MARK BORSUK Attorney at Law 1626 Vallejo Street San Francisco, CA 94123-5116 (415) 922-4740 FAX 922-1485 Internet: mborsuk@ix.netcom.com

May 12, 1996

Mr. Thomas Peacock Supervising HMS, LOP ACHCSA 1131 Harbor Bay Parkway Alameda, CA 94501 (510) 567-6700 / FAX 337-9335 76325.3440@compuserve.com

SUBJECT: IQ96 Monitoring Report 1432 Harrison Street, Oakland, CA 94612 SITE ID 498

Dear Mr. Peacock:

Attached is the IQ96 report for groundwater monitoring at the above location. If you have any questions, please contact me.

Sincerely yours,

5 angling GW dre 12-21-84 3-13-95

6-27-95

9-24-95

12-20-95

7-2-6-96

Mark Borsuk





BLAINE TECH SERVICES INC.

985 TIMOTHY DRIVE SAN JOSE, CA 95133 (408) 995-5535 FAX (408) 293-8773

May 10, 1996

Mark Borsuk 1626 Vallejo Street San Francisco, CA 94123-5116

> Site: 1432 Harrison Street Oakland, California

Date: March 26, 1996

GROUNDWATER SAMPLING REPORT 960326-K-1

Blaine Tech Services, Inc. performs specialized environmental sampling and documentation as an independent third party. In order to avoid compromising the objectivity necessary for the proper and disinterested performance of this work, Blaine Tech Services, Inc. does not participate in the interpretation of analytical results, or become involved with the marketing or installation of remedial systems.

This report deals with the groundwater well sampling performed by our firm in response to your request. Data collected in the course of our work at the site are presented in the TABLE OF WELL MONITORING DATA. This information was collected during our inspection, well evacuation and sample collection. Measurements include the total depth of the well and the depth to water. Water surfaces were further inspected for the presence of immiscibles. A series of electrical conductivity, pH, and temperature readings were obtained during well evacuation and at the time of sample collection.

Mark Borusk

STANDARD PRACTICES

٤ ،

Evacuation and Sampling Equipment

As shown in the TABLE OF WELL MONITORING DATA, the wells at this site were evacuated according to a protocol requirement for the three case volumes of water, before sampling. The wells were evacuated using bailers and electric submersibles.

Samples were collected using bailers.

Bailers: A bailer, in its simplest form, is a hollow tube which has been fitted with a check valve at the lower end. The device can be lowered into a well by means of a cord. When the bailer enters the water, the check valve opens and liquid flows into the interior of the bailer. The bottom check valve prevents water from escaping when the bailer is drawn up and out of the well.

Two types of bailers are used in groundwater wells at sites where fuel hydrocarbons are of concern. The first type of bailer is made of a clear material such as acrylic plastic and is used to obtain a sample of the surface and the near surface liquids, in order to detect the presence of visible or measurable fuel hydrocarbon floating on the surface. The second type of bailer is made of Teflon or stainless steel and is used as an evacuation and/or sampling device.

Bailers are inexpensive and relatively easy to clean. Because they are manually operated, variations in operator technique may have a greater influence than would be found with more automated sampling equipment. Also where fuel hydrocarbons are involved, the bailer may include near surface contaminants that are not representative of water deeper in the well.

Electric Submersible Pumps: Electric submersible pumps are appropriate for the high volume evacuation of wells of any depth provided the well diameter is large enough to admit the pump. Four inch and three inch diameter wells will readily accept electric submersible pumps, while two inch wells do not. In operation, the pump is lowered into the well with a pipe train above it. A checkvalve immediately above the pump and below the first section of pipe prevents water that has entered the pipe from flowing back into the well. Electricity is provided to the pump via an electrical cable and the action of the pump is to push water up out of the well.

Electric submersible pumps are often used as well evacuation devices, which are then supplanted with a more specialized sample collection device (such as a bailer) at the time of sampling. An alternative is to use the pump for both evacuation and sampling. When a bailer is used to collect the sample, interpretation of results by the consultant should allow for variations attributable to near surface contamination entering the bailer. When the electric submersible is, itself, used for

Mark Borusk

sample collection it should be operated with the output restricted to a point where the loss of volatiles becomes indistinguishable from the level obtained with true sampling pumps. It should be noted that when the pump is used for both evacuation and sample collection that it is possible to perform these operations as an uninterrupted continuum. This contrasts with the variations in elapsed time between evacuation and sample collection that occur when field personnel cease one mode of operation and must bring other apparatus into use.

