51P551

CAMBRIA Environmental Technology, Inc.

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

TRANSMITTAL

TO: Susan Hugo

FROM: Ann M. Crum

COMPANY: Alameda County
Dept. Of Environmental Health

DATE: August 13, 1998

SUBJECT: Lathrop Property, Emeryville, CA
Ground Water Monitoring Report

PROJECT NUMBER: 19-122-15

Susan,

As discussed with Joseph Theisen, enclosed please find our First Quarter 1998 Ground Water Monitoring Report for the Lathrop property. Please call (510) 420-3309 if you have any questions.

Thank you,
Ann

H:\MISC\LATHROP\Correspondence\TRANS8-98.WPD

CAMBRIA

August 10, 1998

Mr. James Wilson
Crosby, Heafey, Roach and May
1999 Harrison Street
Oakland, CA 94612

Re: **First Quarter 1998 Semi-Annual Ground Water Monitoring Report**
Lathrop Property
5813-15 Shellmound Street
Emeryville, California
Project No. 190-0122-015

Dear Mr. Wilson:

This report presents the results of ground water monitoring conducted by Cambria Environmental Technology, Inc (Cambria) at the above-referenced site. Our first quarter 1998 ground water monitoring activities are presented below.

FIRST QUARTER 1998 GROUND WATER MONITORING ACTIVITIES

The results of Cambria's first quarter 1998 semi-annual ground water monitoring activities are summarized below. Ground water elevation contours and selected analyte concentrations are presented on Figures 1 and 2, respectively. Tabulated analytical results for ground water are presented in Tables 1 and 2. The laboratory analytical reports are presented as Attachment A.

Sampling Date: March 31, 1998

Purging Method: A minimum of three well volumes was hand bailed from each well while monitoring physio-chemical parameters (pH, conductivity, suspended solids and temperature) for stabilization.

Laboratory Analyses: Ground water samples from the wells were analyzed for:

- TPHg by modified EPA Method 8015;
- TPHcr, TPHmo, and TPHd by modified EPA Method 8015;
- BTEX and MTBE by EPA Method 8020;
- SVOCs (including PNAs) by EPA Method 8270.

Ground Water Flow Direction: Based on the March 31, 1998 depth to ground water measurements, ground water flows toward the south at a gradient of about 0.01 ft/ft.

Oakland, CA
Sonoma, CA
Portland, OR
Seattle, WA

Cambria Environmental Technology, Inc.

1144 65th Street
Suite B
Oakland, CA 94608
Tel (510) 420-0700
Fax (510) 420-9170

Waste Water Disposal: Purge water generated during the first quarter 1998 sampling event was stored on site in sealed, labeled, D.O.T.-approved 55-gallon steel drum.

CLOSING

We appreciate this opportunity to provide environmental consulting services to Crosby, Heafey, Roach and May. Please call if you have any questions or comments.

Sincerely,
Cambria Environmental Technology, Inc.

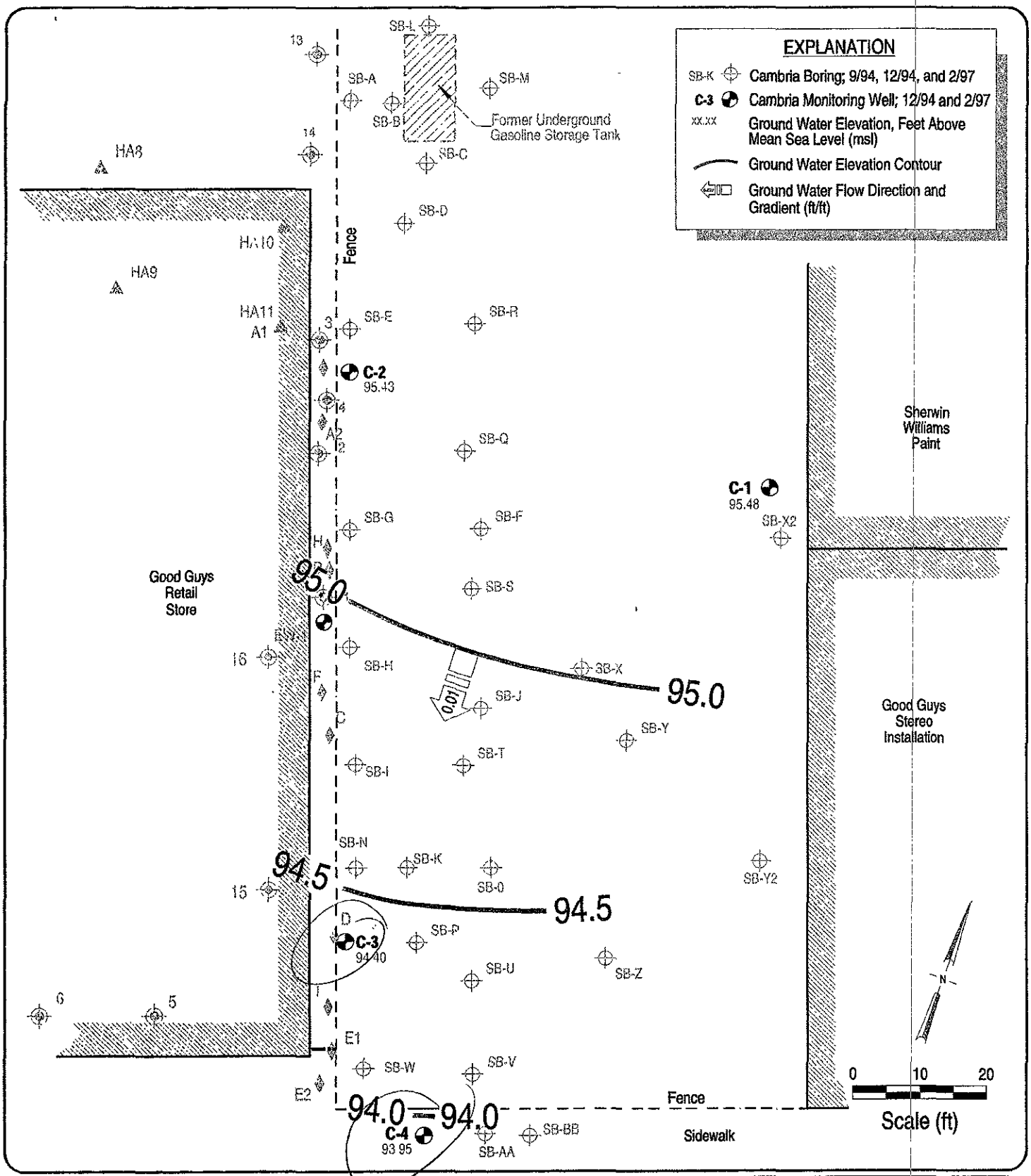
Ann M. Crum
Project Environmental Scientist

Joseph P. Theisen, CEG
Principal Hydrogeologist

Figures: 1 - Ground Water Elevation Contours
2 - Petroleum Hydrocarbons / SVOCs in Ground Water

Attachments: A - Laboratory Analytical Report

H:\MISC\LATHROP\QM and Data Tables\1qm98.wpd



CAMBRIA
Environmental Technology, Inc.

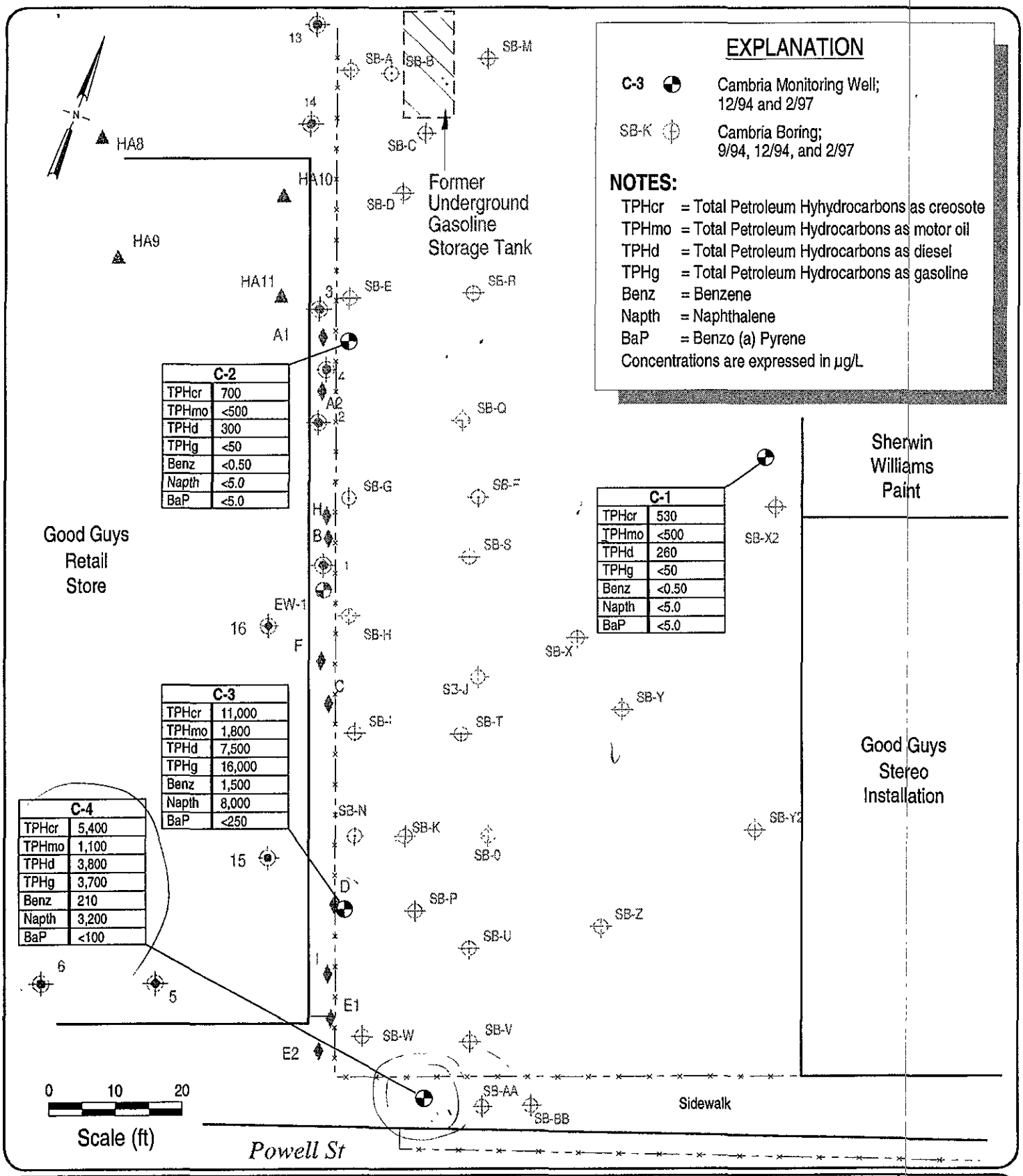
Lathrop Property
5813 - 15 Shellmound Street
Emeryville, CA 94608

H:\MISC\LATHROP\FIGURES\1QM98-MP.DWG

Ground Water Elevation Contours
March 31, 1998

FIGURE
1

04/23/98



CAMBRIA Environmental Technology, Inc.	Lathrop Property 5813-5815 Shellmound Street Emeryville, California H:\WISC\LATHROP\FIGURES\PHYD-MAR98.DWG	Petroleum Hydrocarbons/ SVOCs In Ground Water March 31, 1998	FIGURE 2

05/06/98

Table 1. Ground Water Elevation and Analytical Data for Petroleum Hydrocarbons - Lathrop Investigation, 5813-15 Shellmound St., Emeryville, California

Sample ID	Date Sampled	TOC Elevation (ft)	GW Depth (ft)	GW Elevation (ft)	TPHcr	TPHd	TPHmo	TPHg	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE
					← (Concentrations in ug/L) →								
Semi-annual Sampling													
C-1	12/16/94	100.00	3.82	96.18	<500	NA	NA	<50	<0.5	<0.5	<0.5	<0.5	NA
	03/19/97		4.21	95.79	<500	590[a]	750	<50	<0.50	<0.50	<0.50	0.6	<2.0
	05/30/97		5.45	94.55	<1,000	1,100[a]	2,600	<50	<0.50	<0.50	<0.50	<0.50	<2.0
	07/03/97		5.67	94.33	<2,000	2,600[a]	3,900	<50	<0.50	<0.50	<0.50	<0.50	<2.0
	08/07/97		5.86	94.14	<2,000	3,700[a]	8,200	<50	<0.50	<0.50	<0.50	1.5	<2.0
	03/31/98[c]		**4.52**	**95.48**	**530[b]**	**260[b]**	**<500**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<2.5**
C-2	12/16/94	99.22	3.33	95.89	<500	NA	NA	<50	<0.5	<0.5	<0.5	<0.5	NA
	03/19/97		3.61	95.61	<500	590[a]	790	<50	<0.50	<0.50	<0.50	<0.50	<2.0
	05/30/97		5.94	93.28	<500	650[a]	1,200	<50	1.1	<0.50	0.6	<0.50	<2.0
	07/03/97		4.91	94.31	<500	1,000[a]	1,200	<50	1.1	<0.50	1.4	<0.50	<2.0
	08/07/97		5.12	94.10	<500	810[a]	1,200	<50	0.71	<0.50	2.0	<0.50	<2.0
	03/31/98[c]		**3.79**	**95.43**	**700[b]**	**300[b]**	**<500**	**<50**	**0.72**	**<0.50**	**<0.50**	**<0.50**	**<2.5**
C-3	12/16/94	99.24	3.82	95.42	5,100	NA	NA	17,000	1,900	120	5.1	250	NA
	03/19/97		5.82	93.42	10,000	250	<2,500	9,600	1,300	120	170	150	<20
	05/30/97		5.19	94.05	21,000	<500	<5,000	16,000	1,700	230	320	230	<100
	07/03/97		6.31	92.93	25,000	<500	<5,000	21,000	1,400	160	300	200	<200
	08/07/97		6.44	92.80	24,000	<1,000	<5,000	15,000	1,200	110	260	170	<2.0
	03/31/98[c]		**4.84**	**94.40**	**11,000**	**7,500[b]**	**1,800[b]**	**16,000**	**1,500**	**280**	**240**	**250**	**<250**
C-4	03/19/97	98.64	6.46	92.18	25,000	<500	<5,000	5,400	540	19	62	87	<20
	05/30/97		6.52	92.12	25,000	<500	<5,000	8,800	470	22	170	97	<40
	07/03/97		6.52	92.12	16,000	<500	<5,000	6,800	470	12	140	74	<40
	08/07/97		6.54	92.10	18,000	<1,000	<5,000	4,900	360	13	120	67	<20
	03/31/98[c]		**4.69**	**93.95**	**5,400**	**3,800[b]**	**1,100[b]**	**3,700**	**210**	**26**	**96**	**64**	**<50**

Table 1. Ground Water Elevation and Analytic Data for Petroleum Hydrocarbons - Lathrop Investigation, 5813-15 Shellmound St., Emeryville, California

Sample ID	Date Sampled	TOC Elevation (ft)	GW Depth (ft)	GW Elevation (ft)	TPHcr	TPHd	TPHmo	TPHg	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE
					←			(Concentrations in ug/L)					→

Abbreviations and Notes:

ug/L = Micrograms per liter
ft = feet
NA = Not Analyzed
TOC = Top of Casing
a = The result appears to be a heavier hydrocarbon than diesel
b = unidentified hydrocarbon
c = on 3/31/98, the laboratory used for this project was changed to Sequoia Analytical of Redwood City, California

TPHcr = Total petroleum hydrocarbons as creosote by modified EPA Method 8015
TPHmo = Total petroleum hydrocarbons as motor oil by modified EPA Method 8015
TPHg = Total petroleum hydrocarbons as gasoline by modified EPA Method 8015
TPHd = Total petroleum hydrocarbons as diesel by modified EPA Method 8015
Benzene , Ethylbenzene, Toluene, and Xylenes by EPA Method 8020
MTBE = Methyl Tertiary-Butyl Ether by EPA Method 8020

