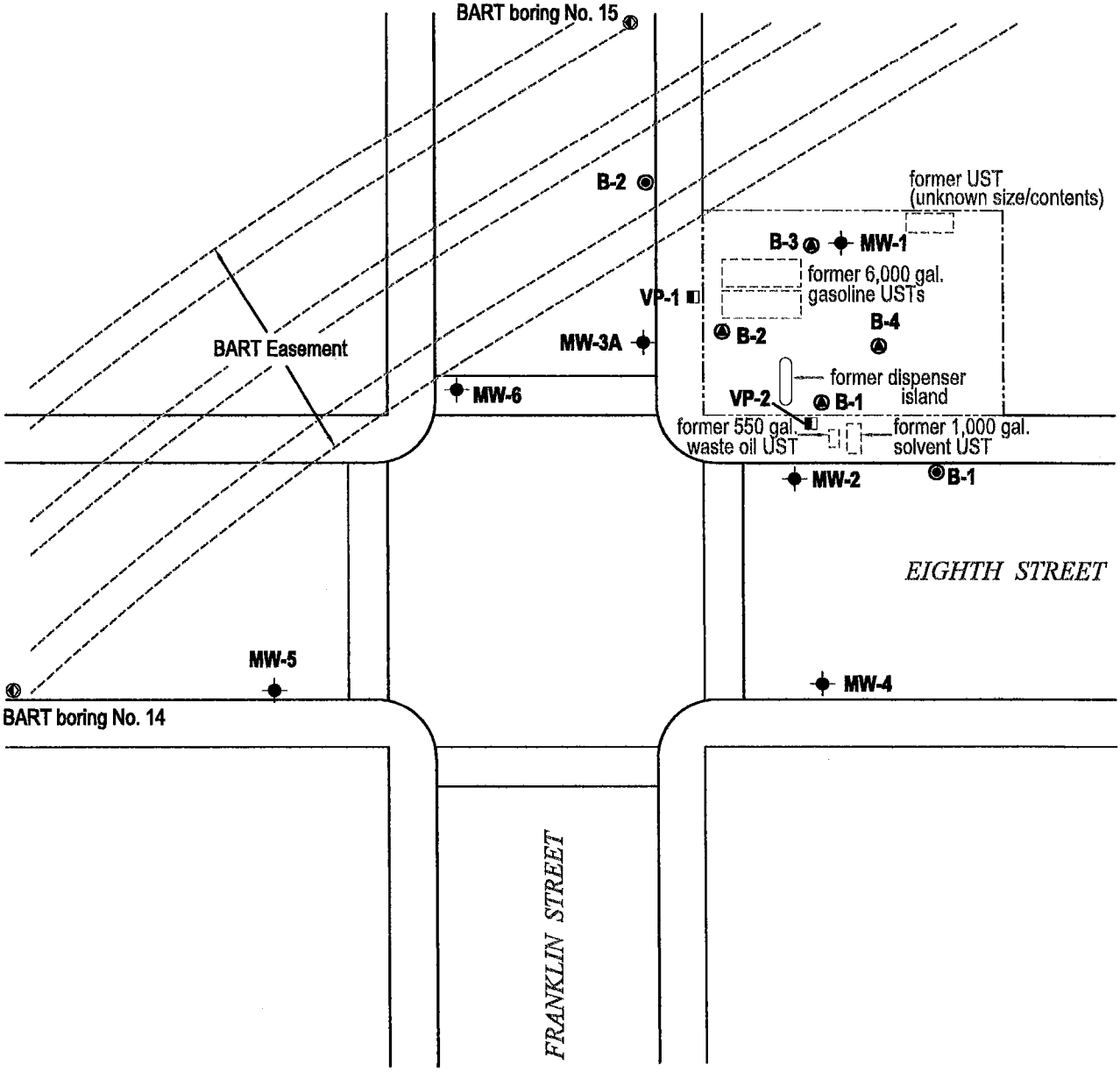
SCALE : 1" = 1/4 MILE

Chiu Property
800 Franklin Street
Oakland, California

CONESTOGA-ROVERS & ASSOCIATES

Vicinity Map

04/17/07



EXPLANATION

MW-1	Monitoring well location
B-1	Soil boring location (Frank Lee & Assoc., 1988)
B-1	Soil boring location (Miller Environmental Co., 1991)
	Approximate BART soil boring location (BART 1963)
VP-1	Soil Vapor probe (Cambria, 2006)

N

0 20 40

Scale (ft)

FIGURE

2

I:\SFO-S1\SHARED\RICHIU PROPERTY\FIGURES\CHIU-SITEPLAN.DWG

Chiu Property

800 Franklin Street

Oakland, California

CONESTOGA-ROVERS & ASSOCIATES

Site Plan

CONESTOGA-ROVERS & ASSOCIATES

Table 1. Soil Vapor Analytical Data - Chiu Property, 800 Franklin Street, Oakland, California

Sample ID	Date Sampled	Depth (ft)	Benzene	2-butanone (Methyl Ethyl Ketone)	2,2,4-Trimethylpentane	m,p-xylene	1,2,4-trimethylbenzene	Freon 12	Acetone	Tetrachloroethene	Isobutane	Butane	Propane
			uG/m^3										
VP-1	11/17/2006	5	ND<3.9	--	--	--	--	--	--	--	ND	ND	ND
	7/25/2007	5	ND<3.9	9.6	12	ND<5.2	ND<5.9	ND<6.0	ND<11	ND<8.2	ND	ND	ND
VP-2	11/17/2006	5	ND<4.0	--	--	--	--	--	--	--	ND	ND	ND
	7/25/2007	5	ND<3.6	ND<3.4	ND<5.3	ND<5.0	ND<5.6	34	27	8.9	ND	ND	ND
Duplicate Samples													
VP-1-Dup	11/17/2006	5	ND<4.0	--	--	--	--	--	--	--	ND	ND	ND
VP-2-Duplicate	11/17/2006	5	ND<4.0	--	--	--	--	--	--	--	ND	ND	ND
SV-1-Dup	7/25/2007	5	ND<4.0	ND<3.7	ND<5.9	6	7.7	ND<6.2	ND<12	--	ND	ND	ND

Abbreviations and Analyses:

ND<n = Not dectected (ND) above laboratory detection limit, n.

ft = Measured in feet

uG/m^3 = Microgram per cubic meter.

Benzene, isobutane, butane and propane by modified EPA Method TO-15 (7/25/2007 event analyzed the TO-15 full scan)

Conestoga-Rovers & Associates, Inc.

Table 2. Soil Analytical Data - Chiu Property, 800 Franklin Street, Oakland, California

Sample ID	Date Sampled	Depth (ft)	TPHg (mg/kg)	TPHd (mg/kg)	TPHwo (mg/kg)	TPHmo (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	MTBE (mg/kg)	SVOCs (mg/kg)	VOCs (mg/kg)	Total Oil & Grease (mg/kg)	TRPH	Total Lead (mg/kg)
Soil and Foundation Investigation by Frank Lee & Associates - Soil Borings																
B-1-3	5/3/1988	3	-	-	-	-	ND<0.1	ND<0.1	ND<0.1	ND<0.1	-	-	ND	ND<30	ND<30	-
B-2-1	5/3/1988	1	ND<1.0 *	-	-	-	ND<0.05	ND<0.1	-	ND<0.1	-	-	ND	-	-	-
B-3-4	5/3/1988	4	ND<1.0 *	-	-	-	ND<0.05	ND<0.1	-	ND<0.1	-	-	ND	-	-	-
UST Removal by Robert J. Miller Company																
UST Excavation Compliance Samples - Collected by The Traverse Group, Inc.																
T1 - Gasoline Tank	June-89	-	ND<1.0	ND<6.3	ND<30	--	0.011	0.0036	ND<0.0025	0.006	-	(1)	ND	-	-	-
T2 - Gasoline Tank	June-89	-	5.0	ND<6.7	30	--	0.050	0.044	0.0036	0.023	-	(2)	ND	-	-	-
T3 - Gasoline Tank	June-89	-	ND<1.0	ND<7.0	ND<30	--	0.0046	ND<0.0025	ND<0.0025	ND<0.0025	-	(3)	ND	-	-	-
T4 - Gasoline Tank	June-89	-	3,100	420	1,350	--	7.5	87	59	290	-	(4)	ND	-	-	-
W1 - Waste Oil Tank	June-89	-	270	430	4,000	--	ND<5.0	ND<5.0	ND<5.0	14	-	(5)	ND	-	-	-
W2A - Waste Oil Tank	June-89	-	2,300	170	50	--	ND<2.5	3	ND<2.5	12	-	(6)	ND	-	-	-
S1 - Solvent Tank	June-89	-	1.8	ND<6.0	ND<30	--	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	-	(7)	ND	-	-	-
S2 - Solvent Tank	June-89	-	62	106	ND<30	--	ND<1.0	ND<1.0	ND<1.0	ND<1.0	-	(8)	ND	-	-	-
SP1 - Spoils Pile "Contaminated"	June-89	-	184	240	900	--	ND<5.0	17	19	110	-	(9)	ND	-	-	-
SP2 - Spoils Pile "Clean"	June-89	-	ND<1.0	ND<6.7	ND<30	--	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	-	ND	ND	-	-	-
SP3 - Spoils Pile "Clean"	June-89	-	120	40	150	--	ND<1.0	ND<1.0	ND<1.0	2.1	-	(10)	ND	-	-	-
Subsurface Investigation by Miller Environmental Company																
Over-Excavation Confirmation Samples																
EX1-A (fuel tank)	9/7/1989	15	ND	ND	ND	--	ND	ND	ND	ND	-	-	-	-	-	-
EX1-B (fuel tank)	9/7/1989	15	ND	ND	40	--	ND	ND	ND	ND	-	-	-	-	-	-
EX1-C (fuel tank)	9/7/1989	15	2.3	ND	80	--	ND	0.05	0.14	ND	-	-	-	-	-	-
EX2-A (waste oil and solvent tanks)	9/7/1989	15	10,000	250	400	--	50	210	270	54	-	-	-	-	-	-
EX2-B (waste oil and solvent tanks)	9/7/1989	15	4.1	ND	ND	--	ND	ND	0.15	ND	-	-	-	-	-	-
Well Installation Soil Samples																
MW1-A	9/12-13/1989	6	ND	23	--	30	ND	ND	ND	ND	-	-	-	30	-	-
MW1-B	9/12-13/1989	11	ND	ND	--	ND	ND	ND	ND	ND	-	-	-	ND	-	-
MW1-C	9/12-13/1989	16	ND	ND	--	ND	ND	ND	ND	ND	-	-	-	ND	-	-
MW1-D	9/12-13/1989	21	52	ND	--	ND	0.12	0.7	0.53	4.5	-	-	-	ND	-	-
MW1-E	9/12-13/1989	26	ND	ND	--	ND	ND	ND	ND	ND	-	-	-	ND	-	-
					--											
MW2-A	9/12-13/1989	6	ND	ND	--	ND	ND	ND	ND	ND	-	-	-	--	-	-
MW2-B	9/12-13/1989	11	ND	ND	--	ND	ND	ND	ND	ND	-	-	-	--	-	-
MW2-C	9/12-13/1989	16	ND	ND	--	ND	ND	ND	ND	ND	-	-	-	--	-	-
MW2-D	9/12-13/1989	21	1,900	110	--	50	7.4	51	24	180	-	-	-	50	-	-
MW2-E	9/12-13/1989	26	7,800	170	--	30	52	220	77	400	-	-	-	30	-	-
					--											
MW3-A	9/12-13/1989	6	ND	ND	--	ND	ND	ND	ND	ND	-	-	-	ND	-	-
MW3-B	9/12-13/1989	11	ND	25	--	ND	ND	ND	ND	ND	-	-	-	ND	-	-
MW3-C	9/12-13/1989	16	ND	ND	--	ND	ND	ND	ND	0.07	-	-	-	ND	-	-
MW3-D	9/12-13/1989	21	2,200	160	--	40	7.5	42.3	16	180	-	-	-	40	-	-

Table 2. Soil Analytical Data - Chiu Property, 800 Franklin Street, Oakland, California

Sample ID	Date Sampled	Depth (ft)	TPHg (mg/kg)	TPHd (mg/kg)	TPHwo (mg/kg)	TPHmo (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	MTBE (mg/kg)	SVOCs (mg/kg)	VOCs (mg/kg)	Total Oil & Grease (mg/kg)	TRPH	Total Lead (mg/kg)
MW3-E	9/12-13/1989	26	24	ND	--	ND	0.6	1.1	0.17	1.4	-	-	-	ND	-	-
Additional Subsurface Investigation by Miller Environmental Company																
B1-5	9/11/1991	5	ND<0.20	ND<5.0	-	-	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	-	-	-	ND	ND<20	-
B1-10	9/11/1991	10	ND<0.20	ND<5.0	-	-	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	-	-	-	ND	ND<20	-
B1-15	9/11/1991	15	ND<0.20	ND<5.0	-	-	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	-	-	-	ND	ND<20	-
B1-20	9/11/1991	20	ND<0.20	ND<5.0	-	-	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	-	-	-	ND	ND<20	-
B1-25	9/11/1991	25	2,900	160	-	-	ND<25	60	ND<25	ND<25	-	-	-	ND	190	-
B2-5	10/2/1991	5	ND<1	ND<1	-	ND<10	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	-	-	-	ND<50	-	-
B2-10	10/2/1991	10	ND<1	ND<1	-	ND<10	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	-	-	-	ND<50	-	-
B2-15	10/2/1991	15	ND<1	ND<1	-	ND<10	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	-	-	-	ND<50	-	-
B2-20	10/2/1991	20	ND<1	ND<1	-	ND<10	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	-	-	-	ND<50	-	-
B2-25	10/2/1991	25	120	83	-	ND<10	ND<0.0025	0.310	0.210	0.600	-	-	-	ND<50	-	-
MW4-5	10/2/1991	5	ND<1	ND<1	-	ND<10	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	-	-	-	ND<50	-	-
MW4-10	10/2/1991	10	ND<1	ND<1	-	ND<10	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	-	-	-	ND<50	-	-
MW4-15	10/2/1991	15	ND<1	ND<1	-	ND<10	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	-	-	-	ND<50	-	-
MW4-20	10/2/1991	20	ND<1	ND<1	-	ND<10	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	-	-	-	ND<50	-	-
MW4-25	10/2/1991	25	ND<1	ND<1	-	ND<10	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	-	-	-	ND<50	-	-
MW5-5	10/3/1991	5	ND<1	ND<1	-	ND<10	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	-	-	-	ND<50	-	-
MW5-10	10/3/1991	10	ND<1	ND<1	-	ND<10	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	-	-	-	ND<50	-	-
MW5-15	10/3/1991	15	ND<1	ND<1	-	ND<10	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	-	-	-	ND<50	-	-
MW5-20	10/3/1991	20	ND<1	ND<1	-	ND<10	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	-	-	-	ND<50	-	-
MW5-25	10/3/1991	25	ND<1	ND<1	-	ND<10	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	-	-	-	ND<50	-	-
Additional Subsurface Investigation by Associated Terra Consultants, Inc.																
B6-1 (MW-6)	5/15/1997	5	ND<1.0	ND<1.0	-	-	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	-	-	ND<50	-	-
B6-2 (MW-6)	5/15/1997	10	ND<1.0	9.1	-	-	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	-	-	ND<50	-	-
B6-3B (MW-6)	5/15/1997	15	ND<1.0	ND<1.0	-	-	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	-	-	ND<50	-	-
B6-4B (MW-6)	5/15/1997	20	ND<1.0	ND<1.0	-	-	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	-	-	ND<50	-	-
B6-5B (MW-6)	5/15/1997	25	ND<1.0	ND<1.0	-	-	0.050	0.011	0.023	0.099	ND<0.0050	-	-	ND<50	-	-
B6-6B (MW-6)	5/15/1997	30	ND<1.0	ND<1.0	-	-	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	0.0050	-	-	ND<50	-	-
B6-11 (MW-6)	5/15/1997	35	ND<1.0	ND<1.0	-	-	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	-	-	ND<50	-	-
Soil Vapor Borings by Cambria																
VP-1.5.5	11/17/2006	5.5	ND<1.0	4.0	--	6.9	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05	-	chloroform & 1,2-DCA: ND<0.005	--	-	35
VP-2-5.5	11/17/2006	5.5	ND<1.0	ND<1.0	--	ND<5.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05	-	chloroform & 1,2-DCA: ND<0.005	--	-	-

Conestoga-Rovers & Associates, Inc.

Table 2. Soil Analytical Data - Chiu Property, 800 Franklin Street, Oakland, California

Sample ID	Date Sampled	Depth (ft)	TPHg (mg/kg)	TPHd (mg/kg)	TPHwo (mg/kg)	TPHmo (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	MTBE (mg/kg)	SVOCs (mg/kg)	VOCs (mg/kg)	Total Oil & Grease (mg/kg)	TRPH	Total Lead (mg/kg)

Abbreviations and Analyses:

ND<0.5 = Not Detected (ND) above laboratory detection limit.

ft = Measured in feet

TPHg = Total petroleum hydrocarbons as gasoline by modified EPA Method 8015

TPHd = Total petroleum hydrocarbons as diesel by modified EPA Method 8015

TPHwo = Total petroleum hydrocarbons as waste oil by modified EPA Method 418.1/3550/SM503

TPHmo = Total petroleum hydrocarbons as motor boil by modified EPA Method 8015

Benzene, ethylbenzene, toluene and xylenes (BTEX) and methyl tertiary butyl ether (MTBE) by EPA Method 8020 or 8021B

SVOCs = Semi-volatile organics by EPA Method 8270.

