CAMBRIA

Closure-ok
No further
action needed
7-7-98
B

June 8, 1998

Chris Boykin
Livermore-Pleasanton Fire Department
4550 East Avenue
Livermore, California 94550

Re: **Waste Oil Remote Fill Piping Sampling Report**
Shell Service Station
318 South Livermore Avenue
Livermore, California
WIC# 204-4380-0303
Cambria Project# 24-1195-984

Dear Ms. Boykin:

On behalf of Shell Oil Products Company (Shell), Cambria Environmental Technology, Inc. (Cambria) is submitting the results of sampling conducted during station upgrade activities at the site referenced above. Presented below are summaries of the site conditions, waste oil remote fill piping sampling activities, and conclusions.

SITE CONDITIONS

The site is located at the intersection of South Livermore Avenue and Third Street in Livermore, California. The area surrounding the site is commercial.

This Shell service station was recently upgraded by Gettler-Ryan Inc. of Dublin, California (Gettler-Ryan). Gettler-Ryan removed the waste oil remote fill piping (Figure 1).

CAMBRIA
ENVIRONMENTAL
TECHNOLOGY, INC.
1144 65TH STREET,
SUITE B
OAKLAND,
CA 94608
PH: (510) 420-0700
FAX: (510) 420-9170

SAMPLING ACTIVITIES AND SAMPLE ANALYSIS

Personnel Present	*Title*	*Company*
Maureen Feineman	Staff Geologist	Cambria
Michael Comer	Site Foreman	Gettler-Ryan
Chris Boykin	Inspector	Livermore-Pleasanton Fire Department

Sample Date: March 6, 1998.

Piping Sampling: Cambria inspected the remote fill piping excavation at the waste oil tank. Chris Boykin of the Livermore-Pleasanton Fire Department (LPFD)was on site to inspect the piping and excavation at the time of Cambria's site visit. Approximately 10 feet of remote fill piping was removed during the site visit. At the direction or Ms. Boykin, Cambria collected soil sample WO-1 from the remote fill piping trench, adjacent to the station building, approximately 2.0 feet below the bottom of the pavement.

Sample Analyses: Sequoia Analytical analyzed soil sample WO-1 collected from the waste oil remote fill piping trench for the following compounds as requested by Ms. Boykin of LPFD:

- Total petroleum hydrocarbons as gasoline (TPHg) by modified EPA Method 8015;
- Total petroleum hydrocarbons as diesel (TPHd) by modified EPA Method 8015;
- Benzene, toluene, ethylbenzene, and xylenes (BTEX) and methyl tert-butyl ether (MTBE) by EPA Method 8020;
- Total Oil and Grease by SM 5520 B&F;
- Chlorinated volatile organic compounds (VOCs) by EPA Method 8010; and
- Cadmium, chromium, lead, nickel, and zinc by EPA Method 6010.

Analytical Results: No hydrocarbons were detected in sample WO-1. In addition, the elemental metal concentrations were below ten times the STLC values in this sample. Analytical results are presented in Tables 1 and 2 and included as Attachment B.

CONCLUSIONS

No hydrocarbons were detected in the waste oil remote fill piping sample. Therefore, no further investigation of the waste oil tank area is proposed at this time.

CLOSING

We appreciate the opportunity to work with you on this project. Please call if you have any questions or comments.

Sincerely,
Cambria Environmental Technology, Inc.

Diane M. Lundquist, P.E.
Principal Engineer

REGISTERED PROFESSIONAL ENGINEER
DIANE M. LUNDQUIST
NO. C46725
CIVIL
STATE OF CALIFORNIA

Attachments: A - Standard Piping and Dispenser Removal Sampling Procedures
B - Laboratory Analytical Reports for Soil

cc: Mr. Tim Hargraves, Shell Oil Products Company, P.O. Box 8080, Martinez, CA 94553
Mr. A.E. (Alex) Perez, Shell Oil Products Company, P.O. Box 8080, Martinez, CA 94553