Table 2. Ground Water Elevation and Analytical Data for Semi-Volatile Organic Compounds (including PNAs) - Lathrop Investigation, 5813-15 Shellmound Street, Emeryville, California

Sample ID	Date Sampled	TOC Elevation (ft)	GW Depth (ft)	GW Elevation (ft)	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(g,h,i)perylene	Chrysene	Fluoranthene	Fluorene	2-Methylnaphthalene	Naphthalene	Phenanthrene	Pyrene	Additional Compounds Detected
					← (Concentrations in ug/L) →													
Semi-annual Sampling																		
C-1	12/16/94	100.00	3.82	96.18	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	
	03/19/97		4.21	95.79	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	
	05/30/97		5.45	94.55	<11	<11	<11	<11	<11	<11	<11	<11	<11	<11	<11	<11	<11	
	07/03/97		5.67	94.33	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	
	08/07/97		5.86	94.14	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	
	03/31/98		**4.52**	**95.48**	**<5.0**	**<5.0**	**<5.0**	**<5.0**	**<5.0**	**<5.0**	**<5.0**	**<5.0**	**<5.0**	**<5.0**	**<5.0**	**<5.0**	**<5.0**	
C-2	12/16/94	99.22	3.33	95.89	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	
	03/19/97		3.61	95.61	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	11	<10	<10	
	05/30/97		5.94	93.28	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	
	07/30/97		4.91	94.31	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	
	08/07/97		5.12	94.10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	
	03/31/98		**3.79**	**95.43**	**<5.0**	**<5.0**	**<5.0**	**<5.0**	**<5.0**	**<5.0**	**<5.0**	**<5.0**	**<5.0**	**<5.0**	**<5.0**	**<5.0**	**<5.0**	
C-3	12/16/94	99.24	3.82	95.42	150	780	37	7.2f	8.5f	7.3[f]	20	50	110	490	11,000	260	61	a
	03/19/97		5.82	93.42	570	310	140	49	95	86	130	210	170	360	12,000	560	240	b
	05/30/97		5.19	94.05	800	550	410	<100	350	230	430	850	330	680	11,000	1,200	1,000	c
	07/03/97		6.31	92.93	2,400	520	1,200	600	850	850	1,200	2,900	670	760	16,000	4,700	3,100	g
	08/07/97		6.44	92.80	930	300	270	180	230	220	280	550	240	460	12,000	1,200	810	j
	03/31/98		**4.84**	**94.40**	**320**	**500**	**<250**	**<250**	**<250**	**<250**	**<250**	**<250**	**<250**	**320**	**8,000**	**<250**	**<2500**	
C-4	03/19/97	98.64	6.46	92.18	2,400	880	1,600	1,300	1,800	1,700	2,000	5,400	1,100	500	13,000	7,300	6,400	d
	05/30/97		6.52	92.12	760	210	400	<100	440	290	460	1,100	300	230	5,000	1,400	1,300	e
	07/03/97		6.52	92.12	680	96	140	130	150	170	160	790	140	95	5,400	1,100	850	h
	08/07/97		6.54	92.10	480	120	130	110	140	150	150	390	150	160	5,800	560	450	k
	03/31/98		**4.69**	**93.95**	**290**	**<100**	**<100**	**<100**	**<100**	**<100**	**<100**	**<100**	**<100**	**110**	**3,200**	**140**	**<100**	

Table 2. Ground Water Elevation and Analytic Data for Semi-Volatile Organic Compounds (including PNAs) - Lathrop Investigation, 5813-15 Shellmound Street, Emeryville, California

Sample ID	Date Sampled	TOC Elevation (ft)	GW Depth (ft)	GW Elevation (ft)	Acenaphth-ene	Acenaphth-ylene	Anthra-cene	Benzo-(a)anthra-cene	Benzo-(a)pyrene	Benzo-(g,h,i) perylene	Chrysene	Fluor-anthene	Fluorene	2-Methyl-naphtha-lene	Naphtha-lene	Phenan-threne	Pyrene	Additional Compounds Detected
					←					(Concentrations in ug/L)							→	

Abbreviations and Notes:

ug/L = Micrograms per liter

a = Dibenzofuran at 15 ug/L by EPA Method 8270

b = Benzo (b&k) fluoranthene detected at 110 ug/L by EPA Method 8270
= Dibenzofuran dectected at 25 ug/L by EPA Method 8270
= Indeno (1,2,3 - cd) pyrene dectected at 61 ug/L by EPA Method 8270

c = Benzo (b&k) fluoranthene detected at 450 ug/L by EPA Method 8270
= Ideno (1,2,3-cd) pyrene detected at 180 ug/L by EPA Method 8270

d = Benzo (b&k) fluoranthene detected at 2,300 ug/L by EPA Method 8270
= Dibenzo (a,h) anthracene detected at 260 ug/L by EPA Method 8270
= Dibenzofuran dectected at 110 ug/L by EPA Method 8270
= Indeno (1,2,3 - cd) pyrene detected at 1,200 ug/L by EPA Method 8270

e = Benzo (b&k) fluoranthene detected at 290 ug/L by EPA Method 8270
= Indeno (1,2,3-cd) pyrene detected at 230 ug/L by EPA Method 8270

f = Lab estimated value

g = Benzo (b&k) fluoranthene detected at 1,100 ug/L by EPA Method 8270
= Dibenzo (a,h) anthracene detected at 110 ug/L by EPA Method 8270
= Dibenzofuran detected at 73 ug/L by EPA Method 8270
= Indeno (1,2,3-cd) pyrene detected at 610 ug/L by EPA Method 8270

h = Benzo (b&k) fluoranthene detected at 230 ug/L by EPA Method 8270
= Dibenzo (a,h) anthracene detected at 21 ug/L by EPA Method 8270
= Indeno (1,2,3-cd) pyrene detected at 120 ug/L by EPA Method 8270

j = Benzo (b&k) fluoranthene detected at 280 ug/L by EPA Method 8270
= Indeno (1,2,3-cd) pyrene detected at 160 ug/L by EPA Method 8270

k = Benzo (b&k) fluoranthene detected at 180 ug/L by EPA Method 8270
= Indeno (1,2,3-cd) pyrene detected at 110 ug/L by EPA Method 8270

Attachment A

Laboratory Analytic Reports

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100
1455 McDowell Blvd. North, Ste. D, Petaluma, CA 94954, (707) 792-1865, FAX (707) 792-0342

Cambria	Client Proj. ID: 190-0122	Received: 03/31/98
1144 65th St. Suite C		
Oakland, CA 94608	Lab Proj. ID: 9803K85	Reported: 04/17/98
Attention: Ann Crum		

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 55 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

SEQUOIA ANALYTICAL

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100
1455 McDowell Blvd. North, Ste. D, Petaluma, CA 94954, (707) 792-1865, FAX (707) 792-0342

Cambria	Client Proj. ID: 190-0122	Sampled: 03/31/98
1144 65th St. Suite C	Sample Descript: C-1	Received: 03/31/98
Oakland, CA 94608	Matrix: LIQUID	Extracted: 04/02/98
	Analysis Method: EPA 8270	Analyzed: 04/02/98
Attention: Ann Crum	Lab Number: 9803K85-01	Reported: 04/17/98

QC Batch Number: MS0402988270EXA
Instrument ID: H5

Semivolatile Organics (EPA 8270)

Analyte	Detection Limit ug/L	Sample Results ug/L
Acenaphthene	5.0	N.D.
Acenaphthylene	5.0	N.D.
Anthracene	5.0	N.D.
Benzoic Acid	10	N.D.
Benzo(a)anthracene	5.0	N.D.
Benzo(b)fluoranthene	5.0	N.D.
Benzo(k)fluoranthene	5.0	N.D.
Benzo(g,h,i)perylene	5.0	N.D.
Benzo(a)pyrene	5.0	N.D.
Benzyl alcohol	5.0	N.D.
Bis(2-chloroethoxy)methane	5.0	N.D.
Bis(2-chloroethyl)ether	5.0	N.D.
Bis(2-chloroisopropyl)ether	5.0	N.D.
Bis(2-ethylhexyl)phthalate	10	N.D.
4-Bromophenyl phenyl ether	5.0	N.D.
Butyl benzyl phthalate	5.0	N.D.
4-Chloroaniline	10	N.D.
2-Chloronaphthalene	5.0	N.D.
4-Chloro-3-methylphenol	5.0	N.D.
2-Chlorophenol	5.0	N.D.
4-Chlorophenyl phenyl ether	5.0	N.D.
Chrysene	5.0	N.D.
Dibenzo(a,h)anthracene	5.0	N.D.
Dibenzofuran	5.0	N.D.
Di-n-butyl phthalate	10	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
3,3-Dichlorobenzidine	10	N.D.
2,4-Dichlorophenol	5.0	N.D.
Diethyl phthalate	5.0	N.D.
2,4-Dimethylphenol	5.0	N.D.
Dimethyl phthalate	5.0	N.D.
4,6-Dinitro-2-methylphenol	10	N.D.
2,4-Dinitrophenol	10	N.D.
2,4-Dinitrotoluene	5.0	N.D.
2,6-Dinitrotoluene	5.0	N.D.
Di-n-octyl phthalate	5.0	N.D.
Fluoranthene	5.0	N.D.

SEQUOIA ANALYTICAL

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
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Cambria
1144 65th St. Suite C
Oakland, CA 94608

Attention: Ann Crum

Client Proj. ID: 190-0122
Sample Descript: C-1
Matrix: LIQUID
Analysis Method: EPA 8270
Lab Number: 9803K85-01

Sampled: 03/31/98
Received: 03/31/98
Extracted: 04/02/98
Analyzed: 04/02/98
Reported: 04/17/98

QC Batch Number: MS0402988270EXA
Instrument ID: H5

Analyte	Detection Limit ug/L	Sample Results ug/L
Fluorene	5.0	N.D.
Hexachlorobenzene	5.0	N.D.
Hexachlorobutadiene	5.0	N.D.
Hexachlorocyclopentadiene	10	N.D.
Hexachloroethane	5.0	N.D.
Indeno(1,2,3-cd)pyrene	5.0	N.D.
Isophorone	5.0	N.D.
2-Methylnaphthalene	5.0	N.D.
2-Methylphenol	5.0	N.D.
4-Methylphenol	5.0	N.D.
Naphthalene	5.0	N.D.
2-Nitroaniline	10	N.D.
3-Nitroaniline	10	N.D.
4-Nitroaniline	10	N.D.
Nitrobenzene	5.0	N.D.
2-Nitrophenol	5.0	N.D.
4-Nitrophenol	10	N.D.
n-Nitrosodiphenylamine	5.0	N.D.
n-Nitroso-di-n-propylamine	5.0	N.D.
Pentachlorophenol	10	N.D.
Phenanthrene	5.0	N.D.
Phenol	5.0	N.D.
Pyrene	5.0	N.D.
1,2,4-Trichlorobenzene	5.0	N.D.
2,4,5-Trichlorophenol	10	N.D.
2,4,6-Trichlorophenol	5.0	N.D.

Surrogates	Control Limits %		% Recovery
2-Fluorophenol	21	110	32
Phenol-d5	10	110	24
Nitrobenzene-d5	35	114	51
2-Fluorobiphenyl	43	116	53
2,4,6-Tribromophenol	10	123	58
p-Terphenyl-d14	33	141	55

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
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1455 McDowell Blvd. North, Ste. D, Petaluma, CA 94954, (707) 792-1865, FAX (707) 792-0342

Cambria	Client Proj. ID: 190-0122	Sampled: 03/31/98
1144 65th St. Suite C	Sample Descript: C-1	Received: 03/31/98
Oakland, CA 94608	Matrix: LIQUID	Extracted: 04/07/98
	Analysis Method: EPA 8015 Mod	Analyzed: 04/16/98
Attention: Ann Crum	Lab Number: 9803K85-01	Reported: 04/17/98

QC Batch Number: GC0407980HBPEXB
Instrument ID: GCHP4A

Analyte	Detection Limit ug/L	Sample Results ug/L
Extractable HC as Creosote	**500**	**530**
Chromatogram Pattern:		
Unidentified HC		**C9-C40**

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	114

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager

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Cambria	Client Proj. ID: 190-0122	Sampled: 03/31/98
1144 65th St. Suite C	Sample Descript: C-1	Received: 03/31/98
Oakland, CA 94608	Matrix: LIQUID	Extracted: 04/07/98
	Analysis Method: EPA 8015 Mod	Analyzed: 04/09/98
Attention: Ann Crum	Lab Number: 9803K85-01	Reported: 04/17/98

QC Batch Number: GC0407980HBPEXB
Instrument ID: GCHP4B

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	**50**	**260**
Chromatogram Pattern:		
Unidentified HC		**C9-C24**

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	115

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

SEQUOIA ANALYTICAL - ELAP #1210

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Cambria	Client Proj. ID: 190-0122	Sampled: 03/31/98
1144 65th St. Suite C	Sample Descript: C-1	Received: 03/31/98
Oakland, CA 94608	Matrix: LIQUID	Extracted: 04/07/98
	Analysis Method: EPA 8015 Mod	Analyzed: 04/09/98
Attention: Ann Crum	Lab Number: 9803K85-01	Reported: 04/17/98

QC Batch Number: GC0407980HBPEXB
Instrument ID: GCHP4B

Fuel Fingerprint : Motor Oil

Analyte	Detection Limit ug/L	Sample Results ug/L
Extractable HC as Motor Oil Chromatogram Pattern:	500	N.D.

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	115

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

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Cambria	Client Proj. ID: 190-0122	Sampled: 03/31/98
1144 65th St. Suite C	Sample Descript: C-1	Received: 03/31/98
Oakland, CA 94608	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 04/10/98
Attention: Ann Crum	Lab Number: 9803K85-01	Reported: 04/17/98

QC Batch Number: GC041098802004A
Instrument ID: HP-4

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit 130	Sample Results 130
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	107

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

SEQUOIA ANALYTICAL - ELAP #1271

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Cambria	Client Proj. ID: 190-0122	Sampled: 03/31/98
1144 65th St. Suite C	Sample Descript: C-2	Received: 03/31/98
Oakland, CA 94608	Matrix: LIQUID	Extracted: 04/02/98
	Analysis Method: EPA 8270	Analyzed: 04/03/98
Attention: Ann Crum	Lab Number: 9803K85-02	Reported: 04/17/98

QC Batch Number: MS0402988270EXA
Instrument ID: H5

Semivolatile Organics (EPA 8270)

Analyte	Detection Limit ug/L	Sample Results ug/L
Acenaphthene	5.0	N.D.
Acenaphthylene	5.0	N.D.
Anthracene	5.0	N.D.
Benzoic Acid	10	N.D.
Benzo(a)anthracene	5.0	N.D.
Benzo(b)fluoranthene	5.0	N.D.
Benzo(k)fluoranthene	5.0	N.D.
Benzo(g,h,i)perylene	5.0	N.D.
Benzo(a)pyrene	5.0	N.D.
Benzyl alcohol	5.0	N.D.
Bis(2-chloroethoxy)methane	5.0	N.D.
Bis(2-chloroethyl)ether	5.0	N.D.
Bis(2-chloroisopropyl)ether	5.0	N.D.
Bis(2-ethylhexyl)phthalate	10	N.D.
4-Bromophenyl phenyl ether	5.0	N.D.
Butyl benzyl phthalate	5.0	N.D.
4-Chloroaniline	10	N.D.
2-Chloronaphthalene	5.0	N.D.
4-Chloro-3-methylphenol	5.0	N.D.
2-Chlorophenol	5.0	N.D.
4-Chlorophenyl phenyl ether	5.0	N.D.
Chrysene	5.0	N.D.
Dibenzo(a,h)anthracene	5.0	N.D.
Dibenzofuran	5.0	N.D.
Di-n-butyl phthalate	10	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
3,3-Dichlorobenzidine	10	N.D.
2,4-Dichlorophenol	5.0	N.D.
Diethyl phthalate	5.0	N.D.
2,4-Dimethylphenol	5.0	N.D.
Dimethyl phthalate	5.0	N.D.
4,6-Dinitro-2-methylphenol	10	N.D.
2,4-Dinitrophenol	10	N.D.
2,4-Dinitrotoluene	5.0	N.D.
2,6-Dinitrotoluene	5.0	N.D.
Di-n-octyl phthalate	5.0	N.D.
Fluoranthene	5.0	N.D.

