

C A M B R I A

RECEIVED

3:17 pm, Oct 08, 2008

Alameda County
Environmental Health

August 14, 2003

Mr. Raymond Hien & Sang Ho
1220 E. 12th Street
Oakland, CA 94606
VIA FAX (510) 534-1889

Rc: **Subsurface Investigation Report**
2834 E. 7th Street
Oakland, California

Dear Mssrs. Hien & Ho:

Cambria Environmental Technology, Inc. has prepared this *Subsurface Investigation Report* for the above-referenced site. The site background, investigation activities, investigation results, and our conclusions and recommendations are described below.

SITE BACKGROUND

Cambria met with you (the prospective purchasers) and the sellers (Hans and Steve Oelschlaegel and Gunther Kitsch) to discuss subsurface investigation beneath the former underground storage tank (UST) at the site. The *Environmental Transaction Screen* dated May 27, 2003, prepared by AEI Consultants of Walnut Creek, recommended subsurface investigation beneath the former UST.

Mr. Kitsch indicated that the UST (1,000 gallons or less) had been used for gasoline storage at the site for approximately 4 years during the gasoline crisis in the late 1970's (about 25 years ago). The tank was removed about 2 years ago by the seller's neighbor, a contractor experienced with tank removal. Mr. Kitsch relied on the contractor's experience to remove the tank in accordance with regulatory requirements. During a brief vacation by the seller, the contractor removed the tank without a permit. According to Mr. Kitsch, during tank removal the tank looked clean with no holes and no contamination was observed in the native soil or excavation cavity. No documentation regarding the UST removal has been provided to Cambria.

The state's Geotracker database lists a site with a former UST and several groundwater monitoring wells at 630 29th Avenue, located approximately 200 feet (ft) southeast of the site on the other side of the 29th Avenue overpass. No analytical data was available for this site.

Cambria
Environmental
Technology, Inc.

5900 Hollis Street
Suite A
Emeryville, CA 94608
Tel (510) 420-0700
Fax (510) 420-9170

SUBSURFACE INVESTIGATION ACTIVITIES

Cambria's investigation activities are described below.

Scope of Work:

Cambria completed one boring beneath the center of the former UST at the site. The sampling required drilling through the surface concrete and the former UST cavity, which was partially filled with brittle, slate roofing material. Cambria collected soil samples from native soil immediately (6 to 12 inches) beneath the former UST cavity and at approximate 5 ft intervals to a total depth of 28 ft below ground surface (bgs). Groundwater was anticipated to be approximately 15 ft bgs but was not encountered. Two soil samples were submitted to a certified analytical laboratory as described below.

Sampling Date:

July 28, 2003.

Drilling Permit:

Alameda County Public Works Agency issued permit number W03-091 for drilling one boring. The drilling permit is included in Attachment A.

Personnel Present:

Matthew Meyers, Cambria's Senior Staff Geologist performed all field activities, which were overseen by Cambria's Senior Geologist Ron Scheele, a California Registered Geologist. Mr. Gunther Kitsch, property owner, was also present.

Drilling Company:

Vironex of San Leandro, California (C-57 License #705927) performed the soil boring.

Number of Borings:

One boring was drilled to approximately 28 ft bgs. The boring and sampling location are shown on Figure 1.


Drilling Method:

A truck-mounted, direct-push rig was used to drill the soil boring.

Sampling Method:

The borings were sampled continuously using Macrocore sampling tubes.

Soil Types Encountered: The boring location was underlain by fill material to a depth of approximately 10 ft bgs. Fill materials consisted of sand and clayey silt materials with slate fragments and gravels. Underlying the fill were silty clays and clayey silts to the total depth explored of approximately 28 ft bgs. A boring log is presented in Attachment B.



Soil Sampling: Soil samples were collected from the boring at a depths of 4.5, 10.5, 14.5, 18, 23.5, and 27.5 ft bgs. The 10.5 ft bgs sample was from native soil at approximately 10.5 to 11 ft bgs, which corresponds to approximately 6 to 12 inches beneath the estimated floor of the UST excavation.

Groundwater Sampling: Groundwater was anticipated to be approximately 15 ft bgs. Cambria drilled to approximately 28 ft bgs attempting to reach groundwater. Groundwater was not encountered.

Chemical Analysis: Soil samples were sent to state-certified McCampbell Analytical, Inc. (McCampbell) of Pacheco, California. The two soil samples collected below the UST cavity (10.5 ft and 14.5 ft bgs, respectively) were analyzed for multiple-range petroleum hydrocarbons [total petroleum hydrocarbons as gasoline (TPHg), diesel (TPHd), and motor oil (TPHmo)]; and volatile organic compounds (VOCs) including benzene, toluene, ethylbenzene, and xylenes (BTEX), oxygenate MTBE, and gasoline lead scavengers (EDB and 1,2-DCA). The sample from native soil immediately beneath the former UST (10.5 ft bgs) was also analyzed for semi-volatile organic compounds (SVOCs) and LUFT metals with laboratory filtration.

Backfill Method: The boring was sealed to surface with bentonite-cement grout.

INVESTIGATION RESULTS

No TPHg, TPHd, TPHmo, VOCs, or SVOCs were detected in the soil samples from beneath the former tank. Metal concentrations appear to represent background conditions, and were below Environmental Screening Levels established by the Regional Water Quality Control Board in July 2003. Soil analytical results are summarized on Table 1. The laboratory analytical report is presented in Attachment C. No odors or soil staining was observed during the soil sampling.



CONCLUSIONS AND RECOMMENDATIONS

Cambria concludes that no impact to site soil was observed beneath the removed tank. Cambria recommends using this investigation report to seek regulatory case closure for the tank removal from the City of Oakland Fire Services Agency. Because the tank was removed by a local contractor without a tank removal permit, the Fire Services Agency will likely require additional information about the tank removal. I recommend discussing this matter with the sellers and having them disclose the investigation information to the Fire Services Agency.