VOCs = Volatile organics by EPA Method 8240.

TRPH = Total Recoverable Petroleum Hydrocarbons by EPA Method 418.1

Total Lead by EPA Method 7420

mg/kg = Milligrams per kilogram

- = Not sampled, not analyzed, or not applicable

* = Analyzed for "low to medium boiling point hydrocarbons" by EPA Method 8015.

(1) = 0.20 mg/kg bis (2-ethylhexyl) phthalate. Other SVOCs were ND.

(2) = 0.24 mg/kg bis (2-ethylhexyl) phthalate. Other SVOCs were ND.

(3) = 0.42 mg/kg bis (2-ethylhexyl) phthalate. Other SVOCs were ND.

(4) = 28 mg/kg naphthalene; 23 mg/kg 2-methyl-naphthalene. Other SVOCs were ND.

(5) = 0.37 mg/kg bis (2-ethylhexyl) phthalate. Other SVOCs were ND.

(6) = 6.4 mg/kg naphthalene; 4.1 mg/kg 2-methyl-naphthalene. Other SVOCs were ND.

(7) = 0.50 mg/kg bis (2-ethylhexyl) phthalate. Other SVOCs were ND.

(7) = 0.50 mg/kg bis (2-ethylhexyl) phthalate. Other SVOCs were ND.

(8) = 2.4 mg/kg naphthalene; 1.9 mg/kg 2-methyl-naphthalene. Other SVOCs were ND.

(9) = 27 mg/kg naphthalene; 13 mg/kg 2-methyl-naphthalene. Other SVOCs were ND.

(10) = 1.6 mg/kg naphthalene; 2.0 mg/kg 2-methyl-naphthalene. Other SVOCs were ND.

WO1 sampled on 1/17/1991 was also analyzed for Total Petroleum Fuel Hydrocarbons by EPA Method 8015 (ND<1.0 mg/kg).

WO1 sampled on 1/17/1991 was also analyzed for Halogenated Volatile Organics by EPA Method 8010 (all analytes were ND).

WO1 sampled on 1/17/1991 was also analyzed for Semi-Volatile Organics by EPA Method 8270. The following analytes were detected: benzo(a)pyrene at 0.10 mg/kg, fluoranthene at 0.11 mg/kg, and pyrene at 0.15 mg/kg (all other analytes were ND).

CONESTOGA-ROVERS
& ASSOCIATES

APPENDIX A

Agency Correspondence

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

Copy

ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

RECEIVED
MAY - 8 2007

May 4, 2007

Mr. Tommy Chiu
P.O. Box 28194
Oakland, CA 94606

Subject: Fuel Leak Case No. RO0000196 and Geotracker Global ID T0600100050, Bill Louie's Auto Service, 800 Franklin Street, Oakland, CA 94607

Dear Mr. Chiu:

Alameda County Environmental Health (ACEH) staff has reviewed the fuel leak case file for the above-referenced site including the recently submitted document entitled, "Site Assessment Report - Addendum," dated April 18, 2007, prepared on your behalf by Conestoga-Rovers & Associates. The "Site Assessment Report – Addendum," presents soil analytical results from soil samples collected in soil vapor probe borings VP-1 and VP-2. These soil analytical results were omitted from the previous February 23, 2007 report. The "Site Assessment Report - Addendum," also includes correspondence entitled, "Response to April 3, 2007 ACEH Comment Letter," dated April 12, 2007.

We request that you address the following technical comments, perform the proposed work, and send us the technical reports requested below.

TECHNICAL COMMENTS

1. **Soil Samples.** Soil analytical results for soil vapor probes are presented in the "Site Assessment Report - Addendum," dated April 18, 2007. No additional soil sampling is requested from soil vapor probes VP-1 and VP-2.

2. **Volatile Organic Compounds.** The lack of analytical data for chlorinated solvents remains a data gap. A solvent tank, waste oil tank, and UST with unknown contents were present at the site. Analysis of soil gas samples only for benzene is not sufficient to evaluate potential vapor intrusion from solvents. Photoionization detector measurements and analysis of soil samples for chloroform and 1,2-dichloroethene are also not sufficient to assess the potential for vapor intrusion from chlorinated solvents. Therefore, the collection and analysis of soil vapor samples for a full target list of VOCs that includes BTEX and chlorinated solvents using Method TO-15 is required. Conestoga-Rovers has previously requested that collection of soil vapor samples at two locations inside the building be deferred pending the results of soil vapor sampling at two locations outside the building. We have no objection to a phased approach but the first phase of soil vapor sampling must provide sufficient data to evaluate potential vapor intrusion issues. Please present the results in the Soil Vapor Sampling Report requested below along with recommendations for installation of the second phase of soil vapor probes inside the building.

3. **Groundwater Monitoring.** For clarification, future groundwater samples are to be analyzed for TPH as diesel and motor oil by EPA Method 8015. The groundwater samples are also to be analyzed for TPH as gasoline and the full target VOC list using EPA Method 8260B. Groundwater monitoring is to be conducted in all existing wells on a semi-annual basis.

TECHNICAL REPORT REQUEST

Please submit technical reports to Alameda County Environmental Health (Attention: Mr. Jerry Wickham), according to the following schedule:

- **July 18, 2007** – Soil Vapor Sampling Report
- **November 15, 2007** – Semi-Annual Monitoring Report for the Third Quarter 2007

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

ELECTRONIC SUBMITTAL OF REPORTS

The Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of all reports in electronic form to the county's ftp site. Paper copies of reports will no longer be accepted. The electronic copy replaces the paper copy and will be used for all public information requests, regulatory review, and compliance/enforcement activities. Instructions for submission of electronic documents to the Alameda County Environmental Cleanup Oversight Program ftp site are provided on the attached "Electronic Report Upload (ftp) Instructions." Please do not submit reports as attachments to electronic mail.

Submission of reports to the Alameda County ftp site is an addition to existing requirements for electronic submittal of information to the State Water Resources Control Board (SWRCB) Geotracker website. Submission of reports to the Geotracker website does not fulfill the requirement to submit documents to the Alameda County ftp site. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for groundwater cleanup programs. For several years, responsible parties for cleanup of leaks from underground storage tanks (USTs) have been required to submit groundwater analytical data, surveyed locations of monitor wells, and other data to the Geotracker database over the Internet. Beginning July 1, 2005, electronic submittal of a complete copy of all necessary reports was required in Geotracker (in PDF format). Please visit the SWRCB website for more information on these requirements (http://www.swrcb.ca.gov/ust/cleanup/electronic_reporting).

PERJURY STATEMENT

All work plans, technical reports, or technical documents submitted to ACEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge." This letter must be signed by an officer or legally authorized representative of your company. Please include a cover

letter satisfying these requirements with all future reports and technical documents submitted for this fuel leak case.

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

The California Business and Professions Code (Sections 6735, 6835, and 7835.1) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately registered or certified professional. For your submittal to be considered a valid technical report, you are to present site specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature, and statement of professional certification. Please ensure all that all technical reports submitted for this fuel leak case meet this requirement.

UNDERGROUND STORAGE TANK CLEANUP FUND

Please note that delays in investigation, later reports, or enforcement actions may result in your becoming ineligible to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse you for the cost of cleanup.

AGENCY OVERSIGHT

If it appears as though significant delays are occurring or reports are not submitted as requested, we will consider referring your case to the Regional Board or other appropriate agency, including the County District Attorney, for possible enforcement actions. California Health and Safety Code, Section 25299.76 authorizes enforcement including administrative action or monetary penalties of up to $10,000 per day for each day of violation.

If you have any questions, please call me at (510) 567-6791.

Sincerely,

Jerry Wickham

Jerry Wickham, P.G.
Hazardous Materials Specialist

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

cc: Celina, Hernandez, Conestoga-Rovers & Associates, 5900 Hollis Street, Suite A, Emeryville, CA 94608

Mark Jonas, Conestoga-Rovers & Associates, 5900 Hollis Street, Suite A, Emeryville, CA 94608

Donna Drogos, ACEH
Jerry Wickham, ACEH
File

CONESTOGA-ROVERS
& ASSOCIATES

5900 Hollis Street, Suite A, Emeryville, California 94608
Telephone: 510-420-0700 Facsimile: 510-420-9170
www.CRAworld.com

April 12, 2007

Mr. Jerry Wickham, P.G.
Alameda County Environmental Health Care Services
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

FILE COPY

Re: **Response to April 3, 2007 ACEH Comment Letter**
Chiu Property
800 Franklin Street, Oakland, California 94607
Fuel Leak Case No. RO0000196
CRA Project No. 581000

Dear Mr. Wickham:

This letter is in response to Alameda County Environmental Health's (ACEH) April 3, 2007 letter (Attachment A) commenting on Cambria's February 23, 2007 *Site Assessment Report.* On April 2, 2007, Cambria Environmental Technology, Inc. (Cambria) was acquired by Conestoga Rovers & Associates, Inc (CRA). Therefore, CRA prepared this response letter for the site referenced on behalf of our client, Mr. Tommy Chiu.

RESPONSE TO ACEH'S APRIL 3, 2007 LETTER

ACEH reviewed Cambria's February 23, 2007 *Site Assessment Report* and made technical comments in their April 3, 2007 letter. ACEH addressed four issues and CRA's response is below:

Soil Samples: On November 17, 2006, two soil samples, VP-1 and VP-2, were collected at 5 feet below ground surface (ft bgs) and analyzed for total petroleum hydrocarbons as gasoline (TPHg), diesel (TPHd), and motor oil (TPHmo) by EPA Method 8015Cm; benzene, toluene, ethylbenzene, and xylenes (BTEX), and methyl tertiary butyl ether (MTBE) by EPA Method 8021B; and 1,2-dichloroehtane (1,2-DCA) and chloroform by EPA Method 8260B. CRA will present these results under a separate cover in a *Site Assessment Report-Addendum.*

Volatile Organic Compounds (VOCs): In the July 24, 2006 *Response to Agency Comments and Work Plan,* Cambria responsed to ACEH's April 7, 2006 letter (Attachment A) regarding VOC analysis. Cambria listed potential contaminants of concern (COCs) as TPHg, TPHd, TPHmo, BTEX, MTBE, 1,2-DCA and chloroform. Cambria then stated that future samples should be analyzed for these constituents, specifically for soil and groundwater. This rececommendation did not include the full suite of VOCs. In the July 24, 2006 Work Plan, Cambria stated "*The soil vapor samples will be analyzed for benzene using EPA Method 8260, TO-15, or TO-14A.*" ACEH approved this approach in the August 8, 2006 letter (Attachment A). Therefore, soil vapor sampling and analysis was completed as proposed and approved.

Please reconsider the need to drill another set of borings to collect and analyze soil vapor for a suite of VOCs. Photoionization detector (PID) measurements collected at 2 and 5 ft bgs, from VP-1 and VP-2, were all non-detect and benzene was not detected in both soil vapor samples. Based on these results, we do not consider it necessary to collected any additional soil vapor samples.

Soil Boring Log for MW-3A: Well MW-3A, replacing well MW-3, was installed on February 8, 2007. Cambria logged the lithology in the boring for MW-3A based on the soil cuttings encountered while drilling. Soil cuttings were screened using a PID. Our project file for thesite did not include the original boring and well construction log for well MW-3. MW-3 was originally installed in 1989 by Miller Environmental Company. Cambria produced a well destruction log for MW-3, assuming that litology in boring MW-3 is similar to boring MW-3A, since they are located within a few feet of each other.

Groundwater Monitoring: In the ACEH April 3, 2007 letter, ACEH requested that "*groundwater samples are to be analyzed for TPH as gasoline, diesel, and motor oil by EPA Method 8015 and BTEX, MTBE, and chlorinated solvents by EPA Method 8260B.*" Groundwater samples have typically been analyzed for TPHg, BTEX, and MTBE using EPA Methods 8015C/8021B; TPHd and TPHmo with EPA Method 8015C with silica gel cleanup; and 1,2-DCE and chloroform by EPA Method 8260B. Several issues: 1) First quarter 2007 (first half 2007) groundwater samples were already collected on March 8, 2007. Samples were analyzed for the typical list of analytes and methods presented above. So, the First Half 2007 Groundwater Monitoring Report will present the result for our typical list analytes and methods. 2) We typically analyze BETX and MTBE using 8021B rather than 8260B. In the future, would you like us to present BTEX and MTBE using Method 8260B? 3) We currently analyze chlorinated solvents 1,2-DCE and chloroform, based on the list of potential COCs for the site. In the future, do you want us to analyze groundwater for the complete VOC list, using method 8260B?

CLOSING

Thank you for your time and consideration of these issues. We look forward to your response. Currently we are on-hold for any additional soil vapor characterization pending you review and response to this correspondence. As always, it is a pleasure working with you and if you have any questions or comments regarding this letter, please call Celina Hernandez at 510/420-3313 or Mark Jonas at 510/420-3307.

Sincerely,
Conestoga-Rovers & Associates, Inc.

Celina Hernandez
Senior Staff Geologist

Mark Jonas, P.G.
Senior Project Manager

Attachments: A – Regulatory Correspondence

cc: Mr. Tommy Chiu, P.O. Box 28194, Oakland, California 94606

\\Sfo-s1\shared\IR\Chiu - Oakland\Correspondence\2007\Letter 4-12-07 Response to ACEH Comments Chiu 581000.doc

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510).567-6700
FAX (510) 337-9335

April 3, 2007

APR - 5 2007

Mr. Tommy Chiu
P.O. Box 28194
Oakland, CA 94606

Subject: Fuel Leak Case No. RO0000196 and Geotracker Global ID T0600100050, Bill Louie's Auto Service, 800 Franklin Street, Oakland, CA 94607

Dear Mr. Chiu:

Alameda County Environmental Health (ACEH) staff has reviewed the fuel leak case file for the above-referenced site and the recently submitted report entitled, "Site Assessment Report," dated February 23, 2007, prepared on your behalf by Cambria Environmental Technology, Inc. The "Site Assessment Report," presents results from the installation and sampling of two soil vapor probes and rebuilding of monitoring well MW-3. Two soil vapor probes were installed outside the building at 800 Franklin Street on November 17, 2006. Benzene and tracer compounds were not detected in soil vapor samples collected from the two probes. Two additional proposed soil vapor probes were to be installed inside the building; however, installation of the probes inside the building was deferred until a later phase of investigation based on a recommendation by Cambria Environmental Technology, Inc. The "Site Assessment Report," dated February 23, 2007 recommends no further soil vapor investigation. However, the data collected to date are not sufficient to support this recommendation. Therefore, as discussed in the technical comments below, we request that you conduct additional soil vapor sampling and groundwater monitoring.

We request that you address the following technical comments, perform the proposed work, and send us the technical reports requested below.

TECHNICAL COMMENTS

1. **Soil Samples.** Soil samples were to have been collected for laboratory analysis from each of the soil vapor probe borings but do not appear to have been analyzed. As proposed in the document entitled, "Response to Agency Comments and Work Plan," dated July 24, 2006, soil samples were to have been collected from 5 feet bgs in each soil vapor probe boring. The purpose of the soil samples was to provide sampling results adjacent to the former UST excavations. Proposed analyses for the soil samples included TPHg, TPHd, TPHmo, BTEX, MTBE, 1,2-DCA, and chloroform. In reviewing the soil boring logs for VP-1 and VP-2, it appears that soil samples may have been collected from approximately 5 feet bgs in the borings but no analytical results are presented. Please collect and analyze soil samples from approximately 5 feet bgs at these locations or describe the rationale for not analyzing these soil samples in the Soil Vapor Sampling Report requested below.

2. **Volatile Organic Compounds.** Solvents were used and stored in USTs on the site. As previously discussed in our correspondence dated April 7, 2006, the lack of analytical data for volatile organic compounds (VOCs) is a data gap for the site. No VOCs other than benzene were analyzed in the soil vapor samples collected on November 17, 2006. Therefore, we request that you sample the soil vapor probes a second time and analyze the soil vapor samples for a full target list of VOCs that includes BTEX and chlorinated solvents using Method TO-15. Please present the results in the Soil Vapor Sampling Report requested below along with recommendations for installation of the second phase of soil vapor probes inside the building.

3. **Soil Boring Log for Well MW-3A.** A notation on the soil boring log for well MW-3 states, "Soil lithology based on soil cuttings from MW-3A and other soil boring logs." Please clarify the source of the information on the MW-3 soil boring log. The purpose of a soil boring log is to present a description of the soils encountered in a specific boring. Information from adjacent borings should not be entered on a boring log for well MW-3.