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Cambria	Client Proj. ID: 190-0122	Sampled: 03/31/98
1144 65th St. Suite C	Sample Descript: C-2	Received: 03/31/98
Oakland, CA 94608	Matrix: LIQUID	Extracted: 04/02/98
	Analysis Method: EPA 8270	Analyzed: 04/03/98
Attention: Ann Crum	Lab Number: 9803K85-02	Reported: 04/17/98

QC Batch Number: MS0402988270EXA
Instrument ID: H5

Analyte	Detection Limit ug/L	Sample Results ug/L
Fluorene	5.0	N.D.
Hexachlorobenzene	5.0	N.D.
Hexachlorobutadiene	5.0	N.D.
Hexachlorocyclopentadiene	10	N.D.
Hexachloroethane	5.0	N.D.
Indeno(1,2,3-cd)pyrene	5.0	N.D.
Isophorone	5.0	N.D.
2-Methylnaphthalene	5.0	N.D.
2-Methylphenol	5.0	N.D.
4-Methylphenol	5.0	N.D.
Naphthalene	5.0	N.D.
2-Nitroaniline	10	N.D.
3-Nitroaniline	10	N.D.
4-Nitroaniline	10	N.D.
Nitrobenzene	5.0	N.D.
2-Nitrophenol	5.0	N.D.
4-Nitrophenol	10	N.D.
n-Nitrosodiphenylamine	5.0	N.D.
n-Nitroso-di-n-propylamine	5.0	N.D.
Pentachlorophenol	10	N.D.
Phenanthrene	5.0	N.D.
Phenol	5.0	N.D.
Pyrene	5.0	N.D.
1,2,4-Trichlorobenzene	5.0	N.D.
2,4,5-Trichlorophenol	10	N.D.
2,4,6-Trichlorophenol	5.0	N.D.

Surrogates	Control Limits %		% Recovery
2-Fluorophenol	21	110	31
Phenol-d5	10	110	23
Nitrobenzene-d5	35	114	59
2-Fluorobiphenyl	43	116	65
2,4,6-Tribromophenol	10	123	71
p-Terphenyl-d14	33	141	51

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

SEQUOIA ANALYTICAL - ELAP #1210

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Cambria	Client Proj. ID: 190-0122	Sampled: 03/31/98
1144 65th St. Suite C	Sample Descript: C-2	Received: 03/31/98
Oakland, CA 94608	Matrix: LIQUID	Extracted: 04/07/98
	Analysis Method: EPA 8015 Mod	Analyzed: 04/16/98
Attention: Ann Crum	Lab Number: 9803K85-02	Reported: 04/17/98

QC Batch Number: GC0407980HBPEXB
Instrument ID: GCHP4A

Analyte	Detection Limit ug/L	Sample Results ug/L
Extractable HC as Creosote	**500**	**700**
Chromatogram Pattern:		
Unidentified HC		**C9-C40**

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	118

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

SEQUOIA ANALYTICAL - ELAP #1210

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Cambria	Client Proj. ID: 190-0122	Sampled: 03/31/98
1144 65th St. Suite C	Sample Descript: C-2	Received: 03/31/98
Oakland, CA 94608	Matrix: LIQUID	Extracted: 04/07/98
	Analysis Method: EPA 8015 Mod	Analyzed: 04/09/98
Attention: Ann Crum	Lab Number: 9803K85-02	Reported: 04/17/98

QC Batch Number: GC0407980HBPEXB
Instrument ID: GCHP4B

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	**50**	**300**
Chromatogram Pattern:		
Unidentified HC		**C9-C24**

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	117

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

SEQUOIA ANALYTICAL - ELAP #1210

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Cambria	Client Proj. ID: 190-0122	Sampled: 03/31/98
1144 65th St. Suite C	Sample Descript: C-2	Received: 03/31/98
Oakland, CA 94608	Matrix: LIQUID	Extracted: 04/07/98
	Analysis Method: EPA 8015 Mod	Analyzed: 04/09/98
Attention: Ann Crum	Lab Number: 9803K85-02	Reported: 04/17/98

QC Batch Number: GC0407980HBPEXB
Instrument ID: GCHP4B

Fuel Fingerprint : Motor Oil

Analyte	Detection Limit ug/L	Sample Results ug/L
Extractable HC as Motor Oil Chromatogram Pattern:	500	N.D.

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	117

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

SEQUOIA ANALYTICAL - ELAP #1210

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Cambria	Client Proj. ID: 190-0122	Sampled: 03/31/98
1144 65th St. Suite C	Sample Descript: C-2	Received: 03/31/98
Oakland, CA 94608	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 04/10/98
Attention: Ann Crum	Lab Number: 9803K85-02	Reported: 04/17/98

QC Batch Number: GC041098802004A
Instrument ID: HP-4

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit 130	Sample Results 130
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	N.D.
Benzene	**0.50**	**0.72**
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	101

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

SEQUOIA ANALYTICAL - ELAP #1271

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Cambria	Client Proj. ID: 190-0122	Sampled: 03/31/98
1144 65th St. Suite C	Sample Descript: C-3	Received: 03/31/98
Oakland, CA 94608	Matrix: LIQUID	Extracted: 04/02/98
	Analysis Method: EPA 8270	Analyzed: 04/06/98
Attention: Ann Crum	Lab Number: 9803K85-03	Reported: 04/17/98

QC Batch Number: MS0402988270EXA
Instrument ID: F4

Semivolatile Organics (EPA 8270)

Analyte	Detection Limit ug/L	Sample Results ug/L
Acenaphthene	**250**	**320**
Acenaphthylene	**250**	**500**
Anthracene	250	N.D.
Benzoic Acid	500	N.D.
Benzo(a)anthracene	250	N.D.
Benzo(b)fluoranthene	250	N.D.
Benzo(k)fluoranthene	250	N.D.
Benzo(g,h,i)perylene	250	N.D.
Benzo(a)pyrene	250	N.D.
Benzyl alcohol	250	N.D.
Bis(2-chloroethoxy)methane	250	N.D.
Bis(2-chloroethyl)ether	250	N.D.
Bis(2-chloroisopropyl)ether	250	N.D.
Bis(2-ethylhexyl)phthalate	500	N.D.
4-Bromophenyl phenyl ether	250	N.D.
Butyl benzyl phthalate	250	N.D.
4-Chloroaniline	500	N.D.
2-Chloronaphthalene	250	N.D.
4-Chloro-3-methylphenol	250	N.D.
2-Chlorophenol	250	N.D.
4-Chlorophenyl phenyl ether	250	N.D.
Chrysene	250	N.D.
Dibenzo(a,h)anthracene	250	N.D.
Dibenzofuran	250	N.D.
Di-n-butyl phthalate	500	N.D.
1,2-Dichlorobenzene	250	N.D.
1,3-Dichlorobenzene	250	N.D.
1,4-Dichlorobenzene	250	N.D.
3,3-Dichlorobenzidine	500	N.D.
2,4-Dichlorophenol	250	N.D.
Diethyl phthalate	250	N.D.
2,4-Dimethylphenol	250	N.D.
Dimethyl phthalate	250	N.D.
4,6-Dinitro-2-methylphenol	500	N.D.
2,4-Dinitrophenol	500	N.D.
2,4-Dinitrotoluene	250	N.D.
2,6-Dinitrotoluene	250	N.D.
Di-n-octyl phthalate	250	N.D.
Fluoranthene	250	N.D.

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

Attention: Ann Crum

Client Proj. ID: 190-0122
Sample Descript: C-3
Matrix: LIQUID
Analysis Method: EPA 8270
Lab Number: 9803K85-03

Sampled: 03/31/98
Received: 03/31/98
Extracted: 04/02/98
Analyzed: 04/06/98
Reported: 04/17/98

QC Batch Number: MS0402988270EXA
Instrument ID: F4

Analyte	Detection Limit ug/L	Sample Results ug/L
Fluorene	250	N.D.
Hexachlorobenzene	250	N.D.
Hexachlorobutadiene	250	N.D.
Hexachlorocyclopentadiene	500	N.D.
Hexachloroethane	250	N.D.
Indeno(1,2,3-cd)pyrene	250	N.D.
Isophorone	250	N.D.
2-Methylnaphthalene	**250**	**320**
2-Methylphenol	250	N.D.
4-Methylphenol	250	N.D.
Naphthalene	**250**	**8000**
2-Nitroaniline	500	N.D.
3-Nitroaniline	500	N.D.
4-Nitroaniline	500	N.D.
Nitrobenzene	250	N.D.
2-Nitrophenol	250	N.D.
4-Nitrophenol	500	N.D.
n-Nitrosodiphenylamine	250	N.D.
n-Nitroso-di-n-propylamine	250	N.D.
Pentachlorophenol	500	N.D.
Phenanthrene	250	N.D.
Phenol	250	N.D.
Pyrene	250	N.D.
1,2,4-Trichlorobenzene	250	N.D.
2,4,5-Trichlorophenol	500	N.D.
2,4,6-Trichlorophenol	250	N.D.

Surrogates	Control Limits %		% Recovery
2-Fluorophenol	21	110	Q
Phenol-d5	10	110	Q
Nitrobenzene-d5	35	114	Q
2-Fluorobiphenyl	43	116	Q
2,4,6-Tribromophenol	10	123	Q
p-Terphenyl-d14	33	141	Q

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
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Cambria
1144 65th St. Suite C
Oakland, CA 94608

Attention: Ann Crum

Client Proj. ID: 190-0122
Sample Descript: C-3
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9803K85-03

Sampled: 03/31/98
Received: 03/31/98
Extracted: 04/07/98
Analyzed: 04/17/98
Reported: 04/17/98

QC Batch Number: GC0407980HBPEXB
Instrument ID: GCHP4A

Analyte	Detection Limit ug/L	Sample Results ug/L
Extractable HC as Creosote Chromatogram Pattern:	**2000 C9-C40**	**11000 Creosote**

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	95

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
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Cambria	Client Proj. ID: 190-0122	Sampled: 03/31/98
1144 65th St. Suite C	Sample Descript: C-3	Received: 03/31/98
Oakland, CA 94608	Matrix: LIQUID	Extracted: 04/07/98
	Analysis Method: EPA 8015 Mod	Analyzed: 04/09/98
Attention: Ann Crum	Lab Number: 9803K85-03	Reported: 04/17/98

QC Batch Number: GC0407980HBPEXB
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	**200**	**7500**
Chromatogram Pattern:		
Unidentified HC		**C9-C24**

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	96

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
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1455 McDowell Blvd. North, Ste. D, Petaluma, CA 94954, (707) 792-1865, FAX (707) 792-0342

Cambria	Client Proj. ID: 190-0122	Sampled: 03/31/98
1144 65th St. Suite C	Sample Descript: C-3	Received: 03/31/98
Oakland, CA 94608	Matrix: LIQUID	Extracted: 04/07/98
	Analysis Method: EPA 8015 Mod	Analyzed: 04/09/98
Attention: Ann Crum	Lab Number: 9803K85-03	Reported: 04/17/98

QC Batch Number: GC0407980HBPEXB
Instrument ID: GCHP5A

Fuel Fingerprint : Motor Oil

Analyte	Detection Limit ug/L	Sample Results ug/L
Extractable HC as Motor Oil	**2000**	**1800**
Chromatogram Pattern:		
Unidentified HC		**C16-C36**

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	96

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager .

Sequoia Analytical

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Cambria	Client Proj. ID: 190-0122	Sampled: 03/31/98
1144 65th St. Suite C	Sample Descript: C-3	Received: 03/31/98
Oakland, CA 94608	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 04/10/98
Attention: Ann Crum	Lab Number: 9803K85-03	Reported: 04/17/98

QC Batch Number: GC041098802004A
Instrument ID: HP-4

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit 130	Sample Results 130
TPPH as Gas	**5000**	**16000**
Methyl t-Butyl Ether	250	N.D.
Benzene	**50**	**1500**
Toluene	**50**	**280**
Ethyl Benzene	**50**	**240**
Xylenes (Total)	**50**	**250**
Chromatogram Pattern:		**Gas**
Discrete Peaks		**>C8**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	104

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

SEQUOIA ANALYTICAL - ELAP #1271

Richard Herling
Project Manager

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1455 McDowell Blvd. North, Ste. D, Petaluma, CA 94954, (707) 792-1865, FAX (707) 792-0342

Cambria	Client Proj. ID: 190-0122	Sampled: 03/31/98
1144 65th St. Suite C	Sample Descript: C-4	Received: 03/31/98
Oakland, CA 94608	Matrix: LIQUID	Extracted: 04/02/98
	Analysis Method: EPA 8270	Analyzed: 04/06/98
Attention: Ann Crum	Lab Number: 9803K85-04	Reported: 04/17/98

QC Batch Number: MS0402988270EXA
Instrument ID: F4

Semivolatile Organics (EPA 8270)

Analyte	Detection Limit ug/L	Sample Results ug/L
Acenaphthene	**100**	**290**
Acenaphthylene	100	N.D.
Anthracene	100	N.D.
Benzoic Acid	200	N.D.
Benzo(a)anthracene	100	N.D.
Benzo(b)fluoranthene	100	N.D.
Benzo(k)fluoranthene	100	N.D.
Benzo(g,h,i)perylene	100	N.D.
Benzo(a)pyrene	100	N.D.
Benzyl alcohol	100	N.D.
Bis(2-chloroethoxy)methane	100	N.D.
Bis(2-chloroethyl)ether	100	N.D.
Bis(2-chloroisopropyl)ether	100	N.D.
Bis(2-ethylhexyl)phthalate	200	N.D.
4-Bromophenyl phenyl ether	100	N.D.
Butyl benzyl phthalate	100	N.D.
4-Chloroaniline	200	N.D.
2-Chloronaphthalene	100	N.D.
4-Chloro-3-methylphenol	100	N.D.
2-Chlorophenol	100	N.D.
4-Chlorophenyl phenyl ether	100	N.D.
Chrysene	100	N.D.
Dibenzo(a,h)anthracene	100	N.D.
Dibenzofuran	100	N.D.
Di-n-butyl phthalate	200	N.D.
1,2-Dichlorobenzene	100	N.D.
1,3-Dichlorobenzene	100	N.D.
1,4-Dichlorobenzene	100	N.D.
3,3-Dichlorobenzidine	200	N.D.
2,4-Dichlorophenol	100	N.D.
Diethyl phthalate	100	N.D.
2,4-Dimethylphenol	100	N.D.
Dimethyl phthalate	100	N.D.
4,6-Dinitro-2-methylphenol	200	N.D.
2,4-Dinitrophenol	200	N.D.
2,4-Dinitrotoluene	100	N.D.
2,6-Dinitrotoluene	100	N.D.
Di-n-octyl phthalate	100	N.D.
Fluoranthene	100	N.D.

