ENVIRONMENTAL PROTECTION

98 JUN -2 PM 3:44

Mark Borsuk Attorney at Law mborsuk@ix.netcom.com (415) 922-4740 / Fax 922-1485 1626 Vallejo Street San Francisco, CA 94123-5116

May 29, 1998

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: IQ'98 Monitoring Report

1432 Harrison Street, Oakland, CA 94612

SITE ID 498

Dear Mr. Peacock:

Attached is the IQ'98 groundwater monitoring report for the above location. If you have a question regarding the data, please contact me.

Mark Borsuk

Sincerely yours,



1680 ROGERS AVENUE SAN JOSE, CALIFORNIA 95112 (408) 573-7771 FAX (408) 573-0555 PHONE

May 27, 1998

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

> Site: 1432 Harrison Street Oakland, California

Date: March 12, 1997

GROUNDWATER SAMPLING REPORT 980312-K-2

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 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 sample collection.

STANDARD PRACTICES

Sampling Equipment

Samples were collected using disposable 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. Disposable bailers are made of polyethylene plastic, decontaminated by the manufacturer, individually packaged for one-time only use, and are inexpensive. Teflon and stainless steel bailers are relatively easy to clean and are considered reusable with proper decontamination.

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.

Decontamination

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

Sampling Methodology

Samples were obtained by standardized sampling procedures that follow a non-purge sample collection protocol. The sampling methodology conforms to both State and Regional Water Quality Control Board standards for no purge sampling 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

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 Sequoia Analytical Services in Redwood City, California. Sequoia is certified by the California Department of Health Services as a Hazardous Materials Testing Laboratory, and is listed as DOHS HMTL #1210.

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.

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.

Kent Brown

KEB/dg

attachments: table of well monitoring data

certified professional report and gradient map

certified analytical report

chain of custody

cc:

Scott MacLeod

Cambria Environmental Technology, Inc.

1144 65th St., Suite C Oakland, CA 94608

Well I.D.	MW-1	MW-1	MW-1
Date Sampled	09/09/97	12/18/97	03/12/98
Well Diameter (in.)	4	4	4
Total Well Depth (ft.)	25.05	25.08	25.01
Depth To Water (ft.)	19.70	19.25	17.52
Free Product (in.)	NONE	NONE	NONE
Reason If Not Sampled			
1 Case Volume (gal.)	NOT PURGED	NOT PURGED	NOT PURGED
Did Well Dewater?			
Gallons Actually Evacuated			
Purging Device	NONE	NONE	NONE
Sampling Device	DISPOSABLE	DISPOSABLE	DISPOSABLE
	BAILER	BAILER	BAILER
Time	14:00	14:18	10:53
Temperature (Fahrenheit)	71.4	69.6	65.8
Hq	6.8	6.5	6.7
Conductivity (micromhos/cm)	900	600	680
BTS Chain of Custody	970909-s2	971218-22	980312-K2
BTS Sample I.D.	MW-1	MW-1	MW-1
DOHS HMTL Laboratory	LEGEND	LEGEND	SEQUOIA
Analysis	TPH-GAS, BTEX	TPH-GAS, BTEX,	TPH-GAS, BTEX,
	& MTBE	MTBE, MTBE (8260)	MTBE, MTBE (8260)

SUMMARY OF	CAR RESULTS:	in parts per billion unless othe	erwise noted
DOHS HMTL Laboratory	LEGEND	LEGEND	SEQUOIA
Laboratory Sample I.D.	278119	280419	9803A70-01
			7
TPH Gasoline	99,000	160,000	190,000 /
Benzene	22,000	30,000	20,000
Toluene	27,000	44,000	49,000
Ethyl Benzene	1,600	2,200	2,500 7
Xylene Isomers	13,000	15,000	18,000 7 1 now
Methyl-tert-butyl ether (MTBE)	270		4,500
MTBE by EPA 8260	_	ND	G (19)
			Continuation

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.