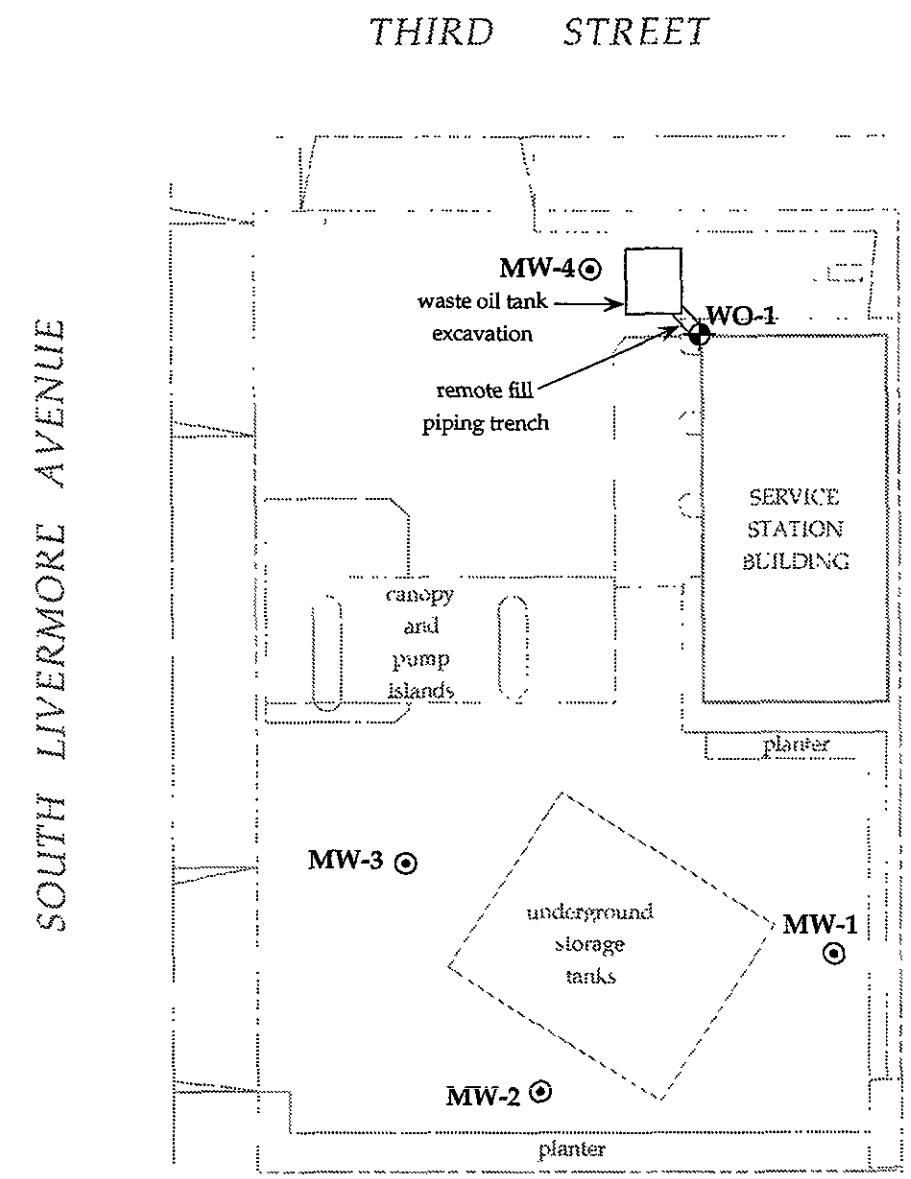

Figure 2. Waste Oil Tank Remote Fill Piping Sample Location - Shell Service Station WIC #204-4380-0303, 318 South Livermore Avenue, Livermore, California

Table 1. Soil Analytical Data - Gasoline Hydrocarbons - Shell Service Station - WIC #204-4380-0303, 318 South Livermore Avenue, Livermore, California

Sample ID	Depth (feet)	TPHg	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes
		(Concentrations reported in milligrams per kilogram)					
May 13, 1998 Samples:							
WO-1	2.0	<1.0	<0.025	<0.0050	<0.0050	<0.0050	<0.0050

Abbreviations and Notes:

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

MTBE = Methyl tert-butyl ether by EPA Method 8020.