Decontamination

٤,

All apparatus is brought to the site in clean and serviceable condition. The equipment is decontaminated after each use and before leaving the site.

Effluent Materials

The evacuation process creates a volume of effluent water which must be contained. Blaine Tech Services, Inc. will place this water in appropriate containers of the client's choice or bring new 55 gallon DOT 17 E drums to the site, which are appropriate for the containment of the effluent materials. The determination of how to properly dispose of the effluent water must usually await the results of laboratory analyses of the sample collected from the groundwater well. If that sample does not establish whether or not the effluent water is contaminated, or if effluent from more than one source has been combined in the same container, it may be necessary to conduct additional analyses on the effluent material.

Sampling Methodology

Samples were obtained by standardized sampling procedures that follow an evacuation and sample collection protocol. The sampling methodology conforms to both State and Regional Water Quality Control Board standards and specifically adheres to EPA requirements for apparatus, sample containers and sample handling as specified in publication SW 846 and T.E.G.D. which is published separately.

Sample Containers

Sample containers are supplied by the laboratory performing the analyses.

Sample Handling Procedures

Following collection, samples are promptly placed in an ice chest containing deionized ice or an inert ice substitute such as Blue Ice or Super Ice. The samples are maintained in either an ice chest or a refrigerator until delivered into the custody of the laboratory.

Sample Designations

۴,

All sample containers are identified with both a sampling event number and a discrete sample identification number. Please note that the sampling event number is the number that appears on our chain of custody. It is roughly equivalent to a job number, but applies only to work done on a particular day of the year rather than spanning several days, as jobs and projects often do.

Chain of Custody

Samples are continuously maintained in an appropriate cooled container while in our custody and until delivered to the laboratory under our standard chain of custody. If the samples are taken charge of by a different party (such as another person from our office, a courier, etc.) prior to being delivered to the laboratory, appropriate release and acceptance records are made on the chain of custody (time, date and signature of person accepting custody of the samples).

Hazardous Materials Testing Laboratory

The samples obtained at this site were delivered to National Environmental Testing, Inc. in Santa Rosa, California. NET is certified by the California Department of Health Services as a Hazardous Materials Testing Laboratory, and is listed as DOHS HMTL #1386.

Personnel

All Blaine Tech Services, Inc. personnel receive 29 CFR 1910.120(e)(2) training as soon after being hired as is practical. In addition, many of our personnel have additional certifications that include specialized training in level B supplied air apparatus and the supervision of employees working on hazardous materials sites. Employees are not sent to a site unless we are confident they can adhere to any site safety provisions in force at the site and unless we know that they can follow the written provisions of an SSP and the verbal directions of an SSO.

In general, employees sent to a site to perform groundwater well sampling will assume an OSHA level D (wet) environment exists unless otherwise informed. The use of gloves and double glove protocols protects both our employees and the integrity of the samples being collected. Additional protective gear and procedures for higher OSHA levels of protection are available.

Reportage

Submission to the Regional Water Quality Control Board and the local implementing agency should include copies of the sampling report, the chain of custody and the certified analytical report issued by the Hazardous Materials Testing Laboratory.

Mark Borusk

The following addresses have been listed here for your convenience:

Water Quality Control Board San Francisco Bay Region 2101 Webster Street Suite 500 Oakland, CA 94612 ATTN: Richard Hiett

Oakland Fire Prevention Bureau One City Hall Plaza Oakland, CA 94612 ATTN: Stanley Y. Chi

Please call if we can be of any further assistance.

James allen for Richard C. Blaine

RCB/mc

attachments: table of well monitoring data certified professional report and gradient map chain of custody certified analytical report

cc: David Elias Cambria Environmental Technology, Inc. 1144 65th St., Suite C Oakland, CA 94608