Well I.D.	MW-2	MW-2	MW-2
Date Sampled	09/09/97	12/18/97	03/12/98
Well Diameter (in.)	2	2	2
Total Well Depth (ft.)	25.62	25.63	25.60
Depth To Water (ft.)	20.20	19.80	18.07
Free Product (in.)	NONE	NONE	NONE
Reason If Not Sampled			
1 Case Volume (gal.)	NOT PURGED	NOT PURGED	NOT PURGED
Did Well Dewater?			
Gallons Actually Evacuated	- -		
Purging Device	NONE	NONE	NONE
Sampling Device	DISPOSABLE	DISPOSABLE	DISPOSABLE
	BAILER	BAILER	BAILER
	•		
Time	13:45	13:59	10:45
Temperature (Fahrenheit)	73.2	70.4	66.6
рН	6.8	6.6	6.8
Conductivity (micromhos/cm)	1100	860	821
BTS Chain of Custody	970909-s2	971218-72	980312-K2
BTS Sample I.D.	MW-2	MW-2	MW-2
DOHS HMTL Laboratory	LEGEND	LEGEND	SEQUOIA
Analysis	TPH-GAS, BTEX,	TPH-GAS, BTEX,	TPH-GAS, BTEX,
	MTBE, MTBE (8260)	MTBE, MTBE (8260)	MTBE, MTBE (8260)
	, 11100 (0200)	(0500)	, (0200)

SUMMARY OF C	AR RESULTS	in parts per billion unless other	wise noted
DOHS HMTL Laboratory	LEGEND	LEGEND	SEQUOIA
Laboratory Sample I.D.	278120	280420	9803A70-02
TPH Gasoline	81,000	110,000	120,000
Benzene	16,000	18,000	16,000
Toluene	18,000	26,000	26,000
Ethyl Benzene	1,800	2,200	2,200
Xylene Isomers	8,600	9,500	9,400 —
Methyl-tert-butyl ether (MTBE)	220		2,300 New
MTBE by EPA 8260	ИĎ	ND	SA ND
			Gufmadoon

Well I.D.	MW-3	MW-3	MW-3
Date Sampled	09/09/97	12/18/97	03/12/98
Well Diameter (in.)	2	2	2
Total Well Depth (ft.)	23.88	23.90	23.87
Depth To Water (ft.)	19.18	18.64	17.56
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

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

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

Well I.D.	MW-4	MW-4	MW-4
Date Sampled	09/09/97	12/18/97	03/12/98
Well Diameter (in.)	2	2	2
Total Well Depth (ft.)	24.85	24.83	24.79
Depth To Water (ft.)	19.33	19.17	17.68
Free Product (in.)	NONE	NONE	NONE
Reason If Not Sampled			
1 Case Volume (gal.)	NOT PURGED	NOT PURGED	NOT PURGED
Did Well Dewater?			
Gallons Actually Evacuated			
Purging Device	NONE	NONE	NONE
Sampling Device	DISPOSABLE	DISPOSABLE	DISPOSABLE
	BAILER	BAILER	BAILER
Time	13:17	13:43	10:36
Temperature (Fahrenheit)	69.4	70.2	66.1
рн	6.7	6.5	7.0
Conductivity (micromhos/cm)	1500	910	711
BTS Chain of Custody	970909-s2	971218 - Z2	980312 - K2
BTS Sample I.D.	MW-4	MW-4	MW-4
DOHS HMTL Laboratory	LEGEND	LEGEND	SEQUOIA
Analysis	TPH-GAS, BTEX	TPH-GAS, BTEX,	TPH-GAS, BTEX,
	& MTBE	MTBE, MTBE (8260)	MTBE, MTBE (8260)

SUMMARY OF	CAR RESULTS	in parts per billion unless othe	erwise noted
OHS HMTL Laboratory	LEGEND	legend .	SEQUOIA
aboratory Sample I.D.	278121	280421	9803A70-03
PH Gasoline	7,400	710	1,300
enzene	5,000	170	410
oluene	410	8.0	21
thyl Benzene	230	ND	ND 🥕
ylene Isomers	470	39	57
ethyl-tert-butyl ether (MTBE)	33		12 - war
TBE by EPA 8260		ND	ND A