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Cambria	Client Proj. ID: 190-0122	Sampled: 03/31/98
1144 65th St. Suite C	Sample Descript: C-4	Received: 03/31/98
Oakland, CA 94608	Matrix: LIQUID	Extracted: 04/02/98
	Analysis Method: EPA 8270	Analyzed: 04/06/98
Attention: Ann Crum	Lab Number: 9803K85-04	Reported: 04/17/98

QC Batch Number: MS0402988270EXA
Instrument ID: F4

Analyte	Detection Limit ug/L	Sample Results ug/L
Fluorene	100	N.D.
Hexachlorobenzene	100	N.D.
Hexachlorobutadiene	100	N.D.
Hexachlorocyclopentadiene	200	N.D.
Hexachloroethane	100	N.D.
Indeno(1,2,3-cd)pyrene	100	N.D.
Isophorone	100	N.D.
2-Methylnaphthalene	**100**	**110**
2-Methylphenol	100	N.D.
4-Methylphenol	100	N.D.
Naphthalene	**100**	**3200**
2-Nitroaniline	200	N.D.
3-Nitroaniline	200	N.D.
4-Nitroaniline	200	N.D.
Nitrobenzene	100	N.D.
2-Nitrophenol	100	N.D.
4-Nitrophenol	200	N.D.
n-Nitrosodiphenylamine	100	N.D.
n-Nitroso-di-n-propylamine	100	N.D.
Pentachlorophenol	200	N.D.
Phenanthrene	**100**	**140**
Phenol	100	N.D.
Pyrene	100	N.D.
1,2,4-Trichlorobenzene	100	N.D.
2,4,5-Trichlorophenol	200	N.D.
2,4,6-Trichlorophenol	100	N.D.

Surrogates	Control Limits %		% Recovery
2-Fluorophenol	21	110	Q
Phenol-d5	10	110	Q
Nitrobenzene-d5	35	114	Q
2-Fluorobiphenyl	43	116	Q
2,4,6-Tribromophenol	10	123	Q
p-Terphenyl-d14	33	141	Q

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager

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Cambria	Client Proj. ID: 190-0122	Sampled: 03/31/98
1144 65th St. Suite C	Sample Descript: C-4	Received: 03/31/98
Oakland, CA 94608	Matrix: LIQUID	Extracted: 04/07/98
	Analysis Method: EPA 8015 Mod	Analyzed: 04/17/98
Attention: Ann Crum	Lab Number: 9803K85-04	Reported: 04/17/98

QC Batch Number: GC0407980HBPEXB
Instrument ID: GCHP4A

Analyte	Detection Limit ug/L	Sample Results ug/L
Extractable HC as Creosote Chromatogram Pattern:	**1000 C9-C40**	**5400 Creosote**

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	99

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager

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Cambria	Client Proj. ID: 190-0122	Sampled: 03/31/98
1144 65th St. Suite C	Sample Descript: C-4	Received: 03/31/98
Oakland, CA 94608	Matrix: LIQUID	Extracted: 04/07/98
	Analysis Method: EPA 8015 Mod	Analyzed: 04/09/98
Attention: Ann Crum	Lab Number: 9803K85-04	Reported: 04/17/98

QC Batch Number: GC0407980HBPEXB
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	**100**	**3800**
Chromatogram Pattern:		
Unidentified HC		**C9-C24**

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	108

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

SEQUOIA ANALYTICAL - ELAP #1210

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Cambria	Client Proj. ID: 190-0122	Sampled: 03/31/98
1144 65th St. Suite C	Sample Descript: C-4	Received: 03/31/98
Oakland, CA 94608	Matrix: LIQUID	Extracted: 04/07/98
	Analysis Method: EPA 8015 Mod	Analyzed: 04/09/98
Attention: Ann Crum	Lab Number: 9803K85-04	Reported: 04/17/98

QC Batch Number: GC0407980HBPEXB
Instrument ID: GCHP5A

Fuel Fingerprint : Motor Oil

Analyte	Detection Limit ug/L	Sample Results ug/L
Extractable HC as Motor Oil	**1000**	**1100**
Chromatogram Pattern:		
Unidentified HC		**C16-C36**

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	108

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager

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1455 McDowell Blvd. North, Ste. D, Petaluma, CA 94954, (707) 792-1865, FAX (707) 792-0342

Cambria	Client Proj. ID: 190-0122	Sampled: 03/31/98
1144 65th St. Suite C	Sample Descript: C-4	Received: 03/31/98
Oakland, CA 94608	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 04/14/98
Attention: Ann Crum	Lab Number: 9803K85-04	Reported: 04/17/98

QC Batch Number: GC041498802004A
Instrument ID: HP-4

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit 130	Sample Results 130
TPPH as Gas	**1000**	**3700**
Methyl t-Butyl Ether	50	N.D.
Benzene	**10**	**210**
Toluene	**10**	**26**
Ethyl Benzene	**10**	**96**
Xylenes (Total)	**10**	**64**
Chromatogram Pattern:		**Gas**
Discrete Peaks		**>C8**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	105

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

SEQUOIA ANALYTICAL - ELAP #1271

Richard Herling
Project Manager

Sequoia Analytical

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Cambria	Client Proj. ID: 190-0122	Sampled: 03/31/98
1144 65th St. Suite C	Sample Descript: Trip Blank	Received: 03/31/98
Oakland, CA 94608	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 04/14/98
Attention: Ann Crum	Lab Number: 9803K85-05	Reported: 04/17/98

QC Batch Number: GC041498802009A
Instrument ID: HP-4

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit 130	Sample Results 130
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	107

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

SEQUOIA ANALYTICAL - ELAP #1271

Richard Herling
Project Manager

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Cambria Environmental Tech.
1144 65th St., Ste. C
Oakland, CA 94608
Attention: Ann Crum

Client Project ID: 190-0122
Matrix: Liquid
Work Order #: 9803K85 01, 03, 04

Reported: Apr 16, 1998

QUALITY CONTROL DATA REPORT

Analyte:	Phenol	2-Chlorophenol	1,4-Dichloro-benzene	N-Nitroso-Di-N-propylamine
QC Batch#:	MS0402988270EXA	MS0402988270EXA	MS0402988270EXA	MS0402988270EXA
Analy. Method:	EPA 8270	EPA 8270	EPA 8270	EPA 8270
Prep. Method:	EPA 3510	EPA 3510	EPA 3510	EPA 3510
Analyst:	B. Pitamah	B. Pitamah	B. Pitamah	B. Pitamah
MS/MSD #:	9803K8501	9803K8501	9803K8501	9803K8501
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	4/2/98	4/2/98	4/2/98	4/2/98
Analyzed Date:	4/2/98	4/2/98	4/2/98	4/2/98
Instrument I.D.#:	H5	H5	H5	H5
Conc. Spiked:	200 µg/L	200 µg/L	200 µg/L	200 µg/L
Result:	41	106	112	140
MS % Recovery:	21	53	56	70
Dup. Result:	52	116	107	137
MSD % Recov.:	26	58	54	69
RPD:	24	9.0	4.6	2.2
RPD Limit:	0-30	0-30	0-30	0-30
LCS #:	LCS040298	LCS040298	LCS040298	LCS040298
Prepared Date:	4/2/98	4/2/98	4/2/98	4/2/98
Analyzed Date:	4/2/98	4/2/98	4/2/98	4/2/98
Instrument I.D.#:	H5	H5	H5	H5
Conc. Spiked:	200 µg/L	200 µg/L	200 µg/L	200 µg/L
LCS Result:	45	102	90	123
LCS % Recov.:	23	51	45	62
MS/MSD LCS Control Limits	12-110	27-123	36-97	41-116

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

SEQUOIA ANALYTICAL

Richard Herling
Project Manager

Sequoia Analytical

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Cambria Environmental Tech.
1144 65th St., Ste. C
Oakland, CA 94608
Attention: Ann Crum

Client Project ID: 190-0122
Matrix: Liquid
Work Order #: 9803K85 01, 03, 04
Reported: Apr 16, 1998

QUALITY CONTROL DATA REPORT

Analyte:	1,2,4-Trichloro-benzene	4-Chloro-3-Methylphenol	Acenaphthene	4-Nitrophenol
QC Batch#:	MS0402988270EXA	MS0402988270EXA	MS0402988270EXA	MS0402988270EXA
Analy. Method:	EPA 8270	EPA 8270	EPA 8270	EPA 8270
Prep. Method:	EPA 3510	EPA 3510	EPA 3510	EPA 3510
Analyst:	B. Pitamah	B. Pitamah	B. Pitamah	B. Pitamah
MS/MSD #:	9803K8501	9803K8501	9803K8501	9803K8501
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	4/2/98	4/2/98	4/2/98	4/2/98
Analyzed Date:	4/2/98	4/2/98	4/2/98	4/2/98
Instrument I.D.#:	H5	H5	H5	H5
Conc. Spiked:	200 µg/L	200 µg/L	200 µg/L	200 µg/L
Result:	142	141	136	58
MS % Recovery:	71	71	68	29
Dup. Result:	136	142	136	68
MSD % Recov.:	68	71	68	34
RPD:	4.3	0.71	0.0	16
RPD Limit:	0-30	0-30	0-30	0-30
LCS #:	LCS040298	LCS040298	LCS040298	LCS040298
Prepared Date:	4/2/98	4/2/98	4/2/98	4/2/98
Analyzed Date:	4/2/98	4/2/98	4/2/98	4/2/98
Instrument I.D.#:	H5	H5	H5	H5
Conc. Spiked:	200 µg/L	200 µg/L	200 µg/L	200 µg/L
LCS Result:	117	120	119	53
LCS % Recov.:	59	60	60	27
MS/MSD LCS Control Limits	39-98	23-97	46-118	10-80

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

SEQUOIA ANALYTICAL

Richard Herling
Project Manager

Sequoia Analytical

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Cambria Environmental Tech.
1144 65th St., Ste. C
Oakland, CA 94608
Attention: Ann Crum

Client Project ID: 190-0122
Matrix: Liquid
Work Order #: 9803K85 01, 03, 04
Reported: Apr 16, 1998

QUALITY CONTROL DATA REPORT

Analyte:	2,4-Dinitro-toluene	Pentachloro-phenol	Pyrene
QC Batch#:	MS0402988270EXA	MS0402988270EXA	MS0402988270EXA
Analy. Method:	EPA 8270	EPA 8270	EPA 8270
Prep. Method:	EPA 3510	EPA 3510	EPA 3510
Analyst:	B. Pitamah	B. Pitamah	B. Pitamah
MS/MSD #:	9803K8501	9803K8501	9803K8501
Sample Conc.:	N.D.	N.D.	N.D.
Prepared Date:	4/2/98	4/2/98	4/2/98
Analyzed Date:	4/2/98	4/2/98	4/2/98
Instrument I.D.#:	H5	H5	H5
Conc. Spiked:	200 µg/L	200 µg/L	200 µg/L
Result:	146	168	163
MS % Recovery:	73	84	82
Dup. Result:	146	163	164
MSD % Recov.:	73	82	82
RPD:	0.0	3.0	0.61
RPD Limit:	0-30	0-30	0-30
LCS #:	LCS040298	LCS040298	LCS040298
Prepared Date:	4/2/98	4/2/98	4/2/98
Analyzed Date:	4/2/98	4/2/98	4/2/98
Instrument I.D.#:	H5	H5	H5
Conc. Spiked:	200 µg/L	200 µg/L	200 µg/L
LCS Result:	130	138	152
LCS % Recov.:	65	69	76
MS/MSD LCS Control Limits	24-96	9-103	26-127

SEQUOIA ANALYTICAL

Richard Herling
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

Sequoia Analytical

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Cambria Environmental Tech.
1144 65th St., Ste. C
Oakland, CA 94608
Attention: Ann Crum

Client Project ID: 190-0122
Matrix: Liquid
Work Order #: 9803K85 02
Reported: Apr 16, 1998

QUALITY CONTROL DATA REPORT

Analyte:	Phenol	2-Chlorophenol	1,4-Dichloro-benzene	N-Nitroso-Di-N-propylamine
QC Batch#:	MS0402988270EXA	MS0402988270EXA	MS0402988270EXA	MS0402988270EXA
Analy. Method:	EPA 8270	EPA 8270	EPA 8270	EPA 8270
Prep. Method:	EPA 3510	EPA 3510	EPA 3510	EPA 3510
Analyst:	B. Pitamah	B. Pitamah	B. Pitamah	B. Pitamah
MS/MSD #:	980K8501	980K8501	980K8501	980K8501
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	4/2/98	4/2/98	4/2/98	4/2/98
Analyzed Date:	4/2/98	4/2/98	4/2/98	4/2/98
Instrument I.D.#:	H5	H5	H5	H5
Conc. Spiked:	200 µg/L	200 µg/L	200 µg/L	200 µg/L
Result:	41	106	112	140
MS % Recovery:	21	53	56	70
Dup. Result:	52	116	107	137
MSD % Recov.:	26	58	54	69
RPD:	24	9.0	4.6	2.2
RPD Limit:	0-30	0-30	0-30	0-30
LCS #:	LCS040298	LCS040298	LCS040298	LCS040298
Prepared Date:	4/2/98	4/2/98	4/2/98	4/2/98
Analyzed Date:	4/2/98	4/2/98	4/2/98	4/2/98
Instrument I.D.#:	H5	H5	H5	H5
Conc. Spiked:	200 µg/L	200 µg/L	200 µg/L	200 µg/L
LCS Result:	45	102	90	123
LCS % Recov.:	23	51	45	62
MS/MSD LCS Control Limits	12-110	27-123	36-97	41-116

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

SEQUOIA ANALYTICAL

Richard Herling
Project Manager

Sequoia Analytical

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Cambria Environmental Tech.
1144 65th St., Ste. C
Oakland, CA 94608
Attention: Ann Crum

Client Project ID: 190-0122
Matrix: Liquid
Work Order #: 9803K85 02
Reported: Apr 16, 1998

QUALITY CONTROL DATA REPORT

Analyte:	1,2,4-Trichloro-benzene	4-Chloro-3-Methylphenol	Acenaphthene	4-Nitrophenol
QC Batch#:	MS0402988270EXA	MS0402988270EXA	MS0402988270EXA	MS0402988270EXA
Analy. Method:	EPA 8270	EPA 8270	EPA 8270	EPA 8270
Prep. Method:	EPA 3510	EPA 3510	EPA 3510	EPA 3510
Analyst:	B. Pitamah	B. Pitamah	B. Pitamah	B. Pitamah
MS/MSD #:	980K8501	980K8501	980K8501	980K8501
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	4/2/98	4/2/98	4/2/98	4/2/98
Analyzed Date:	4/2/98	4/2/98	4/2/98	4/2/98
Instrument I.D.#:	H5	H5	H5	H5
Conc. Spiked:	200 µg/L	200 µg/L	200 µg/L	200 µg/L
Result:	142	141	136	58
MS % Recovery:	71	71	68	29
Dup. Result:	136	142	136	68
MSD % Recov.:	68	71	68	34
RPD:	4.3	0.71	0.0	16
RPD Limit:	0-30	0-30	0-30	0-30
LCS #:	LCS040298	LCS040298	LCS040298	LCS040298
Prepared Date:	4/2/98	4/2/98	4/2/98	4/2/98
Analyzed Date:	4/2/98	4/2/98	4/2/98	4/2/98
Instrument I.D.#:	H5	H5	H5	H5
Conc. Spiked:	200 µg/L	200 µg/L	200 µg/L	200 µg/L
LCS Result:	117	120	119	53
LCS % Recov.:	59	60	60	27
MS/MSD LCS Control Limits	39-98	23-97	46-118	10-80

Please Note:
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SEQUOIA ANALYTICAL

Richard Herling
Project Manager

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Cambria Environmental Tech.
1144 65th St., Ste. C
Oakland, CA 94608
Attention: Ann Crum