Mark Borusk

TABLE OF WELL MONITORING DATA

۲,

Well I.D.	MW-1			MW-1			MW-1					
Date Sampled	9/28/95			12/20/95			3/26/96	3/26/96				
Well Diameter (in.)	4			4			4					
Total Well Depth (ft.)	25.15			25.14			25.03					
Depth To Water (ft.)	18.70			19.96			19.27					
Free Product (in.)	NONE			NONE			NONE					
Reason If Not Sampled												
1 Case Volume (gal.)	4.19			3.40			3.70					
Did Well Dewater?	NO			NO			NO					
Gallons Actually Evacuated	lly Evacuated 13.0						12.0					
Purging Device	ELECTRIC	SUBMERSI	IBLE	BAILER			ELECTRI	C SUBMERS	IBLE			
Sampling Device	BAILER			BAILER			BAILER					
Time	12:20	12:24	12:26	10:56	11:04	11:10	7:38	7:41	7:45			
Temperature (Fahrenheit)	72.2	72.5	72.6	65.0	64.0	63.8	65.4	64.4	64.6			
рH	7.0	7.0	7.0	7.1	6.8	6.8	6.7	6.7	6.6			
Conductivity (micromhos/cm	1000	1000	1000	500	480	480	1400	600	620			
BTS Chain of Custody	950928-S	-2		951220-W	951220-W-1			960326-K-1				
BTS Sample I.D.	MW-1			MW-1			MW-1					
DOHS HMTL Laboratory	NET			NET		NET						
Analysis	TPH-GAS	BTEX		TPH-GAS	& BTEX		TPH-GAS & BTEX					

SUMMARY	OF CAR RESULTS	in parts per billion unless	otherwise noted
DOHS HMTL Laboratory	NET	NET	NET
Laboratory Sample I.D.	252096	257659	262571
TPH Gasoline	110,000	120,000	140 Com
Benzene	27,000	33,000	29,000
Toluene	34,000	43,000	36,000
Ethyl Benzene	1,700	2,300	1,900
Xylene Isomers	14,000	15,000	13,000
Methyl-tert-butyl ether	_ 		ND

In the interest of clarity, an addendum has been added to the TABLE which lists analytical results in such a way that our field observations are presented together with the analytical results. This addendum is entitled a **SUMMARY OF CAR RESULTS**. As indicated by the title, the source documents for these numbers are the laboratory's certified analytical reports. These certified analytical reports (CARs) are generated by the laboratory as the sole official documents in which they issue their findings. Any discrepancy between the CAR and a tabular or text presentation of analytical values must be decided in favor of the CAR on the grounds that the CAR is the authoritative legal document.

TABLE OF WELL MONITORING DATA

г 1

)

Well I.D.	MW-2			MW-2			MW-2				
Date Sampled	9/28/95			12/20/95			3/26/96				
Well Diameter (in.)	2			2			2				
Total Well Depth (ft.)	25.90			25.98			25.95				
Depth To Water (ft.)	19.30			20.24			19.69				
Free Product (in.)	NONE			NONE			NONE				
Reason If Not Sampled											
1 Case Volume (gal.)	1.0			1.0			1.0				
Did Well Dewater?	NO			NO			NO				
Gallons Actually Evacuated	d 3.0			3.0			3.0				
Purging Device	MIDDLEB	URG		BAILER			BAILER				
Sampling Device	BAILER			BAILER			BAILER				
Time	11:54	11:55	11:56	11:39	11:43	11:47	8:08	8:09	8:11		
Temperature (Fahrenheit)	72.0	71.8	72.0	68.4	68.0	67.2	68.4	68.8	68.8		
рН	6.8	6.8	7.0	6.4	6.4	6.4	6.6	6.6	6.6		
Conductivity (micromhos/c	m)1000	1000	1000	440	440	430	640	660	660		
BTS Chain of Custody	950928-	s-2		951220-W-1			960326-K-1				
BTS Sample I.D.	MW-2	MW-2			MW-2			MW-2			
DOHS HMTL Laboratory	NET	NET			NET			NET			
Analysis	TPH-GAS	& BTEX		TPH-GAS	& BTEX		TPH-GAS & BTEX				

SUMMARY	OF CAR RESULTS	in parts per billion unless	otherwise noted
DOHS HMTL Laboratory	NET	NET	NET
Laboratory Sample I.D.	252097	257660	262572
TPH Gasoline	110,000	83,000	150
Benzene	23,000	980	23,000
Toluene	29,000	1,800	32,000
Ethyl Benzene	2,500	2,200	2,800
Xylene Isomers	11,000	10,000	12,000
Methyl-tert-butyl ether			ND

~

TABLE OF WELL MONITORING DATA

Well I.D.	MW-3	MW-3	MW-3
Date Sampled	9/28/95	12/20/95	3/26/96
Well Diameter (in.)	2	2	2
Total Well Depth (ft.)	24.00	23.96	23.95
Depth To Water (ft.)	18.00	18.74	18.25
Free Product (in.)	NONE	NONE	NONE
Reason If Not Sampled	GAUGE ONLY	GAUGE ONLY	GAUGE ONLY

1 Case Volume (gal.)
Did Well Dewater?
Gallons Actually Evacuated

Purging Device Sampling Device

а. ^с.