CLOSING

Cambria appreciates this opportunity to assist you with this project. If you have any questions, please contact me at (510) 420-3303.

Sincerely,
Cambria Environmental Technology, Inc.

Bob Clark-Riddell
Bob Clark-Riddell, PE
Principal Engineer

ATTACHMENTS

Figure 1 – Soil Boring Location Map
Table 1 – Soil Analytical Data
Attachment A – Drilling Permit
Attachment B – Boring Log
Attachment C – Laboratory Analytical Report

Cc: Gunther Kitsch, 2325 Belvedere Avenue, San Leandro, California 94577
Steve Oelschlaegel, 1432 Via Lucas, San Lorenzo, California 94580

H:\Misc Sites\Raymond Hien (Hans & Gunther)\Report\invest report.doc

PORTWOOD AVENUE

EXPLANATION

B-1 ● Soil boring location

HIGHWAY 880

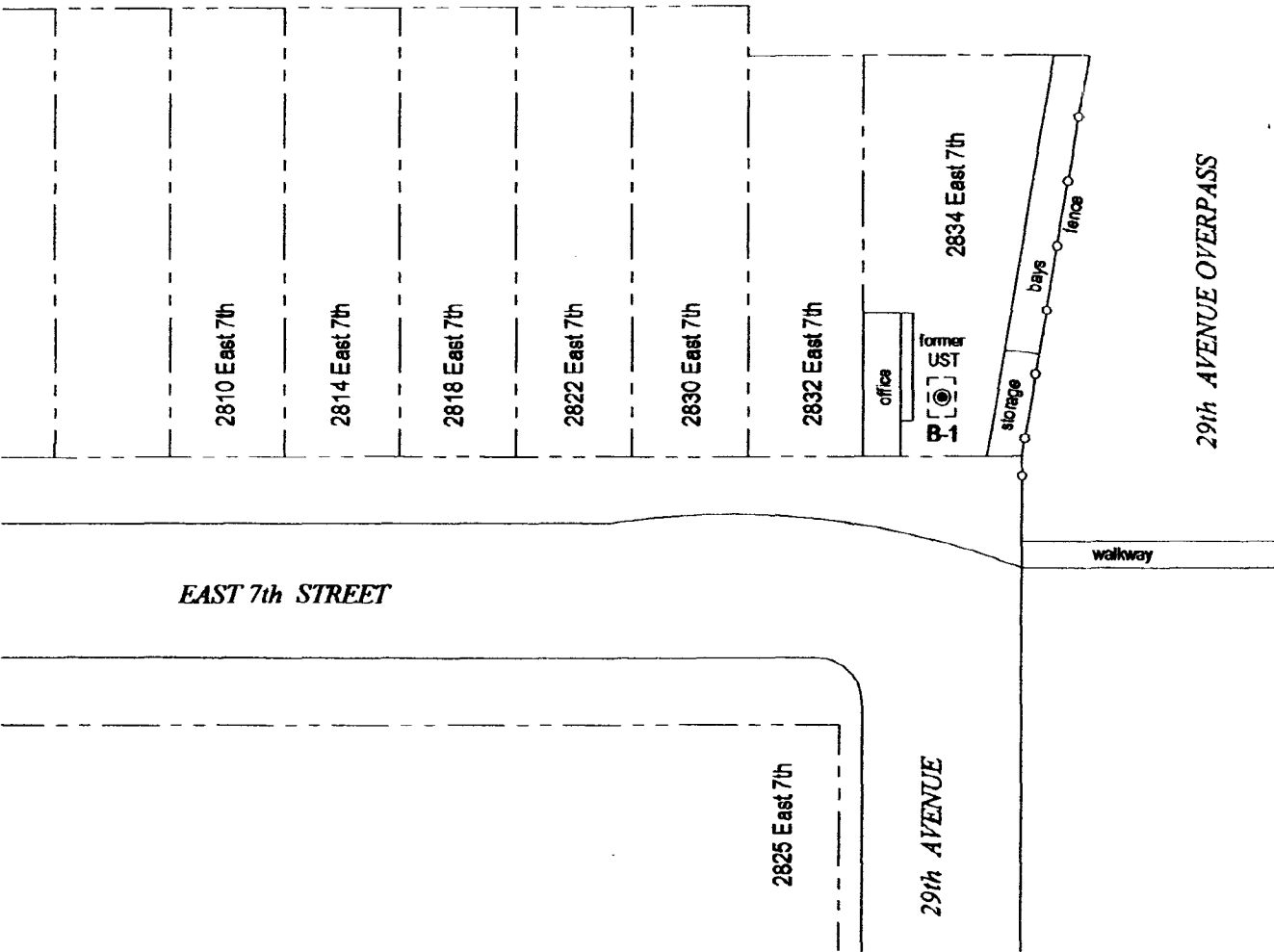
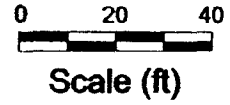


FIGURE 1

Hien Phase II
2834 East 7th Street
Oakland, California



C A M B R I A

Soil Boring
Location Map

CAMBRIA

Table 1: Soil Analytical Data - Petroleum Hydrocarbons: 2834 East 7th Street, Oakland, California

Sample ID	Date Sampled	Sample Depth (ft)	TPHg	TPHd	TPHmo	Benzene	Ethyl- µg/kg					VOCs	SVOCs	mg/kg				
							Toluene	benzene	Xylenes	MTBE	Cadmium			Chromium	Nickel	Lead	Zinc	
B-1@10.5	07/29/03	10.5	< 1.0	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	ND	ND	< 0.5	49	121	10	42
B-1@14.5	07/29/03	14.5	< 1.0	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	ND	--	--	--	--	--	--

Abbreviations and Methods:

ft = measured in feet

TPHg = Total petroleum hydrocarbons as gasoline by modified EPA Method 8021B/8015Cm

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

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

Benzene, toluene, ethylbenzene, and xylenes by EPA Method 8260B

MTBE = Methyl tertiary butyl ether by EPA Method 8260B

VOCs = Volatile organics by modified EPA Method 8260B

SVOCs = Semi-volatile organics by modified EPA Method 8270D

µg/kg = Micrograms per kilogram

mg/kg = Milligrams per kilogram

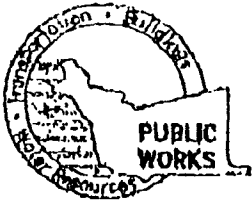
ND = analyte not detected above laboratory limit. See report laboratory report for limits.