Client Project ID: 190-0122
Matrix: Liquid
Work Order #: 9803K85 02

Reported: Apr 16, 1998

QUALITY CONTROL DATA REPORT

Analyte:	2,4-Dinitro-toluene	Pentachloro-phenol	Pyrene
QC Batch#:	MS0402988270EXA	MS0402988270EXA	MS0402988270EXA
Analy. Method:	EPA 8270	EPA 8270	EPA 8270
Prep. Method:	EPA 3510	EPA 3510	EPA 3510
Analyst:	B. Pitamah	B. Pitamah	B. Pitamah
MS/MSD #:	980K8501	980K8501	980K8501
Sample Conc.:	N.D.	N.D.	N.D.
Prepared Date:	4/2/98	4/2/98	4/2/98
Analyzed Date:	4/2/98	4/2/98	4/2/98
Instrument I.D.#:	H5	H5	H5
Conc. Spiked:	200 µg/L	200 µg/L	200 µg/L
Result:	146	168	163
MS % Recovery:	73	84	82
Dup. Result:	146	163	164
MSD % Recov.:	73	82	82
RPD:	0.0	3.0	0.61
RPD Limit:	0-30	0-30	0-30
LCS #:	LCS040298	LCS040298	LCS040298
Prepared Date:	4/2/98	4/2/98	4/2/98
Analyzed Date:	4/2/98	4/2/98	4/2/98
Instrument I.D.#:	H5	H5	H5
Conc. Spiked:	200 µg/L	200 µg/L	200 µg/L
LCS Result:	130	138	152
LCS % Recov.:	65	69	76
MS/MSD LCS Control Limits	24-96	9-103	26-127

SEQUOIA ANALYTICAL

Richard Herling
Project Manager

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Cambria Environmental Tech.
1144 65th St., Ste. C
Oakland, CA 94608
Attention: Ann Crum

Client Project ID: 190-0122
Matrix: Liquid
Work Order #: 9803K85 01-04
Reported: Apr 16, 1998

QUALITY CONTROL DATA REPORT

Analyte:	Diesel
QC Batch#:	GC0407980HBPEXB
Analy. Method:	EPA 8015M
Prep. Method:	EPA 3510
Analyst:	A. Porter
MS/MSD #:	980406201
Sample Conc.:	1300
Prepared Date:	4/7/98
Analyzed Date:	4/9/98
Instrument I.D.#:	GCHP4B
Conc. Spiked:	1000 µg/L
Result:	2100
MS % Recovery:	80
Dup. Result:	2100
MSD % Recov.:	80
RPD:	0.0
RPD Limit:	0-50

LCS #:	BLK040798
Prepared Date:	4/7/98
Analyzed Date:	4/9/98
Instrument I.D.#:	GCHP4B
Conc. Spiked:	1000 µg/L
LCS Result:	850
LCS % Recov.:	85

MS/MSD	50-150
LCS	60-140
Control Limits	

SEQUOIA ANALYTICAL

Richard Herling
Project Manager

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Cambria Environmental Tech.
1144 65th St., Ste. C
Oakland, CA 94608
Attention: Ann Crum

Client Project ID: 190-0122
Matrix: Liquid
Work Order #: 9803K85 01-03
Reported: Apr 16, 1998

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC041098802004A	GC041098802004A	GC041098802004A	GC041098802004A	GC041098802004A
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 #:	8040642	8040642	8040642	8040642	8040642
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	4/10/98	4/10/98	4/10/98	4/10/98	4/10/98
Analyzed Date:	4/10/98	4/10/98	4/10/98	4/10/98	4/10/98
Instrument I.D.#:	HP4	HP4	HP4	HP4	HP4
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L	260 µg/L
Result:	21	22	21	65	480
MS % Recovery:	105	110	105	108	185
Dup. Result:	20	21	21	65	330
MSD % Recov.:	100	105	105	108	127
RPD:	4.9	4.7	0.0	0.0	37
RPD Limit:	0-20	0-20	0-20	0-20	0-50
LCS #:	LCS041098	LCS041098	LCS041098	LCS041098	LCS041098
Prepared Date:	4/10/98	4/10/98	4/10/98	4/10/98	4/10/98
Analyzed Date:	4/10/98	4/10/98	4/10/98	4/10/98	4/10/98
Instrument I.D.#:	HP4	HP4	HP4	HP4	HP4
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L	260 µg/L
LCS Result:	19	20	19	62	280
LCS % Recov.:	95	100	95	103	108
MS/MSD LCS Control Limits	70-130	70-130	70-130	70-130	60-140

SEQUOIA ANALYTICAL
ELAP #1271

Richard Herling
Project Manager

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Cambria Environmental Tech.
1144 65th St., Ste. C
Oakland, CA 94608
Attention: Ann Crum

Client Project ID: 190-0122
Matrix: Liquid
Work Order #: 9803k85 04
Reported: Apr 16, 1998

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC041498802004A	GC041498802004A	GC041498802004A	GC041498802004A	GC041498802004A
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 #:	8040680	8040680	8040680	8040680	8040680
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	4/14/98	4/14/98	4/14/98	4/14/98	4/14/98
Analyzed Date:	4/14/98	4/14/98	4/14/98	4/14/98	4/14/98
Instrument I.D.#:	HP4	HP4	HP4	HP4	HP4
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L	290 µg/L
Result:	18	19	18	56	280
MS % Recovery:	90	95	90	93	97
Dup. Result:	18	19	18	57	260
MSD % Recov.:	90	95	90	95	90
RPD:	0.0	0.0	0.0	1.8	7.4
RPD Limit:	0-20	0-20	0-20	0-20	0-50
LCS #:	LCS041498	LCS041498	LCS041498	LCS041498	LCS041498
Prepared Date:	4/14/98	4/14/98	4/14/98	4/14/98	4/14/98
Analyzed Date:	4/14/98	4/14/98	4/14/98	4/14/98	4/14/98
Instrument I.D.#:	HP4	HP4	HP4	HP4	HP4
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L	290 µg/L
LCS Result:	17	18	17	53	360
LCS % Recov.:	85	90	85	88	124
MS/MSD LCS Control Limits	70-130	70-130	70-130	70-130	60-140

SEQUOIA ANALYTICAL
ELAP #1271

Richard Herling
Project Manager

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Cambria Environmental Tech.
1144 65th St., Ste. C
Oakland, CA 94608
Attention: Ann Crum

Client Project ID: 190-0122
Matrix: Liquid
Work Order #: 9803K85 05
Reported: Apr 16, 1998

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC041498802009A	GC041498802009A	GC041498802009A	GC041498802009A	GC041498802009A
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 #:	8040734	8040734	8040734	8040734	8040734
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	4/14/98	4/14/98	4/14/98	4/14/98	4/14/98
Analyzed Date:	4/14/98	4/14/98	4/14/98	4/14/98	4/14/98
Instrument I.D.#:	HP9	HP9	HP9	HP9	HP9
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L	350 µg/L
Result:	21	23	23	70	350
MS % Recovery:	105	115	115	117	100
Dup. Result:	19	21	21	64	310
MSD % Recov.:	95	105	105	107	89
RPD:	10	9.1	9.1	9.0	12.1
RPD Limit:	0-20	0-20	0-20	0-20	0-50
LCS #:	LCS041498	LCS041498	LCS041498	LCS041498	LCS041498
Prepared Date:	4/14/98	4/14/98	4/14/98	4/14/98	4/14/98
Analyzed Date:	4/14/98	4/14/98	4/14/98	4/14/98	4/14/98
Instrument I.D.#:	HP9	HP9	HP9	HP9	HP9
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L	350 µg/L
LCS Result:	20	22	22	68	350
LCS % Recov.:	100	110	110	113	100
MS/MSD LCS Control Limits	70-130	70-130	70-130	70-130	60-140

SEQUOIA ANALYTICAL
ELAP #1271

Richard Herring
Project Manager

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CAMBRIA ENVIRONMENTAL TECHNOLOGY, INC.

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(510) 420-0700 Fax: (510) 420-9170

CHAIN OF CUSTODY

9803K65

Cambria Manager: ANN CRUM
Cambria Sampler: SCOTT CHENOWETH
Client: CAMBRIA
Site Address: 5813-15 SHELLMAND
Project Number: 190-0122

LAB: SEQUOIA

SAMPLES ON ICE IN TWO TOTAL COOLERS

SAMPLE ID	DATE	TIME	MATRIX	# OF VOA SAMPLES	# OF LAMBER	ANALYSES: TPH (GAS) + MTBE + BTEX 8015/8020	ANALYSES: TPH DIESEL, MOTOR OIL & CREOSOTE	ANALYSES: SVOCs w/PNAs 8270
C-1 1	3/31/98	1312	WATER	3	4	✓	✓	✓
C-2 2		1242		3	4	✓	✓	✓
C-3 3		1405		3	4	✓	✓	✓
C-4 4	↓	1455	↓	3	4	✓	✓	✓

Relinquished by:	Relinquished by:	Relinquished by:	Relinquished by:
Received by:	Received by:	Received by:	Received by: Jeri Downs
Time/Date: 3/31/98 3:39 pm	Time/Date: 3/31	Time/Date:	Time/Date: 3/31/98 1717

Sequoia Analytical

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

Attention: Ann Crum

Client Proj. ID: 190-0122
Sample Descript: C-1
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9803K85-01

Sampled: 03/31/98
Received: 03/31/98
Extracted: 04/07/98
Analyzed: 04/16/98
Reported: 04/17/98

QC Batch Number: GC0407980HBPEXB
Instrument ID: GCHP4A

Analyte	Detection Limit ug/L	Sample Results ug/L
Extractable HC as Creosote	500	530
Chromatogram Pattern:		
Unidentified HC		C9-C40

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	114

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
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Cambria
1144 65th St. Suite C
Oakland, CA 94608

Attention: Ann Crum

Client Proj. ID: 190-0122
Sample Descript: C-2
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9803K85-02

Sampled: 03/31/98
Received: 03/31/98
Extracted: 04/07/98
Analyzed: 04/16/98
Reported: 04/17/98

QC Batch Number: GC0407980HBPEXB
Instrument ID: GCHP4A

Analyte	Detection Limit ug/L	Sample Results ug/L
Extractable HC as Creosote	**500**	**700**
Chromatogram Pattern:		
Unidentified HC		**C9-C40**

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	118

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100
1455 McDowell Blvd. North, Ste. D, Petaluma, CA 94954, (707) 792-1865, FAX (707) 792-0342

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

Attention: Ann Crum

Client Proj. ID: 190-0122
Sample Descript: C-3
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9803K85-03

Sampled: 03/31/98
Received: 03/31/98
Extracted: 04/07/98
Analyzed: 04/17/98
Reported: 04/17/98

QC Batch Number: GC0407980HBPEXB
Instrument ID: GCHP4A

Analyte	Detection Limit ug/L	Sample Results ug/L
Extractable HC as Creosote	**2000**	**11000**
Chromatogram Pattern:	**C9-C40**	**Creosote**

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	95

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Hoiling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
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Cambria
1144 65th St. Suite C
Oakland, CA 94608

Attention: Ann Crum

Client Proj. ID: 190-0122
Sample Descript: C-4
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9803K85-04

Sampled: 03/31/98
Received: 03/31/98
Extracted: 04/07/98
Analyzed: 04/17/98
Reported: 04/17/98

QC Batch Number: GC0407980HBPEXB
Instrument ID: GCHP4A

Analyte	Detection Limit ug/L	Sample Results ug/L
Extractable HC as Creosote Chromatogram Pattern:	1000 C9-C40	5400 Creosote

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	99

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager

CAMBRIA

November 16, 1998

Attn: Susan Hugo
Alameda County Dept. Of Env. Health
1131 Harbor Bay Pkwy.
Alameda, Ca. 94502

STP 5559

Re: **Second Period 1998 Semi-Annual Ground Water Monitoring Report**
Lathrop Property
5813-15 Shellmound Street
Emeryville, California
Project No. 190-0122-015

Dear Ms. Hugo:

This report presents the results of ground water monitoring conducted by Cambria Environmental Technology, Inc (Cambria) at the above-referenced site. Our semi-annual ground water monitoring activities are presented below.

SECOND PERIOD 1998 GROUND WATER MONITORING ACTIVITIES

The results of Cambria's semi-annual ground water monitoring activities for the second half of 1998 are summarized below. Ground water elevation contours and selected analyte concentrations are presented on Figures 1 and 2, respectively. Tabulated analytical results for ground water are presented in Tables 1 and 2. The laboratory analytical reports are presented as Attachment A.

Sampling Date: October 19, 1998

Purging Method: A minimum of three well volumes was hand bailed from each well while monitoring physio-chemical parameters (pH, conductivity, suspended solids and temperature) for stabilization.

Laboratory Analyses: Ground water samples from the wells were analyzed for:

- TPHg by modified EPA Method 8015;
- TPHcr, TPHmo, and TPHd by modified EPA Method 8015;
- BTEX by EPA Method 8020;
- SVOCs (including PNAs) by EPA Method 8270.

Ground Water Flow Direction: Based on the October 19, 1998 depth to ground water measurements, ground water flows toward the south at a gradient of about 0.02 ft/ft.

Oakland, CA
Sonoma, CA
Portland, OR
Seattle, WA

Cambria Environmental Technology, Inc.

1144 65th Street
Suite B
Oakland, CA 94608
Tel (510) 420-0700
Fax (510) 420-9170

Waste Water Disposal: Purge water generated during the Second 1998 Semi-annual sampling event was stored on site in sealed, labeled, D.O.T.-approved 55-gallon steel drums.

CLOSING

We appreciate this opportunity to provide environmental consulting services to Crosby, Heafey, Roach and May. Please call if you have any questions or comments.

Sincerely,

Cambria Environmental Technology, Inc.

Troy A. Buggle
Staff Environmental Scientist

Joseph P. Theisen, CEG
Principal Hydrogeologist

REGISTERED GEOLOGIST
JOSEPH P. THEISEN
No. EG-1645
CERTIFIED ENGINEERING GEOLOGIST
STATE OF CALIFORNIA

cc (w/o attachments): James Wilson, Crosby, Heafey, Roach and May

Figures: 1 - Ground Water Elevation Contours
2 - Petroleum Hydrocarbons / SVOCs in Ground Water