Benzene, ethylbenzene, toluene, xylenes by EPA Method 8020.

Table 2. Soil Analytical Data - Non-Gasoline Analytes - Shell Service Station - WIC #204-4380-0303, 318 South Livermore Avenue, Livermore, California

Sample ID	Depth (feet)	Oil & Grease	TPHd	VOCs	Cadmium	Chromium	Lead	Nickel	Zinc
		← mg/kg →							
May 13, 1998 Samples:									
WO-1	2.0	<50	<1.0	ND	<0.50	33	20	77	38

Notes and Abbreviations:

mg/kg = Milligrams per kilogram
Oil & Grease = Total oil and grease by SM 5520 B&F
TPHd = Total petroleum hydrocarbons as diesel by modified EPA Method 8015
VOCs = Chlorinated Volatile Organic Compounds by EPA Method 8010
Cadmium, chromium, lead, nickel, and zinc by EPA Method 6010
<n = Below detection limit of n mg/kg
ND = Not detected. See laboratory report for specific detection limits.

ATTACHMENT A

Standard Piping and Dispenser Removal
Sampling Procedures

STANDARD PIPING AND DISPENSER REMOVAL SAMPLING PROCEDURES

Cambria Environmental Technology, Inc. (Cambria) has developed standard operating procedures for collecting soil samples during petroleum dispenser and piping removal. These procedures ensure that the samples are collected, handled, and documented in compliance with California Administration Code Title 23: Waters; Chapter 3: Water Resources Control Board; Subchapter 16: Underground Storage Tank Regulations (Title 23). Cambria's sampling procedures are based on guidelines contained in the California State Regional Water Quality Control Board Tri-Regional Staff Recommendations for Preliminary Evaluation and Investigation of Underground Tank Sites dated August 10, 1990.

Piping and Dispenser Removal Sampling

The objective of sample collection during routine dispenser and piping removals is to determine whether hydrocarbons or other stored chemicals have leaked to the subsurface. We collect one soil sample from the native soil beneath each dispenser unit, at each piping elbow, and at every 20 ft of product piping, as applicable.

The soil samples are collected in steam cleaned brass or steel tubes from either a driven split-spoon type sampler or the bucket of a backhoe. When a backhoe is used, approximately three inches of soil are scraped from the surface and the tube is driven into the exposed soil.

Upon removal from the split-spoon sampler or the backhoe, the samples are trimmed flush, capped with Teflon sheets and plastic end caps, labeled, logged and refrigerated for delivery under chain of custody to a State certified analytic laboratory.

ATTACHMENT B

Laboratory Analytical Reports for Soil

Sequoia Analytical

680[redacted]apeake Drive, Redwood City, CA 940[redacted] (650) 364-9600 FAX (650) 364-9233
404[redacted]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
1144 65th St. Suite C
Oakland, CA 94608
Attention: Maureen Feineman

Project: Shell 318 S. Livermore

Enclosed are the results from samples received at Sequoia Analytical on May 15, 1998. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE COLLECTED	TEST METHOD
9805B21 -01	SOLID, WO-1	05/13/98	TRPH (SM 5520 E&F)
9805B21 -01	SOLID, WO-1	05/13/98	Halogen. Volatiles, Solid
9805B21 -01	SOLID, WO-1	05/13/98	Cadmium by ICP
9805B21 -01	SOLID, WO-1	05/13/98	Chromium by ICP
9805B21 -01	SOLID, WO-1	05/13/98	Nickel by ICP
9805B21 -01	SOLID, WO-1	05/13/98	Lead by ICP
9805B21 -01	SOLID, WO-1	05/13/98	Zinc by ICP
9805B21 -01	SOLID, WO-1	05/13/98	Purgeable TPH/BTEX/MTBE
9805B21 -01	SOLID, WO-1	05/13/98	TPHD_S Extractable TPH

Please contact me if you have any questions. In the meantime, thank you for the opportunity to work with you on this project.