Time Temperature (Fahrenheit) pH Conductivity (micrombos/cm)

BTS Chain of Custody BTS Sample I.D. DOHS HMTL Laboratory Analysis



May 9, 1996

Jim Keller Blaine Tech Services 985 Timothy Drive San Jose, CA 95133

Re: Quarterly Monitoring Report 1432 Harrison Street Oakland, California

Dear Mr. Keller:

As you requested, Cambria Environmental Technology, Inc. (Cambria) has prepared this letter summarizing the results of the first quarter 1996 ground water monitoring sampling at the site referenced above. Presented below are sampling activities performed in the first quarter of 1996 and a discussion of hydrocarbon distribution in ground water.

First Quarter 1996 Activities: On March 26, 1996 Blaine Tech Services (BTS) gauged all the site wells, collected ground water samples from wells MW-1 and MW-2, and analyzed the samples for total petroleum hydrocarbons as gasoline (TPHg), methyl tert-butyl ether (MTBE), and benzene, ethylbenzene, toluene and xylenes (BETX). Ground water elevations are shown on Figure 1.

Hydrocarbon Distribution in Ground Water: Samples from wells MW-1 and MW-2, which are located near the former tanks and pump islands, contained up to 150,000 parts per billion (ppb) TPHg and 29,000 ppb benzene. No MTBE was detected in either of the monitoring wells.

Anticipated Second Quarter 1996 Activities: BTS will gauge all the site wells and collect ground water samples from MW-1 and MW-2. Cambria will submit a workplan to the Alameda County Department of Environmental Health (ACDEH) to define the lateral extent of contamination in soil and ground water. Cambria will begin field work for the investigation by June 1996.

Jim Keller May 9, 1996

٢,



We appreciate this opportunity to provide Blaine Tech Services with environmental consulting services. Please call if you have any questions or comments.

Sincerely, Cambria Environmental Technology, Inc.

Scott MacLeod, R.G. Principal Geologist

D:\PROJECT\BTS\HARRISON\QM-1-96.WPD







Santa Rosa Division 3636 North Laughlin Road Suite 110 Santa Rosa, CA 95403-8226 Tel: (707) 526-7200 Fax: (707) 541-2333

Kent Brown Blaine Tech Services 985 Timothy Dr. San Jose, CA 95133 Date: 04/15/1996 NET Client Acct. No: 43200 NET Job No: 96.01127 Received: 03/28/1996

Client Reference Information

Mark Borsuk, Oakland, CA./960326-K1

Sample analysis in support of the project referenced above has been completed and results are presented on the following pages. Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety. Please refer to the enclosed "Key to Abbreviations" for definition of terms. Should you have questions regarding procedures or results, please feel free to call me at (707) 541-2305.

Submitted by:

Coordinator

Enclosure(s)



Client Name: Blaine Tech Services Client Acct: 43200 NET Job No: 96.01127



Run

Ref: Mark Borsuk, Oakland, CA./960326-K1

SAMPLE DESCRIPTION: MW1 Date Taken: 03/26/1996

Time Taken: 07:50

NET Sample No: 262571

. ..

-			Reporting	t		Date	Date	Batch
Parameter	Results	Flags	Limit	Units	Method	Extracted	Analyzed	No.
TPH (Gas/BTXE, Liquid)								
5030/M8015							03/30/1996	3608
DILUTION FACTOR*	100						03/30/1996	3608
as Gasoline	140		5		5030		03/30/1996	3608
8020 (GC, Liquid)							03/30/1996	3608
Benzene	29,000	FI	500	ug/L	8020		04/02/1996	3612
Toluene	36,000	FI	500	ug/L	8020		04/02/1996	3612
Ethylbenzene	1,900		50		8020		03/30/1996	3608
Xylenes (Total)	13,000		50		8020		03/30/1996	3608
Methyl-tert-butyl ether	ND	с	200	ug/L	8020		03/30/1996	3617
SURROGATE RESULTS							03/30/1996	3608
Bromofluorobenzene (SURR)	92				5030		03/30/1996	3608

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

.