Attachments: A - Laboratory Analytical Report

H:\MISC\LATHROP\QM and Data Tables\2qm98.wpd

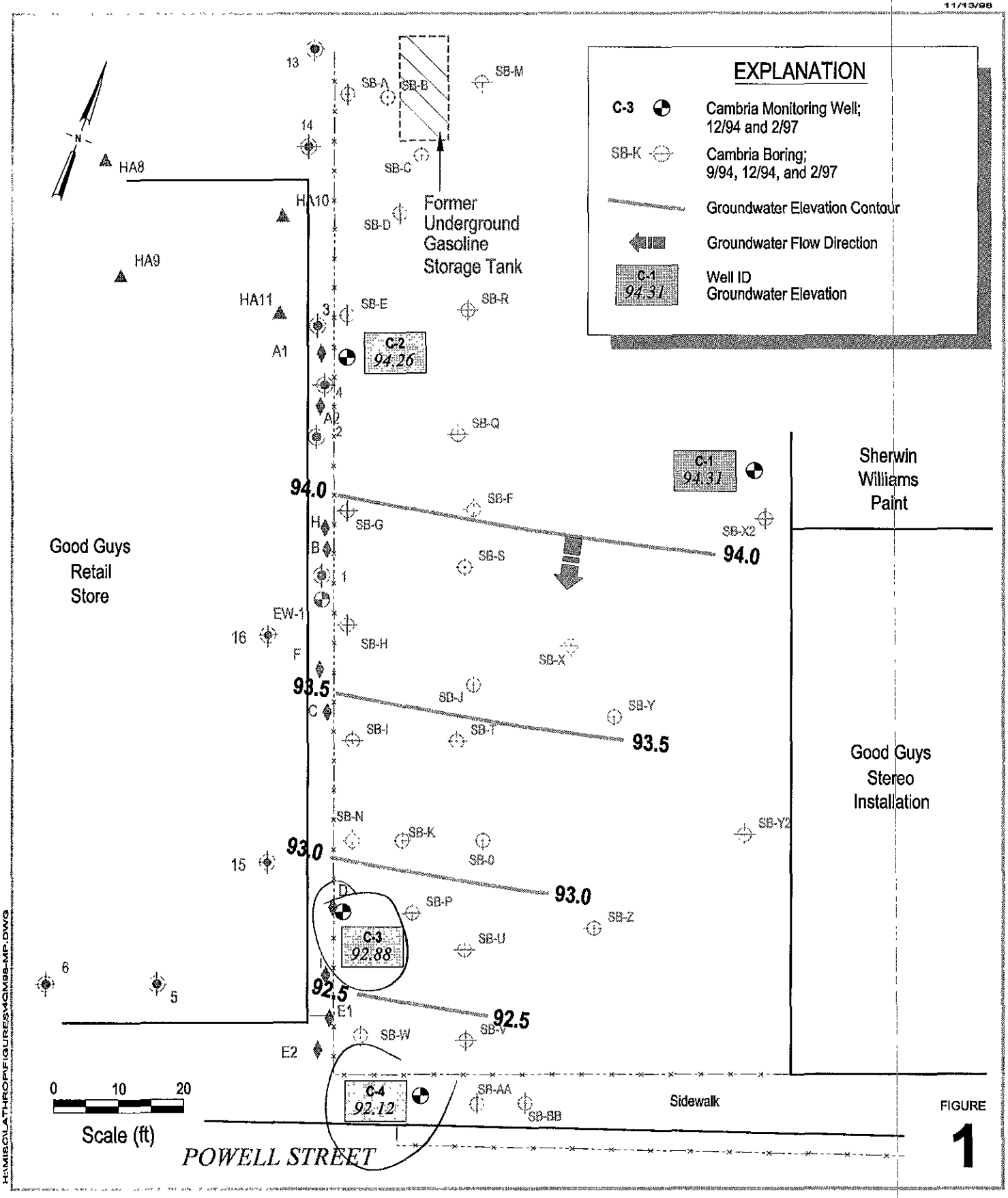

FIGURE **1**

H:\MISC\LATHROP\FIGURES\4QM98-MP.DWG

Lathrop Property
5813-5815 Shellmound Street
Emeryville, California

CAMBRIA

Groundwater Elevation Contour Map
October 19, 1998

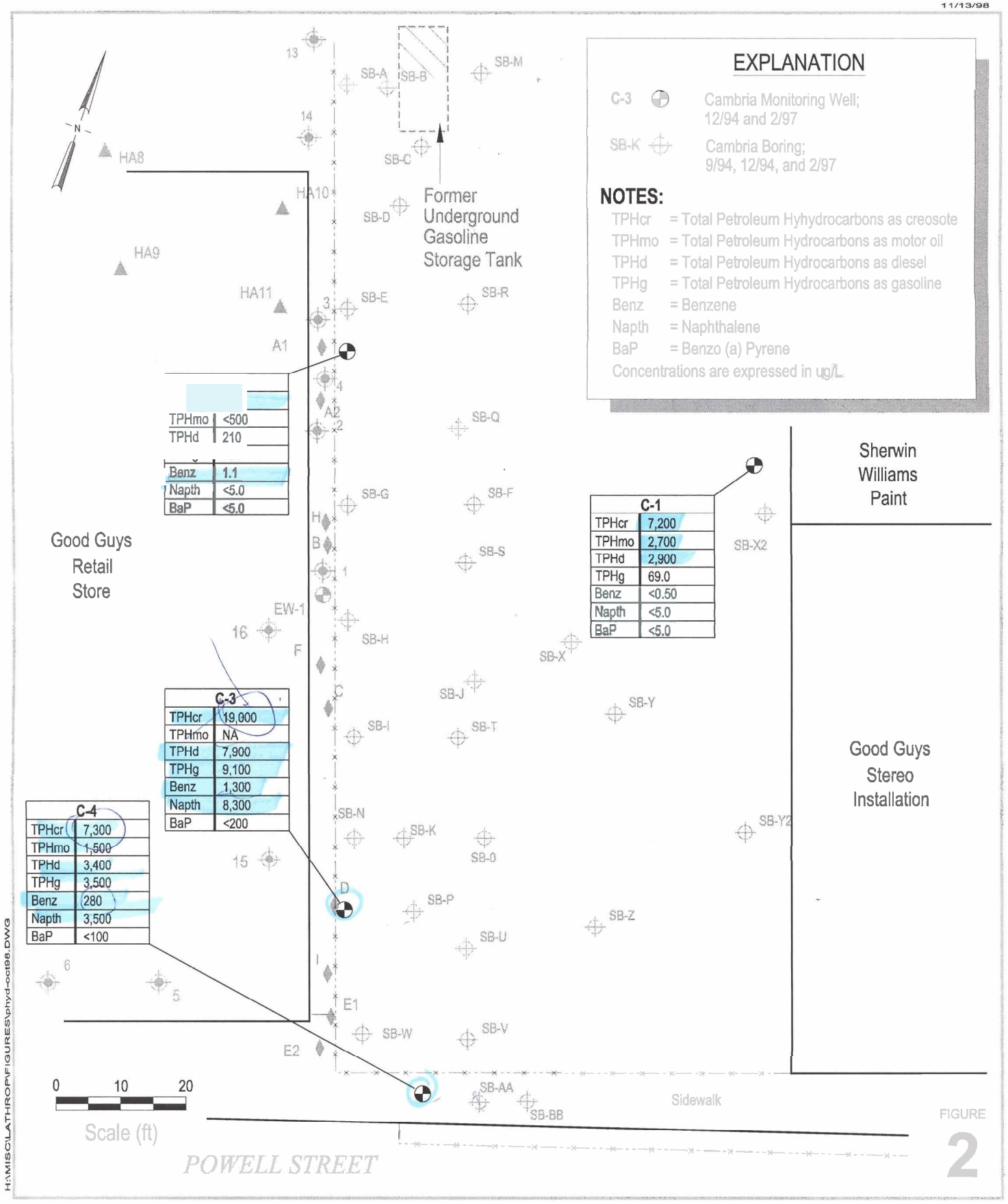

FIGURE 2

H:\MISC\LATHROP\FIGURES\phyd-oct98.DWG

Lathrop Property
5813-5815 Shellmound Street
Emeryville, California

CAMBRIA

Petroleum Hydrocarbons/SVOCs in Groundwater
October 19, 1998

Attachment A

Laboratory Analytical Reports

Table 1. Ground Water Elevation and Analytical Data for Petroleum Hydrocarbons - Lathrop Investigation, 5813-15 Shellmound St., Emeryville, California

Sample ID	Date Sampled	TOC Elevation (ft)	GW Depth (ft)	GW Elevation (ft)	TPHcr	TPHd	TPHmo	TPHg	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE
					← (Concentrations in ug/L) →								
Semi-annual Sampling													
C-1	12/16/94	100.00	3.82	96.18	<500	NA	NA	<50	<0.5	<0.5	<0.5	<0.5	NA
	03/19/97		4.21	95.79	<500	590[a]	750	<50	<0.50	<0.50	<0.50	0.6	<2.0
	05/30/97		5.45	94.55	<1,000	1,100[a]	2,600	<50	<0.50	<0.50	<0.50	<0.50	<2.0
	07/03/97		5.67	94.33	<2,000	2,600[a]	3,900	<50	<0.50	<0.50	<0.50	<0.50	<2.0
	08/07/97		5.86	94.14	<2,000	3,700[a]	8,200	<50	<0.50	<0.50	<0.50	1.5	<2.0
	03/31/98[c]		4.52	95.48	530[b]	260[b]	<500	<50	<0.50	<0.50	<0.50	<0.50	<2.5
	10/19/98		**5.69**	**94.31**	**7,200**	**2,900**	**2,700**	**69**	**<0.50**	**0.85**	**<0.50**	**1.8**	**NA**
C-2	12/16/94	99.22	3.33	95.89	<500	NA	NA	<50	<0.5	<0.5	<0.5	<0.5	NA
	03/19/97		3.61	95.61	<500	590[a]	790	<50	<0.50	<0.50	<0.50	<0.50	<2.0
	05/30/97		5.94	93.28	<500	650[a]	1,200	<50	1.1	<0.50	0.6	<0.50	<2.0
	07/03/97		4.91	94.31	<500	1,000[a]	1,200	<50	1.1	<0.50	1.4	<0.50	<2.0
	08/07/97		5.12	94.10	<500	810[a]	1,200	<50	0.71	<0.50	2.0	<0.50	<2.0
	03/31/98[c]		3.79	95.43	700[b]	300[b]	<500	<50	0.72	<0.50	<0.50	<0.50	<2.5
	10/19/98		**4.96**	**94.26**	**530**	**210**	**<500**	**<50**	**1.1**	**<0.50**	**2.1**	**<0.50**	**NA**
C-3	12/16/94	99.24	3.82	95.42	5,100	NA	NA	17,000	1,900	120	5.1	250	NA
	03/19/97		5.82	93.42	10,000	250	<2,500	9,600	1,300	120	170	150	<20
	05/30/97		5.19	94.05	21,000	<500	<5,000	16,000	1,700	230	320	230	<100
	07/03/97		6.31	92.93	25,000	<500	<5,000	21,000	1,400	160	300	200	<200
	08/07/97		6.44	92.80	24,000	<1,000	<5,000	15,000	1,200	110	260	170	<2.0
	03/31/98[c]		4.84	94.40	11,000	7,500[b]	1,800[b]	16,000	1,500	280	240	250	<250
	10/19/98		**6.36**	**92.88**	**19,000**	**7,900**	**NA**	**9,100**	**1,300**	**150**	**250**	**110**	**NA**
									1300				
C-4	03/19/97	98.64	6.46	92.18	25,000	<500	<5,000	5,400	540	19	62	87	<20
	05/30/97		6.52	92.12	25,000	<500	<5,000	8,800	470	22	170	97	<40
	07/03/97		6.52	92.12	16,000	<500	<5,000	6,800	470	12	140	74	<40
	08/07/97		6.54	92.10	18,000	<1,000	<5,000	4,900	360	13	120	67	<20
	03/31/98[c]		4.69	93.95	5,400	3,800[b]	1,100[b]	3,700	210	26	96	64	<50
	10/19/98		**6.52**	**92.12**	**7,300**	**3,400**	**1,500**	**3,500**	**280**	**12**	**120**	**60**	**NA**

Table 1. Ground Water Elevation and Analytical Data for Petroleum Hydrocarbons - Lathrop Investigation, 5813-15 Shellmound St., Emeryville, California

Sample ID	Date Sampled	TOC Elevation (ft)	GW Depth (ft)	GW Elevation (ft)	TPHcr	TPHd	TPHmo	TPHg	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE
					← (Concentrations in ug/L) →								

Abbreviations and Notes:

ug/L = Micrograms per liter
ft = feet
NA = Not Analyzed
TOC = Top of Casing
a = The result appears to be a heavier hydrocarbon than diesel
b = unidentified hydrocarbon
c = on 3/31/98, the laboratory used for this project was changed to Sequoia Analytical of Redwood City, California

TPHcr = Total petroleum hydrocarbons as creosote by modified EPA Method 8015
TPHmo = Total petroleum hydrocarbons as motor oil by modified EPA Method 8015
TPHg = Total petroleum hydrocarbons as gasoline by modified EPA Method 8015
TPHd = Total petroleum hydrocarbons as diesel by modified EPA Method 8015
Benzene , Ethylbenzene, Toluene, and Xylenes by EPA Method 8020
MTBE = Methyl Tertiary-Butyl Ether by EPA Method 8020

Table 2. Ground Water Elevation and Analytical Data for Semi-Volatile Organic Compounds (including PNAs) - Lathrop Investigation, 5813-15 Shellmound Street, Emeryville, California

Sample ID	Date Sampled	TOC Elevation (ft)	GW Depth (ft)	GW Elevation (ft)	Acenaphth-ene	Acenaphth-ylene	Anthra-cene	Benzo-(a)anthra-cene	Benzo-(a)pyrene	Benzo-(g,h,i) perylene	Chrysene	Fluor-anthene	Fluorene	2-Methyl-naphtha-lene	Naphtha-lene	Phenan-threne	Pyrene	Additional Compounds Detected
					← (Concentrations in ug/L) →													
Semi-annual Sampling																		
C-1	12/16/94	100.00	3.82	96.18	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	
	03/19/97		4.21	95.79	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	
	05/30/97		5.45	94.55	<11	<11	<11	<11	<11	<11	<11	<11	<11	<11	<11	<11	<11	
	07/03/97		5.67	94.33	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	
	08/07/97		5.86	94.14	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	
	03/31/98		4.52	95.48	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
	10/19/98		**5.69**	**94.31**	**<5.0**	**<5.0**	**<5.0**	**<5.0**	**<5.0**	**<5.0**	**<5.0**	**<5.0**	**<5.0**	**<5.0**	**<5.0**	**<5.0**	**<5.0**	
C-2	12/16/94	99.22	3.33	95.89	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	
	03/19/97		3.61	95.61	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	11	<10	<10	
	05/30/97		5.94	93.28	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	
	07/30/97		4.91	94.31	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	
	08/07/97		5.12	94.10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	
	03/31/98		3.79	95.43	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
	10/19/98		**4.96**	**94.26**	**<5.0**	**<5.0**	**<5.0**	**<5.0**	**<5.0**	**<5.0**	**<5.0**	**<5.0**	**<5.0**	**<5.0**	**<5.0**	**<5.0**	**<5.0**	
C-3	12/16/94	99.24	3.82	95.42	150	780	37	7.2f	8.5f	7.3[f]	20	50	110	490	11,000	260	61	a
	03/19/97		5.82	93.42	570	310	140	49	95	86	130	210	170	360	12,000	560	240	b
	05/30/97		5.19	94.05	800	550	410	<100	350	230	430	850	330	680	11,000	1,200	1,000	c
	07/03/97		6.31	92.93	2,400	520	1,200	600	850	850	1,200	2,900	670	760	16,000	4,700	3,100	g
	08/07/97		6.44	92.80	930	300	270	180	230	220	280	550	240	460	12,000	1,200	810	j
	03/31/98		4.84	94.40	320	500	<250	<250	<250	<250	<250	<250	<250	320	8,000	<250	<2500	
	10/19/98		**6.36**	**92.88**	**810**	**370**	**<200**	**<200**	**<200**	**<200**	**<200**	**<200**	**<200**	**400**	**8,300**	**380**	**<200**	
C-4	03/19/97	98.64	6.46	92.18	2,400	880	1,600	1,300	1,800	1,700	2,000	5,400	1,100	500	13,000	7,300	6,400	d
	05/30/97		6.52	92.12	760	210	400	<100	440	290	460	1,100	300	230	5,000	1,400	1,300	e
	07/03/97		6.52	92.12	680	96	140	130	150	170	160	790	140	95	5,400	1,100	850	h
	08/07/97		6.54	92.10	480	120	130	110	140	150	150	390	150	160	5,800	560	450	k
	03/31/98		4.69	93.95	290	<100	<100	<100	<100	<100	<100	<100	<100	110	3,200	140	<100	
	10/19/98		**6.52**	**92.12**	**500**	**<100**	**<100**	**<100**	**<100**	**<100**	**<100**	**<100**	**110**	**120**	**3,500**	**230**	**<100**	

Table 2. Ground Water Elevation and Analytical Data for Semi-Volatile Organic Compounds (including PNAs) - Lathrop Investigation, 5813-15 Shellmound Street, Emeryville, California

Sample ID	Date Sampled	TOC Elevation (ft)	GW Depth (ft)	GW Elevation (ft)	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(g,h,i)perylene	Chrysene	Fluoranthene	Fluorene	2-Methylnaphthalene	Naphthalene	Phenanthrene	Pyrene	Additional Compounds Detected
					←					(Concentrations in ug/L)							→	

Abbreviations and Notes:

ug/L = Micrograms per liter

a = Dibenzofuran at 15 ug/L by EPA Method 8270

b = Benzo (b&k) fluoranthene detected at 110 ug/L by EPA Method 8270
= Dibenzofuran dectected at 25 ug/L by EPA Method 8270
= Indeno (1,2,3 - cd) pyrene dectected at 61 ug/L by EPA Method 8270

c = Benzo (b&k) fluoranthene detected at 450 ug/L by EPA Method 8270
= Ideno (1,2,3-cd) pyrene detected at 180 ug/L by EPA Method 8270

d = Benzo (b&k) fluoranthene detected at 2,300 ug/L by EPA Method 8270
= Dibenzo (a,h) anthracene detected at 260 ug/L by EPA Method 8270
= Dibenzofuran dectected at 110 ug/L by EPA Method 8270
= Indeno (1,2,3 - cd) pyrene detected at 1,200 ug/L by EPA Method 8270

e = Benzo (b&k) fluoranthene detected at 290 ug/L by EPA Method 8270
= Indeno (1,2,3-cd) pyrene detected at 230 ug/L by EPA Method 8270

f = Lab estimated value

g = Benzo (b&k) fluoranthene detected at 1,100 ug/L by EPA Method 8270
= Dibenzo (a,h) anthracene detected at 110 ug/L by EPA Method 8270
= Dibenzofuran detected at 73 ug/L by EPA Method 8270
= Indeno (1,2,3-cd) pyrene detected at 610 ug/L by EPA Method 8270

h = Benzo (b&k) fluoranthene detected at 230 ug/L by EPA Method 8270
= Dibenzo (a,h) anthracene detected at 21 ug/L by EPA Method 8270
= Indeno (1,2,3-cd) pyrene detected at 120 ug/L by EPA Method 8270

j = Benzo (b&k) fluoranthene detected at 280 ug/L by EPA Method 8270
= Indeno (1,2,3-cd) pyrene detected at 160 ug/L by EPA Method 8270

k = Benzo (b&k) fluoranthene detected at 180 ug/L by EPA Method 8270
= Indeno (1,2,3-cd) pyrene detected at 110 ug/L by EPA Method 8270

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
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1455 McDowell Blvd. North, Ste. D, Petaluma, CA 94954, (707) 792-1865, FAX (707) 792-0342

Cambria 1144 65th St. Suite C Oakland, CA 94608 Attention: Joe Theisen	Client Proj. ID: 190-0122-017, 5813-5815 Lab Proj. ID: 9810E47	Received: 10/20/98 Reported: 11/06/98

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.).