C A M B R I A



ATTACHMENT A

Drilling Permit



ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION
399 ELMHURST ST. HAYWARD CA. 94544-1995
PHONE (510) 670-6633 James Yoo
FAX (510) 782-1939

**APPLICANTS: PLEASE ATTACH A SITE MAP FOR ALL DRILLING PERMIT APPLICATIONS
DESTRUCTION OF WELLS OVER 45 FEET REQUIRES A SEPARATE PERMIT APPLICATION**

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

FOR OFFICE USE

LOCATION OF PROJECT 2834 East 7th Street
Oakland, CA

PERMIT NUMBER W03-0661
WELL NUMBER _____
APN _____

CLIENT
Name Raymond Hien
Address 1220 E. 12th St Phone _____
City Oakland Zip 94606

APPLICANT
Name Math Meyers of Cambria
Environmental Phone 510-420-9770
Address 5500 Hallis St, Suite Phone 510-420-3314
City Emeryville Zip 94608

TYPE OF PROJECT

Well Construction		Geotechnical Investigation	
Cathodic Protection	<input type="checkbox"/>	General	<input checked="" type="checkbox"/>
Water Supply	<input type="checkbox"/>	Contamination	<input checked="" type="checkbox"/>
Monitoring	<input type="checkbox"/>	Well Destruction	<input type="checkbox"/>
		Soil Boring	<input checked="" type="checkbox"/>

PROPOSED WATER SUPPLY WELL USE

New Domestic	<input type="checkbox"/>	Replacement Domestic	<input type="checkbox"/>
Municipal	<input type="checkbox"/>	Irrigation	<input type="checkbox"/>
Industrial	<input type="checkbox"/>	Other	<input type="checkbox"/>

DRILLING METHOD:

Mud Rotary	<input type="checkbox"/>	Air Rotary	<input type="checkbox"/>	Auger	<input type="checkbox"/>
Cable	<input type="checkbox"/>	Other	<input checked="" type="checkbox"/>	<u>60probe</u>	

DRILLER'S NAME Vivanex

DRILLER'S LICENSE NO. 105927

WELL PROJECTS

Drill Hole Diameter	<u>7"</u> in.	Maximum	
Casing Diameter	_____ in.	Depth	_____ ft.
Surface Seal Depth	_____ ft.	Owner's Well Number	_____

**ENVIRONMENTAL
GEOTECHNICAL PROJECTS**

Number of Borings	<u>1</u>	Maximum	
Hole Diameter	<u>2"</u> in.	Depth	<u>20</u> ft.

ESTIMATED STARTING DATE 7/29/03

ESTIMATED COMPLETION DATE 7/30/03

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.

APPLICANT'S SIGNATURE [Signature] DATE 7/21/03

PLEASE PRINT NAME Matthew A. Meyers Rev. 3-04-02

PERMIT CONDITIONS

Circled Permit Requirements Apply

A. GENERAL

1. A permit application should be submitted so as to arrive at the ACPWA office five days prior to proposed starting date.
2. Submit to ACPWA within 60 days after completion of permit original Department of Water Resources-Well Completion Report.
3. Permit is void if project not begun within 90 days of approval date.

B. WATER SUPPLY WELLS

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.

**C. GROUNDWATER MONITORING WELLS
INCLUDING PIEZOMETERS**

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

D. GEOTECHNICAL / Contamination Investigation

Seal hole by tremie with cement grout of cement grout/sand mixture Upper two-three feet replaced in kind or with compacted cuttings.

E. CATHODIC

Fill hole anode zone with concrete placed by tremie.

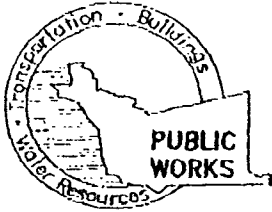
F. WELL DESTRUCTION

Send a map of work site. A separate permit is required for wells deeper than 45 feet.

G. SPECIAL CONDITIONS

NOTE: One application must be submitted for each well or well destruction. Multiple borings on one application are acceptable for geotechnical and contamination investigations.