na na Sirina Sirina Manaziri

Client Name: Blaine Tech Services Client Acct: 43200 NET Job No: 96.01127



Run

Ref: Mark Borsuk, Oakland, CA./960326-K1

SAMPLE DESCRIPTION: MW2

Date Taken: 03/26/1996

Time Taken: 08:15 NET Sample No: 262572

NEI Sampie No: 2023/2							Data	Batab
			Reporting	1		Date	Date	Balch
Parameter	Results	Flags	Limit	Units	Method	Extracted	Analyzed	No.
TPH (Gas/BTXE, Liquid)								
5030/M8015							03/30/1996	3608
DILUTION FACTOR*	100						03/30/1996	3608
as Gasoline	150		5	mg/L	5030		03/30/1996	3608
8020 (GC. Liquid)				•	-		03/30/1996	3608
Benzene	23.000	FI	500	ug/L	8020		04/03/1996	3614
Toluene	32,000	FI	500	ug/L	6020		04/03/1996	3614
Ft hvlbenzene	2.800		50	uq/L	6020		03/30/1996	3608
Yvlenes (Total)	12,000		50	uq/L	8020		03/30/1996	3608
Mathyl_tert_butyl ether	NTD	с	200	ug/L	8020		03/30/1996	3608
CIPDOGATE DECIDICAL		•		-31 -			03/30/1996	3608
Bromofluorobenzene (SURR)	100			≹ Rec.	5030		03/30/1996	3608

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.



Ref: Mark Borsuk, Cakland, CA./960326-K1

CONTINUING CALIBRATION VERIFICATION STANDARD REPORT

	CCV	CCV					
CCV	Standard	Standard					Run
Standard	Amount	Amount			Date	Analyst	Batch
% Recovery	Found	Expected	Flags	Units	<u>Analyzed</u>	Initials	Number
108.0	0.54	0.50		mg∕L	04/02/1996	cjy	3612
98.4	4.92	5.00		ug/L	04/02/1996	cjy	3612
95.6	4.78	5.00		ug/L	04/02/1996	сју	3612
98.2	4.91	5.00		ug/L	04/02/1996	cjy	3612
99.7	14.96	15.0		ug/L	04/02/1996	cjy	3612
95.0	95	100		% Rec.	04/02/1996	cjy	3612
100.0	0.50	0.50		mg/L	04/03/1996	сју	3614
94.4	4.72	5.00		ug/L	04/03/1996	cjy	3614
89.2	4 46	5.00		ug/L	04/03/1996	cjy	3614
94.4	4.72	5.00		ug/L	D4/03/1996	cjy	3614
96.7	14.50	15.0		ug/L	04/03/1996	сју	3614
85.0	85	100		∛ Rec.	04/03/1996	cjy	3614
	CCV Standard <u>% Recovery</u> 108.0 98.4 95.6 98.2 99.7 95.0 100.0 94.4 89.2 94.4 96.7 85.0	CCV Standard Amount Standard Amount <u>Recovery Found</u> 108.0 0.54 98.4 4.92 95.6 4.78 98.2 4.91 99.7 14.96 95.0 95 100.0 0.50 94.4 4.72 89.2 4.46 94.4 4.72 96.7 14.50 85.0 85	CCV CCV CCV Standard Standard Standard Amount Amount Amount Pound Expected 108.0 0.54 0.50 98.4 4.92 5.00 95.6 4.78 5.00 98.2 4.91 5.00 95.0 95 100 100.0 0.50 0.50 94.4 4.72 5.00 94.4 4.72 5.00 94.4 4.72 5.00 94.4 4.72 5.00 95.7 14.50 15.0	CCV CCV CCV Standard Standard Standard Amount Amount \$\$ Recovery Found Expected Flags 108.0 0.54 0.50 98.4 4.92 5.00 95.6 4.78 5.00 98.2 4.91 5.00 95.0 95 100 100.0 0.50 0.50 94.4 4.72 5.00 94.4 4.72 5.00 94.4 4.72 5.00 95.7 14.50 15.0	CCV CCV CCV Standard Standard Standard Amount Amount % Recovery Found Expected Flags Units 108.0 0.54 0.50 mg/L 98.4 4.92 5.00 ug/L 95.6 4.78 5.00 ug/L 98.2 4.91 5.00 ug/L 99.7 14.96 15.0 ug/L 95.0 95 100 % Rec. 100.0 0.50 0.50 mg/L 94.4 4.72 5.00 ug/L 94.4 4.72 5.00 ug/L 96.7 14.50 15.0 ug/L 96.7 14.50 15.0 ug/L 85.0 85 100 % Rec.	CCV CCV CCV Standard Standard Standard Amount Amount Date % Recovery Found Expected Flaqs Units Analyzed 108.0 0.54 0.50 mg/L 04/02/1996 98.4 4.92 5.00 ug/L 04/02/1996 98.2 4.91 5.00 ug/L 04/02/1996 99.7 14.96 15.0 ug/L 04/02/1996 95.0 95 100 % Rec. 04/02/1996 910.0 0.50 0.50 ug/L 04/02/1996 92.2 4.91 5.00 ug/L 04/02/1996 95.0 95 100 % Rec. 04/02/1996 94.4 4.72 5.00 ug/L 04/03/1996 94.4 4.72 5.00 ug/L 04/03/1996 96.7 14.50 15.0 ug/L 04/03/1996 95.0 85 100 % Rec. 04/03/1996 <td>CCVCCVCCVStandardStandardAmountAmountAmountAmountExpectedFoundExpectedFlaqsUnitsAnalyzedInitials108.00.540.5098.44.925.0095.64.785.00ug/L04/02/1996cjy98.24.915.00ug/L04/02/1996cjy95.095100% Rec.04/02/1996cjy95.095100% Rec.04/02/1996cjy94.44.724.725.0094.44.724.725.0096.714.5015.0ug/L04/03/1996cjy96.714.5015.0ug/L04/03/1996cjy96.714.5015.0ug/L04/03/1996cjy95.095100<</td>	CCVCCVCCVStandardStandardAmountAmountAmountAmountExpectedFoundExpectedFlaqsUnitsAnalyzedInitials108.00.540.5098.44.925.0095.64.785.00ug/L04/02/1996cjy98.24.915.00ug/L04/02/1996cjy95.095100% Rec.04/02/1996cjy95.095100% Rec.04/02/1996cjy94.44.724.725.0094.44.724.725.0096.714.5015.0ug/L04/03/1996cjy96.714.5015.0ug/L04/03/1996cjy96.714.5015.0ug/L04/03/1996cjy95.095100<