4. **Groundwater Monitoring.** Groundwater monitoring is to be conducted in all existing wells on a semi-annual basis. The groundwater samples are to be analyzed for TPH as gasoline, diesel, and motor oil by EPA Method 8015 and BTEX, MTBE, and chlorinated solvents by EPA Method 8260B. Please present results of the groundwater sampling in the semi-annual groundwater monitoring reports requested below.

TECHNICAL REPORT REQUEST

Please submit technical reports to Alameda County Environmental Health (Attention: Mr. Jerry Wickham), according to the following schedule:

- **May 15, 2007** – Semi-Annual Monitoring Report for the First Quarter 2007
- **July 18, 2007** – Soil Vapor Sampling Report
- **November 15, 2007** – Semi-Annual Monitoring Report for the Third Quarter 2007

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

ELECTRONIC SUBMITTAL OF REPORTS

The Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of all reports in electronic form to the county's ftp site. Paper copies of reports will no longer be accepted. The electronic copy replaces the paper copy and will be used for all public information requests, regulatory review, and compliance/enforcement activities. Instructions for submission of electronic documents to the Alameda County Environmental Cleanup Oversight Program ftp site are provided on the attached "Electronic Report Upload (ftp) Instructions." Please do not submit reports as attachments to electronic mail.

Submission of reports to the Alameda County ftp site is an addition to existing requirements for electronic submittal of information to the State Water Resources Control Board (SWRCB) Geotracker website. Submission of reports to the Geotracker website does not fulfill the requirement to submit documents to the Alameda County ftp site. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for groundwater cleanup programs. For several years, responsible parties for cleanup of leaks from underground storage tanks (USTs) have been required to submit groundwater analytical data, surveyed locations of monitor wells, and other data to the Geotracker database over the Internet. Beginning July 1, 2005, electronic submittal of a complete copy of all necessary reports was required in Geotracker (in PDF format). Please visit the SWRCB website for more information on these requirements (http://www.swrcb.ca.gov/ust/cleanup/electronic_reporting).

PERJURY STATEMENT

All work plans, technical reports, or technical documents submitted to ACEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge." This letter must be signed by an officer or legally authorized representative of your company. Please include a cover letter satisfying these requirements with all future reports and technical documents submitted for this fuel leak case.

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

The California Business and Professions Code (Sections 6735, 6835, and 7835.1) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately registered or certified professional. For your submittal to be considered a valid technical report, you are to present site specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature, and statement of professional certification. Please ensure all that all technical reports submitted for this fuel leak case meet this requirement.

UNDERGROUND STORAGE TANK CLEANUP FUND

Please note that delays in investigation, later reports, or enforcement actions may result in your becoming ineligible to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse you for the cost of cleanup.

AGENCY OVERSIGHT

If it appears as though significant delays are occurring or reports are not submitted as requested, we will consider referring your case to the Regional Board or other appropriate agency, including the County District Attorney, for possible enforcement actions. California Health and Safety Code, Section 25299.76 authorizes enforcement including administrative action or monetary penalties of up to $10,000 per day for each day of violation.

If you have any questions, please call me at (510) 567-6791.

Sincerely,

Jerry Wickham

Jerry Wickham, P.G.
Hazardous Materials Specialist

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

cc: Mark Jonas
Cambria Environmental Technology, Inc.
5900 Hollis Street, Suite A
Emeryville, CA 94608

Donna Drogos, ACEH
Jerry Wickham, ACEH
File

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

ORIGINAL

ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

August 8, 2006

AUG 10 2006

Mr. Tommy Chiu
P.O. Box 28194
Oakland, CA 94606

Subject: Fuel Leak Case No. RO0000196, Bill Louie's Auto Service, 800 Franklin Street, Oakland, CA

Dear Mr. Chiu:

Alameda County Environmental Health (ACEH) staff has reviewed the fuel leak case file for the above-referenced site and the document entitled, "Response to Agency Comments and Work Plan," dated July 24, 2006, prepared on your behalf by Cambria Environmental Technology, Inc. The "Response to Agency Comments and Work Plan," presents responses to technical comments in our April 11, 2006 correspondence and proposes a scope of work to rebuild monitoring well MW-3 and collect soil vapor samples at four sampling locations. We concur with the proposed scope of work provided that the technical comments below are addressed during the field investigation.

We request that you address the following technical comments, perform the proposed work, and send us the technical reports requested below.

TECHNICAL COMMENTS

1. **Depth of Soil Vapor Samples.** The depths at which soil vapor samples will be collected do not appear to be specified in the Work. We request that soil vapor samples be collected at a depth of approximately 4 feet bgs. The recommended depth may be adjusted in the field based on encountered conditions to intercept any significant coarse-grained layers that may be preferential pathways for soil vapors. Please present results of the soil vapor sampling in the Site Assessment Report requested below.

2. **Laboratory Analyses of Soil Vapor Samples.** The Work Plan proposes analyses of soil vapor samples by EPA Methods TO-15, TO-14A, or 8260. EPA Method 8260 is acceptable provided that a reporting limit of 85 micrograms per cubic meter can be achieved.

3. **Hydraulic Gradient and Off-site Receptors.** ACEH appreciates the research conducted on of-site receptors and the BART tube. Based on the information provided, nearby buildings and the BART tube do not appear to be receptors for groundwater from the site.

4. **Groundwater Monitoring.** Groundwater monitoring is to be conducted in all existing wells on a semi-annual basis. ACEH concurs with the proposed analyses. Please present results of the groundwater sampling in the semi-annual groundwater monitoring reports requested below.

TECHNICAL REPORT REQUEST

Please submit technical reports to Alameda County Environmental Health (Attention: Mr. Jerry Wickham), according to the following schedule:

- **November 15, 2006** – Quarterly Monitoring Report for the Third Quarter 2006
- **December 15, 2006** – Site Assessment Report

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

ELECTRONIC SUBMITTAL OF REPORTS

Effective **January 31, 2006**, the Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of all reports in electronic form to the county's ftp site. Paper copies of reports will no longer be accepted. The electronic copy replaces the paper copy and will be used for all public information requests, regulatory review, and compliance/enforcement activities. Instructions for submission of electronic documents to the Alameda County Environmental Cleanup Oversight Program ftp site are provided on the attached "Electronic Report Upload (ftp) Instructions." Please do not submit reports as attachments to electronic mail.

Submission of reports to the Alameda County ftp site is an addition to existing requirements for electronic submittal of information to the State Water Resources Control Board (SWRCB) Geotracker website. Submission of reports to the Geotracker website does not fulfill the requirement to submit documents to the Alameda County ftp site. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for groundwater cleanup programs. For several years, responsible parties for cleanup of leaks from underground storage tanks (USTs) have been required to submit groundwater analytical data, surveyed locations of monitor wells, and other data to the Geotracker database over the Internet. Beginning July 1, 2005, electronic submittal of a complete copy of all necessary reports was required in Geotracker (in PDF format). Please visit the SWRCB website for more information on these requirements (http://www.swrcb.ca.gov/ust/cleanup/electronic_reporting).

PERJURY STATEMENT

All work plans, technical reports, or technical documents submitted to ACEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge." This letter must be signed by an officer or legally authorized representative of your company. Please include a cover letter satisfying these requirements with all future reports and technical documents submitted for this fuel leak case.

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

The California Business and Professions Code (Sections 6735, 6835, and 7835.1) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately registered or certified professional. For your submittal to be considered a valid technical report, you are to present site specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature, and statement of professional certification. Please ensure all that all technical reports submitted for this fuel leak case meet this requirement.

UNDERGROUND STORAGE TANK CLEANUP FUND

Please note that delays in investigation, later reports, or enforcement actions may result in your becoming ineligible to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse you for the cost of cleanup.

AGENCY OVERSIGHT

If it appears as though significant delays are occurring or reports are not submitted as requested, we will consider referring your case to the Regional Board or other appropriate agency, including the County District Attorney, for possible enforcement actions. California Health and Safety Code, Section 25299.76 authorizes enforcement including administrative action or monetary penalties of up to $10,000 per day for each day of violation.

If you have any questions, please call me at (510) 567-6791.

Sincerely,

Jerry Wickham, P.G.
Hazardous Materials Specialist

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

cc: Matt Meyer
Cambria Environmental Technology, Inc.
5900 Hollis Street, Suite A
Emeryville, CA 94608

Mark Jonas
Cambria Environmental Technology, Inc.
5900 Hollis Street, Suite A
Emeryville, CA 94608

Donna Drogos, ACEH
Jerry Wickham, ACEH
File

Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC)	**ISSUE DATE:** Jun 4 2005
	REVISION DATE: May 31, 2006
	PREVIOUS REVISIONS: October 31, 2005, December 16, 2005
SECTION: Miscellaneous Administrative Topics & Procedures	**SUBJECT:** Electronic Report Upload (ftp) Instructions

Effective **January 31, 2006**, the Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of all reports in electronic form to the county's ftp site. Paper copies of reports will no longer be accepted. The electronic copy replaces the paper copy and will be used for all public information requests, regulatory review, and compliance/enforcement activities.

REQUIREMENTS

- Entire report including cover letter must be submitted to the ftp site as **a single portable document format (PDF) with no password protection**. (Please do not submit reports as attachments to electronic mail.)
- It is **preferable** that reports be converted to PDF format from their original format, (e.g., Microsoft Word) rather than scanned.
- Signature pages and perjury statements **must** be included and have either original or electronic signature.
- **Do not password protect the document**. Once indexed and inserted into the correct electronic case file, the document will be secured in compliance with the County's current security standards and a password. **Documents with password protection will not be accepted**.
- Each page in the PDF document should be rotated in the direction that will make it easiest to read on a computer monitor.
- Reports must be named and saved using the following naming convention:
  RO#_Report Name_Year-Month-Date (e.g., RO#5555_WorkPlan_2005-06-14)

Additional Recommendations

- A separate copy of the tables in the document should be submitted by e-mail to your Caseworker in **Excel** format. These are for use by assigned Caseworker only.

Submission Instructions

1) Obtain User Name and Password:
   a) Contact the Alameda County Environmental Health Department to obtain a User Name and Password to upload files to the ftp site.
      i) Send an e-mail to dehloptoxic@acgov.org
      or
      ii) Send a fax on company letterhead to (510) 337-9335, to the attention of: **ftp Site Coordinator**.
   b) In the subject line of your request, be sure to include **"ftp PASSWORD REQUEST"** and in the body of your request, include the **Contact Information, Site Addresses**, and the **Case Numbers (RO# available in Geotracker) you will be posting for**.

2) Upload Files to the ftp Site
   a) Using Internet Explorer (IE4+), go to ftp://alcoftp1.acgov.org
      (i) Note: Netscape and Firefox browsers will not open the FTP site.
   b) Click on File, then on Login As.
   c) Enter your User Name and Password. (Note: Both are Case Sensitive.)
   d) Open "My Computer" on your computer and navigate to the file(s) you wish to upload to the ftp site.
   e) With both "My Computer" and the ftp site open in separate windows, drag and drop the file(s) from "My Computer" to the ftp window.

3) Send E-mail Notifications to the Environmental Cleanup Oversight Programs
   a) Send email to dehloptoxic@acgov.org notify us that you have placed a report on our ftp site.
   b) Copy your Caseworker on the e-mail. Your Caseworker's e-mail address is the entire first name then a period and entire last name at acgov.org. (e.g., firstname.lastname@acgov.org)
   c) The subject line of the e-mail must start with the RO# followed by **Report Upload**. (e.g., Subject: RO1234 Report Upload)

CONESTOGA-ROVERS
& ASSOCIATES

APPENDIX B

Standard Operating Procedures

Cambria

STANDARD FIELD PROCEDURES SOIL VAPOR SAMPLING DIRECT PUSH AND VAPOR POINT METHODS

This document describes Cambria Environmental Technology's standard field methods for soil vapor sampling. These procedures are designed to comply with Federal, State and local regulatory guidelines. Specific field procedures are summarized below.

Objectives

Soil vapor samples are collected and analyzed to assess whether vapor-phase subsurface contaminants pose a threat to human health or the environment.

Direct Push Method for Soil Vapor Sampling

The direct push method for soil vapor sampling uses a hollow vapor probe, which is pushed into the ground, rather than augured, and the stratigraphy forms a vapor seal between the surface and subsurface environments ensuring that the surface and subsurface gases do not mix. Once the desired soil vapor sampling depth has been reached, the field technician installs disposable polyethylene tubing with a threaded adapter that screw into the bottom of the rods. The screw adapter ensures that the vapor sample comes directly from the bottom of the drill rods and does not mix with other vapor from inside the rod or from the ground surface. In addition, hydrated bentonite is placed around the sampling rod and the annulus of the boring to prevent ambient air from entering the boring. The operator then pulls up on the rods and exposes the desired stratigraphy by leaving an expendable drive point at the maximum depth. The required volume of soil vapor is then purged through the polyethylene tubing using a standard vacuum pump. The soil vapor can be sampled for direct injection into a field gas chromatograph, pumped into inert tedlar bags using a "bell jar" sampling device, or allowed to enter a Summa vacuum canister. Once collected, the vapor sample is transported under chain-of-custody to a state-certified laboratory. The ground surface immediately adjacent to the boring is used as a datum to measure sample depth. The horizontal location of each boring is measured in the field relative to a permanent on-site reference using a measuring wheel or tape measure. Drilling and sampling equipment is washed between samples with trisodium phosphate or an equivalent EPA-approved detergent. Once the sampling is completed, the borings are filled to the ground surface with neat cement.

Shallow Soil Vapor Point Method for Soil Vapor Sampling

The shallow soil vapor point method for soil vapor sampling utilizes a hand auger or drill rig to advance a boring for the installation of a soil vapor sampling point. Once the boring is hand augered to the final depth, a 6-inch slotted probe, capped on either end with brass or Swagelok fittings, is placed within 12-inches of number 2/16 filter sand (Figure A). Nylon tubing of ¼-inch inner-diameter of known length is attached to the probe. A 2-inch to 12-inch layer of unhydrated bentonite chips is placed on top of the filter pack. Next pre-hydrated granular bentonite is then poured into the hole to approximately and topped with another 2-inch layer of unhydrated bentonite chips or concrete, depending if the boring will hold one probe or multiple probes. The tube is coiled and placed within a wellbox finished flush to the surface. Soil vapor samples will be collected no sooner than one week after installation of the soil-vapor points to allow adequate time for representative soil vapors to accumulate. Soil vapor sample collection will not be scheduled until after a minimum of three consecutive precipitation-free days and irrigation onsite has ceased. Figure B shows the soil vapor sampling apparatus. A measured volume of air will be purged from the tubing using a vacuum pump

and a tedlar bag. Immediately after purging, soil-vapor samples will be collected using the appropriate size Summa canister with attached flow regulator and sediment filter. The soil-vapor points will be preserved until they are no longer needed for risk evaluation purposes. At that time, they will be destroyed by extracting the tubing, hand augering to remove the sand and bentonite, and backfilling the boring with neat cement. The boring will be patched with asphalt or concrete, as appropriate.

Vapor Sample Storage, Handling, and Transport

Samples are stored and transported under chain-of-custody to a state-certified analytic laboratory. Samples should never be cooled due to the possibility of condensation within the canister.

STANDARD FIELD PROCEDURES FOR SOIL AND SOIL VAPOR SAMPLING

This document describes Conestoga-Rovers & Associates' standard field methods for soil and soil vapor sampling. These procedures are designed to comply with Federal, State and local regulatory guidelines. Specific field procedures are summarized below.

Objectives

Soil and soil vapor samples are collected and analyzed to characterize subsurface contaminant distribution and to assess whether vapor-phase subsurface contaminants pose a threat to human health or the environment.

Soil Sampling

Soil samples are collected using lined samplers driven into undisturbed sediments beyond the bottom of the borehole. The vertical location of each soil sample is determined by measuring the distance from the middle of the soil sample tube to the end of the drive rod used to advance the sampler. The ground surface immediately adjacent to the boring is used as a datum to measure sample depth. The horizontal location of each boring is measured in the field relative to a permanent on-site reference using a measuring wheel or tape measure.

Sampling equipment is washed prior to and between samples to prevent cross-contamination. Trisodium phosphate or an equivalent EPA-approved detergent is used to wash equipment.

Sample Storage, Handling and Transport

Sampling tubes chosen for analysis are trimmed of excess soil and capped with Teflon tape and plastic end caps. Soil samples are labeled and stored at or below 4°C on either crushed or dry ice, depending upon local regulations. Samples are transported under chain-of-custody to a State-certified analytic laboratory.