APPROVED [Signature] DATE 7-14-03



ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION

399 ELMHURST ST. HAYWARD, CA. 94544-1395
PHONE (510) 670-6633 James Yoo FAX (510) 782-1939

PERMIT NO. W03-0691

WATER RESOURCES SECTION GROUNDWATER PROTECTION ORDINANCE GP # 1-GENERAL CONDITIONS: CONTAMINATION INVESTIGATION

1. Prior to any drilling activities shall be the applicants responsibilities to contact and coordinate a Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits required for that Federal, State, County or to the City and follow all City or County Ordinances No work shall begin until all the permits and requirements have been approved or obtained.
2. Borings shall be sealed within **24 hours** following completion of testing or sampling activities. Borings shall not be left in a condition as to allow for the introduction of surface waters or foreign materials into them. No borehole(s) shall be left in a manner to act as a conduit at any time. Borings shall be secured such that they do not endanger public health. All boreholes left open more than 24 hours will need approval from Alameda County Public Works Agency, Water Resources Section. All boreholes shall be backfilled according to permit destruction requirements and all concrete material and asphalt material shall be to Caltrans Spec or County/City Codes.
3. Permittee, permittee's, contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on-or off site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.
4. Permit is valid only for the purpose specified herein on **July 28 to July 28, 2003**. No changes in construction procedures, as described on this permit application. Geoprobe shall not be converted to monitoring wells, without a permit application process.
5. Drilling Permit(s) can be voided/ canceled only in writing. It is the applicants responsibilities to notify Alameda County Public Works Agency, Water Resources Section in writing for an extension or to cancel the drilling permit application. No drilling permit application(s) shall be extended beyond ninety (90) days from the original start date. Applicants may not cancel a drilling permit application after the completion date of the permit issued has passed.
6. Compliance with the above well-sealing specifications shall not exempt the well-sealing contractor from complying with appropriate State reporting-requirements related to well destruction (Sections 13750 through 13755 (Division 7, Chapter 10, Article 3) of the California Water Code). **Contractor must complete State DWR Form 188 and mail original to the Alameda County Public Works Agency, Water Resources Section, within 60 days. Including a site map showing all the borehole locations.**
7. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.
8. This permit may be voided if it contains incorrect information.

C A M B R I A



ATTACHMENT B

Boring Log



Cambria Environmental Technology, Inc.
 1144 - 65th St.
 Oakland, CA 94608
 Telephone: (510) 420-0700
 Fax: (510) 420-9170

BORING/WELL LOG

CLIENT NAME Raymond Hien
 JOB/SITE NAME 2830-2834 East 7th Street
 LOCATION Oakland, California
 PROJECT NUMBER 542-1000
 DRILLER Vironex
 DRILLING METHOD Hydraulic push
 BORING DIAMETER 2 inches
 LOGGED BY M. Meyers
 REVIEWED BY R. Clark-Riddell, PE# 49629

BORING/WELL NAME B-1
 DRILLING STARTED 29-Jul-03
 DRILLING COMPLETED 29-Jul-03
 WELL DEVELOPMENT DATE (YIELD) NA
 GROUND SURFACE ELEVATION Not Surveyed
 TOP OF CASING ELEVATION NA
 SCREENED INTERVAL NA
 DEPTH TO WATER (First Encountered) NA
 DEPTH TO WATER (Static) NA

REMARKS

TPHg (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (ft bgs)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (ft bgs)	WELL DIAGRAM
				0.3			CONCRETE: 4 inches thick. FILL: brown; loose; damp; 90% medium grained sand, 10% gravel to 10mm; high estimated permeability; majority of gravel sized material are slate fragments.	0.3	
		B-1@4.5		5			@ 4' becomes 70% sand, 30% gravels to 80mm slate fragments. FILL: light brown; medium stiff; damp; 30% clay, 50% silt, 20% gravel to 30mm; medium plasticity; low estimated permeability; mottled.	5.0	
<1.0		B-1@10.5		10	ML		Clayey SILT (ML): brown; stiff; moist; 40% clay, 60% silt; medium plasticity; low estimated permeability.	10.0	
<1.0		B-1@14.5		15	CL		Silty CLAY (CL): brown; medium stiff; moist; 60% clay, 40% silt; medium plasticity; low estimated permeability.	15.0	
		B-1@18		19	SC		@ 18' becomes soft, high plasticity. Clayey SAND (SC): orange brown; dense; moist; 30% clay, 70% medium grained sand; medium estimated permeability.	19.0	
		B-1@23.5		20	CH		Silty CLAY (CH): brown; medium stiff; moist; 70% clay, 30% silt; high plasticity; low estimated permeability.	20.0	
		B-1@27.5		25				28.0	
									Bottom of Boring @ 28 ft

WELL LOG (SHELL) H:\MISC SITES\RAYMOND HEN (HANS & GUNTHER)\542-1000.GPJ DEFAULT.GDT 8/14/03

C A M B R I A



ATTACHMENT C

Laboratory Analytical Report



McC Campbell Analytical Inc.

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

Cambria Env. Technology 5900 Hollis St, Suite A Emeryville, CA 94608	Client Project ID: #542-1000-001; Raymond Hien	Date Sampled: 07/28/03
	Client Contact: Matt Meyers	Date Received: 07/29/03
	Client P.O.:	Date Reported: 08/01/03
		Date Completed: 08/01/03

WorkOrder: 0307495

August 01, 2003

Dear Matt:

Enclosed are:

- 1). the results of 2 analyzed samples from your #542-1000-001; Raymond Hien 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. McC Campbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Yours truly,

Angela Rydelius, Lab Manager



McC Campbell Analytical Inc.

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

Cambria Env. Technology 5900 Hollis St, Suite A Emeryville, CA 94608	Client Project ID: #542-1000-001; Raymond Hien	Date Sampled: 07/28/03
	Client Contact: Matt Meyers	Date Received: 07/29/03
	Client P.O.:	Date Extracted: 07/29/03
		Date Analyzed: 07/30/03