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.



Ref: Mark Borsuk, Oakland, CA./960326-Kl

METHOD BLANK REPORT

	Method						
	Blank						Run
	Amount	Reporting			Date	Analyst	Batch
Parameter	Found	Limit	Flags	Units	Analyzed	Initials	Number
TPH (Gas/BTXE, Liquid)							
as Gasoline	ND	0.050		mg/∟	04/02/1996	cjy	3612
Benzene	ND	0.50		ug/L	04/02/1996	cjy	3612
Toluene	ND	0.50		ug/L	04/02/1996	cjy	3612
Ethylbenzene	ND	0.50		ug/L	04/02/1996	cjy	3612
Xylenes (Total)	ND	0.50		ug/L	04/02/1996	cjy	3612
Methyl-tert-butyl ether	ND	2		ug/L	04/02/1996	cjy	3612
Bromofluorobenzene (SURR)	92			% Rec.	04/02/1996	¢jy	3612
TPH (Gas/BTXE, Liquid)							
as Gasoline	ND	0,050		mg∕L	04/03/1996	dld	3614
Benzene	ND	0.50		ug/L	04/03/1996	dld	3614
Toluene	ND	0.50		ug/L	04/03/1996	ald	3614
Ethvlbenzene	ND	0.50		ug/L	04/03/1996	dld	3614
Xvlenes (Total)	ND	0.50		ug/L	04/03/1996	dld	3614
Methyl-tert-butyl ether	ND	2		ug/L	04/03/1996	dld	3614
Bromofluorobenzene (SURR)	87			% Rec.	04/03/1996	dld	3614

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.