Soil Vapor Sampling

Hand push soil vapor sampling method assures sample collection to shallow depths in most hydrogeologic environments. A hollow vapor probe is pushed into the ground, rather than augured, and the stratigraphy forms a vapor seal between the surface and subsurface environments ensuring that the surface and subsurface gases do not mix. Once the desired soil vapor sampling depth has been reached, the field technician installs disposable polyethylene tubing with a threaded adapter that screws into the bottom of the rods. The screw adapter ensures that the vapor sample comes directly from the bottom of the drill rods and does not mix with other vapor from inside the rod or from the ground surface. The operator then pulls up on the rods and exposes the desired stratigraphy by leaving an expendable drive point at the maximum depth. The required volume of soil vapor is then purged through the polyethylene tubing using a standard vacuum pump. The soil vapor can be sampled for direct injection into a field gas chromatograph, pumped into inert tedlar bags using a "bell jar" sampling device, or allowed to enter a Summa vacuum canister. Once collected, the vapor sample is transported under chain-of-custody to a state-certified laboratory. The ground surface immediately adjacent to the boring is used as a datum to measure sample depth. The horizontal location of each boring is measured in the field relative to a permanent on-site reference using a measuring wheel or tape measure. Drilling and sampling equipment is washed between samples with trisodium phosphate or an equivalent EPA-approved detergent.

STANDARD FIELD PROCEDURES FOR SOIL AND SOIL VAPOR SAMPLING
CONT'D

Sample Storage, Handling and Transport

Samples are stored out of direct sunlight in coolers and transported under chain-of-custody to a state-certified analytic laboratory.

Field Screening

After collecting a vapor sample for laboratory analysis, Cambria often collects an additional vapor sample for field screening using a portable photo-ionization detector (PID), flame-ionization detector (FID), or GasTech□ combustible gas detector to measure volatile hydrocarbon vapor concentrations. These measurements are used along with the field observations, odors, stratigraphy and ground water depth to help select the best location for additional borings to be advanced during the field mobilization.

Grouting

The borings are filled to the ground surface with neat cement.

CONESTOGA-ROVERS
& ASSOCIATES

APPENDIX C

Soil Vapor Probe Construction Log

Cambria Environmental Technology, Inc.
5900 Hollis Street, Suite A
Emeryville, CA 94608
Telephone: 510-420-0700
Fax: 510-420-9170

BORING/WELL LOG

CLIENT NAME	Chen Tso Chiu	**BORING/WELL NAME**	VP-1
JOB/SITE NAME	Chiu	**DRILLING STARTED**	17-Nov-06
LOCATION	800 Franklin Street, Oakland, CA	**DRILLING COMPLETED**	17-Nov-06
PROJECT NUMBER	589-1000	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Vironex	**GROUND SURFACE ELEVATION**	Not Surveyed
DRILLING METHOD	Hollow-stem auger		
BORING DIAMETER	3-inch	**SCREENED INTERVALS**	5.5 to 6 fbg
LOGGED BY	C. Hernandez	**DEPTH TO WATER (First Encountered)**	NA
REVIEWED BY	M. Jonas	**DEPTH TO WATER (Static)**	NA
REMARKS	On Franklin St. in front of 800 Franklin St. building		

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
							Surface: 4-inches of concrete.	0.3	Portland Type I/II
0							**Silty SAND (fill):** Light brown; damp; 15% silt, 85% fine to medium sand; non-plastic; high estimated permeability.		Hydrated Granular Bentonite 1.5 - 4 fbg
									1/4-inch Nyflow tubing
									Dry Granular Bentonite 4 - 5 fbg
0		VP-1- 5.5		5					Monterey Sand #2/12
								6.0	6-inch Screened Vapor Probe
									Bottom of Boring @ 6 fbg

Note:
Installed soil vapor probe VP-1 to 6 fbg.
See Figure 3 for construction details of the soil vapor probe.
Soil vapor probe was sampled on 12/28/2006.

WELL LOG (PID) H:\CHIU-O~1\BORING~1\CHIU- SOIL VAPOR PROBES.GPJ DEFAULT.GDT 2/13/07

Cambria Environmental Technology, Inc.
5900 Hollis Street, Suite A
Emeryville, CA 94608
Telephone: 510-420-0700
Fax: 510-420-9170

BORING/WELL LOG

CLIENT NAME Chen Tso Chiu
JOB/SITE NAME Chiu
LOCATION 800 Franklin Street, Oakland, CA
PROJECT NUMBER 589-1000
DRILLER Vironex
DRILLING METHOD Hollow-stem auger
BORING DIAMETER 3-inch
LOGGED BY C. Hernandez
REVIEWED BY M. Jonas
REMARKS On 8th St. in sidewalk in front of 800 Franklin St. building

BORING/WELL NAME VP-2
DRILLING STARTED 17-Nov-06
DRILLING COMPLETED 17-Nov-06
WELL DEVELOPMENT DATE (YIELD) NA
GROUND SURFACE ELEVATION Not Surveyed

SCREENED INTERVALS 5.5 to 6 fbg
DEPTH TO WATER (First Encountered) NA
DEPTH TO WATER (Static) NA

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
							Surface: 4-inches of Concrete.	0.3	Portland Type I/II
							Silty SAND (fill): Light brown; damp; 15% silt, 85% fine to medium sand; non-plastic; high estimated permeability.		Hydrated Granular Bentonite 1.5 - 4 fbg
0									
							@3': Yellow-grey; 25% silt, 75% fine to medium sand.		1/4-inch Nyflow tubing
									Dry Granular Bentonite 4 - 5 fbg
0		VP-2- 5.5		5					Monterey Sand #2/12
								6.0	6-inch Screened Vapor Probe
									Bottom of Boring @ 6 fbg

Note:
Installed soil vapor probe VP-1 to 6 fbg.
See Figure 3 for construction details of the soil vapor probe.
Soil Vapor probe was sampled on 12/28/2006.

WELL LOG (PID) H:\CHIU-O~1\BORING~1\CHIU- SOIL VAPOR PROBES.GPJ DEFAULT.GDT 2/13/07

CONESTOGA-ROVERS
& ASSOCIATES

APPENDIX D

Permits

CITY OF OAKLAND • Community and Economic Development Agency
250 Frank H. Ogawa Plaza, 2nd Floor, Oakland, CA 94612 • Phone (510) 238-3443 • FAX (510) 238-2263

Job Site 800 FRANKLIN ST Parcel# 001 -0193-015-00 Appl# X0601999

Descr soil boring on 8th St Permit Issued 11/10/06

Soil vapor probe 1

Work Type EXCAVATION-PRIVATE P

USA # Util Co. Job #: Acctg#:
Util Fund #:

	Applcnt	Phone#	Lic#	License Classes
Owner CHIU CHENTSO				
Contractor VIRONEX INC	X	(510)568-7676	705927	C57
Arch/Engr				
Agent CAMBRIA ENVIRO/C HERNANDEZ		(510)376-0115		
Applic Addr 2110 ADAMS AVE, SAN LEANDRO, CA, 94577				

$414.25 TOTAL FEES PAID AT ISSUANCE

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

JOB SITE

ADDRESS:

DIST:

CITY OF OAKLAND

Date: 11/10/06 Amt Paid: $1,105.05
By: DLR Register R02 Receipt# 090234

CITY OF OAKLAND
Office of Planning and Building

EXCAVATION PERMIT

TO EXCAVATE IN STREETS OR OTHER SPECIFIED WORK

CIVIL ENGINEERING

Soil vapor probe 1

Permit valid for 90 days from date of issuance.

PERMIT NUMBER	SITE ADDRESS/LOCATION
X0601999 *	800 Franklin St. Oakland, CA

APPROX. START DATE	APPROX. END DATE	24-HOUR EMERGENCY PHONE NUMBER (Permit not valid without 24-Hour number)
11/17/06	11/17/06	

CONTRACTOR'S LICENSE # AND CLASS	CITY BUSINESS TAX #
C57 - 705927	1247727

ATTENTION: 510 - 238-3766 Yaqing Chin

1- State law requires that the contractor/owner call Underground Service Alert (USA) two working days before excavating. This permit is not valid unless applicant has secured an inquiry identification number issued by USA. The USA telephone number is 1-800-642-2444. Underground Service Alert (USA) # _____

2- 48 hours prior to starting work, you MUST CALL (510) 238-3651 to schedule an inspection.

3- 48 hours prior to re-paving, a compaction certificate is required (waived for approved slurry backfill).

OWNER/BUILDER

I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5 Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he is licensed pursuant to the provisions of the Contractor's License law Chapter 9 (commencing with Sec. 7000) of Division 3 of the Business and Professions Code, or that he is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than $500):

☐ I, as an owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale).

☐ I, as owner of the property, am exempt from the sale requirements of the above due to: (1) I am improving my principal place of residence or appurtenances thereto, (2) the work will be performed prior to sale, (3) I have resided in the residence for the 12 months prior to completion of the work, and (4) I have not claimed exemption on this subdivision on more than two structures more than once during any three-year period. (Sec. 7044 Business and Professions Code).

☐ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project, (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License law).

☐ I am exempt under Sec. _____, B&PC for this reason _____

WORKER'S COMPENSATION

☒ I hereby affirm that I have a certificate of consent to self-insure, or a certificate of Worker's Compensation Insurance, or a certified copy thereof (Sec. 3700, Labor Code).

Policy # BZ 342-23 87 Company Name Granite State

☐ I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Worker's Compensation Laws of California (not required for work valued at one hundred dollars ($100) or less).

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Worker's Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked. This permit is issued pursuant to all provisions of Title 12 Chapter 12.12 of the Oakland Municipal Code. It is granted upon the express condition that the permittee shall be responsible for all claims and liabilities arising out of work performed under the permit or arising out of permittee's failure to perform the obligations with respect to street maintenance. The permittee shall, and by acceptance of the permit agrees to defend, indemnify, save and hold harmless the City, its officers and employees, from and against any and all suits, claims, or actions brought by any person for or on account of any bodily injuries, disease or illness or damage to persons and/or property sustained or arising in the construction of the work performed under the permit or in consequence of permittee's failure to perform the obligations with respect to street maintenance. This permit is void 90 days from the date of issuance unless an extension is granted by the Director of the Office of Planning and Building.

I hereby affirm that I am licensed under provisions of Chapter 9 of Division 3 of the Business and Professions Code and my license is in full force and effect (if contractor), that I have read this permit and agree to its requirements, and that the above information is true and correct under penalty of law.

X _____ 11/10/06

Signature of Permittee ☒ Agent for ☐ Contractor ☐ Owner Date

DATE STREET LAST RESURFACED	SPECIAL PAVING DETAIL REQUIRED? ☐ YES ☐ NO	HOLIDAY RESTRICTION? (NOV 1 - JAN 1) ☐ YES ☐ NO	LIMITED OPERATION AREA? (7AM-9AM & 4PM-6PM) ☐ YES ☐ NO
ISSUED BY		DATE ISSUED	

CITY OF OAKLAND • Community and Economic Development Agency
250 Frank H. Ogawa Plaza, 2nd Floor, Oakland, CA 94612 • Phone (510) 238-3443 • FAX (510) 238-2263

Job Site 800 FRANKLIN ST Parcel# 001 -0193-015-00 Appl# X0601998

Descr soil boring on Franklin St Permit Issued 11/10/06

Soil Vapor probe 2

Work Type EXCAVATION-PRIVATE P

USA # Util Co. Job # Acctg#:
Util Fund #

	Applcnt	Phone#	Lic#	License Classes
Owner CHIU CHENTSO				
Contractor VIRONEX INC	X	(510)568-7676	705927	C57
Arch/Engr				
Agent CAMBRIA ENVIRO/C HERNANDEZ		(510)376-0115		

Applic Addr 2110 ADAMS AVE, SAN LEANDRO, CA, 94577

$414.25 TOTAL FEES PAID AT ISSUANCE

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

JOB SITE

ADDRESS:

DIST:

CITY OF OAKLAND

Date: 11/10/06 Amt Paid: $1,105.05
By: DLR Register R02 Receipt# 098234

CITY OF OAKLAND
Office of Planning and Building

EXCAVATION PERMIT

TO EXCAVATE IN STREETS OR OTHER SPECIFIED WORK

CIVIL ENGINEERI

 Soil Vapor probe 2

Permit valid for 90 days from date of issuance.

PERMIT NUMBER	SITE ADDRESS/LOCATION
X 0601998	* 800 Franklin St. Oakland, CA

APPROX. START DATE	APPROX. END DATE	24-HOUR EMERGENCY PHONE NUMBER (Permit not valid without 24-Hour number)
11/17/06	11/17/06	

CONTRACTOR'S LICENSE # AND CLASS	CITY BUSINESS TAX #
C57 - 705927	1247727

ATTENTION:

1- State law requires that the contractor/owner call Underground Service Alert (USA) two working days before excavating. This permit is not valid unless applicant has secured an inquiry identification number issued by USA. The USA telephone number is 1-800-642-2444. Underground Service Alert (USA) # _____

2- 48 hours prior to starting work, you MUST CALL (510) 238-3651 to schedule an inspection.

3- 48 hours prior to re-paving, a compaction certificate is required (waived for approved slurry backfill).

OWNER/BUILDER

I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5 Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he is licensed pursuant to the provisions of the Contractor's License law Chapter 9 (commencing with Sec. 7000) of Division 3 of the Business and Professions Code, or that he is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than $500):

☐ I, as an owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale).

☐ I, as owner of the property, am exempt from the sale requirements of the above due to: (1) I am improving my principal place of residence or appurtenances thereto, (2) the work will be performed prior to sale, (3) I have resided in the residence for the 12 months prior to completion of the work, and (4) I have not claimed exemption on this subdivision on more than n structures more than once during any three-year period. (Sec. 7044 Business and Professions Code).

☐ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project, (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License law).

☐ I am exempt under Sec. _____, B&PC for this reason _____.

WORKER'S COMPENSATION

☒ I hereby affirm that I have a certificate of consent to self-insure, or a certificate of Worker's Compensation Insurance, or a certified copy thereof (Sec. 3700, Labor Code).

Policy # 342-2387 Company Name Granite State

☐ I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Worker's Compensation Laws of California (not required for work valued at one hundred dollars ($100) or less).

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Worker's Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked. This permit is issued pursuant to all provisions of Title 12 Chapter 12.12 of the Oakland Municipal Code. It is granted upon the express condition that the permittee shall be responsible for all claims and liabilities arising out of work performed under the permit or arising out of permittee's failure to perform the obligations with respect to street maintenance. The permittee shall, and by acceptance of the permit agrees to defend, indemnify, save and hold harmless the City, its officers and employees, from and against any and all suits, claims, or actions brought by any person for or on account of any bodily injuries, disease or illness or damage to persons and/or property sustained or arising in the construction of the work performed under the permit or in consequence of permittee's failure to perform the obligations with respect to street maintenance. This permit is void 90 days from the date of issuance unless an extension is granted by the Director of the Office of Planning and Building.

I hereby affirm that I am licensed under provisions of Chapter 9 of Division 3 of the Business and Professions Code and my license is in full force and effect (if contractor), that I have read this permit and agree to its requirements, and that the above information is true and correct under penalty of law.

X _____ 11/10/06

Signature of Permittee ☐ Agent for ☐ Contractor ☐ Owner — Date

DATE STREET LAST RESURFACED	SPECIAL PAVING DETAIL REQUIRED? ☐ YES ☐ NO	HOLIDAY RESTRICTION? (NOV 1 - JAN 1) ☐ YES ☐ NO	LIMITED OPERATION AREA? (7AM-9AM & 4PM-6PM) ☐ YES ☐ NO
ISSUED BY		DATE ISSUED	

forms/ops/excavate.pg2 (04/98)

CITY OF OAKLAND • Community and Economic Development Agency
250 Frank H. Ogawa Plaza, 2nd Floor, Oakland, CA 94612 • Phone (510) 238-3443 • FAX (510) 238-2263

Job Site 800 FRANKLIN ST (Parking meters?) Parcel# 001 -0193-015-00 Appl# OB060743

reserve meters [two no fee with X0601998/1999] 8-374;-372; Permit Issued 11/10/06
370;368;F-800;-802;-804;-806 soil boring on Franklin St

For Soil vapor probes

Nbr of days: 1
Effective: 11/17/06

Nbr of meters: 6
Expiration: 11/17/06

SHORT TERM METERED

	Applcnt	Phone#	Lic#	License Classes
Owner	CHIU CHENTSO			
Contractor	VIRONEX INC	X (510)568-7676	705927	C57
Arch/Engr				
Agent	CAMBRIA ENVIRO/C.HERNANDEZ	(510)376-0115		
Applic Addr	2110 ADAMS AVE, SAN LEANDRO, CA, 94577			

$276.55 TOTAL FEES PAID AT ISSUANCE

$61.00	Applic	$180.00	Permit
$.00	Process	$22.90	Rec Mgmt
$.00	Gen Plan	$.00	Invstg
$.00	Other	$12.65	Tech Enh

ADDRESS:

DIST:

CITY OF OAKLAND JOB SITE

TCP needs to be approved by Transportation Services every 30 days or whenever deviated from the previously approved plan.