8270 Note:
Samples 9810E47-03 and 04 were diluted 40 and 20 times, respectively, due to high target compounds. The surrogates were diluted out.

Q - Surrogate diluted out.
#Q - Surrogate coelution was confirmed.

TPH-Motor Oil Note:
Sample 9810E47-03 was not run for Motor Oil because the chromatograph from the straight run did not indicate the presence of Motor Oil.

SEQUOIA ANALYTICAL

Mike Gregory
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (925) 988-9600, FAX (925) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100
1455 McDowell Blvd. North, Ste. D, Petaluma, CA 94954, (707) 792-1865, FAX (707) 792-0342

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

Attention: Joe Theisen

Client Proj. ID: 190-0122-017, 5813-5815
Sample Descript: C-1
Matrix: LIQUID
Analysis Method: EPA 8270
Lab Number: 9810E47-01

Sampled: 10/19/98
Received: 10/20/98
Extracted: 10/22/98
Analyzed: 10/23/98
Reported: 11/06/98

QC Batch Number: MS1022988270EXA
Instrument ID: F4

Semivolatile Organics (EPA 8270)

Analyte	Detection Limit ug/L	Sample Results ug/L
Acenaphthene	5.0	N.D.
Acenaphthylene	5.0	N.D.
Anthracene	5.0	N.D.
Benzoic Acid	10	N.D.
Benzo(a)anthracene	5.0	N.D.
Benzo(b)fluoranthene	5.0	N.D.
Benzo(k)fluoranthene	5.0	N.D.
Benzo(g,h,i)perylene	5.0	N.D.
Benzo(a)pyrene	5.0	N.D.
Benzyl alcohol	5.0	N.D.
Bis(2-chloroethoxy)methane	5.0	N.D.
Bis(2-chloroethyl)ether	5.0	N.D.
Bis(2-chloroisopropyl)ether	5.0	N.D.
Bis(2-ethylhexyl)phthalate	10	N.D.
4-Bromophenyl phenyl ether	5.0	N.D.
Butyl benzyl phthalate	5.0	N.D.
4-Chloroaniline	10	N.D.
2-Chloronaphthalene	5.0	N.D.
4-Chloro-3-methylphenol	5.0	N.D.
2-Chlorophenol	5.0	N.D.
4-Chlorophenyl phenyl ether	5.0	N.D.
Chrysene	5.0	N.D.
Dibenzo(a,h)anthracene	5.0	N.D.
Dibenzofuran	5.0	N.D.
Di-n-butyl phthalate	10	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
3,3-Dichlorobenzidine	10	N.D.
2,4-Dichlorophenol	5.0	N.D.
Diethyl phthalate	5.0	N.D.
2,4-Dimethylphenol	5.0	N.D.
Dimethyl phthalate	5.0	N.D.
4,6-Dinitro-2-methylphenol	10	N.D.
2,4-Dinitrophenol	10	N.D.
2,4-Dinitrotoluene	5.0	N.D.
2,6-Dinitrotoluene	5.0	N.D.
Di-n-octyl phthalate	5.0	N.D.
Fluoranthene	5.0	N.D.

Sequoia Analytical

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

Attention: Joe Theisen

Client Proj. ID: 190-0122-017, 5813-5815
Sample Descript: C-1
Matrix: LIQUID
Analysis Method: EPA 8270
Lab Number: 9810E47-01

Sampled: 10/19/98
Received: 10/20/98
Extracted: 10/22/98
Analyzed: 10/23/98
Reported: 11/06/98

QC Batch Number: MS1022988270EXA
Instrument ID: F4

Analyte	Detection Limit ug/L	Sample Results ug/L
Fluorene	5.0	N.D.
Hexachlorobenzene	5.0	N.D.
Hexachlorobutadiene	5.0	N.D.
Hexachlorocyclopentadiene	10	N.D.
Hexachloroethane	5.0	N.D.
Indeno(1,2,3-cd)pyrene	5.0	N.D.
Isophorone	5.0	N.D.
2-Methylnaphthalene	5.0	N.D.
2-Methylphenol	5.0	N.D.
4-Methylphenol	5.0	N.D.
Naphthalene	5.0	N.D.
2-Nitroaniline	10	N.D.
3-Nitroaniline	10	N.D.
4-Nitroaniline	10	N.D.
Nitrobenzene	5.0	N.D.
2-Nitrophenol	5.0	N.D.
4-Nitrophenol	10	N.D.
n-Nitrosodiphenylamine	5.0	N.D.
n-Nitroso-di-n-propylamine	5.0	N.D.
Pentachlorophenol	10	N.D.
Phenanthrene	5.0	N.D.
Phenol	5.0	N.D.
Pyrene	5.0	N.D.
1,2,4-Trichlorobenzene	5.0	N.D.
2,4,5-Trichlorophenol	10	N.D.
2,4,6-Trichlorophenol	5.0	N.D.

Surrogates	Control Limits %		% Recovery
2-Fluorophenol	21	110	43
Phenol-d5	10	110	35
Nitrobenzene-d5	35	114	61
2-Fluorobiphenyl	43	116	56
2,4,6-Tribromophenol	10	123	76
p-Terphenyl-d14	33	141	56

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

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager

Sequoia Analytical

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

Attention: Joe Thelsen

Client Proj. ID: 190-0122-017, 5813-5815
Sample Descript: C-1
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9810E47-01

Sampled: 10/19/98
Received: 10/20/98
Extracted: 10/26/98
Analyzed: 10/28/98
Reported: 11/06/98

QC Batch Number: SP1026988015EXA
Instrument ID: HP3A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	50	2900
Chromatogram Pattern: **Diesel & Non Diesel Mix**		>C16

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	374 Q

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

SEQUOIA ANALYTICAL - ELAP #1271

Mike Gregory
Project Manager

Sequoia Analytical

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

Attention: Joe Thelsen

Client Proj. ID: 190-0122-017, 5813-5815
Sample Descript: C-1
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9810E47-01

Sampled: 10/19/98
Received: 10/20/98
Extracted: 10/26/98
Analyzed: 10/28/98
Reported: 11/06/98

QC Batch Number: SP1026980015EXA
Instrument ID: HP3A

Fuel Fingerprint : Motor Oil

Analyte	Detection Limit ug/L	Sample Results ug/L
Extractable HC as Motor Oil	500	2700
Chromatogram Pattern:	C16-C36	Motor Oil

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	374 Q

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

SEQUOIA ANALYTICAL - ELAP #1271

Mike Gregory
Project Manager

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

Attention: Joe Thelsen

Client Proj. ID: 190-0122-017, 5813-5815
Sample Descript: C-1
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9810E47-01

Sampled: 10/19/98
Received: 10/20/98
Extracted: 10/26/98
Analyzed: 10/28/98
Reported: 11/06/98

QC Batch Number: SP1026988015EXA
Instrument ID: HP3A

Fuel Fingerprint-Crude Oil

Analyte	Detection Limit ug/L	Sample Results ug/L
Extractable HC as Crude Oil	100	7200
Hydrocarbon Range	Unid.HC	C9-C40

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	374 Q

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

SEQUOIA ANALYTICAL - ELAP #1271

Mike Gregory
Project Manager

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

Attention: Joe Theisen

Client Proj. ID: 190-0122-017, 5813-5815
Sample Descript: C-1
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9810E47-01

Sampled: 10/19/98
Received: 10/20/98

Analyzed: 10/23/98
Reported: 11/06/98

QC Batch Number: GC102398BTEX02A
Instrument ID: GCHP02

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**50**	**69**
Benzene	0.50	N.D.
Toluene	**0.50**	**0.65**
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	**0.50**	**1.8**
Chromatogram Pattern:		**GAS**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	125

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

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager

Sequoia Analytical

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

Attention: Joe Theisen

Client Proj. ID: 190-0122-017, 5813-5815
Sample Descript: C-2
Matrix: LIQUID
Analysis Method: EPA 8270
Lab Number: 9810E47-02

Sampled: 10/19/98
Received: 10/20/98
Extracted: 10/22/98
Analyzed: 10/26/98
Reported: 11/06/98

QC Batch Number: MS1022988270EXA
Instrument ID: F4

Semivolatile Organics (EPA 8270)

Analyte	Detection Limit ug/L	Sample Results ug/L
Acenaphthene	5.0	N.D.
Acenaphthylene	5.0	N.D.
Anthracene	5.0	N.D.
Benzoic Acid	10	N.D.
Benzo(a)anthracene	5.0	N.D.
Benzo(b)fluoranthene	5.0	N.D.
Benzo(k)fluoranthene	5.0	N.D.
Benzo(g,h,i)perylene	5.0	N.D.
Benzo(a)pyrene	5.0	N.D.
Benzyl alcohol	5.0	N.D.
Bis(2-chloroethoxy)methane	5.0	N.D.
Bis(2-chloroethyl)ether	5.0	N.D.
Bis(2-chloroisopropyl)ether	5.0	N.D.
Bis(2-ethylhexyl)phthalate	10	N.D.
4-Bromophenyl phenyl ether	5.0	N.D.
Butyl benzyl phthalate	5.0	N.D.
4-Chloroaniline	10	N.D.
2-Chloronaphthalene	5.0	N.D.
4-Chloro-3-methylphenol	5.0	N.D.
2-Chlorophenol	5.0	N.D.
4-Chlorophenyl phenyl ether	5.0	N.D.
Chrysene	5.0	N.D.
Dibenzo(a,h)anthracene	5.0	N.D.
Dibenzofuran	5.0	N.D.
Di-n-butyl phthalate	10	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
3,3-Dichlorobenzidine	10	N.D.
2,4-Dichlorophenol	5.0	N.D.
Diethyl phthalate	5.0	N.D.
2,4-Dimethylphenol	5.0	N.D.
Dimethyl phthalate	5.0	N.D.
4,6-Dinitro-2-methylphenol	10	N.D.
2,4-Dinitrophenol	10	N.D.
2,4-Dinitrotoluene	5.0	N.D.
2,6-Dinitrotoluene	5.0	N.D.
Di-n-octyl phthalate	5.0	N.D.
Fluoranthene	5.0	N.D.

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

Attention: Joe Theisen

Client Proj. ID: 190-0122-017, 5813-5815
Sample Descript: C-2
Matrix: LIQUID
Analysis Method: EPA 8270
Lab Number: 9810E47-02

Sampled: 10/19/98
Received: 10/20/98
Extracted: 10/22/98
Analyzed: 10/26/98
Reported: 11/06/98

QC Batch Number: MS1022988270EXA
Instrument ID: F4

Analyte	Detection Limit ug/L	Sample Results ug/L
Fluorene	5.0	N.D.
Hexachlorobenzene	5.0	N.D.
Hexachlorobutadiene	5.0	N.D.
Hexachlorocyclopentadiene	10	N.D.
Hexachloroethane	5.0	N.D.
Indeno(1,2,3-cd)pyrene	5.0	N.D.
Isophorone	5.0	N.D.
2-Methylnaphthalene	5.0	N.D.
2-Methylphenol	5.0	N.D.
4-Methylphenol	5.0	N.D.
Naphthalene	5.0	N.D.
2-Nitroaniline	10	N.D.
3-Nitroaniline	10	N.D.
4-Nitroaniline	10	N.D.
Nitrobenzene	5.0	N.D.
2-Nitrophenol	5.0	N.D.
4-Nitrophenol	10	N.D.
n-Nitrosodiphenylamine	5.0	N.D.
n-Nitroso-di-n-propylamine	5.0	N.D.
Pentachlorophenol	10	N.D.
Phenanthrene	5.0	N.D.
Phenol	5.0	N.D.
Pyrene	5.0	N.D.
1,2,4-Trichlorobenzene	5.0	N.D.
2,4,5-Trichlorophenol	10	N.D.
2,4,6-Trichlorophenol	5.0	N.D.

Surrogates	Control Limits %		% Recovery
2-Fluorophenol	21	110	33
Phenol-d5	10	110	28
Nitrobenzene-d5	35	114	55
2-Fluorobiphenyl	43	116	57
2,4,6-Tribromophenol	10	123	78
p-Terphenyl-d14	33	141	49

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

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager

Sequoia Analytical

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

Attention: Joe Theisen

Client Proj. ID: 190-0122-017, 5813-5815
Sample Descript: C-2
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9810E47-02

Sampled: 10/19/98
Received: 10/20/98
Extracted: 10/26/98
Analyzed: 10/28/98
Reported: 11/06/98

QC Batch Number: SP1026988015EXA
Instrument ID: HP3A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	50	210
Chromatogram Pattern: **Non Diesel Mix**		UH>C12

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	106

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

SEQUOIA ANALYTICAL - ELAP #1271

Mike Gregory
Project Manager

Sequoia Analytical

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1455 McDowell Blvd. North, Ste. D, Petaluma, CA 94954, (707) 792-1865, FAX (707) 792-0342

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

Attention: Joe Theisen

Client Proj. ID: 190-0122-017, 5813-5815
Sample Descript: C-2
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9810E47-02

Sampled: 10/19/98
Received: 10/20/98
Extracted: 10/26/98
Analyzed: 10/28/98
Reported: 11/06/98

QC Batch Number: SP1026988015EXA
Instrument ID: HP3A

Fuel Fingerprint : Motor Oil

Analyte	Detection Limit ug/L	Sample Results ug/L
Extractable HC as Motor Oil Chromatogram Pattern:	500	N.D.