Well I.D. Date Sampled	MW-5 09/09/97	MW-5 12/18/97	MW-5 03/12/98
# 12 Minutes (I -)			•
Well Diameter (in.)	2	2	2
Total Well Depth (ft.)	28.90	28.87	28.65
Depth To Water (ft.)	19.93	19.77	19.77
Free Product (in.)	NONE	NONE	NONE
Reason If Not Sampled			
1 Case Volume (gal.)	NOT PURGED	NOT PURGED	NOT PURGED
Did Well Dewater?	 .		
Gallons Actually Evacuated			
Purging Device	NONE	NONE	NONE
Sampling Device	DISPOSABLE	DISPOSABLE	DISPOSABLE
	BAILER	BAILER	BAILER
Time	13:05	13:28	10:22
Temperature (Fahrenheit)	65.8	67.0	64.8
рн	6.9	6.6	6.9
Conductivity (micromhos/cm)	1400	790	867
BTS Chain of Custody	970909-52	971218-22	980312-K2
BTS Sample I.D.	MW-5	MW-5	MW-5
DOHS HMTL Laboratory	LEGEND	LEGEND	SEQUOIA
Analysis	TPH-GAS, BTEX	TPH-GAS, BTEX	TPH-GAS, BTEX
	& MTBE	& MTBE	& MTBE
		= ==	

SUMMARY OF CA	R RESULTS in p	arts per billion unless ot	herwise noted
DOHS HMTL Laboratory	LEGEND	LEGEND	SEQUOIA
Laboratory Sample I.D.	278122	280422	9803A70-04
TPH Gasoline	ND	ND	79 1
Benzene	ND ·	ND	2.3
Toluene	ND	ри	ND
Ethyl Benzene	ND	מא	0.8
Xylene Isomers	ND	ND	ND
Methyl-tert-butyl ether (MTBE)	ND		ND
MTBE by EPA 8260	-	ND	

Well I.D.	MW-6	MW-6	MW-6
Date Sampled	09/09/97	12/18/97	03/12/98
Well Diameter (in.)	2	• 2	2
Total Well Depth (ft.)	28.32	28.36	28.31
Depth To Water (ft.)	20.06	19.90	18.00
Free Product (in.)	NONE	NONE	NONE
Reason If Not Sampled			
1 Case Volume (gal.)	NO PURGE	NO PURGE	NO PURGE
Did Well Dewater?			
Gallons Actually Evacuated			
Purging Device	NONE	NONE	NONE
Sampling Device	BAILER	BAILER	BAILER
m.t			
Time	12:50	13:15	10:10
Temperature (Fahrenheit)	69.6	69.0	65.8
pH	7.8	6.6	6.9
Conductivity (micromhos/cm)	2000	1280	1683
BTS Chain of Custody	970909-S2	971218-Z2	980312-K2
BTS Sample I.D.	MW-6	MW-6	MW-6
DOHS HMTL Laboratory	LEGEND	LEGEND	SEQUOIA
-	•		=
Analysis	TPH-GAS, BTEX	BTEX	TPH-GAS, BTEX
	& MTBE		& MTBE

CAR RESULTS	in parts per billion unless other	wise noted
LEGEND	LEGEND	SEQUOIA
278123	280423	9803A70-05
ND		ND
ND	ND	ND
ND		ND
	LEGEND 278123 ND ND ND ND ND ND ND ND ND	278123 280423 ND





Kent Brown Blaine Tech Services 1680 Rogers Avenue San Jose, California 95112

Re:

First Quarter 1998 Monitoring Report

1432 Harrison Street Oakland, California Cambria Project #18-214

Dear Mr. Brown:

As you requested, Cambria Environmental Technology, Inc. (Cambria) has summarized the results of the first quarter 1998 ground water sampling at the site referenced above. Presented below are sampling activities performed in the first quarter 1998, the anticipated second quarter 1998 activities, and the hydrocarbon distribution in ground water.