Applicant: _____ 11/10/06

Issued by: _____ -

Date: 11/10/06 Amt Paid: $1,185.05
By: DLR Register R02 Receipt# 030234

CITY OF OAKLAND • Community and Economic Development Agency
250 Frank H. Ogawa Plaza, 2nd Floor, Oakland, CA 94612 • Phone (510) 238-3443 • FAX (510) 238-2263

Job Site 800 FRANKLIN ST Parcel# 001 -0193-015-00 Appl# X0700110

Descr MONITORING WELL rebuild Permit Issued 01/23/07
ONE MONITORING WELL TO BE INSTALLED ON FRANKLIN ST.
RECORDED 10-7-96 96-256691 RE-RECORDED 10-31-97
Work Type EXCAVATION-PRIVATE P

USA # Cntl Co. Job # Acctg#:
Cntl Fund #

	Applcnt	Phone#	Lic#	License Classes
Owner	CHEN-TSO CHIU C/O TOMMY CHIU			
Contractor	WOODWARD DRILLING CO INC	X	(707)374-6300	710070 C57
Arch/Engr				
Agent	CAMBRIA ENVIRO/G HERNANDEZ		(510)420-3313	
Applic Addr	P.O.BOX 336 PIO VISTA CA 94571			

$414.25 TOTAL FEES PAID AT ISSUANCE

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

JOB SITE

DRESS:

CITY OF OAKLAND

CONESTOGA-ROVERS
& ASSOCIATES

APPENDIX E

Soil Vapor Sampling Field Data

CAMBRIA

SOIL VAPOR SAMPLING DATA SHEET

Soil Vapor Sampling Point ID: VP-2

Project Name: Chm
Project No: 589-1000-017
Site Address: 800 Franklin St. Oakland, CA

Date: 12/28/06
Sampler: CH / CM
PM: MJ

Purge Volume

Calculated Purge Volume: 3 purge volumes per DTSC

Time	Flow Rate	Volume	Comments
900			1/4D 1L tedlar bag

Sample Collection

Flow Control Setting: 30 min
Summa Canister ID: 22960
Summa Canister Size: 1L
Analysis: Benzene

Time - Begin Sampling	Canister Vacuum	Time - End Sampling	Canister Vacuum	Sampling Time
909	-28 Hg	914	-5	5min

Notes: -28 Hg prior to sampling
Flow control = FC00426

Soil Vapor Sampling Point ID: VP-1

Project Name: Chm
Project No:
Site Address:

Date: 12/20/06
Sampler: CH / CM
PM: MJ

Purge Volume

Calculated Purge Volume: 3 purge volumes per DTSC

Time	Flow Rate	Volume	Comments
940			1/4D 1L Tedlar bag

Sample Collection

Flow control = FC00118

Flow Control Setting: 30 min.
Summa Canister ID: 12366
Summa Canister Size: 1L
Analysis: Benzene

Time - Begin Sampling	Canister Vacuum	Time - End Sampling	Canister Vacuum	Sampling Time
942	-28 Hg	948	-5 Hg	6min

Notes: For each location:
Disconnected purge line to flow meter and reconnected to line at end of pump w/ valve. Because line from flow meter wasn't working; no air.

CAMBRIA

SOIL VAPOR SAMPLING DATA SHEET

Soil Vapor Sampling Point ID: VP-1-DUP

Project Name: Chili
Project No: 589-1000-017
Site Address: 800 Franklin St. Oakland CA

Date: 12/28/06
Sampler: CH
PM: MJ

Purge Volume

Calculated Purge Volume: Bypass Cut.

Time	Flow Rate	Volume	Comments
~~0908~~ 954			1/10 1L Tedlar Bag

Sample Collection

Flow Control Setting: 30 min
Summa Canister ID: 1448
Summa Canister Size: 1L
Analysis: Benzene

Time - Begin Sampling	Canister Vacuum	Time - End Sampling	Canister Vacuum	Sampling Time
957	~~-30 Hg~~ -27.5 Hg	1002	-5 Hg	5 min

Notes: Flow Control = FC 00092

Soil Vapor Sampling Point ID:

Project Name:
Project No:
Site Address:

Date:
Sampler:
PM:

Purge Volume

Calculated Purge Volume:

Time	Flow Rate	Volume	Comments

Sample Collection

Flow Control Setting:
Summa Canister ID:
Summa Canister Size:
Analysis:

Time - Begin Sampling	Canister Vacuum	Time - End Sampling	Canister Vacuum	Sampling Time

Notes:

CAMBRIA

SOIL VAPOR SAMPLING DATA SHEET

Soil Vapor Sampling Point ID: ~~SV-1~~ VP-1

Project Name: CH1U CM Date: 7/25/07

Project No: SB1000 Sampler: C. McClelland

Site Address: 800 Franklin St, Oakland, CA PM: M. Jonas

Purge Volume

Calculated Purge Volume: _____

Time	Flow Rate	Volume	Comments
8:37		1/3 L	

Sample Collection

Flow Control Setting: 100ml/min Summa Canister ID: 3288

Summa Canister Size: 1L Analysis: TO-15

Time - Begin Sampling	Canister Vacuum	Time - End Sampling	Canister Vacuum	Sampling Time
8:39	↑	8:50	-5	11min

Notes:

Initial Vacuum= -28 FC00320

Soil Vapor Sampling Point ID: ~~SV-1~~ Duplicate

Project Name: CH1U VP-1 Date: 7/25/07

Project No: SB1000 Sampler: C. McClelland

Site Address: 800 Franklin Oakland PM: M. Jonas

Purge Volume

Calculated Purge Volume: _____

Time	Flow Rate	Volume	Comments
8:59		1/3 L	

Sample Collection

Flow Control Setting: 100mL/min Summa Canister ID: 0781

Summa Canister Size: 1L Analysis: TO-15

Time - Begin Sampling	Canister Vacuum	Time - End Sampling	Canister Vacuum	Sampling Time
9:01	-27	9:09	-5	8min.

Notes:

FC00612

CAMBRIA

SOIL VAPOR SAMPLING DATA SHEET

Soil Vapor Sampling Point ID: ~~SV-2~~ VP-2

Project Name: CHLI
Project No: 581000
Site Address: 800 Franklin Oakland

Date: 7/25/07
Sampler: C.McClelland
PM: M. Jonas

Purge Volume

Calculated Purge Volume: _____

Time	Flow Rate	Volume	Comments
9:36		4.3 L	

Sample Collection

Flow Control Setting: 100 mL/min. Summa Canister ID: 2719

Summa Canister Size: 1L Analysis: TO-15

Time - Begin Sampling	Canister Vacuum	Time - End Sampling	Canister Vacuum	Sampling Time
9:38	-29.5	9:47	-5	9 min

Notes:

FC00485

Soil Vapor Sampling Point ID: _____

Project Name: _____
Project No: _____
Site Address: _____

Date: _____
Sampler: _____
PM: _____

Purge Volume

Calculated Purge Volume: _____

Time	Flow Rate	Volume	Comments

Sample Collection

Flow Control Setting: _____ Summa Canister ID: _____

Summa Canister Size: _____ Analysis: _____

Time - Begin Sampling	Canister Vacuum	Time - End Sampling	Canister Vacuum	Sampling Time

Notes:

CONESTOGA-ROVERS
& ASSOCIATES

APPENDIX F

Soil Vapor Analytical Laboratory Report

@ AIR TOXICS LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX (916) 985-1020

Page 1 of 1

CHAIN-OF-CUSTODY RECORD

Sample Transportation Notice
Relinquishing signature on this document indicates that sample is being shipped in compliance with all applicable local, State, Federal, national, and international laws, regulations and ordinances of any kind. Air Toxics Limited assumes no liability with respect to the collection, handling or shipping of these samples. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Air Toxics Limited against any claim, demand, or action, of any kind, related to the collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922.

Contact Person: Celina Hernandez
Company: Cambria Environmental Email:
Address: 5900 Hollis St Ste A City: Emeryville State: CA Zip: 94608
Phone: 510 420-3313 Fax: 510 420-9170
Collected by: (Signature) Celina

Project Info:
P.O. #: 589-1000-017
Project #: 589-1000 017
Project Name: Chili-Oakland

Turn Around Time:
X Normal
☐ Rush
specify

Lab Use Only VF12
Pressurized by:
Date: 11/5/07
Pressurization Gas: N_2 He

Lab I.D.	Field Sample I.D. (Location)	Can#	Date	Time	Analyses Requested	Canister Pressure/Vacuum Initial	Final	Receipt	Final (psi)
01A	VP-2	2440	12/28/06	914	TO15 Benzene	-28	-5	6.0 "Hg	15.0 psi
02A	VP-1	3160	12/28/06	948	TO15 Benzene	-28	-5	5.5 "Hg	
03A	VP-1-DUP	1448	12/28/06	1002	TO15 Benzene	-27.5	-5	6.0 "Hg	
04A	TRIP	3413	12/28/06					29.0 "Hg	

Relinquished by: (signature) Celina Date/Time 12/28/06 1110
Received by: (signature) Secured location Date/Time 12/28/06 1100
Notes:

Relinquished by: (signature) Date/Time
Received by: (signature) Monica Bogen ATL Date/Time 12/29/06 930

Relinquished by: (signature) Date/Time
Received by: (signature) Date/Time

Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Customer Seals Intact?	Work Order #
	DHL	1941674705 5	NA	Good	Yes No None	0612627

Form 1293 rev.10

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0612627

Work Order Summary

CLIENT:	Ms. Celina Hernandez Cambria Environmental Technology, Inc. 5900 Hollis Street Suite A Emeryville, CA 94608	**BILL TO:**	Ms. Celina Hernandez Cambria Environmental Technology, Inc. 5900 Hollis Street Suite A Emeryville, CA 94608
PHONE:	510-420-3313	**P.O. #**	589-1000-017
FAX:	510-420-9170	**PROJECT #**	589-1000-017 Chiu-Oakland
DATE RECEIVED:	12/29/2006	**CONTACT:**	Kyle Vagadori
DATE COMPLETED:	01/12/2007		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.
01A	VP-2	Modified TO-15/TICs	6.0 "Hg
01AA	VP-2 Duplicate	Modified TO-15/TICs	6.0 "Hg
02A	VP-1	Modified TO-15/TICs	5.5 "Hg
03A	VP-1-DUP	Modified TO-15/TICs	6.0 "Hg
04A	TRIP	Modified TO-15/TICs	29.0 "Hg
05A	Lab Blank	Modified TO-15/TICs	NA
06A	CCV	Modified TO-15/TICs	NA
07A	LCS	Modified TO-15/TICs	NA

CERTIFIED BY: Linda J. Fruman DATE: 01/12/07

Laboratory Director

Certfication numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
NY NELAP - 11291, UT NELAP - 9166389892
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/06, Expiration date: 06/30/07
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

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

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

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

LABORATORY NARRATIVE
Modified TO-15
Cambria Environmental Technology
Workorder# 0612627

Four 1 Liter Summa Canister samples were received on December 29, 2006. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode. The method involves concentrating up to 0.2 liters of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis.

Method modifications taken to run these samples are summarized in the below table. Specific project requirements may over-ride the ATL modifications.

Requirement	*TO-15*	*ATL Modifications*
Daily CCV	+- 30% Difference	</= 30% Difference with two allowed out up to </=40%.; flag and narrate outliers
Sample collection media	Summa canister	ATL recommends use of summa canisters to insure data defensibility, but will report results from Tedlar bags at client request
Method Detection Limit	Follow 40CFR Pt.136 App. B	The MDL met all relevant requirements in Method TO-15 (statistical MDL less than the LOQ). The concentration of the spiked replicate may have exceeded 10X the calculated MDL in some cases

Receiving Notes

The Chain of Custody (COC) information for sample TRIP did not match the entry on the sample tag with regard to sample identification. The discrepancy was noted in the Sample Receipt Confirmation email/fax and the information on the COC was used to process and report the sample.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

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

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: VP-2

Lab ID#: 0612627-01A
No Detections Were Found.

Client Sample ID: VP-2 Duplicate

Lab ID#: 0612627-01AA
No Detections Were Found.

Client Sample ID: VP-1

Lab ID#: 0612627-02A
No Detections Were Found.

Client Sample ID: VP-1-DUP

Lab ID#: 0612627-03A
No Detections Were Found.

Client Sample ID: TRIP

Lab ID#: 0612627-04A
No Detections Were Found.

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP-2

Lab ID#: 0612627-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	f010917	Date of Collection:	12/28/06
Dil. Factor:	2.53	Date of Analysis:	1/9/07 11:53 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	1.3	Not Detected	4.0	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Isobutane	75-28-5	NA	Not Detected
Butane	106-97-8	NA	Not Detected
Propane	74-98-6	NA	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	94	70-130
Toluene-d8	112	70-130
4-Bromofluorobenzene	103	70-130

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP-2 Duplicate

Lab ID#: 0612627-01AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	f010921	Date of Collection:	12/28/06
Dil. Factor:	2.53	Date of Analysis:	1/10/07 02:56 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	1.3	Not Detected	4.0	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Isobutane	75-28-5	NA	Not Detected
Butane	106-97-8	NA	Not Detected
Propane	74-98-6	NA	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	111	70-130
4-Bromofluorobenzene	100	70-130

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP-1

Lab ID#: 0612627-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	f010918	Date of Collection:	12/28/06
Dil. Factor:	2.47	Date of Analysis:	1/10/07 12:32 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	1.2	Not Detected	3.9	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Isobutane	75-28-5	NA	Not Detected
Butane	106-97-8	NA	Not Detected
Propane	74-98-6	NA	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	97	70-130
Toluene-d8	110	70-130
4-Bromofluorobenzene	99	70-130

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP-1-DUP

Lab ID#: 0612627-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	f010919	Date of Collection:	12/28/06
Dil. Factor:	2.53	Date of Analysis:	1/10/07 01:21 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	1.3	Not Detected	4.0	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Isobutane	75-28-5	NA	Not Detected
Butane	106-97-8	NA	Not Detected
Propane	74-98-6	NA	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	107	70-130
4-Bromofluorobenzene	101	70-130

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: TRIP

Lab ID#: 0612627-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	f010920	Date of Collection:	12/28/06
Dil. Factor:	1.00	Date of Analysis:	1/10/07 02:07 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.50	Not Detected	1.6	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Isobutane	75-28-5	NA	Not Detected
Butane	106-97-8	NA	Not Detected
Propane	74-98-6	NA	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	105	70-130
4-Bromofluorobenzene	96	70-130

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0612627-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	f010906	Date of Collection: NA	
Dil. Factor:	1.00	Date of Analysis: 1/9/07 01:21 PM	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.50	Not Detected	1.6	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Isobutane	75-28-5	NA	Not Detected
Butane	106-97-8	NA	Not Detected
Propane	74-98-6	NA	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	96	70-130
Toluene-d8	109	70-130
4-Bromofluorobenzene	100	70-130

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: CCV

Lab ID#: 0612627-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	f010903	Date of Collection: NA	
Dil. Factor:	1.00	Date of Analysis: 1/9/07 10:46 AM	

Compound	%Recovery
Benzene	101

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	97	70-130
Toluene-d8	108	70-130
4-Bromofluorobenzene	103	70-130

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCS

Lab ID#: 0612627-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	f010904	Date of Collection: NA	
Dil. Factor:	1.00	Date of Analysis: 1/9/07 11:38 AM	

Compound	%Recovery
Benzene	97

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	106	70-130
4-Bromofluorobenzene	96	70-130

Air Toxics LTD.

CHAIN-OF-CUSTODY RECORD

Sample Transportation Notice
Relinquishing signature on this document indicates that sample is being shipped in compliance with all applicable local, State, Federal, national, and international laws, regulations and ordinances of any kind. Air Toxics Limited assumes no liability with respect to the collection, handling or shipping of these samples. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Air Toxics Limited against any claim, demand, or action, of any kind, related to the collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922

180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX (916) 985-1020

Project Manager Mark Jonas
Collected by: (Print and Sign) Christina McClelland C. McClelland
Company Conestoga-Rovers & Assoc. Email cmcclelland@craworld.com
Address 5900 Hollis St. #A City Emeryville State CA Zip 94608
Phone (510) 420-3309 Fax (510) 420-9170

Project Info:
P.O. #
Project # 581000
Project Name Chili

Turn Around Time:
☒ Normal
☐ Rush
specify

Lab Use Only
Pressurized by: C
Date: 7/27/07
Pressurization Gas: (N_2) He

Lab I.D.	Field Sample I.D. (Location)	Can #	Date of Collection	Time of Collection	Analyses Requested	Canister Pressure/Vacuum Initial	Final	Receipt	Final (psig)
01A	SV-1 VP-1 cm	3288	7/25/07	8:39	TO-15 Full VOC target list & TICs: isobutane, butane & propane for all samples	-28	-5	5.0"Hg	15.0psi
02A	SV-1 Duplicate	0781	7/25/07	9:01		-27	-5	6.0"Hg	
03A	SV-2 VP-2 cm	2719	7/25/07	9:38		-29.5	-5	5.5"Hg	
04A	Trip Blank	3265	7/25/07	—					

Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
C. McClelland CRA	7/25/07 11:20	T. LaFlash AATL	7/26/07 0885
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time

Notes:

Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?	Work Order #
	DHL	2267575652	NA	good	Yes No (None)	0707462

Air Toxics LTD.
AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0707462R1

Work Order Summary

CLIENT:	Ms. Christina McClelland Conestoga-Rovers Associates (CRA) 5900 Hollis Street Suite A Emeryville, CA 94608	**BILL TO:**	Ms. Christina McClelland Conestoga-Rovers Associates (CRA) 5900 Hollis Street Suite A Emeryville, CA 94608
PHONE:	510-420-3309	**P.O. #**	
FAX:	510-420-9170	**PROJECT #**	581000 Chiu
DATE RECEIVED:	07/26/2007	**CONTACT:**	Kyle Vagadori
DATE COMPLETED:	08/07/2007		
DATE REISSUED:	08/14/2007		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.
01A	VP-1	Modified TO-15/TICs	5.0 "Hg
02A	VP-1 Duplicate	Modified TO-15/TICs	6.0 "Hg
03A	VP-2	Modified TO-15/TICs	3.5 "Hg
03AA	VP-2 Lab Duplicate	Modified TO-15/TICs	3.5 "Hg
04A(cancelled)	Trip Blank	Modified TO-15/TICs	
05A	Lab Blank	Modified TO-15/TICs	NA
06A	CCV	Modified TO-15/TICs	NA
07A	LCS	Modified TO-15/TICs	NA

CERTIFIED BY: Linda D. Truman DATE: 08/16/07

Laboratory Director

Certfication numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
NY NELAP - 11291, UT NELAP - 9166389892
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/07, Expiration date: 06/30/08
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

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

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

LABORATORY NARRATIVE
Modified TO-15
Conestoga-Rovers Associates
Workorder# 0707462R1

LUMEN DATA VALIDATED

Four 1 Liter Summa Canister samples were received on July 26, 2007. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode. The method involves concentrating up to 0.2 liters of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the ATL modifications.