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	106

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

SEQUOIA ANALYTICAL - ELAP #1271

Mike Gregory
Project Manager

Sequoia Analytical

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Cambria	Client Proj. ID: 190-0122-017, 5813-5815	Sampled: 10/19/98
1144 65th St. Suite C	Sample Descript: C-2	Received: 10/20/98
Oakland, CA 94608	Matrix: LIQUID	Extracted: 10/26/98
	Analysis Method: EPA 8015 Mod	Analyzed: 10/28/98
Attention: Joe Theisen	Lab Number: 9810E47-02	Reported: 11/06/98

QC Batch Number: SP1026988015EXA
Instrument ID: HP3A

Fuel Fingerprint-Crude Oil

Analyte	Detection Limit ug/L	Sample Results ug/L
Extractable HC as Crude Oil	100	530
Hydrocarbon Range	C9-C40	Crude Oil

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	106

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

SEQUOIA ANALYTICAL - ELAP #1271

Mike Gregory
Project Manager

Sequoia Analytical

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

Attention: Joe Theisen

Client Proj. ID: 190-0122-017, 5813-5815
Sample Descript: C-2
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9810E47-02

Sampled: 10/19/98
Received: 10/20/98

Analyzed: 10/23/98
Reported: 11/06/98

QC Batch Number: GC102398BTEX02A
Instrument ID: GCHP02

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	**0.50**	**1.1**
Toluene	0.50	N.D.
Ethyl Benzene	**0.50**	**2.1**
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	115

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

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager

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

Attention: Joe Theisen

Client Proj. ID: 190-0122-017, 5813-5815
Sample Descript: C-3
Matrix: LIQUID
Analysis Method: EPA 8270
Lab Number: 9810E47-03

Sampled: 10/19/98
Received: 10/20/98
Extracted: 10/22/98
Analyzed: 10/28/98
Reported: 11/06/98

QC Batch Number: MS1022988270EXA
Instrument ID: F4

Semivolatile Organics (EPA 8270)

Analyte	Detection Limit ug/L	Sample Results ug/L
Acenaphthene	**200**	**810**
Acenaphthylene	**200**	**370**
Anthracene	200	N.D.
Benzoic Acid	400	N.D.
Benzo(a)anthracene	200	N.D.
Benzo(b)fluoranthene	200	N.D.
Benzo(k)fluoranthene	200	N.D.
Benzo(g,h,i)perylene	200	N.D.
Benzo(a)pyrene	200	N.D.
Benzyl alcohol	200	N.D.
Bis(2-chloroethoxy)methane	200	N.D.
Bis(2-chloroethyl)ether	200	N.D.
Bis(2-chloroisopropyl)ether	200	N.D.
Bis(2-ethylhexyl)phthalate	400	N.D.
4-Bromophenyl phenyl ether	200	N.D.
Butyl benzyl phthalate	200	N.D.
4-Chloroaniline	400	N.D.
2-Chloronaphthalene	200	N.D.
4-Chloro-3-methylphenol	200	N.D.
2-Chlorophenol	200	N.D.
4-Chlorophenyl phenyl ether	200	N.D.
Chrysene	200	N.D.
Dibenzo(a,h)anthracene	200	N.D.
Dibenzofuran	200	N.D.
Di-n-butyl phthalate	400	N.D.
1,2-Dichlorobenzene	200	N.D.
1,3-Dichlorobenzene	200	N.D.
1,4-Dichlorobenzene	200	N.D.
3,3-Dichlorobenzidine	400	N.D.
2,4-Dichlorophenol	200	N.D.
Diethyl phthalate	200	N.D.
2,4-Dimethylphenol	200	N.D.
Dimethyl phthalate	200	N.D.
4,6-Dinitro-2-methylphenol	400	N.D.
2,4-Dinitrophenol	400	N.D.
2,4-Dinitrotoluene	200	N.D.
2,6-Dinitrotoluene	200	N.D.
Di-n-octyl phthalate	200	N.D.
Fluoranthene	200	N.D.

Sequoia Analytical

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

Attention: Joe Thelsen

Client Proj. ID: 190-0122-017, 5813-5815
Sample Descript: C-3
Matrix: LIQUID
Analysis Method: EPA 8270
Lab Number: 9810E47-03

Sampled: 10/19/98
Received: 10/20/98
Extracted: 10/22/98
Analyzed: 10/28/98
Reported: 11/06/98

QC Batch Number: MS1022988270EXA
Instrument ID: F4

Analyte	Detection Limit ug/L	Sample Results ug/L
Fluorene	200	N.D.
Hexachlorobenzene	200	N.D.
Hexachlorobutadiene	200	N.D.
Hexachlorocyclopentadiene	400	N.D.
Hexachloroethane	200	N.D.
Indeno(1,2,3-cd)pyrene	200	N.D.
Isophorone	200	N.D.
2-Methylnaphthalene	**200**	**400**
2-Methylphenol	200	N.D.
4-Methylphenol	200	N.D.
Naphthalene	**200**	**8300**
2-Nitroaniline	400	N.D.
3-Nitroaniline	400	N.D.
4-Nitroaniline	400	N.D.
Nitrobenzene	200	N.D.
2-Nitrophenol	200	N.D.
4-Nitrophenol	400	N.D.
n-Nitrosodiphenylamine	200	N.D.
n-Nitroso-di-n-propylamine	200	N.D.
Pentachlorophenol	400	N.D.
Phenanthrene	**200**	**380**
Phenol	200	N.D.
Pyrene	200	N.D.
1,2,4-Trichlorobenzene	200	N.D.
2,4,5-Trichlorophenol	400	N.D.
2,4,6-Trichlorophenol	200	N.D.

Surrogates	Control Limits %		% Recovery
2-Fluorophenol	21	110	Q
Phenol-d5	10	110	Q
Nitrobenzene-d5	35	114	Q
2-Fluorobiphenyl	43	116	Q
2,4,6-Tribromophenol	10	123	Q
p-Terphenyl-d14	33	141	Q

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

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager

Sequoia Analytical

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

Attention: Joe Theisen

Client Proj. ID: 190-0122-017, 5813-5815
Sample Descript: C-3
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9810E47-03

Sampled: 10/19/98
Received: 10/20/98
Extracted: 10/26/98
Analyzed: 10/29/98
Reported: 11/06/98

QC Batch Number: SP1026988015EXA
Instrument ID: HP3B

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	250	7900
Chromatogram Pattern: **Non Diesel Mix**		C9-C24

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	Q

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

SEQUOIA ANALYTICAL - ELAP #1271

Mike Gregory
Project Manager

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

Attention: Joe Theisen

Client Proj. ID: 190-0122-017, 5813-5815
Sample Descript: C-3
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9810E47-03

Sampled: 10/19/98
Received: 10/20/98
Extracted: 10/26/98
Analyzed: 10/29/98
Reported: 11/06/98

QC Batch Number: SP1026988015EXA
Instrument ID: HP3B

Fuel Fingerprint-Crude Oil

Analyte	Detection Limit ug/L	Sample Results ug/L
Extractable HC as Crude Oil	500	19000
Hydrocarbon Range	Unid.HC	C9-C40

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	Q

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

SEQUOIA ANALYTICAL - ELAP #1271

Mike Gregory
Project Manager

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

Attention: Joe Theisen

Client Proj. ID: 190-0122-017, 5813-5815
Sample Descript: C-3
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9810E47-03

Sampled: 10/19/98
Received: 10/20/98

Analyzed: 10/26/98
Reported: 11/06/98

QC Batch Number: GC102698BTEX30A
Instrument ID: GCHP30

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	1250	9100
Benzene	12	1300
Toluene	12	150
Ethyl Benzene	12	250
Xylenes (Total)	12	110
Chromatogram Pattern:		GAS

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	109

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

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager

Sequoia Analytical

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

Attention: Joe Theisen

Client Proj. ID: 190-0122-017, 5813-5815
Sample Descript: C-4
Matrix: LIQUID
Analysis Method: EPA 8270
Lab Number: 9810E47-04

Sampled: 10/19/98
Received: 10/20/98
Extracted: 10/22/98
Analyzed: 10/28/98
Reported: 11/06/98

QC Batch Number: MS1022988270EXA
Instrument ID: F4

Semivolatile Organics (EPA 8270)

Analyte	Detection Limit ug/L	Sample Results ug/L
Acenaphthene	**100**	**500**
Acenaphthylene	100	N.D.
Anthracene	100	N.D.
Benzoic Acid	200	N.D.
Benzo(a)anthracene	100	N.D.
Benzo(b)fluoranthene	100	N.D.
Benzo(k)fluoranthene	100	N.D.
Benzo(g,h,i)perylene	100	N.D.
Benzo(a)pyrene	100	N.D.
Benzyl alcohol	100	N.D.
Bis(2-chloroethoxy)methane	100	N.D.
Bis(2-chloroethyl)ether	100	N.D.
Bis(2-chloroisopropyl)ether	100	N.D.
Bis(2-ethylhexyl)phthalate	200	N.D.
4-Bromophenyl phenyl ether	100	N.D.
Butyl benzyl phthalate	100	N.D.
4-Chloroaniline	200	N.D.
2-Chloronaphthalene	100	N.D.
4-Chloro-3-methylphenol	100	N.D.
2-Chlorophenol	100	N.D.
4-Chlorophenyl phenyl ether	100	N.D.
Chrysene	100	N.D.
Dibenzo(a,h)anthracene	100	N.D.
Dibenzofuran	100	N.D.
Di-n-butyl phthalate	200	N.D.
1,2-Dichlorobenzene	100	N.D.
1,3-Dichlorobenzene	100	N.D.
1,4-Dichlorobenzene	100	N.D.
3,3-Dichlorobenzidine	200	N.D.
2,4-Dichlorophenol	100	N.D.
Diethyl phthalate	100	N.D.
2,4-Dimethylphenol	100	N.D.
Dimethyl phthalate	100	N.D.
4,6-Dinitro-2-methylphenol	200	N.D.
2,4-Dinitrophenol	200	N.D.
2,4-Dinitrotoluene	100	N.D.
2,6-Dinitrotoluene	100	N.D.
Di-n-octyl phthalate	100	N.D.
Fluoranthene	100	N.D.

Sequoia Analytical

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

Attention: Joe Thelsen

Client Proj. ID: 190-0122-017, 5813-5815
Sample Descript: C-4
Matrix: LIQUID
Analysis Method: EPA 8270
Lab Number: 9810E47-04

Sampled: 10/19/98
Received: 10/20/98
Extracted: 10/22/98
Analyzed: 10/28/98
Reported: 11/06/98

QC Batch Number: MS1022988270EXA
Instrument ID: F4

Analyte	Detection Limit ug/L	Sample Results ug/L
Fluorene	**100**	**110**
Hexachlorobenzene	100	N.D.
Hexachlorobutadiene	100	N.D.
Hexachlorocyclopentadiene	200	N.D.
Hexachloroethane	100	N.D.
Indeno(1,2,3-cd)pyrene	100	N.D.
Isophorone	100	N.D.
2-Methylnaphthalene	**100**	**120**
2-Methylphenol	100	N.D.
4-Methylphenol	100	N.D.
Naphthalene	**100**	**3500**
2-Nitroaniline	200	N.D.
3-Nitroaniline	200	N.D.
4-Nitroaniline	200	N.D.
Nitrobenzene	100	N.D.
2-Nitrophenol	100	N.D.
4-Nitrophenol	200	N.D.
n-Nitrosodiphenylamine	100	N.D.
n-Nitroso-di-n-propylamine	100	N.D.
Pentachlorophenol	200	N.D.
Phenanthrene	**100**	**230**
Phenol	100	N.D.
Pyrene	100	N.D.
1,2,4-Trichlorobenzene	100	N.D.
2,4,5-Trichlorophenol	200	N.D.
2,4,6-Trichlorophenol	100	N.D.

Surrogates	Control Limits %		% Recovery
2-Fluorophenol	21	110	Q
Phenol-d5	10	110	Q
Nitrobenzene-d5	35	114	Q
2-Fluorobiphenyl	43	116	Q
2,4,6-Tribromophenol	10	123	Q
p-Terphenyl-d14	33	141	Q

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

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager

Sequoia Analytical

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

Attention: Joe Theisen

Client Proj. ID: 190-0122-017, 5813-5815
Sample Descript: C-4
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9810E47-04

Sampled: 10/19/98
Received: 10/20/98
Extracted: 10/26/98
Analyzed: 10/28/98
Reported: 11/06/98

QC Batch Number: SP1026988015EXA
Instrument ID: HP3A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	50	3400
Chromatogram Pattern: Non Diesel Mix		C9-C24

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	199 Q

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

SEQUOIA ANALYTICAL - ELAP #1271

Mike Gregory
Project Manager

Sequoia Analytical

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1455 McDowell Blvd. North, Ste. D, Petaluma, CA 94954, (707) 792-1865, FAX (707) 792-0342

Cambria	Client Proj. ID: 190-0122-017, 5813-5815	Sampled: 10/19/98
1144 65th St. Suite C	Sample Descript: C-4	Received: 10/20/98
Oakland, CA 94608	Matrix: LIQUID	Extracted: 10/26/98
	Analysis Method: EPA 8015 Mod	Analyzed: 10/28/98
Attention: Joe Theisen	Lab Number: 9810E47-04	Reported: 11/06/98

QC Batch Number: SP1026988015EXA
Instrument ID: HP3A

Fuel Fingerprint : Motor Oil

Analyte	Detection Limit ug/L	Sample Results ug/L
Extractable HC as Motor Oil	500	1500
Chromatogram Pattern:		
Unidentified HC		>C16

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	199 Q

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

SEQUOIA ANALYTICAL - ELAP #1271

Mike Gregory
Project Manager

Sequoia Analytical

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

Attention: Joe Thelsen

Client Proj. ID: 190-0122-017, 5813-5815
Sample Descript: C-4
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9810E47-04

Sampled: 10/19/98
Received: 10/20/98
Extracted: 10/26/98
Analyzed: 10/28/98
Reported: 11/06/98

QC Batch Number: SP1026988015EXA
Instrument ID: HP3A

Fuel Fingerprint-Crude Oil

Analyte	Detection Limit ug/L	Sample Results ug/L
Extractable HC as Crude Oil	100	7300
Hydrocarbon Range	Unid.HC	C9-C40

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	199 Q

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

SEQUOIA ANALYTICAL - ELAP #1271

Miles Gregory
Project Manager

Sequoia Analytical

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

Attention: Joe Thelsen

Client Proj. ID: 190-0122-017, 5813-5815
Sample Descript: C-4
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9810E47-04

Sampled: 10/19/98
Received: 10/20/98

Analyzed: 10/23/98
Reported: 11/06/98

QC Batch Number: GC102398BTEX02A
Instrument ID: GCHP02

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	500	3500
Benzene	5.0	280
Toluene	5.0	12
Ethyl Benzene	5.0	120
Xylenes (Total)	5.0	60
Chromatogram Pattern:		GAS
Discrete Peaks		C10-C13

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	109

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

SEQUOIA ANALYTICAL - ELAP #1210

Mike Gregory
Project Manager

CAMBRIA ENVIRONMENTAL TECHNOLOGY, INC.

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CHAIN OF CUSTODY

9810E47

Cambria Manager: Joe Theisen
Cambria Sampler: Anni Kreml
Client: Lathrop
Site Address: 5813 - 5815 Shellmound, Emeryville
Project Number: 190-0122-017

LAB: Sequoia

SAMPLE ID	DATE	TIME	MATRIX	# OF SAMPLES	ANALYSES: TPHg/BTEX 8015/8020	TPHd/mo/cr 8015	SVOCs w/PNAs 8270
C-1	10/19/98	1303	Water	4	X		
C-1				1		X	
C-1				1			X
C-2		1231		4	X		
C-2				1		X	
C-2				1			X
C-3		1414		4	X		
C-3				1		X	
C-3				1			X
C-4		1334		4	X		
C-4				1		X	
C-4				1			X

Relinquished by:	Relinquished by:	Relinquished by:	Relinquished by:
Received by:	Received by:	Received by:	Received by:
Time/Date: 11:24 10/20/98	Time/Date: 10/20/98	Time/Date: 10/20/98 1139	Time/Date:

MTBE