Very truly yours,

SEQUOIA ANALYTICAL

Peggy Penner
Project Manager

Sequoia Analytical

680[redacted]apeake Drive, Redwood City, CA 940[redacted] (650) 364-9600 FAX (650) 364-9233
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Cambria
1144 65th St. Suite C
Oakland, CA 94608

Attention: Maureen Feineman

Client Proj. ID: Shell 318 S. Livermore

Lab Proj. ID: 9805B21

Sampled: 05/13/98
Received: 05/15/98
Analyzed: see below

Reported: 06/01/98

LABORATORY ANALYSIS

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9805B21-01				
Sample Desc : **SOLID,WO-1**				
Cadmium by ICP	mg/Kg	05/19/98	0.50	N.D.
Chromium by ICP	**mg/Kg**	**05/19/98**	**0.50**	**33**
Lead by ICP	**mg/Kg**	**05/19/98**	**5.0**	**20**
Nickel by ICP	**mg/Kg**	**05/19/98**	**2.5**	**77**
TRPH (SM 5520 E&F)	mg/Kg	05/21/98	50	N.D.
Zinc by ICP	**mg/Kg**	**05/19/98**	**0.50**	**38**

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

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Penner
Project Manager

Sequoia Analytical

680[redacted]apeake Drive, Redwood City, CA 940[redacted] (650) 364-9600 FAX (650) 364-9233
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Cambria	Client Proj. ID: Shell 318 S. Livermore	Sampled: 05/13/98
1144 65th St. Suite C	Sample Descript: WO-1	Received: 05/15/98
Oakland, CA 94608	Matrix: SOLID	Extracted: 05/26/98
	Analysis Method: EPA 8010	Analyzed: 05/27/98
Attention: Maureen Feineman	Lab Number: 9805B21-01	Reported: 06/01/98

QC Batch Number: GC052698OVOAEXA
Instrument ID: GCHP09

Halogenated Volatile Organics (EPA 8010)

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Bromodichloromethane	25	N.D.
Bromoform	25	N.D.
Bromomethane	50	N.D.
Carbon Tetrachloride	25	N.D.
Chlorobenzene	25	N.D.
Chloroethane	50	N.D.
2-Chloroethylvinyl ether	50	N.D.
Chloroform	25	N.D.
Chloromethane	50	N.D.
Dibromochloromethane	25	N.D.
1,2-Dichlorobenzene	25	N.D.
1,3-Dichlorobenzene	25	N.D.
1,4-Dichlorobenzene	25	N.D.
1,1-Dichloroethane	25	N.D.
1,2-Dichloroethane	25	N.D.
1,1-Dichloroethene	25	N.D.
cis-1,2-Dichloroethene	25	N.D.
trans-1,2-Dichloroethene	25	N.D.
1,2-Dichloropropane	25	N.D.
cis-1,3-Dichloropropene	25	N.D.
trans-1,3-Dichloropropene	25	N.D.
Methylene chloride	250	N.D.
1,1,2,2-Tetrachloroethane	25	N.D.
Tetrachloroethene	25	N.D.
1,1,1-Trichloroethane	25	N.D.
1,1,2-Trichloroethane	25	N.D.
Trichloroethene	25	N.D.
Trichlorofluoromethane	25	N.D.
Vinyl chloride	50	N.D.

Surrogates	Control Limits %		% Recovery
1-Chloro-2-fluorobenzene	60	130	112
4-Bromofluorobenzene	60	140	88

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

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Penner
Project Manager

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Cambria	Client Proj. ID: Shell 318 S. Livermore	Sampled: 05/13/98
1144 65th St. Suite C	Sample Descript: WO-1	Received: 05/15/98
Oakland, CA 94608	Matrix: SOLID	Extracted: 05/27/98
	Analysis Method: 8015Mod/8020	Analyzed: 05/27/98
Attention: Maureen Feineman	Lab Number: 9805B21-01	Reported: 06/01/98

QC Batch Number: GC052798BTEXEXA
Instrument ID: GCHP18

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	N.D.
Methyl t-Butyl Ether	0.025	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	99
4-Bromofluorobenzene	60	140	97