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

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0307495

Lab ID	0307495-002A
Client ID	B-1@10.5
Matrix	Soil

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	50	Benzene	ND	1.0	5.0
Bromobenzene	ND	1.0	5.0	Bromochloromethane	ND	1.0	5.0
Bromodichloromethane	ND	1.0	5.0	Bromoform	ND	1.0	5.0
2-Butanone (MEK)	ND	1.0	10	Bromomethane	ND	1.0	5.0
n-Butyl benzene	ND	1.0	5.0	sec-Butyl benzene	ND	1.0	5.0
tert-Butyl benzene	ND	1.0	5.0	Carbon Disulfide	ND	1.0	5.0
Carbon Tetrachloride	ND	1.0	5.0	Chlorobenzene	ND	1.0	5.0
Chloroethane	ND	1.0	5.0	2-Chloroethyl Vinyl Ether	ND	1.0	5.0
Chloroform	ND	1.0	5.0	Chloromethane	ND	1.0	5.0
2-Chlorotoluene	ND	1.0	5.0	4-Chlorotoluene	ND	1.0	5.0
Dibromochloromethane	ND	1.0	5.0	1,2-Dibromo-3-chloropropane	ND	1.0	5.0
1,2-Dibromoethane (EDB)	ND	1.0	5.0	Dibromomethane	ND	1.0	5.0
1,2-Dichlorobenzene	ND	1.0	5.0	1,3-Dichlorobenzene	ND	1.0	5.0
1,4-Dichlorobenzene	ND	1.0	5.0	Dichlorodifluoromethane	ND	1.0	5.0
1,1-Dichloroethane	ND	1.0	5.0	1,2-Dichloroethane (1,2-DCA)	ND	1.0	5.0
1,1-Dichloroethene	ND	1.0	5.0	cis-1,2-Dichloroethene	ND	1.0	5.0
trans-1,2-Dichloroethene	ND	1.0	5.0	1,2-Dichloropropane	ND	1.0	5.0
1,3-Dichloropropane	ND	1.0	5.0	2,2-Dichloropropane	ND	1.0	5.0
1,1-Dichloropropene	ND	1.0	5.0	cis-1,3-Dichloropropene	ND	1.0	5.0
trans-1,3-Dichloropropene	ND	1.0	5.0	Ethylbenzene	ND	1.0	5.0
Hexachlorobutadiene	ND	1.0	5.0	2-Hexanone	ND	1.0	5.0
Iodomethane (Methyl iodide)	ND	1.0	50	Isopropylbenzene	ND	1.0	5.0
4-Isopropyl toluene	ND	1.0	5.0	Methyl-t-butyl ether (MTBE)	ND	1.0	5.0
Methylene chloride	ND	1.0	5.0	4-Methyl-2-pentanone (MIBK)	ND	1.0	5.0
Naphthalene	ND	1.0	5.0	n-Propyl benzene	ND	1.0	5.0
Styrene	ND	1.0	5.0	1,1,1,2-Tetrachloroethane	ND	1.0	5.0
1,1,2,2-Tetrachloroethane	ND	1.0	5.0	Tetrachloroethene	ND	1.0	5.0
Toluene	ND	1.0	5.0	1,2,3-Trichlorobenzene	ND	1.0	5.0
1,2,4-Trichlorobenzene	ND	1.0	5.0	1,1,1-Trichloroethane	ND	1.0	5.0
1,1,2-Trichloroethane	ND	1.0	5.0	Trichloroethene	ND	1.0	5.0
Trichlorofluoromethane	ND	1.0	5.0	1,2,3-Trichloropropane	ND	1.0	5.0
1,2,4-Trimethylbenzene	ND	1.0	5.0	1,3,5-Trimethylbenzene	ND	1.0	5.0
Vinyl Acetate	ND	1.0	50	Vinyl Chloride	ND	1.0	5.0
Xylenes	ND	1.0	5.0				

Surrogate Recoveries (%)

%SS1:	98.7	%SS2:	102
%SS3:	99.9		

Comments:

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

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

surrogate diluted out of range or surrogate coelutes with another peak.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than -2 vol. % sediment; j) sample diluted due to high organic content.



Cambria Env. Technology 5900 Hollis St, Suite A Emeryville, CA 94608	Client Project ID: #542-1000-001; Raymond Hien	Date Sampled: 07/28/03
	Client Contact: Matt Meyers	Date Received: 07/29/03
	Client P.O.:	Date Extracted: 07/29/03
		Date Analyzed: 07/30/03

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

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0307495

Lab ID	0307495-003A
Client ID	B-1@14.5
Matrix	Soil

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	50	Benzene	ND	1.0	5.0
Bromobenzene	ND	1.0	5.0	Bromochloromethane	ND	1.0	5.0
Bromodichloromethane	ND	1.0	5.0	Bromoform	ND	1.0	5.0
2-Butanone (MEK)	ND	1.0	10	Bromomethane	ND	1.0	5.0
n-Butyl benzene	ND	1.0	5.0	sec-Butyl benzene	ND	1.0	5.0
tert-Butyl benzene	ND	1.0	5.0	Carbon Disulfide	ND	1.0	5.0
Carbon Tetrachloride	ND	1.0	5.0	Chlorobenzene	ND	1.0	5.0
Chloroethane	ND	1.0	5.0	2-Chloroethyl Vinyl Ether	ND	1.0	5.0
Chloroform	ND	1.0	5.0	Chloromethane	ND	1.0	5.0
2-Chlorotoluene	ND	1.0	5.0	4-Chlorotoluene	ND	1.0	5.0
Dibromochloromethane	ND	1.0	5.0	1,2-Dibromo-3-chloropropane	ND	1.0	5.0
1,2-Dibromoethane (EDB)	ND	1.0	5.0	Dibromomethane	ND	1.0	5.0
1,2-Dichlorobenzene	ND	1.0	5.0	1,3-Dichlorobenzene	ND	1.0	5.0
1,4-Dichlorobenzene	ND	1.0	5.0	Dichlorodifluoromethane	ND	1.0	5.0
1,1-Dichloroethane	ND	1.0	5.0	1,2-Dichloroethane (1,2-DCA)	ND	1.0	5.0
1,1-Dichloroethene	ND	1.0	5.0	cis-1,2-Dichloroethene	ND	1.0	5.0
trans-1,2-Dichloroethene	ND	1.0	5.0	1,2-Dichloropropane	ND	1.0	5.0
1,3-Dichloropropane	ND	1.0	5.0	2,2-Dichloropropane	ND	1.0	5.0
1,1-Dichloropropene	ND	1.0	5.0	cis-1,3-Dichloropropene	ND	1.0	5.0
trans-1,3-Dichloropropene	ND	1.0	5.0	Ethylbenzene	ND	1.0	5.0
Hexachlorobutadiene	ND	1.0	5.0	2-Hexanone	ND	1.0	5.0
Iodomethane (Methyl iodide)	ND	1.0	50	Isopropylbenzene	ND	1.0	5.0
4-Isopropyl toluene	ND	1.0	5.0	Methyl-t-butyl ether (MTBE)	ND	1.0	5.0
Methylene chloride	ND	1.0	5.0	4-Methyl-2-pentanone (MIBK)	ND	1.0	5.0
Naphthalene	ND	1.0	5.0	n-Propyl benzene	ND	1.0	5.0
Styrene	ND	1.0	5.0	1,1,1,2-Tetrachloroethane	ND	1.0	5.0
1,1,2,2-Tetrachloroethane	ND	1.0	5.0	Tetrachloroethene	ND	1.0	5.0
Toluene	ND	1.0	5.0	1,2,3-Trichlorobenzene	ND	1.0	5.0
1,2,4-Trichlorobenzene	ND	1.0	5.0	1,1,1-Trichloroethane	ND	1.0	5.0
1,1,2-Trichloroethane	ND	1.0	5.0	Trichloroethene	ND	1.0	5.0
Trichlorofluoromethane	ND	1.0	5.0	1,2,3-Trichloropropane	ND	1.0	5.0
1,2,4-Trimethylbenzene	ND	1.0	5.0	1,3,5-Trimethylbenzene	ND	1.0	5.0
Vinyl Acetate	ND	1.0	50	Vinyl Chloride	ND	1.0	5.0
Xylenes	ND	1.0	5.0				