FIRST QUARTER 1998 ACTIVITIES

Ground Water Sampling: On March 12, 1998, Blaine Tech Services (Blaine) gauged all site wells and collected ground water samples from site wells MW-1, MW-2, MW-4, MW-5, and MW-6. No sampling of site well MW-3 is required at this time. Ground water elevations are shown on Figure 1.

Corrective Action Plan (CAP): In a letter, dated March 18, 1998, Alameda County Health Care Services Agency accepted the December 29, 1997 CAP submitted by Cambria.

Cambria

ANTICIPATED SECOND QUARTER 1998 ACTIVITIES

TECHNOLOGY, INC.

Environmental

11 A4 A Cons Consess

1144 65TH STREET,

SUITE B

OAKLAND,

CA 94608

CA 94008

PH: (510) 420-0700

Fax: (510) 420-9170

CH: (3,10) 420-0700

Ground Water Sampling: Blaine will gauge all site wells and collect ground water samples from selected wells including MW-1, MW-2, MW-4, MW-5, and MW-6. Cambria will prepare a ground water monitoring report summarizing the sampling data.

Corrective Action Plan: Cambria will request pre-approval from the UST Cleanup Fund to complete a remedial action plan that will include the specific system design.

CAMBRIA

Kent Brown April 28, 1998

HYDROCARBON DISTRIBUTION IN GROUND WATER

Ground water analytical data suggest that hydrocarbon concentrations are highest in wells MW-1 and MW-2, which are located near the former underground storage tank area. The cross gradient horizontal extent is defined to below or near method detection limits by wells MW-3 and MW-5. The southern up-gradient extent is defined by MW-6, in which no hydrocarbons were detected during this sampling event. Hydrocarbon concentrations in well MW-4 continue to fluctuate.

CLOSING

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

Sincerely,

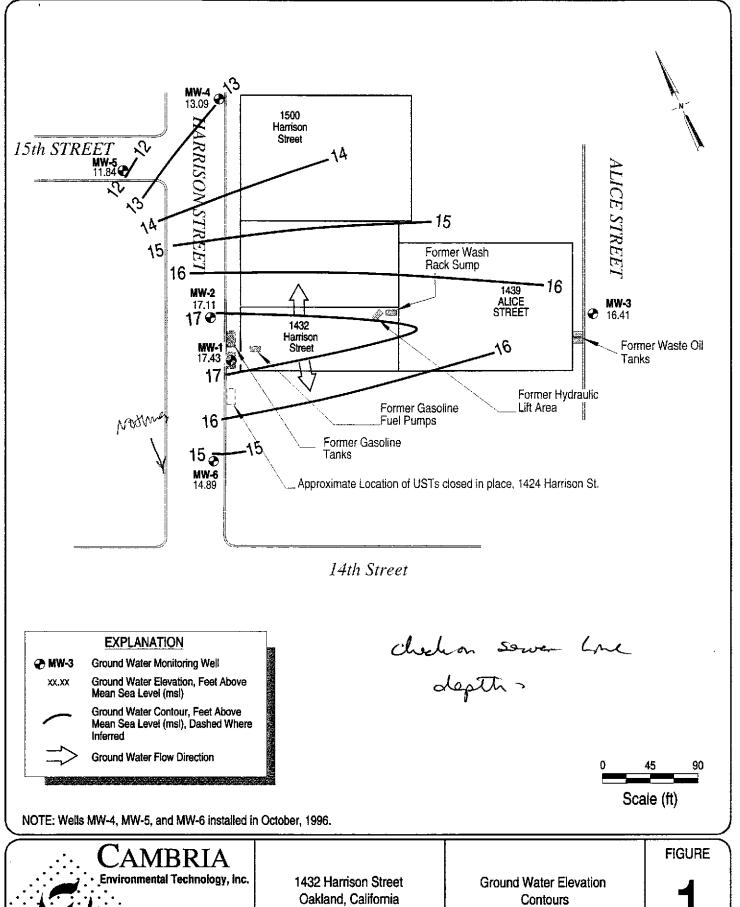
Cambria Environmental Technology, Inc.