Ref: Mark Borsuk, Oakland, CA./960326-K1

MATRIX SPIKE / MATRIX SPIKE DUPLICATE

		Matrix					Matrix					
	Matrix	Spike				Matrix	Spike					
	Spike	Dup		Spike	Sample	Spike	Dup.			Date	Run	Sample
Parameter	* Rec.	* Rec.	RPD	Amount	Conc.	Conc.	Conc,	Flags	Units	Analyzed	Batch	Spiked
TPH (Gas/BTXE, Liquid)												262625
as Gasoline	122.0	124.0	1.6	0.50	NĎ	0.61	0.62		mg/L	04/02/1996	3612	262625
Benzene	105.8	105.4	0.4	7.05	ND	7.46	7.43		ug/L	04/02/1996	3612	262625
Toluene	104.2	105.4	1.1	24.27	ND	25.29	25.57		ug/L	D4/02/1996	3612	262625
Bromofluorobenzene (SURR)	102.0	105.0	2.9	100	91	102	105		<pre>% Rec.</pre>	04/02/1996	3612	262625
TPH (Gas/BTXE, Liquid)												262625
Benzene				1.0	ND				ug/L	04/02/1996	3612	262625
Bromofluorobenzene (SURR)				0.0	91				% Rec.	04/02/1996	3612	262625
TPH (Gas/BTXE,Liquid)												262718
as Gasoline	94.0	92.0	2.2	0.5	ND	0.47	0.46		mg∕L	04/03/1996	3614	262718
Benzene	96.0	94.B	1.3	5.94	ND	5.70	5.63		ug/L	04/03/1996	3614	262718
Toluene	95.6	94.6	1.1	22.98	NĎ	21.96	21.74		ug/L	04/03/1996	3614	262718
Bromofluorobenzene (SURR)	88.0	90.0	2.2	100	77	88	90		<pre>% Rec.</pre>	04/03/1996	3614	262718

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

.

KEY TO RESULT FLAGS

: RPD between sample duplicates exceeds 30%. : RPD between sample duplicates or MS/MSD exceeds 20%. *М : Correlation coefficient for the Method of Standard Additions is less than 0.995. + < : Sample result is less than reported value. : Value is between Method Detection Limit and Reporting Limit. B-I B = 0: Analyte found in blank and sample. C : The result confirmed by secondary column or GC/MS analysis. CNA : Cr+6 not analyzed; Total Chromium concentration below Cr+6 regulatory level. COMP : Sample composited by equal volume prior to analysis. **D**-: The result has an atypical pattern for Diesel analysis. D1 : The result for Diesel is an unknown hydrocarbon which consists of a single peak. DH : The result appears to be a heavier hydrocarbon than Diesel. DL: The result appears to be a lighter hydrocarbon than Diesel. DR : Elevated Reporting Limit due to Matrix. DS : Surrogate diluted out of range. DX : The result for Diesel is an unknown hydrocarbon which consists of several peaks. FA : Compound quantitated at a 2X dilution factor. : Compound quantitated at a 5X dilution factor. FB \mathbf{FC} : Compound quantitated at a 10X dilution factor. FD: Compound quantitated at a 20X dilution factor. \mathbf{FE} : Compound quantitated at a 50X dilution factor. \mathbf{FF} : Compound quantitated at a 100X dilution factor. \mathbf{FG} : Compound quantitated at a 200X dilution factor. \mathbf{FH} : Compound quantitated at a 500X dilution factor. FI : Compound quantitated at a 1000X dilution factor. FJ : Compound quantitated at a greater than 1000x dilution factor. FΚ : Compound quantitated at a 25X dilution factor. \mathbf{FL} : Compound quantitated at a 250X dilution factor. G-: The result has an atypical pattern for Gasoline. G1 : The result for Gasoline is an unknown hydrocarbon which consists of a single peak. : The result appears to be a heavier hydrocarbon than Gasoline. GH GL: The result appears to be a lighter hydrocarbon than Gasoline. : The result for Gasoline is an unknown hydrocarbon which consists of several peaks. GΧ HX : Peaks detected within the quantitation range do not match standard used. J : Value is estimated. MI : Matrix Interference Suspected. : Value determined by Method of Standard Additions. MSA MSA* : Value obtained by Method of Standard Additions; Correlation coefficient is <0.995. : Sample spikes outside of QC limits; matrix interference suspected. NI1 NI2 : Sample concentration is greater than 4X the spiked value; the spiked value is considered insignificant. : Matrix Spike values exceed established QC limits, post digestion spike is in NI3 control. : pH of sample > 2; sample analyzed past 7 days. **P**7 : Refer to subcontract laboratory report for QC data. RSC S2 : Matrix interference confirmed by repeat analysis. SCN : Thiocyanate not analyzed separately; total value is below the Reporting Limit for Free Cyanide. UMDL : Undetected at the Method Detection Limit.

.

KEY TO ABBREVIATIONS

• • •

.