Surrogate Recoveries (%)

%SS1:	97.7	%SS2:	100
%SS3:	101		

Comments:

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

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

surrogate diluted out of range or surrogate coelutes with another peak.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~2 vol. % sediment; j) sample diluted due to high organic content.



McC Campbell Analytical Inc.

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

Cambria Env. Technology 5900 Hollis St, Suite A Emeryville, CA 94608	Client Project ID: #542-1000-001; Raymond Hien	Date Sampled: 07/28/03
	Client Contact: Matt Meyers	Date Received: 07/29/03
	Client P.O.:	Date Extracted: 07/29/03
		Date Analyzed: 07/29/03

Semi-Volatile Organics by GC/MS (Basic Target List)*

Extraction Method: SW3550C

Analytical Method: SW8270D

Work Order: 0307495

Lab ID	0307495-002A
Client ID	B-1@10.5
Matrix	Soil

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acenaphthene	ND	1.0	0.33	Acenaphthylene	ND	1.0	0.33
Anthracene	ND	1.0	0.33	Benzidine	ND	1.0	1.6
Benzoic Acid	ND	1.0	1.6	Benz(a)anthracene	ND	1.0	0.33
Benzo(b)fluoranthene	ND	1.0	0.33	Benzo(k)fluoranthene	ND	1.0	0.33
Benzo(g,h,i)perylene	ND	1.0	0.33	Benzo(a)pyrene	ND	1.0	0.33
Benzyl Alcohol	ND	1.0	0.66	Bis (2-chloroethoxy) Methane	ND	1.0	0.33
Bis (2-chloroethyl) Ether	ND	1.0	0.33	Bis (2-chloroisopropyl) Ether	ND	1.0	0.33
Bis (2-ethylhexyl) Phthalate	ND	1.0	0.33	4-Bromophenyl Phenyl Ether	ND	1.0	0.33
Butylbenzyl Phthalate	ND	1.0	0.33	4-Chloroaniline	ND	1.0	0.66
4-Chloro-3-methylphenol	ND	1.0	0.33	2-Chloronaphthalene	ND	1.0	0.33
2-Chlorophenol	ND	1.0	0.33	4-Chlorophenyl Phenyl Ether	ND	1.0	0.33
Chrysene	ND	1.0	0.33	Dibenzo(a,h)anthracene	ND	1.0	0.33
Dibenzofuran	ND	1.0	0.33	Di-n-butyl Phthalate	ND	1.0	0.33
1,2-Dichlorobenzene	ND	1.0	0.33	1,3-Dichlorobenzene	ND	1.0	0.33
1,4-Dichlorobenzene	ND	1.0	0.33	3,3-Dichlorobenzidine	ND	1.0	0.66
2,4-Dichlorophenol	ND	1.0	0.33	Diethyl Phthalate	ND	1.0	0.33
2,4-Dimethylphenol	ND	1.0	0.33	Dimethyl Phthalate	ND	1.0	0.33
4,6-Dinitro-2-methylphenol	ND	1.0	1.6	2,4-Dinitrophenol	ND	1.0	1.6
2,4-Dinitrotoluene	ND	1.0	0.33	2,6-Dinitrotoluene	ND	1.0	0.33
Di-n-octyl Phthalate	ND	1.0	0.33	1,2-Diphenylhydrazine	ND	1.0	0.33
Fluoranthene	ND	1.0	0.33	Fluorene	ND	1.0	0.33
Hexachlorobenzene	ND	1.0	0.33	Hexachlorobutadiene	ND	1.0	0.33
Hexachlorocyclopentadiene	ND	1.0	1.6	Hexachloroethane	ND	1.0	0.33
Indeno (1,2,3-cd) pyrene	ND	1.0	0.33	Isophorone	ND	1.0	0.33
2-Methylnaphthalene	ND	1.0	0.33	2-Methylphenol (o-Cresol)	ND	1.0	0.33
3 &/or 4-Methylphenol (m,p-Cresol)	ND	1.0	0.33	Naphthalene	ND	1.0	0.33
2-Nitroaniline	ND	1.0	1.6	3-Nitroaniline	ND	1.0	1.6
4-Nitroaniline	ND	1.0	1.6	2-Nitrophenol	ND	1.0	1.6
4-Nitrophenol	ND	1.0	1.6	Nitrobenzene	ND	1.0	0.33
N-Nitrosodiphenylamine	ND	1.0	0.33	N-Nitrosodi-n-propylamine	ND	1.0	0.33
Pentachlorophenol	ND	1.0	1.6	Phenanthrene	ND	1.0	0.33
Phenol	ND	1.0	0.33	Pyrene	ND	1.0	0.33
1,2,4-Trichlorobenzene	ND	1.0	0.33	2,4,5-Trichlorophenol	ND	1.0	0.33
2,4,6-Trichlorophenol	ND	1.0	0.33				

Surrogate Recoveries (%)

%SS1:	94.5	%SS2:	96.9
%SS3:	101	%SS4:	88.5
%SS5:	101	%SS6:	84.8

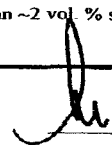
Comments:

* water 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.