Requirement	*TO-15*	*ATL Modifications*
Daily CCV	+- 30% Difference	</= 30% Difference with two allowed out up to </=40%.; flag and narrate outliers
Sample collection media	Summa canister	ATL recommends use of summa canisters to insure data defensibility, but will report results from Tedlar bags at client request
Method Detection Limit	Follow 40CFR Pt.136 App. B	The MDL met all relevant requirements in Method TO-15 (statistical MDL less than the LOQ). The concentration of the spiked replicate may have exceeded 10X the calculated MDL in some cases

Receiving Notes

Sample Trip Blank was cancelled per client's request.

THE WORK ORDER WAS REISSUED ON 8/14/07 TO AMEND IDENTIFICATION OF THE FOLLOWING SAMPLES VP-1, VP-1 DUPLICATE AND VP-2, PER CLIENT REQUEST.

Analytical Notes

Specific analytes that are requested by the client to be reported as tentatively identified compounds (TICs) are determined by searching for each compound's characteristic spectra. If no chromatographic peak displaying the compound specific spectra exists, then the TIC is reported as not detected. Please note that the laboratory has not evaluated the stability of any heretofore tentatively identified compound in the vapor phase or for efficiency of recovery through the analytical system.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

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

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: VP-1

Lab ID#: 0707462R1-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2-Butanone (Methyl Ethyl Ketone)	1.2	3.3	3.6	9.6
2,2,4-Trimethylpentane	1.2	2.7	5.6	12

Client Sample ID: VP-1 Duplicate

Lab ID#: 0707462R1-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
m,p-Xylene	1.3	1.4	5.5	6.0
1,2,4-Trimethylbenzene	1.3	1.6	6.2	7.7

Client Sample ID: VP-2

Lab ID#: 0707462R1-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	1.1	6.8	5.7	34
Acetone	4.6	12	11	27
Tetrachloroethene	1.1	1.3	7.8	8.9

Client Sample ID: VP-2 Lab Duplicate

Lab ID#: 0707462R1-03AA

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	1.1	6.4	5.7	32
Acetone	4.6	12	11	28
Tetrachloroethene	1.1	1.7	7.8	12
1,2,4-Trimethylbenzene	1.1	1.2	5.6	5.8

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP-1

Lab ID#: 0707462R1-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7080526	Date of Collection:	7/25/07
Dil. Factor:	2.42	Date of Analysis:	8/6/07 04:49 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	1.2	Not Detected	6.0	Not Detected
Freon 114	1.2	Not Detected	8.4	Not Detected
Chloromethane	4.8	Not Detected	10	Not Detected
Vinyl Chloride	1.2	Not Detected	3.1	Not Detected
1,3-Butadiene	1.2	Not Detected	2.7	Not Detected
Bromomethane	1.2	Not Detected	4.7	Not Detected
Chloroethane	1.2	Not Detected	3.2	Not Detected
Freon 11	1.2	Not Detected	6.8	Not Detected
Ethanol	4.8	Not Detected	9.1	Not Detected
Freon 113	1.2	Not Detected	9.3	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.8	Not Detected
Acetone	4.8	Not Detected	11	Not Detected
2-Propanol	4.8	Not Detected	12	Not Detected
Carbon Disulfide	1.2	Not Detected	3.8	Not Detected
3-Chloropropene	4.8	Not Detected	15	Not Detected
Methylene Chloride	1.2	Not Detected	4.2	Not Detected
Methyl tert-butyl ether	1.2	Not Detected	4.4	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.8	Not Detected
Hexane	1.2	Not Detected	4.3	Not Detected
1,1-Dichloroethane	1.2	Not Detected	4.9	Not Detected
2-Butanone (Methyl Ethyl Ketone)	1.2	3.3	3.6	9.6
cis-1,2-Dichloroethene	1.2	Not Detected	4.8	Not Detected
Tetrahydrofuran	1.2	Not Detected	3.6	Not Detected
Chloroform	1.2	Not Detected	5.9	Not Detected
1,1,1-Trichloroethane	1.2	Not Detected	6.6	Not Detected
Cyclohexane	1.2	Not Detected	4.2	Not Detected
Carbon Tetrachloride	1.2	Not Detected	7.6	Not Detected
2,2,4-Trimethylpentane	1.2	2.7	5.6	12
Benzene	1.2	Not Detected	3.9	Not Detected
1,2-Dichloroethane	1.2	Not Detected	4.9	Not Detected
Heptane	1.2	Not Detected	5.0	Not Detected
Trichloroethene	1.2	Not Detected	6.5	Not Detected
1,2-Dichloropropane	1.2	Not Detected	5.6	Not Detected
1,4-Dioxane	4.8	Not Detected	17	Not Detected
Bromodichloromethane	1.2	Not Detected	8.1	Not Detected
cis-1,3-Dichloropropene	1.2	Not Detected	5.5	Not Detected
4-Methyl-2-pentanone	1.2	Not Detected	5.0	Not Detected
Toluene	1.2	Not Detected	4.6	Not Detected
trans-1,3-Dichloropropene	1.2	Not Detected	5.5	Not Detected

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP-1

Lab ID#: 0707462R1-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7080526	Date of Collection:	7/25/07
Dil. Factor:	2.42	Date of Analysis:	8/6/07 04:49 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
1,1,2-Trichloroethane	1.2	Not Detected	6.6	Not Detected
Tetrachloroethene	1.2	Not Detected	8.2	Not Detected
2-Hexanone	4.8	Not Detected	20	Not Detected
Dibromochloromethane	1.2	Not Detected	10	Not Detected
1,2-Dibromoethane (EDB)	1.2	Not Detected	9.3	Not Detected
Chlorobenzene	1.2	Not Detected	5.6	Not Detected
Ethyl Benzene	1.2	Not Detected	5.2	Not Detected
m,p-Xylene	1.2	Not Detected	5.2	Not Detected
o-Xylene	1.2	Not Detected	5.2	Not Detected
Styrene	1.2	Not Detected	5.2	Not Detected
Bromoform	1.2	Not Detected	12	Not Detected
Cumene	1.2	Not Detected	5.9	Not Detected
1,1,2,2-Tetrachloroethane	1.2	Not Detected	8.3	Not Detected
Propylbenzene	1.2	Not Detected	5.9	Not Detected
4-Ethyltoluene	1.2	Not Detected	5.9	Not Detected
1,3,5-Trimethylbenzene	1.2	Not Detected	5.9	Not Detected
1,2,4-Trimethylbenzene	1.2	Not Detected	5.9	Not Detected
1,3-Dichlorobenzene	1.2	Not Detected	7.3	Not Detected
1,4-Dichlorobenzene	1.2	Not Detected	7.3	Not Detected
alpha-Chlorotoluene	1.2	Not Detected	6.3	Not Detected
1,2-Dichlorobenzene	1.2	Not Detected	7.3	Not Detected
1,2,4-Trichlorobenzene	4.8	Not Detected	36	Not Detected
Hexachlorobutadiene	4.8	Not Detected	52	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Butane	106-97-8	NA	Not Detected
Isobutane	75-28-5	NA	Not Detected
Propane	74-98-6	NA	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	90	70-130
1,2-Dichloroethane-d4	108	70-130
4-Bromofluorobenzene	98	70-130

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP-1 Duplicate

Lab ID#: 0707462R1-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7080527	Date of Collection:	7/25/07
Dil. Factor:	2.53	Date of Analysis:	8/6/07 05:28 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	1.3	Not Detected	6.2	Not Detected
Freon 114	1.3	Not Detected	8.8	Not Detected
Chloromethane	5.1	Not Detected	10	Not Detected
Vinyl Chloride	1.3	Not Detected	3.2	Not Detected
1,3-Butadiene	1.3	Not Detected	2.8	Not Detected
Bromomethane	1.3	Not Detected	4.9	Not Detected
Chloroethane	1.3	Not Detected	3.3	Not Detected
Freon 11	1.3	Not Detected	7.1	Not Detected
Ethanol	5.1	Not Detected	9.5	Not Detected
Freon 113	1.3	Not Detected	9.7	Not Detected
1,1-Dichloroethene	1.3	Not Detected	5.0	Not Detected
Acetone	5.1	Not Detected	12	Not Detected
2-Propanol	5.1	Not Detected	12	Not Detected
Carbon Disulfide	1.3	Not Detected	3.9	Not Detected
3-Chloropropene	5.1	Not Detected	16	Not Detected
Methylene Chloride	1.3	Not Detected	4.4	Not Detected
Methyl tert-butyl ether	1.3	Not Detected	4.6	Not Detected
trans-1,2-Dichloroethene	1.3	Not Detected	5.0	Not Detected
Hexane	1.3	Not Detected	4.4	Not Detected
1,1-Dichloroethane	1.3	Not Detected	5.1	Not Detected
2-Butanone (Methyl Ethyl Ketone)	1.3	Not Detected	3.7	Not Detected
cis-1,2-Dichloroethene	1.3	Not Detected	5.0	Not Detected
Tetrahydrofuran	1.3	Not Detected	3.7	Not Detected
Chloroform	1.3	Not Detected	6.2	Not Detected
1,1,1-Trichloroethane	1.3	Not Detected	6.9	Not Detected
Cyclohexane	1.3	Not Detected	4.4	Not Detected
Carbon Tetrachloride	1.3	Not Detected	8.0	Not Detected
2,2,4-Trimethylpentane	1.3	Not Detected	5.9	Not Detected
Benzene	1.3	Not Detected	4.0	Not Detected
1,2-Dichloroethane	1.3	Not Detected	5.1	Not Detected
Heptane	1.3	Not Detected	5.2	Not Detected
Trichloroethene	1.3	Not Detected	6.8	Not Detected
1,2-Dichloropropane	1.3	Not Detected	5.8	Not Detected
1,4-Dioxane	5.1	Not Detected	18	Not Detected
Bromodichloromethane	1.3	Not Detected	8.5	Not Detected
cis-1,3-Dichloropropene	1.3	Not Detected	5.7	Not Detected
4-Methyl-2-pentanone	1.3	Not Detected	5.2	Not Detected
Toluene	1.3	Not Detected	4.8	Not Detected
trans-1,3-Dichloropropene	1.3	Not Detected	5.7	Not Detected

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP-1 Duplicate

Lab ID#: 0707462R1-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7080527	Date of Collection:	7/25/07
Dil. Factor:	2.53	Date of Analysis:	8/6/07 05:28 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
1,1,2-Trichloroethane	1.3	Not Detected	6.9	Not Detected
Tetrachloroethene	1.3	Not Detected	8.6	Not Detected
2-Hexanone	5.1	Not Detected	21	Not Detected
Dibromochloromethane	1.3	Not Detected	11	Not Detected
1,2-Dibromoethane (EDB)	1.3	Not Detected	9.7	Not Detected
Chlorobenzene	1.3	Not Detected	5.8	Not Detected
Ethyl Benzene	1.3	Not Detected	5.5	Not Detected
m,p-Xylene	1.3	1.4	5.5	6.0
o-Xylene	1.3	Not Detected	5.5	Not Detected
Styrene	1.3	Not Detected	5.4	Not Detected
Bromoform	1.3	Not Detected	13	Not Detected
Cumene	1.3	Not Detected	6.2	Not Detected
1,1,2,2-Tetrachloroethane	1.3	Not Detected	8.7	Not Detected
Propylbenzene	1.3	Not Detected	6.2	Not Detected
4-Ethyltoluene	1.3	Not Detected	6.2	Not Detected
1,3,5-Trimethylbenzene	1.3	Not Detected	6.2	Not Detected
1,2,4-Trimethylbenzene	1.3	1.6	6.2	7.7
1,3-Dichlorobenzene	1.3	Not Detected	7.6	Not Detected
1,4-Dichlorobenzene	1.3	Not Detected	7.6	Not Detected
alpha-Chlorotoluene	1.3	Not Detected	6.5	Not Detected
1,2-Dichlorobenzene	1.3	Not Detected	7.6	Not Detected
1,2,4-Trichlorobenzene	5.1	Not Detected	38	Not Detected
Hexachlorobutadiene	5.1	Not Detected	54	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Butane	106-97-8	NA	Not Detected
Isobutane	75-28-5	NA	Not Detected
Propane	74-98-6	NA	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	89	70-130
1,2-Dichloroethane-d4	108	70-130
4-Bromofluorobenzene	101	70-130

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP-2

Lab ID#: 0707462R1-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7080528	Date of Collection:	7/25/07
Dil. Factor:	2.29	Date of Analysis:	8/6/07 06:11 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	1.1	6.8	5.7	34
Freon 114	1.1	Not Detected	8.0	Not Detected
Chloromethane	4.6	Not Detected	9.4	Not Detected
Vinyl Chloride	1.1	Not Detected	2.9	Not Detected
1,3-Butadiene	1.1	Not Detected	2.5	Not Detected
Bromomethane	1.1	Not Detected	4.4	Not Detected
Chloroethane	1.1	Not Detected	3.0	Not Detected
Freon 11	1.1	Not Detected	6.4	Not Detected
Ethanol	4.6	Not Detected	8.6	Not Detected
Freon 113	1.1	Not Detected	8.8	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.5	Not Detected
Acetone	4.6	12	11	27
2-Propanol	4.6	Not Detected	11	Not Detected
Carbon Disulfide	1.1	Not Detected	3.6	Not Detected
3-Chloropropene	4.6	Not Detected	14	Not Detected
Methylene Chloride	1.1	Not Detected	4.0	Not Detected
Methyl tert-butyl ether	1.1	Not Detected	4.1	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.5	Not Detected
Hexane	1.1	Not Detected	4.0	Not Detected
1,1-Dichloroethane	1.1	Not Detected	4.6	Not Detected
2-Butanone (Methyl Ethyl Ketone)	1.1	Not Detected	3.4	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.5	Not Detected
Tetrahydrofuran	1.1	Not Detected	3.4	Not Detected
Chloroform	1.1	Not Detected	5.6	Not Detected
1,1,1-Trichloroethane	1.1	Not Detected	6.2	Not Detected
Cyclohexane	1.1	Not Detected	3.9	Not Detected
Carbon Tetrachloride	1.1	Not Detected	7.2	Not Detected
2,2,4-Trimethylpentane	1.1	Not Detected	5.3	Not Detected
Benzene	1.1	Not Detected	3.6	Not Detected
1,2-Dichloroethane	1.1	Not Detected	4.6	Not Detected
Heptane	1.1	Not Detected	4.7	Not Detected
Trichloroethene	1.1	Not Detected	6.2	Not Detected
1,2-Dichloropropane	1.1	Not Detected	5.3	Not Detected
1,4-Dioxane	4.6	Not Detected	16	Not Detected
Bromodichloromethane	1.1	Not Detected	7.7	Not Detected
cis-1,3-Dichloropropene	1.1	Not Detected	5.2	Not Detected
4-Methyl-2-pentanone	1.1	Not Detected	4.7	Not Detected
Toluene	1.1	Not Detected	4.3	Not Detected
trans-1,3-Dichloropropene	1.1	Not Detected	5.2	Not Detected