Gina Kathuria, P.E. Project Engineer

David Elias, R.G. Senior Geologist

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No. 6584







Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834 Petaluma, CA 94954

(650) 364-9600 (510) 988-9600 (916) 921-9600 (707) 792-1865

FAX (650) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100 FAX (707) 792-0342

Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112

Attention: Fran Thie

Client Proj. ID: Mark Borsuk/980312-K2

Sample Descript: MW-1 Matrix: LIQUID

Analysis Method: 8015Mod/8020

Lab Number: 9803A70-01

Sampled: 03/12/98 Received: 03/13/98

Extracted: 03/26/98 Analyzed: 03/26/98 Reported: 04/13/98

Instrument ID: HP9

Analyte	De	tection Limit ug/L	Sa	mple Results ug/L
TPPH as Gas Methyl t-Butyl Ether Benzene Toluene Ethyl Benzene Xylenes (Total) Chromatogram Pattern:		50000 2500 500 500 500 500		190000 4500 20000 49000 2500 18000 C6-C12

Surrogates Trifluorotoluene

Control Limits %

130

% Recovery 103

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL -

ELAP #1271

Peggy Penner Project Manager

Page:



Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834 Petaluma, CA 94954 (650) 364-9600 (510) 988-9600 (916) 921-9600 (707) 792-1865 FAX (650) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100 FAX (707) 792-0342

Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112

Attention: Fran Thie

Client Proj. ID: Mark Borsuk/980312-K2

Sample Descript: MW-1

Matrix: LIQUID

Analysis Method: EPA 8260 Lab Number: 9803A70-01 Sampled: 03/12/98 Received: 03/13/98

Analyzed: 04/11/98 Reported: 04/13/98

QC Batch Number: MS040998MTBEH6A

Instrument ID: H6

Methyl t-Butyl Ether (MTBE)

Analyte

Detection Limit ug/L

Sample Results ug/L

Methyl t-Butyl Ether

1000

N.D.

Surrogates 1,2-Dichloroethane-d4

Control Limits % 76

114

% Recovery

92

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOYA AMATIYTICAL -

ELAP #1210

Peggy Penner Project Manager

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Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834 Petaluma, CA 94954 (650) 364-9600 (510) 988-9600 (916) 921-9600 (707) 792-1865 FAX (650) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100 FAX (707) 792-0342

Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112

Attention: Fran Thie

Client Proj. ID: Mark Borsuk/980312-K2

Sample Descript: MW-2 Matrix: LIQUID

Analysis Method: 8015Mod/8020

Lab Number: 9803A70-02

Sampled: 03/12/98 Received: 03/13/98 Extracted: 03/26/98 Analyzed: 03/26/98 Reported: 04/13/98

Instrument ID: GC9

Analyte		ction Limit ug/L	Sample Results ug/L
TPPH as Gas Methyl t-Butyl Ether Benzene Toluene Ethyl Benzene Xylenes (Total) Chromatogram Pattern:		20000	2300 16000 26000 2200 9400
Surrogates Trifluorotoluene	Contr 70	ol Limits %	% Recovery

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL -

ELAP #1271

Peggy Penner Project Manager

Page:



Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834 Petaluma, CA 94954

(650) 364-9600 (510) 988-9600 (916) 921-9600 (707) 792-1865 FAX (650) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100 FAX (707) 792-0342

Client Proj. ID: Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112

Attention: Fran Thie

Mark Borsuk/980312-K2

Sample Descript: MW-2 Matrix: LIQUID

Analysis Method: EPA 8260 Lab Number: 9803A70-02

Sampled: 03/12/98 Received: 03/13/98

Analyzed: 04/11/98 Reported: 04/13/98

QC Batch Number: MS040998MTBEH6A

Instrument ID: H6

Methyl t-Butyl Ether (MTBE)

Anaiyte

Detection Limit ug/L

Sample Results

ug/L

Methyl t-Butyl Ether

400

N.D.