ICVS	:	Initial Calibration Verification Standard (External Standard).
mean	:	Average; sum of measurements divided by number of measurements.
mg/Kg	:	Concentration in units of milligrams of analyte per kilogram of sample.
mg/L	:	Concentration in units of milligrams of analyte per liter of sample.
mL/L/hr	:	Milliliters per liter per hour.
MPN/100 mL	:	Most probable number of bacteria per one hundred milliliters of sample.
N/A	:	Not applicable.
NA	:	Not analyzed.
ND	:	Not detected.
NTU	:	Nephelometric turbidity units.
RPD	;	Relative percent difference.
SNA	:	Standard not available.
ug/Kg	:	Concentration in units of micrograms of analyte per kilogram of sample.
ug/L	:	Concentration in units of micrograms of analyte per liter of sample.

÷

umhos/cm : Micromhos per centimeter.

		I	985 TIMOTI	HY DRIVE							KIET			CALL
	RVICES	INC.	SAN JOSE, (408) FAX (408)	CA 95133 995-5535 293-8773				ALYSIS TO		LLAB ALL / SET	ANALYSES MUS	T MEET SPECIF	ICATIONS AN	IDHS #
CHAIN OF CUST	ody 9603	326-4	<u> </u>] EPA] LIA] OTHER		RWO	CB REGION
	MARK	Bollo	<u>L</u>			2				SPE		IONS	11	
	<u>1432</u> Dalet a	<u>HHRRE</u>	ON :	57.						70	AUGICE Q	4 TEPUL	ef 40 62 iil	ise
			CONTA	INERS						A KA	hi: le	rech wt Be	Bart	
AMPLE I.D.		S = SO # H2O € = N2O								ADD'L		STATUS	CONDITION	LAB SAMPLE #
w/	750		3		X						·			
<u>w2</u>	815	~	3		$\downarrow \geq$									
<u></u>						-			·			· · · · · · · · · · · · · · · · · · ·		
	<u> </u>							_				701	ATONS	1411 A. F. Market
	<u> </u>					$\left - \right $						Date 3/27/2		
												Yes	No	Initials 3
	DATE TIME	SAMPL								RESU	LTS NEEDED	UIA	NCS	
LEASED BY	5/46 8		k.	IDATE	- i (- . a.c		<u>zur</u>	REC	EIVED BY		TER THAN Z	outine	DATE/	TIME
LEASED BY)))			DATE	1a		<u>-</u> 55		EIVED BY	nad			2/27/ DATE	192 10 m TIME
LEASED BY	qenne <u>e l</u>		, <u>, , , , , , , , , , , , , , , , , , </u>	DATE	<u> / / ~</u>	TIME		REGE	NED BY	Junn	NO N	· <u>·</u> ···	DATE	
IIPPED VIA			. <u>,,</u>	DATE S	ENT	TIME SE	NT	COOLE	ER#	ang	5.1		212014	16 <u>0800</u>
								<u> </u>					TEMP.	1. 00,

- --

CAMBRIA

PAGE Ø1

CAMBRIA Environmental Technology, Inc.

1144 65th Street, Suite C = Oakland, CA 94608 • (510) 420-0700 • Fax (510) 420-9170

FAX TRANSMITTAL

TO: Tom Peacock

COMPANY: ACDEH

FAX NUMBER:

SUBJECT: 1432-1434 Harrison Street

FROM: N. Scott MacLeod DATE: May 7, 1996 PROJECT NUMBER: 54-188 PAGES TO FOLLOW: 1 HARD COPY TO FOLLOW:

COMMENTS:

As we discussed in our phone conversation earlier today, Cambria is in the final stages of preparing the workplan that you requested by May 8, 1996. Our proposed soil boring locations are indicated on the attached figures, which comprise part of the workplan that will be submitted. We are investigating potential sources of gasoline and methyl tert-butyl ether measured in upgradient wells and may change the soil boring locations based on this review. As we discussed, we will submit the final workplan to your office by May 15, 1996.

Once the workplan is approved we anticipate beginning the field work for this investigation within the 30 days allotted in your April 8, 1996 letter to the Alvin H. Bacharach and Barbara J. Borsuk Trust.

Call me at 510-420-9172 if you have additional questions or concerns. Thank you.

This fax transmittal is intended solely for use by the person or entity identified above. Any copying or distribution of this document by anyone other than the intended recipient is strictly prohibited. If you are not the intended recipient, please telephone us immediately and return the original transmittal to us at the address listed above.