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

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Penner
Project Manager

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Cambria	Client Proj. ID: Shell 318 S. Livermore	Sampled: 05/13/98
1144 65th St. Suite C	Sample Descript: WO-1	Received: 05/15/98
Oakland, CA 94608	Matrix: SOLID	Extracted: 05/18/98
	Analysis Method: EPA 8015 Mod	Analyzed: 05/19/98
Attention: Maureen Feineman	Lab Number: 9805B21-01	Reported: 06/01/98

QC Batch Number: GC0518980HBPEXD
Instrument ID: GCHP5B

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel	1.0	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	85

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

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Renner
Project Manager

Sequoia Analytical

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Cambria
1144 65th St., Ste. C
Oakland, CA 94608
Attention: Maureen Feineman

Client Project ID: Shell 318 S. Livermore

QC Sample Group: 9805B21-01

Reported: Jun 1, 1998

QUALITY CONTROL DATA REPORT

Matrix: Solid
Method: EPA 8020
Analyst: R. GECKLER

ANALYTE	Benzene	Toluene	Ethylbenzene	Xylenes
QC Batch #:	GC052798BTEXEXA			
Sample No.:	GS9805D69-2			
Date Prepared:	5/27/98	5/27/98	5/27/98	5/27/98
Date Analyzed:	5/27/98	5/27/98	5/27/98	5/27/98
Instrument I.D.#:	GCHP18	GCHP18	GCHP18	GCHP18
ample Conc., mg/Kg:	N.D.	N.D.	N.D.	N.D.
Conc. Spiked, mg/Kg:	0.20	0.20	0.20	0.60
Matrix Spike, mg/Kg:	0.20	0.19	0.20	0.59
% Recovery:	100.0	95	100.0	98
Matrix ike Duplicate, mg/Kg:	0.20	0.20	0.20	0.59
% Recovery:	100.0	100.0	100.0	98
elative % Difference:	0.0	5.1	0 0	0.0
RPD Control Limits:	0-25	0-25	0-25	0-25

LCS Batch#:	GSBLK052798A			
Date Prepared:	5/27/98	5/27/98	5/27/98	5/27/98
Date Analyzed:	5/27/98	5/27/98	5/27/98	5/27/98
Instrument I.D.#:	GCHP18	GCHP18	GCHP18	GCHP18
Conc. Spiked, mg/Kg:	0.20	0.20	0.20	0.60
Recovery, mg/Kg:	0.23	0.22	0.22	0.67
LCS % Recovery:	115	110	110	112

Percent Recovery Control Limits:

MS/MSD	60-140	60-140	60-140	60-140
LCS	70-130	70-130	70-130	70-130

Quality Assurance Statement: All standard operating procedures and quality control requirements have been met.

SEQUOIA ANALYTICAL

Peggy Penner
Project Manager

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

Sequoia Analytical

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Cambria
1144 65th St., Ste. C
Oakland, CA 94608
Attention: Maureen Feineman

Client Project ID: Shell 318 S. Livermore

QC Sample Group: 9805B21-01

Reported: Jun 1, 1998

QUALITY CONTROL DATA REPORT

Matrix: Solid
Method: EPA 8015M
Analyst: A. PORTER

ANALYTE Diesel

QC Batch #: GC0518980HBPEXD

Sample No.: 9805942-1
Date Prepared: 5/15/98
Date Analyzed: 5/18/98
Instrument I.D.#: GCHP5B

ample Conc., mg/Kg: 15 mg/Kg
Conc. Spiked, mg/Kg: 17

Matrix Spike, mg/Kg: 22
% Recovery: 41

Matrix
ike Duplicate, mg/Kg: 19
% Recovery: 24

elative % Difference: 52

RPD Control Limits: 0-50

LCS Batch#: BLK051898DS

Date Prepared: 5/18/98
Date Analyzed: 5/19/98
Instrument I.D.#: GCHP5B

Conc. Spiked, mg/Kg: 17

Recovery, mg/Kg: 14
LCS % Recovery: 82

Percent Recovery Control Limits:

MS/MSD	50-150
LCS	60-140

Quality Assurance Statement: All standard operating procedures and quality control requirements have been met.