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP-2

Lab ID#: 0707462R1-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7080528	Date of Collection:	7/25/07
Dil. Factor:	2.29	Date of Analysis:	8/6/07 06:11 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
1,1,2-Trichloroethane	1.1	Not Detected	6.2	Not Detected
Tetrachloroethene	1.1	1.3	7.8	8.9
2-Hexanone	4.6	Not Detected	19	Not Detected
Dibromochloromethane	1.1	Not Detected	9.8	Not Detected
1,2-Dibromoethane (EDB)	1.1	Not Detected	8.8	Not Detected
Chlorobenzene	1.1	Not Detected	5.3	Not Detected
Ethyl Benzene	1.1	Not Detected	5.0	Not Detected
m,p-Xylene	1.1	Not Detected	5.0	Not Detected
o-Xylene	1.1	Not Detected	5.0	Not Detected
Styrene	1.1	Not Detected	4.9	Not Detected
Bromoform	1.1	Not Detected	12	Not Detected
Cumene	1.1	Not Detected	5.6	Not Detected
1,1,2,2-Tetrachloroethane	1.1	Not Detected	7.9	Not Detected
Propylbenzene	1.1	Not Detected	5.6	Not Detected
4-Ethyltoluene	1.1	Not Detected	5.6	Not Detected
1,3,5-Trimethylbenzene	1.1	Not Detected	5.6	Not Detected
1,2,4-Trimethylbenzene	1.1	Not Detected	5.6	Not Detected
1,3-Dichlorobenzene	1.1	Not Detected	6.9	Not Detected
1,4-Dichlorobenzene	1.1	Not Detected	6.9	Not Detected
alpha-Chlorotoluene	1.1	Not Detected	5.9	Not Detected
1,2-Dichlorobenzene	1.1	Not Detected	6.9	Not Detected
1,2,4-Trichlorobenzene	4.6	Not Detected	34	Not Detected
Hexachlorobutadiene	4.6	Not Detected	49	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Butane	106-97-8	NA	Not Detected
Isobutane	75-28-5	NA	Not Detected
Propane	74-98-6	NA	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	83	70-130
1,2-Dichloroethane-d4	106	70-130
4-Bromofluorobenzene	107	70-130

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP-2 Lab Duplicate

Lab ID#: 0707462R1-03AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7080529	Date of Collection:	7/25/07
Dil. Factor:	2.29	Date of Analysis:	8/6/07 06:51 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	1.1	6.4	5.7	32
Freon 114	1.1	Not Detected	8.0	Not Detected
Chloromethane	4.6	Not Detected	9.4	Not Detected
Vinyl Chloride	1.1	Not Detected	2.9	Not Detected
1,3-Butadiene	1.1	Not Detected	2.5	Not Detected
Bromomethane	1.1	Not Detected	4.4	Not Detected
Chloroethane	1.1	Not Detected	3.0	Not Detected
Freon 11	1.1	Not Detected	6.4	Not Detected
Ethanol	4.6	Not Detected	8.6	Not Detected
Freon 113	1.1	Not Detected	8.8	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.5	Not Detected
Acetone	4.6	12	11	28
2-Propanol	4.6	Not Detected	11	Not Detected
Carbon Disulfide	1.1	Not Detected	3.6	Not Detected
3-Chloropropene	4.6	Not Detected	14	Not Detected
Methylene Chloride	1.1	Not Detected	4.0	Not Detected
Methyl tert-butyl ether	1.1	Not Detected	4.1	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.5	Not Detected
Hexane	1.1	Not Detected	4.0	Not Detected
1,1-Dichloroethane	1.1	Not Detected	4.6	Not Detected
2-Butanone (Methyl Ethyl Ketone)	1.1	Not Detected	3.4	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.5	Not Detected
Tetrahydrofuran	1.1	Not Detected	3.4	Not Detected
Chloroform	1.1	Not Detected	5.6	Not Detected
1,1,1-Trichloroethane	1.1	Not Detected	6.2	Not Detected
Cyclohexane	1.1	Not Detected	3.9	Not Detected
Carbon Tetrachloride	1.1	Not Detected	7.2	Not Detected
2,2,4-Trimethylpentane	1.1	Not Detected	5.3	Not Detected
Benzene	1.1	Not Detected	3.6	Not Detected
1,2-Dichloroethane	1.1	Not Detected	4.6	Not Detected
Heptane	1.1	Not Detected	4.7	Not Detected
Trichloroethene	1.1	Not Detected	6.2	Not Detected
1,2-Dichloropropane	1.1	Not Detected	5.3	Not Detected
1,4-Dioxane	4.6	Not Detected	16	Not Detected
Bromodichloromethane	1.1	Not Detected	7.7	Not Detected
cis-1,3-Dichloropropene	1.1	Not Detected	5.2	Not Detected
4-Methyl-2-pentanone	1.1	Not Detected	4.7	Not Detected
Toluene	1.1	Not Detected	4.3	Not Detected
trans-1,3-Dichloropropene	1.1	Not Detected	5.2	Not Detected

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP-2 Lab Duplicate

Lab ID#: 0707462R1-03AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7080529	Date of Collection:	7/25/07
Dil. Factor:	2.29	Date of Analysis:	8/6/07 06:51 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
1,1,2-Trichloroethane	1.1	Not Detected	6.2	Not Detected
Tetrachloroethene	1.1	1.7	7.8	12
2-Hexanone	4.6	Not Detected	19	Not Detected
Dibromochloromethane	1.1	Not Detected	9.8	Not Detected
1,2-Dibromoethane (EDB)	1.1	Not Detected	8.8	Not Detected
Chlorobenzene	1.1	Not Detected	5.3	Not Detected
Ethyl Benzene	1.1	Not Detected	5.0	Not Detected
m,p-Xylene	1.1	Not Detected	5.0	Not Detected
o-Xylene	1.1	Not Detected	5.0	Not Detected
Styrene	1.1	Not Detected	4.9	Not Detected
Bromoform	1.1	Not Detected	12	Not Detected
Cumene	1.1	Not Detected	5.6	Not Detected
1,1,2,2-Tetrachloroethane	1.1	Not Detected	7.9	Not Detected
Propylbenzene	1.1	Not Detected	5.6	Not Detected
4-Ethyltoluene	1.1	Not Detected	5.6	Not Detected
1,3,5-Trimethylbenzene	1.1	Not Detected	5.6	Not Detected
1,2,4-Trimethylbenzene	1.1	1.2	5.6	5.8
1,3-Dichlorobenzene	1.1	Not Detected	6.9	Not Detected
1,4-Dichlorobenzene	1.1	Not Detected	6.9	Not Detected
alpha-Chlorotoluene	1.1	Not Detected	5.9	Not Detected
1,2-Dichlorobenzene	1.1	Not Detected	6.9	Not Detected
1,2,4-Trichlorobenzene	4.6	Not Detected	34	Not Detected
Hexachlorobutadiene	4.6	Not Detected	49	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Butane	106-97-8	NA	Not Detected
Isobutane	75-28-5	NA	Not Detected
Propane	74-98-6	NA	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	89	70-130
1,2-Dichloroethane-d4	120	70-130
4-Bromofluorobenzene	106	70-130

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0707462R1-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7080506	Date of Collection: NA	
Dil. Factor:	1.00	Date of Analysis: 8/5/07 11:59 AM	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.50	Not Detected	2.5	Not Detected
Freon 114	0.50	Not Detected	3.5	Not Detected
Chloromethane	2.0	Not Detected	4.1	Not Detected
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
1,3-Butadiene	0.50	Not Detected	1.1	Not Detected
Bromomethane	0.50	Not Detected	1.9	Not Detected
Chloroethane	0.50	Not Detected	1.3	Not Detected
Freon 11	0.50	Not Detected	2.8	Not Detected
Ethanol	2.0	Not Detected	3.8	Not Detected
Freon 113	0.50	Not Detected	3.8	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Acetone	2.0	Not Detected	4.8	Not Detected
2-Propanol	2.0	Not Detected	4.9	Not Detected
Carbon Disulfide	0.50	Not Detected	1.6	Not Detected
3-Chloropropene	2.0	Not Detected	6.3	Not Detected
Methylene Chloride	0.50	Not Detected	1.7	Not Detected
Methyl tert-butyl ether	0.50	Not Detected	1.8	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Hexane	0.50	Not Detected	1.8	Not Detected
1,1-Dichloroethane	0.50	Not Detected	2.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.50	Not Detected	1.5	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Tetrahydrofuran	0.50	Not Detected	1.5	Not Detected
Chloroform	0.50	Not Detected	2.4	Not Detected
1,1,1-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Cyclohexane	0.50	Not Detected	1.7	Not Detected
Carbon Tetrachloride	0.50	Not Detected	3.1	Not Detected
2,2,4-Trimethylpentane	0.50	Not Detected	2.3	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
1,2-Dichloroethane	0.50	Not Detected	2.0	Not Detected
Heptane	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
1,2-Dichloropropane	0.50	Not Detected	2.3	Not Detected
1,4-Dioxane	2.0	Not Detected	7.2	Not Detected
Bromodichloromethane	0.50	Not Detected	3.4	Not Detected
cis-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
4-Methyl-2-pentanone	0.50	Not Detected	2.0	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
trans-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0707462R1-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7080506	Date of Collection: NA	
Dil. Factor:	1.00	Date of Analysis: 8/5/07 11:59 AM	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
1,1,2-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
2-Hexanone	2.0	Not Detected	8.2	Not Detected
Dibromochloromethane	0.50	Not Detected	4.2	Not Detected
1,2-Dibromoethane (EDB)	0.50	Not Detected	3.8	Not Detected
Chlorobenzene	0.50	Not Detected	2.3	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
Styrene	0.50	Not Detected	2.1	Not Detected
Bromoform	0.50	Not Detected	5.2	Not Detected
Cumene	0.50	Not Detected	2.4	Not Detected
1,1,2,2-Tetrachloroethane	0.50	Not Detected	3.4	Not Detected
Propylbenzene	0.50	Not Detected	2.4	Not Detected
4-Ethyltoluene	0.50	Not Detected	2.4	Not Detected
1,3,5-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,2,4-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,3-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,4-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
alpha-Chlorotoluene	0.50	Not Detected	2.6	Not Detected
1,2-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,2,4-Trichlorobenzene	2.0	Not Detected	15	Not Detected
Hexachlorobutadiene	2.0	Not Detected	21	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ppbv
Butane	106-97-8	NA	Not Detected
Isobutane	75-28-5	NA	Not Detected
Propane	74-98-6	NA	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	87	70-130
1,2-Dichloroethane-d4	106	70-130
4-Bromofluorobenzene	94	70-130

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: CCV

Lab ID#: 0707462R1-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7080503	Date of Collection: NA	
Dil. Factor:	1.00	Date of Analysis: 8/5/07 09:24 AM	

Compound	%Recovery
Freon 12	94
Freon 114	98
Chloromethane	86
Vinyl Chloride	93
1,3-Butadiene	92
Bromomethane	87
Chloroethane	88
Freon 11	88
Ethanol	88
Freon 113	92
1,1-Dichloroethene	93
Acetone	96
2-Propanol	100
Carbon Disulfide	99
3-Chloropropene	93
Methylene Chloride	94
Methyl tert-butyl ether	90
trans-1,2-Dichloroethene	95
Hexane	98
1,1-Dichloroethane	111
2-Butanone (Methyl Ethyl Ketone)	116
cis-1,2-Dichloroethene	113
Tetrahydrofuran	124
Chloroform	112
1,1,1-Trichloroethane	112
Cyclohexane	112
Carbon Tetrachloride	111
2,2,4-Trimethylpentane	118
Benzene	113
1,2-Dichloroethane	120
Heptane	118
Trichloroethene	107
1,2-Dichloropropane	108
1,4-Dioxane	104
Bromodichloromethane	102
cis-1,3-Dichloropropene	101
4-Methyl-2-pentanone	104
Toluene	95
trans-1,3-Dichloropropene	116

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: CCV

Lab ID#: 0707462R1-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7080503	Date of Collection: NA	
Dil. Factor:	1.00	Date of Analysis: 8/5/07 09:24 AM	

Compound	%Recovery
1,1,2-Trichloroethane	117
Tetrachloroethene	116
2-Hexanone	122
Dibromochloromethane	116
1,2-Dibromoethane (EDB)	110
Chlorobenzene	104
Ethyl Benzene	109
m,p-Xylene	112
o-Xylene	112
Styrene	122
Bromoform	118
Cumene	113
1,1,2,2-Tetrachloroethane	109
Propylbenzene	108
4-Ethyltoluene	104
1,3,5-Trimethylbenzene	107
1,2,4-Trimethylbenzene	109
1,3-Dichlorobenzene	102
1,4-Dichlorobenzene	105
alpha-Chlorotoluene	105
1,2-Dichlorobenzene	103
1,2,4-Trichlorobenzene	71
Hexachlorobutadiene	74

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	93	70-130
1,2-Dichloroethane-d4	107	70-130
4-Bromofluorobenzene	105	70-130

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCS

Lab ID#: 0707462R1-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7080504	Date of Collection: NA	
Dil. Factor:	1.00	Date of Analysis: 8/5/07 10:11 AM	

Compound	%Recovery
Freon 12	101
Freon 114	108
Chloromethane	94
Vinyl Chloride	101
1,3-Butadiene	96
Bromomethane	94
Chloroethane	95
Freon 11	103
Ethanol	109
Freon 113	112
1,1-Dichloroethene	119
Acetone	112
2-Propanol	119
Carbon Disulfide	110
3-Chloropropene	107
Methylene Chloride	116
Methyl tert-butyl ether	90
trans-1,2-Dichloroethene	102
Hexane	106
1,1-Dichloroethane	108
2-Butanone (Methyl Ethyl Ketone)	120
cis-1,2-Dichloroethene	120
Tetrahydrofuran	121
Chloroform	113
1,1,1-Trichloroethane	111
Cyclohexane	113
Carbon Tetrachloride	112
2,2,4-Trimethylpentane	114
Benzene	111
1,2-Dichloroethane	115
Heptane	113
Trichloroethene	110
1,2-Dichloropropane	120
1,4-Dioxane	109
Bromodichloromethane	105
cis-1,3-Dichloropropene	109
4-Methyl-2-pentanone	114
Toluene	101
trans-1,3-Dichloropropene	112

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCS

Lab ID#: 0707462R1-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7080504	Date of Collection: NA	
Dil. Factor:	1.00	Date of Analysis: 8/5/07 10:11 AM	

Compound	%Recovery
1,1,2-Trichloroethane	109
Tetrachloroethene	111
2-Hexanone	109
Dibromochloromethane	117
1,2-Dibromoethane (EDB)	105
Chlorobenzene	106
Ethyl Benzene	106
m,p-Xylene	108
o-Xylene	111
Styrene	120
Bromoform	112
Cumene	109
1,1,2,2-Tetrachloroethane	95
Propylbenzene	101
4-Ethyltoluene	104
1,3,5-Trimethylbenzene	100
1,2,4-Trimethylbenzene	104
1,3-Dichlorobenzene	101
1,4-Dichlorobenzene	102
alpha-Chlorotoluene	106
1,2-Dichlorobenzene	97
1,2,4-Trichlorobenzene	78
Hexachlorobutadiene	80

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	91	70-130
1,2-Dichloroethane-d4	107	70-130
4-Bromofluorobenzene	101	70-130

CONESTOGA-ROVERS
& ASSOCIATES

APPENDIX G

Soil Analytical Laboratory Report

McCampbell Analytical, Inc.
"When Quality Counts"

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

Cambria Env. Technology	Client Project ID: #589-1000	Date Sampled: 11/17/06
5900 Hollis St, Suite A		Date Received: 11/20/06
Emeryville, CA 94608	Client Contact: Mark Jonas	Date Reported: 11/28/06
	Client P.O.:	Date Completed: 11/28/06

WorkOrder: 0611419

November 28, 2006

Dear Mark:

Enclosed are:

1). the results of **3** analyzed samples from your **#589-1000 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.