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

#) surrogate diluted out of range; &) low or no surrogate due to matrix interference.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~2 vol. % sediment; j) sample diluted due to high organic content.

 Angela Rydelius, Lab Manager



QC SUMMARY REPORT FOR SW8021B/8015Cm

Matrix: S

WorkOrder: 0307495

EPA Method: SW8021B/8015Cm		Extraction: SW5030B		BatchID: 7981			Spiked Sample ID: 0307464-013A			
	Sample	Spiked	MS*	MSD*	MS-MSD*	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	Low	High
TPH(btex) [£]	ND	0.60	104	106	2.27	95	94.6	0.464	70	130
MTBE	ND	0.10	82.8	90.4	8.82	87.5	94.8	7.98	70	130
Benzene	ND	0.10	95.2	91.8	3.66	88.7	90.8	2.36	70	130
Toluene	ND	0.10	96.1	92.5	3.83	89	91.3	2.54	70	130
Ethylbenzene	ND	0.10	96.6	93.4	3.42	92.9	95.3	2.58	70	130
Xylcncs	ND	0.30	99.3	95	4.46	94.3	95.3	1.05	70	130
%SS:	112	100	87.1	81.4	6.77	106	110	3.70	70	130

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

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 and / or MSD spike recoveries may not be near 100% or the RPDs near 0% if: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) if that specific sample matrix interferes with spike recovery.

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

cluttered chromatogram; sample peak coelutes with surrogate peak.

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

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



McC Campbell Analytical Inc.

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

QC SUMMARY REPORT FOR SW8015C

Matrix: S

WorkOrder: 0307495

EPA Method: SW8015C		Extraction: SW3550C		BatchID: 7977			Spiked Sample ID: 0307456-028A			
	Sample	Spiked	MS*	MSD*	MS-MSD*	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	Low	High
TPH(d)	ND	150	91.6	91.2	0.485	104	106	2.22	70	130
%SS:	95.8	100	97.8	97.5	0.297	102	102	0	70	130
All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions: NONE										

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 and / or MSD spike recoveries may not be near 100% or the RPDs near 0% if. a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) if that specific sample matrix interferes with spike recovery.

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

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



QC SUMMARY REPORT FOR SW8260B

Matrix: S

WorkOrder: 0307495

EPA Method: SW8260B		Extraction: SW5030B			BatchID: 7990		Spiked Sample ID: 0307495-003A			
	Sample	Spiked	MS*	MSD*	MS-MSD*	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/Kg	µg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	Low	High
Benzene	ND	50	110	112	1.55	111	112	1.04	70	130
Chlorobenzene	ND	50	111	114	2.31	114	114	0	70	130
1,1-Dichloroethene	ND	50	82.2	83.3	1.35	84	83.5	0.551	70	130
Methyl-t-butyl ether (MTBE)	ND	50	107	108	0.997	109	111	2.25	70	130
Toluene	ND	50	115	117	1.65	117	117	0	70	130
Trichloroethene	ND	50	94.9	95.9	0.986	95.8	97.1	1.43	70	130
%SS1:	97.7	100	103	103	0	105	104	1.19	70	130
%SS2:	100	100	98.6	98.8	0.228	100	100	0	70	130
%SS3:	101	100	95.9	97.5	1.68	95.6	95.9	0.286	70	130

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

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

$\% \text{ Recovery} = 100 * (\text{MS-Sample}) / (\text{Amount Spiked}); \text{RPD} = 100 * (\text{MS} - \text{MSD}) / (\text{MS} + \text{MSD}) * 2.$

* MS and / or MSD spike recoveries may not be near 100% or the RPDs near 0% if: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) if that specific sample matrix interferes with spike recovery.

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

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

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



QC SUMMARY REPORT FOR SW8270D

Matrix: S

WorkOrder: 0307495

EPA Method: SW8270D		Extraction: SW3550C		BatchID: 8000			Spiked Sample ID: 0307495-002A			
	Sample	Spiked	MS*	MSD*	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	Low	High
Acenaphthene	ND	2	71.6	68.8	3.86	95.9	97.4	1.55	30	130
4-Chloro-3-methylphenol	ND	4	84.5	84.2	0.302	97.8	97	0.816	30	130
2-Chlorophenol	ND	4	86.6	85.4	1.44	96.8	96.1	0.679	30	130
1,4-Dichlorobenzene	ND	2	79.2	77.2	2.56	99.6	100	0.531	30	130
2,4-Dinitrotoluene	ND	2	83	79.2	4.60	92.6	93.6	1.01	30	130
4-Nitrophenol	ND	4	85.3	87.7	2.78	92.8	93.4	0.677	30	130
N-Nitrosodi-n-propylamine	ND	2	117	117	0	103	106	2.78	30	130
Pentachlorophenol	ND	4	57.1	55.6	2.66	90.5	90.4	0.0719	30	130
Phenol	ND	4	86.4	84.6	2.15	97.1	97.5	0.401	30	130
Pyrene	ND	2	73.4	69.8	5.07	90.4	90.6	0.133	30	130
1,2,4-Trichlorobenzene	ND	2	72.4	70	3.44	94.5	95.5	1.07	30	130
%SS1:	94.5	100	91.7	89.1	2.95	98.7	101	2.52	30	130
%SS2:	96.9	100	99.4	91.7	8.14	110	110	0	30	130
%SS3:	101	100	99.7	95	4.83	96.9	97.6	0.811	30	130
%SS4:	88.5	100	83.6	80.2	4.15	97.7	98.5	0.752	30	130
%SS5:	101	100	106	98	8.06	103	98.1	4.97	30	130
%SS6:	84.8	100	81.9	77.5	5.60	89.7	89.8	0.148	30	130

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

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 and / or MSD spike recoveries may not be near 100% or the RPDs near 0% if: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) if that specific sample matrix interferes with spike recovery.