SEQUOIA ANALYTICAL

Peggy Penner
Project Manager

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

Sequoia Analytical

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Cambria
1144 65th St., Ste. C
Oakland, CA 94608
Attention: Maureen Feineman

Client Project ID: Shell 318 S. Livermore

QC Sample Group: 9805B21-01

Reported: Jun 1, 1998

QUALITY CONTROL DATA REPORT

Matrix: Solid
Method: EPA 8010
Analyst: M. McLachlan

ANALYTE	1,1-DCE	TCE	Chlorobenzene
QC Batch #:	GC0526980VOAEXA		
Sample No.:	9805824-01		
Date Prepared:	5/20/98	5/20/98	5/20/98
Date Analyzed:	5/22/98	5/22/98	5/22/98
Instrument I.D.#:	gchp09	gchp09	gchp09
ample Conc., mg/Kg:	N.D.	N.D.	N.D.
Conc. Spiked, mg/Kg:	50	50	50
Matrix Spike, mg/Kg:	40	50	41
% Recovery:	80	100.0	82
Matrix ike Duplicate, mg/Kg:	41	50	40
% Recovery:	82	100.0	80
elative % Difference:	2.5	0.0	2.5
RPD Control Limits:	0-25	0-25	0-25

LCS Batch#:	VSBLK052698BS		
Date Prepared:	5/26/98	5/26/98	5/26/98
Date Analyzed:	5/29/98	5/29/98	5/29/98
Instrument I.D.#:	gchp09	gchp09	gchp09
Conc. Spiked, mg/Kg:	50	50	50
Recovery, mg/Kg:	47	54	43
LCS % Recovery:	94	108	86

Percent Recovery Control Limits:

MS/MSD	65-135	70-130	70-130
LCS	65-135	70-130	70-130

Quality Assurance Statement: All standard operating procedures and quality control requirements have been met.

SEQUOIA ANALYTICAL

Peggy Penner
Project Manager

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

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

Client Project ID: Shell 318 S. Livermore
Matrix: Solid
Work Order #: 9805B21 -01
Reported: Jun 4, 1998

QUALITY CONTROL DATA REPORT

Analyte:	Beryllium	Cadmium	Chromium	Nickel
QC Batch#:	ME0519986010MDE	ME0519986010MDE	ME0519986010MDE	ME0519986010MDE
Analy. Method:	EPA 6010	EPA 6010	EPA 6010	EPA 6010
Prep. Method:	EPA 3050	EPA 3050	EPA 3050	EPA 3050
Analyst:	R. Butler	R. Butler	R. Butler	R. Butler
MS/MSD #:	980593105	980593105	980593105	980593105
Sample Conc.:	N.D.	N.D.	28	29
Prepared Date:	5/19/98	5/19/98	5/19/98	5/19/98
Analyzed Date:	5/19/98	5/19/98	5/19/98	5/19/98
Instrument I.D.#:	MTJA5	MTJA5	MTJA5	MTJA5
Conc. Spiked:	50 mg/Kg	50 mg/Kg	50 mg/Kg	50 mg/Kg
Result:	46	48	75	76
MS % Recovery:	92	96	94	94
Dup. Result:	47	49	73	76
MSD % Recov.:	94	98	90	94
RPD:	2.2	2.1	2.7	0.0
RPD Limit:	0-20	0-20	0-20	0-20
LCS #:	BLK051998	BLK051998	BLK051998	BLK051998
Prepared Date:	5/19/98	5/19/98	5/19/98	5/19/98
Analyzed Date:	5/19/98	5/19/98	5/19/98	5/19/98
Instrument I.D.#:	MTJA5	MTJA5	MTJA5	MTJA5
Conc. Spiked:	50 mg/Kg	50 mg/Kg	50 mg/Kg	50 mg/Kg
LCS Result:	48	49	50	49
LCS % Recov.:	96	98	100	98
MS/MSD	80-120	80-120	80-120	80-120
LCS	80-120	80-120	80-120	80-120
Control Limits				

SEQUOIA ANALYTICAL

Peggy Penner
Project Manager

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

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

Sequoia Analytical

680[redacted]apeake Drive, Redwood City, CA 940[redacted] (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 Environmental Tech.	Client Project ID:	Shell 318 S. Livermore	
1144 65th St., Ste. C	Matrix:	Solid	
Oakland, CA 94608			
Attention: Maureen Feineman	Work Order #:	9805B21-01	Reported: Jun 4, 1998