Surrogates 1,2-Dichloroethane-d4 **Control Limits %**

% Recovery

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUØÏA

'ICAL -

ELAP #1210

Peggy Penner Project Manager

Page:



Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834 Petaluma, CA 94954

(650) 364-9600 (510) 988-9600 (916) 921-9600 (707) 792-1865

FAX (650) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100 FAX (707) 792-0342

Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112

Attention: Fran Thie

Client Proj. ID: Mark Borsuk/980312-K2

Sample Descript: MW-4 Matrix: LIQUID

Analysis Method: 8015Mod/8020

Lab Number: 9803A70-03

Sampled: 03/12/98 Received: 03/13/98 Extracted: 03/27/98

Analyzed: 03/27/98 Reported: 04/13/98

Instrument ID: GC9

Analyte	Dete	ection Limit ug/L	Sample Results ug/L
TPPH as Gas Methyl t-Butyl Ether Benzene Toluene Ethyl Benzene Xylenes (Total) Chromatogram Pattern:		500 25 5.0 5.0 5.0 5.0	
Surrogates Trifluorotoluene	Cont 70	trol Limits %	% Recovery 106

Analytes reported as No. were not present above the stated limit of detection.

SEQUOIA AŃALY/TICAL -

ELAP #1271

Peggy Penner Project Manager

Page:



Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834 Petaluma, CA 94954 (650) 364-9600 (510) 988-9600 (916) 921-9600 (707) 792-1865 FAX (650) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100 FAX (707) 792-0342

∥ Blaine Tech Services ∥ 1680 Rogers Avenue ∥ San Jose, CA 95112

Attention: Fran Thie

Client Proj. ID: Mark Borsuk/980312-K2

Sample Descript: MW-4 Matrix: LIQUID

Analysis Method: EPA 8260 Lab Number: 9803A70-03 Sampled: 03/12/98 Received: 03/13/98

Analyzed: 04/11/98 Reported: 04/13/98

QC Batch Number: MS040998MTBEH6A

Instrument ID: H6

Analyte

Methyl t-Butyl Ether (MTBE)

Detection Limit

Sample Results ug/L

Methyl t-Butyl Ether

2.0

ug/L

N.D.

Surrogates 1,2-Dichloroethane-d4 Control Limits % 76

% Recovery

94

Analytes reported as M.D. were not present above the stated limit of detection.

SEQUOIA/ANALYTICAL

ELAP #1210

Peggy Penner Project Manager

Page:



Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834 Petaluma, CA 94954 (650) 364-9600 (510) 988-9600 (916) 921-9600 (707) 792-1865 FAX (650) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100 FAX (707) 792-0342

Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112

Attention: Fran Thie

Client Proj. ID: Mark Borsuk/980312-K2 Sampled: 03/12/98

Sample Descript: MW-5 Matrix: LIQUID

Matrix: LIQUID
Analysis Method: 8015Mod/8020

Lab Number: 9803A70-04

Sampled: 03/12/98 Received: 03/13/98 Extracted: 03/26/98

Extracted: 03/26/98 Analyzed: 03/26/98 Reported: 04/13/98

Instrument ID: GC5

Analyte	Detectio ug/		Sample Results ug/L
TPPH as Gas Methyl t-Butyl Ether Benzene Toluene Ethyl Benzene Xylenes (Total) Chromatogram Pattern:		5 50 50 50	N.D. 2.3 N.D. 8 N.D.
Surrogates Trifluorotoluene	Control L 70	Limits % 130	% Recovery 100

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOJA) ANALYTICAL -

ELAP #1271

Peggy Penner Project Manager

Page:



Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834 Petaluma, CA 94954

(650) 364-9600 (510) 988-9600 (916) 921-9600 (707) 792-1865

FAX (650) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100 FAX (707) 792-0342

Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112

Attention: Fran Thie

Client Proj. ID: Mark Borsuk/980312-K2

Sample Descript: MW-6 Matrix: LIQUID

Analysis Method: 8015Mod/8020 Lab Number: 9803A70-05

Sampled: 03/12/98 Received: 03/13/98 Extracted: 03/26/98 Analyzed: 03/26/98

Reported: 04/13/98

Instrument ID: GC9

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas Methyl t-Butyl Ether Benzene Toluene Ethyl Benzene Xylenes (Total) Chromatogram Pattern:	50 2.5 0.50 0.50 0.50 0.50	N.D. N.D. N.D. N.D. N.D.
Surrogates Trifluorotoluene	Control Limits % 70 130	% Recovery

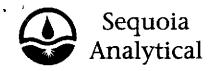
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA AMALYTICAL -

ELAP #1271

Peggy Penner Project Manager

Page:



680 Chesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8 Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834 (650) 364-9600 (510) 988-9600 (916) 921-9600 FAX (650) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100

Blaine Tech Services, Inc. 1680 Rogers Ave. Client Project ID:

Mark Borsuk/ 980312-K2

Matrix:

Liquid

San Jose, CA 95112 Attention: Fran Thie

Work Order #:

9803A70 -01-02, 04-05

Reported:

Apr 14, 1998

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl	Xylenes	Gas
•			Benzene	7.3	
QC Batch#:	GC032698802009A	GC032698802009A	GC032698802009A	GC032698802009A	GC032698802009A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Prep. Method:	EPA 5030				
Analyst:	D. Newcomb				
MS/MSD #:	8032203	8032203	8032203	8032203	8032203
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	3/26/98	3/26/98	3/26/98	3/26/98	3/26/98
Analyzed Date:	3/26/98	3/26/98	3/26/98	3/26/98	3/26/98
Instrument I.D.#:	HP9	HP9	HP9	HP9	HP9
Conc. Spiked:	20 μg/L	20 μg/L	20 μg/L	60 μg/L	360 μg/L
Result:	19	20	20	60	330
MS % Recovery:	95	100	100	100	92
Dup. Result:	20	21	21	63	340
MSD % Recov.:	100	105	105	105	94
RPD:	5.1	4.9	4.9	4.9	3.0
RPD Limit:	0-20	0-20	0-20	0-20	0-50
LCS #:	LCS032698	LCS032698	LCS032698	LCS032698	LCS032698
Prepared Date:	3/26/98	3/26/98	3/26/98	3/26/98	3/26/98
Analyzed Date:	3/26/98	3/26/98	3/26/98	3/26/98	3/26/98
Instrument I.D.#:	HP9	HP9	HP9	HP9	HP9
Conc. Spiked:	20 μg/L	20 μg/L	20 μg/L	60 μg/L	360 μg/L
LCS Result:	21	22	22	66	360
LCS % Recov.:	105	110	110	110	100
MS/MSD	60-140	60-140	60-140	60-140	60-140
LCS	70-130	70-130	70-130	70-130	70-130
Control Limits					

SEQUOIA ANALYTICAL

Peggy Penner Project Manager Please Note:

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

9803A70.BLA <1>



680 Chesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8 Sacramento, CA 95834

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Blaine Tech Services, Inc. 1680 Rogers Ave.

Client Project ID:

Mark Borsuk/ 980312-K2

Matrix:

Liquid

San Jose, CA 95112 Attention: Fran Thie

Work Order #:

9803A70-03

Reported:

Apr 14, 1998

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl	Xylenes	Gas
00 b-t-t //-			Benzene		
QC Batch#:		GC032798802009A	GC032798802009A	GC032798802009A	GC032798802009/
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	D. Newcomb	D. Newcomb	D. Newcomb	D. Newcomb	D. Newcomb
MS/MSD #:	8031823	8031823	8031823	8031823	8031823
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	3/27/98	3/27/98	3/27/98	3/27/98	3/27/98
Analyzed Date:	3/27/98	3/27/98	3/27/98	3/27/98	3/27/98
nstrument I.D.#:	HP9	HP9	HP9	HP9	HP9
Conc. Spiked:	20 μg/L	20 μg/L	20 μg/L	60 μg/L	340 μg/L
Result:	21	22	22	68	350
MS % Recovery:	105	110	110	113	103
Dup. Result:	21	22	22	67	350
MSD % Recov.:	105	110	110	112	103
RPD:	0.0	0.0	0.0	1.5	0.0
RPD Limit:	0-20	0-20	0-20	0-20	0-50
LCS #:	LCS032798	LCS032798	LCS032798	LCS032798	LCS032798
Prepared Date:	3/27/98	3/27/98	3/27/98	3/27/98	3/27/98
Analyzed Date:	3/27/98	3/27/98	3/27/98	3/27/98	3/27/98
nstrument I.D.#:	HP9	HP9	HP9	HP9	HP9
Conc. Spiked:	20 µg/L	20 μ g /L	20 μg/L	60 μg/L	340 μg/L
LCS Result:	21	22	22	68	350
LCS % Recov.:	105	110	110	113	103
MS/MSD	60-140	60-140	60-140	60-140	60-140
ĽCS	70-130	70- 130	70-130	70-130	70-130

SEQUOIA ANALYTICAL

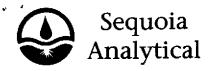
IP∉nner Preject Manager

Control Limits

Please Note:

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^{**} MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference



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Blaine Tech Services, Inc.

1680 Rogers Ave.

San Jose, CA 95112 Attention: Fran Thie

Client Project ID:

Mark Borsuk/ 980312-K2

Matrix:

Liquid

Work Order #:

9803A70-01-03

Reported:

Apr 14, 1998

QUALITY CONTROL DATA REPORT

Analyte:

MTBE

Analy. Method:

QC Batch#: MS040998MTBEH6A EPA 8260

Prep. Method:

N.A.

Analyst:

L. Zhu

MS/MSD #:

980455301

Sample Conc.:

47

Prepared Date:

4/9/98

Analyzed Date: Instrument I.D.#: 4/9/98 Н6

Conc. Spiked:

 $50 \mu g/L$

Result:

100

MS % Recovery:

106

Dup. Result:

99

MSD % Recov.:

104

RPD:

1.0

RPD Limit:

0-25

LCS #:

LCS041198

Prepared Date:

4/11/98

Analyzed Date:

4/11/98

Instrument I.D.#: Conc. Spiked: H6

50 µg/L

LCS Result: LCS % Recov.:

49 98

MS/MSD

60-140

LCS

70-130

Control Limits

QUDIA/ANALYTICAL

'eggy**∕**Penner ojegt Manager Please Note:

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

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9803A70.BLA <3>



Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834 Petaluma, CA 94954

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Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112 Attention: Fran Thie Client Proj. ID: Mark Borsuk/980312-K2

Received: 03/13/98

Lab Proj. ID: 9803A70

Reported: 04/13/98

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of ______ pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

Please note: MTBE did not confirm by EPA 8260 therefore all MTBE results at

this site should be considered suspect.

SECTUOIA ANALYTICAL

Peggy Penner Project Manager

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TECH SERVICES INC. PHONE (408) 573-055	71 55	1,00			ALL ANALYSES MUST MEET SPECIFICATIONS AND DETECTION LIMITS SET BY CALIFORNIA DHS AND BPA RWQCB REGION
CLIENT CLIENT	HS HS	mTBE	*		□ LIA □ OTHER
MACK BOCSUIC SITE 1432 HARRELION ST DAKLAND, CA MATRIX CONTAINERS	COMPOSITE ALL CONTAINERS	, BRX,	84 6260		SPECIAL INSTRUCTIONS TOURICE & REPORT TO 9803A70 BLAINE TEXH SERVICES ATTN: KENTBRAIN * MW-1, MW-2, MW-4 DWLY,
SAMPLE I.D. SAMPLE I.D. TOTAL	ır I	9-HCL	17.72 N		CONFIRM MOBIL BY \$260.
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~~~ 1000 B 6		×	×		
nu-5 1023 04 3		×			€ 13 <u>12</u>
mm-6 0 1012 02 3 J					
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RELEASED BY DA	TE.	7 1	TIME	RECEIVED BY	DATE TIME
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