Best regards,

Angela Rydelius, Lab Manager

CETE 0611419

McCAMPBELL ANALYTICAL, INC.
1534 WILLOW PASS ROAD
PITTSBURG, CA 94565-1701
Website: www.mccampbell.com Email: main@mccampbell.com
Telephone: (877) 252-9262 Fax: (925) 252-9269

CHAIN OF CUSTODY RECORD

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

GeoTracker EDF ☒ PDF ☐ Excel ☐ Write On (DW) ☐
☐ Check if sample is effluent and "J" flag is required

Report To: Mark Jonas Bill To: Mark Jonas
Company: Cambria Environmental
5900 Hollis St. Ste A
E-Mail: mjonas@cambria-env.com
Tele: (510) 420-0700 Fax: (510) 420-9170
Project #: 589-1000 Project Name:
Project Location: 800 Franklin St. Oakland
Sampler Signature: Celin

Analysis Request: BTEX & TPH as Gas (602 / 8021 + 8015) / MTBE; TPH as Diesel (8015) w/ Silica Gel cleanup; Total Petroleum Oil & Grease (1664 / 5520 E/B&F); Total Petroleum Hydrocarbons (418.1); EPA 502.2 / 601 / 8010 / 8021 (HVOCs); MTBE / BTEX ONLY (EPA 602 / 8021); EPA 505/ 608 / 8081 (Cl Pesticides); EPA 608 / 8082 PCB's ONLY; Aroclors / Congeners; EPA 507 / 8141 (NP Pesticides); EPA 515 / 8151 (Acidic Cl Herbicides); EPA 524.2 / 624 / 8260 (VOCs); EPA 525.2 / 625 / 8270 (SVOCs); EPA 8270 SIM / 8310 (PAHs / PNAs); CAM 17 Metals (200.7 / 200.8 / 6010 / 6020); LUFT 5 Metals (200.7 / 200.8 / 6010 / 6020); Lead (200.7 / 200.8 / (6010) / 6020)

Other: 1,2 DCA - 8260; Chloroform - 8260

Comments: Filter Samples for Metals analysis: Yes / No

SAMPLE ID	LOCATION/ Field Point Name	Date	Time	# Containers	Type Containers	Matrix	Method Preserved	BTEX & TPH as Gas / MTBE	TPH as Diesel w/ Silica Gel cleanup	Lead (6010)	1,2 DCA - 8260	Chloroform - 8260
VP-1-5.5		11/17/06	1135	1	tube	Soil ✓	ICE ✓	X	X	X	X	X
VP-2.5.5		11/17/06	1240	1	tube	Soil ✓	ICE ✓	X	X		X	X
W-1		11/17/06	1245	1	tube	Soil X	ICE ✓	X	X	X	X	X

Relinquished By:	Date:	Time:	Received By:
Celin	11/17/06	1400	Secured location
[signature]	11/20/06	1040	[signature]
[signature]	11/26	1150	[signature]

ICE/t°______
GOOD CONDITION______
HEAD SPACE ABSENT______
DECHLORINATED IN LAB______
APPROPRIATE CONTAINERS______
PRESERVED IN LAB______

PRESERVATION VOAS O&G METALS OTHER pH<2

COMMENTS:

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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0611419 **ClientID: CETE**

☑ EDF ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty

Requested TAT: 5 days

Report to:
Mark Jonas
Cambria Env. Technology
5900 Hollis St, Suite A
Emeryville, CA 94608

Email: mjonas@cambria-env.com
TEL: (510) 420-070 FAX: (510) 420-917
ProjectNo: #589-1000
PO:

Bill to
Accounts Payable
Cambria Env. Technology
5900 Hollis St, Ste. A
Emeryville, CA 94608

Date Received: **11/20/2006**
Date Printed: **11/20/2006**

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
0611419-001	VP-1.5.5	Soil	11/17/2006	☐	A	A	A	A	A							
0611419-002	VP-2.5.5	Soil	11/17/2006	☐	A	A			A							
0611419-003	W-1	Soil	11/17/2006	☐	A	A	A		A							

Test Legend:

1	8260B_S	2	G-MBTEX_S	3	PB_S	4	PREDF REPORT	5	TPH(D)WSG_S
6		7		8		9		10	
11		12							

Prepared by: Nickole White

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.
"When Quality Counts"

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

Cambria Env. Technology	Client Project ID: #589-1000	Date Sampled: 11/17/06
5900 Hollis St, Suite A		Date Received: 11/20/06
Emeryville, CA 94608	Client Contact: Mark Jonas	Date Extracted: 11/20/06
	Client P.O.:	Date Analyzed: 11/22/06-11/23/06

Diesel Range (C10-C23) & Oil Range (C18+) Extractable Hydrocarbons as Diesel & Motor Oil w/ Silica Gel Clean-Up*

Extraction method: SW3550C/3630C Analytical methods: SW8015C Work Order: 0611419

Lab ID	Client ID	Matrix	TPH(d)	TPH(mo)	DF	% SS
0611419-001A	VP-1.5.5	S	4.0,g,b	6.9	1	90
0611419-002A	VP-2.5.5	S	ND	ND	1	94
0611419-003A	W-1	S	1.8,g	22	1	89

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	NA	NA	ug/L
	S	1.0	5.0	mg/Kg

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

cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

+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 diesel is significant; b) diesel range compounds are significant; no recognizable pattern; c) aged diesel? is significant); d) gasoline range compounds are significant; e) unknown medium boiling point pattern that does not appear to be derived from diesel; f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; k) kerosene/kerosene range; l) bunker oil; m) fuel oil; n) stoddard solvent/mineral spirit; r) results are reported on a dry weight basis

DHS ELAP Certification N° 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

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

Cambria Env. Technology	Client Project ID: #589-1000	Date Sampled: 11/17/06
5900 Hollis St, Suite A		Date Received: 11/20/06
Emeryville, CA 94608	Client Contact: Mark Jonas	Date Extracted: 11/20/06
	Client P.O.:	Date Analyzed 11/22/06-11/23/06

Diesel Range (C10-C23) Extractable Hydrocarbons with Silica Gel Clean-Up*

Extraction method: SW3550C/3630C Analytical methods: SW8015C Work Order: 0611419

Lab ID	Client ID	Matrix	TPH(d)	DF	% SS
0611419-001A	VP-1.5.5	S	4.0,g,b	1	90
0611419-002A	VP-2.5.5	S	ND	1	94
0611419-003A	W-1	S	1.8,g	1	89

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	NA	NA
	S	1.0	mg/Kg

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

cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

+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 diesel is significant; b) diesel range compounds are significant; no recognizable pattern; c) aged diesel? is significant); d) gasoline range compounds are significant; e) unknown medium boiling point pattern that does not appear to be derived from diesel; f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; k) kerosene/kerosene range; l) bunker oil; m) fuel oil; n) stoddard solvent/mineral spirit; r) results are reported on a dry weight basis

DHS ELAP Certification N° 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

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

Cambria Env. Technology	Client Project ID: #589-1000	Date Sampled: 11/17/06
5900 Hollis St, Suite A		Date Received: 11/20/06
Emeryville, CA 94608	Client Contact: Mark Jonas	Date Extracted: 11/20/06
	Client P.O.:	Date Analyzed: 11/20/06-11/21/06

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

Extraction method: SW5030B Analytical methods: SW8021B/8015Cm Work Order: 0611419

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	VP-1.5.5	S	ND	ND	ND	ND	ND	ND	1	91
002A	VP-2.5.5	S	ND	ND	ND	ND	ND	ND	1	91
003A	W-1	S	ND	ND	ND	ND	ND	ND	1	90
Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	NA	NA	NA	NA	NA	NA	1	ug/L
	S	1.0	0.05	0.005	0.005	0.005	0.005	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; n) TPH(g) value derived using a client specified carbon range; o) results are reported on a dry weight basis; p) see attached narrative.

DHS ELAP Certification N° 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

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

Cambria Env. Technology	Client Project ID: #589-1000	Date Sampled: 11/17/06
5900 Hollis St, Suite A		Date Received: 11/20/06
Emeryville, CA 94608	Client Contact: Mark Jonas	Date Extracted: 11/20/06
	Client P.O.:	Date Analyzed: 11/22/06

Volatile Organics by P&T and GC/MS*

Extraction method: SW5030B Analytical methods: SW8260B Work Order: 0611419

Lab ID	Client ID	Matrix	Chloroform	,2-Dichloroethane (1,2-DCA	DF	% SS
0611419-001A	VP-1.5.5	S	ND	ND	1	97
0611419-002A	VP-2.5.5	S	ND	ND	1	98
0611419-003A	W-1	S	ND	ND	1	100

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	NA	NA	ug/L
	S	0.005	0.005	mg/kg

* 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 ELAP Certification N° 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

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

Cambria Env. Technology	Client Project ID: #589-1000	Date Sampled: 11/17/06
5900 Hollis St, Suite A		Date Received: 11/20/06
Emeryville, CA 94608	Client Contact: Mark Jonas	Date Extracted: 11/20/06
	Client P.O.:	Date Analyzed: 11/27/06

Lead by ICP*

Extraction method: SW3050B Analytical methods: 6010C Work Order: 0611419

Lab ID	Client ID	Matrix	Extraction	Lead	DF	% SS
0611419-001A	VP-1.5.5	S	TTLC	35	1	109
0611419-003A	W-1	S	TTLC	210	1	109

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	TTLC	NA	µg/L
	S	TTLC	5.0	mg/Kg

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

means surrogate diluted out of range; ND means not detected above the reporting limit; N/A means not applicable to this sample or instrument.

i) aqueous sample containing greater than ~1 vol. % sediment; for DISSOLVED metals, this sample has been preserved prior to filtration; for TTLC metals, a representative sediment-water mixture was digested; j) reporting limit raised due to insufficient sample amount; k) reporting limit raised due to matrix interference; m) estimated value due to low/high surrrogate recovery, caused by matrix interference; n) results are reported on a dry weight basis; p) see attached narrative.

DHS ELAP Certification N° 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

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

QC SUMMARY REPORT FOR 6010C

W.O. Sample Matrix: Soil QC Matrix: Soil WorkOrder: 0611419

EPA Method 6010C			Extraction SW3050B			BatchID: 24861			Spiked Sample ID 0611340-027A				
Analyte	Sample	Spiked	MS	MSD	MS-MSD	Spiked	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	mg/Kg	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
Lead	10	50	94.8	94.8	0	10	103	96.6	6.29	75 - 125	20	80 - 120	20
%SS:	105	250	105	105	0	250	108	106	1.69	70 - 130	20	70 - 130	20

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

BATCH 24861 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0611419-001A	11/17/06 11:35 AM	11/20/06	11/27/06 6:46 PM	0611419-003A	11/17/06 12:45 PM	11/20/06	11/27/06 6:48 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 applicable to this method.

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

DHS ELAP Certification N° 1644

QA/QC Officer

McCampbell Analytical, Inc.
"When Quality Counts"

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

QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Soil QC Matrix: Soil WorkOrder: 0611419

EPA Method SW8260B	Extraction SW5030B				BatchID: 24841			Spiked Sample ID: 0611396-059a			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
tert-Amyl methyl ether (TAME	ND	0.050	81	92.5	13.2	95.2	93.3	2.09	70 - 130	30	70 - 130	30
Benzene	ND	0.050	110	121	9.61	122	121	0.869	70 - 130	30	70 - 130	30
t-Butyl alcohol (TBA)	ND	0.25	77.2	75.8	1.87	93.1	87.5	6.17	70 - 130	30	70 - 130	30
Chlorobenzene	ND	0.050	99.2	111	10.9	106	103	2.02	70 - 130	30	70 - 130	30
1,2-Dibromoethane (EDB)	ND	0.050	98	109	10.2	112	108	4.08	70 - 130	30	70 - 130	30
1,2-Dichloroethane (1,2-DCA)	ND	0.050	84.7	85.5	0.922	88.7	85.6	3.57	70 - 130	30	70 - 130	30
1,1-Dichloroethene	ND	0.050	113	125	10.0	124	123	0.871	70 - 130	30	70 - 130	30
Diisopropyl ether (DIPE)	ND	0.050	104	118	12.4	119	116	2.64	70 - 130	30	70 - 130	30
Ethyl tert-butyl ether (ETBE)	ND	0.050	81	94.6	15.4	96.1	93.1	3.20	70 - 130	30	70 - 130	30
Methyl-t-butyl ether (MTBE)	ND	0.050	77.7	88.7	13.3	93.1	90.5	2.80	70 - 130	30	70 - 130	30
Toluene	ND	0.050	106	117	9.82	112	110	1.90	70 - 130	30	70 - 130	30
Trichloroethene	ND	0.050	88.1	101	13.5	96.6	95.4	1.18	70 - 130	30	70 - 130	30
%SS1:	105	0.050	97	100	2.88	100	99	0.935	70 - 130	30	70 - 130	30
%SS2:	100	0.050	98	95	3.54	96	95	0.0327	70 - 130	30	70 - 130	30
%SS3:	99	0.050	92	92	0	92	93	1.56	70 - 130	30	70 - 130	30

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

BATCH 24841 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0611419-001	1/17/06 11:35 AM	11/20/06	11/22/06 9:52 AM	0611419-002	1/17/06 12:40 PM	11/20/06	1/22/06 10:39 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.

DHS ELAP Certification N° 1644

QA/QC Officer

McCampbell Analytical, Inc.
"When Quality Counts"

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

QC SUMMARY REPORT FOR 6010C

W.O. Sample Matrix: Soil QC Matrix: Soil WorkOrder: 0611419

EPA Method 6010C	Extraction SW3050B				BatchID: 24861			Spiked Sample ID: 0611340-027A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
Lead	10	10	94.8	94.8	0	103	96.6	6.29	75 - 125	20	80 - 120	20
%SS:	105	250	105	105	0	108	106	1.69	70 - 130	20	70 - 130	20

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

BATCH 24861 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0611419-001	1/17/06 11:35 AM	11/20/06	11/27/06 6:46 PM	0611419-003	1/17/06 12:45 PM	11/20/06	11/27/06 6:48 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 applicable to this method.

DHS ELAP Certification N° 1644

QA/QC Officer

McCampbell Analytical, Inc.
"When Quality Counts"

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

QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Soil QC Matrix: Soil WorkOrder: 0611419

EPA Method SW8260B	Extraction SW5030B				BatchID: 24864			Spiked Sample ID: 0611419-003a			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
tert-Amyl methyl ether (TAME	ND	0.050	83.3	87.8	5.25	84.7	91.8	7.98	70 - 130	30	70 - 130	30
Benzene	ND	0.050	110	115	4.33	100	116	14.9	70 - 130	30	70 - 130	30
t-Butyl alcohol (TBA)	ND	0.25	86.5	85.4	1.26	85.5	87.4	2.27	70 - 130	30	70 - 130	30
Chlorobenzene	ND	0.050	101	103	1.66	85.8	103	18.5	70 - 130	30	70 - 130	30
1,2-Dibromoethane (EDB)	ND	0.050	106	107	1.29	98.8	108	8.93	70 - 130	30	70 - 130	30
1,2-Dichloroethane (1,2-DCA)	ND	0.050	87	80.3	8.01	87.5	84.8	3.12	70 - 130	30	70 - 130	30
1,1-Dichloroethene	ND	0.050	109	116	6.72	97.5	119	19.8	70 - 130	30	70 - 130	30
Diisopropyl ether (DIPE)	ND	0.050	105	111	5.71	100	115	14.0	70 - 130	30	70 - 130	30
Ethyl tert-butyl ether (ETBE)	ND	0.050	83.6	88.3	5.48	89.6	92.6	3.24	70 - 130	30	70 - 130	30
Methyl-t-butyl ether (MTBE)	ND	0.050	81.2	85.7	5.45	81.3	89.6	9.65	70 - 130	30	70 - 130	30
Toluene	ND	0.050	105	108	2.78	87.7	107	19.6	70 - 130	30	70 - 130	30
Trichloroethene	ND	0.050	88	90.5	2.83	79.7	96.6	19.2	70 - 130	30	70 - 130	30
%SS1:	96	0.050	95	97	2.23	104	101	2.73	70 - 130	30	70 - 130	30
%SS2:	103	0.050	95	95	0	94	94	0	70 - 130	30	70 - 130	30
%SS3:	100	0.050	92	91	0.473	91	92	0.491	70 - 130	30	70 - 130	30

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

BATCH 24864 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0611419-003	1/17/06 12:45 PM	11/20/06	1/22/06 11:26 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.

DHS ELAP Certification N° 1644

QA/QC Officer

McCampbell Analytical, Inc.
"When Quality Counts"

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

QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Soil QC Matrix: Soil WorkOrder: 0611419

EPA Method SW8021B/8015Cm **Extraction SW5030B** **BatchID: 24838** **Spiked Sample ID: 0611396-059A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex)£	ND	0.60	112	114	1.67	112	107	4.86	70 - 130	30	70 - 130	30
MTBE	ND	0.10	93.2	99.9	6.95	93.3	95.4	2.25	70 - 130	30	70 - 130	30
Benzene	ND	0.10	107	105	1.49	97.1	99.1	2.02	70 - 130	30	70 - 130	30
Toluene	ND	0.10	97.5	95.8	1.78	88	90.6	2.87	70 - 130	30	70 - 130	30
Ethylbenzene	ND	0.10	110	105	4.73	96.8	96.5	0.307	70 - 130	30	70 - 130	30
Xylenes	ND	0.30	107	107	0	96.3	96	0.347	70 - 130	30	70 - 130	30
%SS:	96	0.10	94	101	7.18	95	84	12.3	70 - 130	30	70 - 130	30

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

BATCH 24838 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0611419-001	1/17/06 11:35 AM	11/20/06	1/20/06 10:50 PM	0611419-002	1/17/06 12:40 PM	11/20/06	11/21/06 5:56 AM
0611419-003	1/17/06 12:45 PM	11/20/06	11/21/06 6:28 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.

DHS ELAP Certification N° 1644

QA/QC Officer

McCampbell Analytical, Inc.
"When Quality Counts"

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

QC SUMMARY REPORT FOR SW8015C

W.O. Sample Matrix: Soil QC Matrix: Soil WorkOrder: 0611419

EPA Method SW8015C	Extraction SW3550C/3630C				BatchID: 24863				Spiked Sample ID: 0611419-003A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(d)	1.8	20	112	113	0.287	99.6	100	0.557	70 - 130	30	70 - 130	30
%SS:	89	50	103	102	0.536	102	105	2.74	70 - 130	30	70 - 130	30

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

NONE

BATCH 24863 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0611419-001	1/17/06 11:35 AM	11/20/06	11/23/06 1:35 AM	0611419-002	1/17/06 12:40 PM	11/20/06	11/23/06 1:35 AM
0611419-003	1/17/06 12:45 PM	11/20/06	1/22/06 12:21 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.

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

DHS ELAP Certification N° 1644

JR QA/QC Officer