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

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

& = low or no surrogate due to matrix interference.

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

McC Campbell Analytical Inc.



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

CHAIN-OF-CUSTODY RECORD

P211-02

WorkOrder: 0307495

Subcontractor:

GEO ANALYTICAL LABORATORIES
 1405 Kansas Avenue
 Modesto, CA 95351

TEL: (209) 572-0900
 FAX: (209) 572-0916
 ProjectNo: #542-1000-001; Raymond Hien
 Acct #: N/A

Date Received: 7/29/03

Date Printed: 7/29/03

Sample ID	ClientSampID	Matrix	Collection Date	TAT	Requested Tests	
					6010C	
0307495-002A	B-1@10.5	Soil	7/28/03 1:40:00 PM	5 DAY	1	P 201331

Comments: PLEASE FAX WHEN READY!

Please send results to:

Relinquished by:	Date/Time	Received by:	Date/Time
<i>Maria Vung</i>	7/29	<i>Courier</i>	7/29/03
<i>Courier</i>	7/30/03	<i>Lidia Paoula</i>	7/30/03 7:30am

GeoAnalytical Laboratories, Inc.

1405 Kansas Avenue Modesto, CA 95351

Phone (209) 572-0900

Fax (209) 572-0916

CERTIFICATE OF ANALYSIS

Report # P211-02

Date: 8/01/03

McCampbell Analytical
110 2nd Ave. South #D7
Pacheco CA 94553

Project: 542-1000-001; Raymond Hien

PO# 0307495

Date Rec'd: 7/30/03

Date Started: 7/30/03

Date Completed: 8/01/03

Date Sampled: 7/28/03

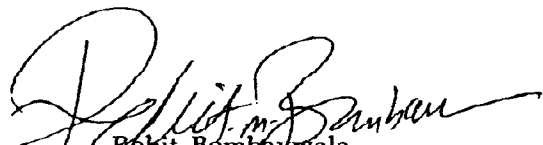
Time: 1:40pm

Sampler:

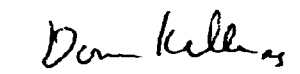
Sample ID: 0307495 - 002A

Lab ID: P201331

Method	RL	Analyte	Results	Units
6010B	0.5	Cadmium	ND	mg/Kg
6010B	1.0	Chromium	49	mg/Kg
6010B	2.0	Nickel	121	mg/Kg
6010B	5.0	Lead	10	mg/Kg
6010B	2.0	Zinc	42	mg/Kg


Rohit Bombaywala
Inorganic Supervisor

Certification # 1157


Donna Keller
Laboratory Director

GeoAnalytical Laboratories, Inc.

1405 Kansas Avenue Modesto, CA 95351 Phone (209) 572-0900 Fax (209) 572-0916

Report# P211-02

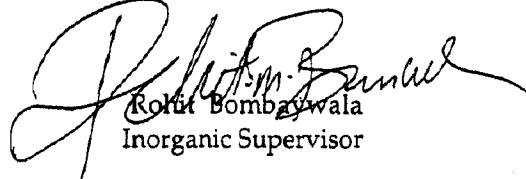
QC REPORT

McC Campbell Analytical
110 2nd Ave. South #D7
Pacheco

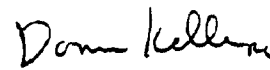
CA 94553

Analyte	Method	Batch #	Dates Analyzed	Orig.	Dupl.	MS %Rec	MSD %Rec	RPD	LCS %Rec	Blank	Comments
Cadmium	6010B	I05196	7/31/03			116.4	119.6	2.6	111.8	ND	
Chromium	6010B	I05197	7/31/03			116.0	112.0 *	3.5		ND	Sample analyte concentration too high to spike.
Nickel	6010B	I05202	7/31/03			109.2	105.8 *	3.2		ND	Sample analyte concentration too high to spike.
Lead	6010B	I05200	7/31/03			103.4	96.4	3.6	95.4	ND	
Zinc	6010B	I05205	7/31/03			37.2	36.5 *	2.0		ND	Sample analyte concentration too high to spike.

* LCS/LCSD (see comments)


Rohit Bombaywala
Inorganic Supervisor

Certification # 1157


Donna Keller
Laboratory Director



CHAIN-OF-CUSTODY RECORD

WorkOrder: 0307495

Client:

Cambria Env. Technology
 5900 Hollis St, Suite A
 Emeryville, CA 94608

TEL: (510) 420-0700
 FAX: (510) 420-3394
 ProjectNo: #542-1000-001; Raymond Hien
 PO:

Date Received: 7/29/03

Date Printed: 7/29/03

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests				
					6010C	SW8015C	N8021B/8015C	SW8260B	SW8270D
0307495-002	B-1@10.5	Soil	7/28/03 1:40:00 PM	<input type="checkbox"/>	A	A	A	A	A
0307495-003	B-1@14.5	Soil	7/28/03 1:50:00 PM	<input type="checkbox"/>		A	A	A	

Prepared by: Maria Venegas

Comments:

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