QUALITY CONTROL DATA REPORT

Analyte:	Total Recoverable Petroleum Hydrocarbons
QC Batch#:	SP0518985520EXB
Analy. Method:	SM 5520EF
Prep. Method:	SM 5520EF

Analyst:	H. Olonan
MS/MSD #:	980580004
Sample Conc.:	1060
Prepared Date:	5/18/98
Analyzed Date:	5/19/98
Instrument I.D.#:	MANUAL
Conc. Spiked:	150 mg/Kg
Result:	1500
MS % Recovery:	300
Dup. Result:	1500
MSD % Recov.:	300
RPD:	0.0
RPD Limit:	0-30

LCS #:	BLK052098
Prepared Date:	5/20/98
Analyzed Date:	5/21/98
Instrument I.D.#:	MANUAL
Conc. Spiked:	150 mg/Kg
LCS Result:	120
LCS % Recov.:	80

MS/MSD	60-140
LCS	70-130
Control Limits	

SEQUOIA ANALYTICAL

Peggy Penner
Project Manager

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Cambria	Client Proj. ID: Shell 318 S. Livermore	Received: 05/15/98
1144 65th St. Suite C		
Oakland, CA 94608	Lab Proj. ID: 9805B21	Reported: 06/01/98
Attention: Maureen Feineman		

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 11 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

SEQUOIA ANALYTICAL

Peggy Penner
Project Manager

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No:

Date: 5/13/98
Page 1 of 1

Site Address: 318 S. Livermore, Livermore

WIC#: 204-4380-0303

Shell Engineer: Alex Perez
Phone No.: (510) 335-5027
Fax #: 335-5029

Consultant Name & Address: CAMBRIA ENVIRONMENTAL
1144 65th St, Suite C, Oakland, CA 94608

Consultant Contact: Maureen Feineman
Phone No.: 510 420-0700
Fax #: 420-9170

Comments:

Sampled by: Maureen Feineman

Printed Name: Maureen Feineman

Analysis Required 9805B21

LAB: Sequoia

Sample ID	Date	Sludge	Soil	Water	Air	No. of conts.	TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602)	Volatile Organics (EPA 8240) 8010 Chlorinated	Total for Disposal	Combination TPH 8015 & BTEX 8020 → MTBE 8260	Oil+Grease SM5520 B+F	Total Metals (Cd, Cr, Pb, Ni, Zn)	Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
WO-1	5/13		X			1		X		X		X	X	X						
SP-1	5/13		X			1		X		X		X	X	X					Not Submitted	

CHECK ONE (1) BOX ONLY — CT/DI

- G.W. Monitoring [ ] 4441
- Site Investigation [X] 4441
- Soil Classify/Disposal [ ] 4442
- Water Classify/Disposal [ ] 4443
- Soil/Air Rem. or Sys. O & M [ ] 4452
- Water Rem. or Sys. O & M [ ] 4453
- Other [ ]

TURN AROUND TIME

- 24 hours [ ]
- 48 hours [ ]
- 16 days [X] (Normal)
- Other [ ] .....

NOTE: Notify Lab as soon as Possible of 24/48 hrs. TAT.

UST AGENCY: ~~Alameda County~~ Livermore/Pleasanton Fire Department

Relinquished By (signature):	Printed Name:	Date:	Received (signature):	Printed Name:	Date:
Maureen Feineman	Maureen Feineman	5/13/98		Nick Castro	5/15/98
		Time: 0910			Time: 0910
Relinquished By (signature):	Printed Name: Nick Castro	Date: 5/15/98	Received (signature):	Printed Name:	Date:
		Time:			Time:
Relinquished By (signature):	Printed Name:	Date:	Received (signature): Evangeline B.	Printed Name: EVANGELINE BLANCO	Date: 5/15/98
		Time:			Time: 12:45

THE LABORATORY MUST PROVIDE A COPY OF THIS CHAIN-OF-CUSTODY WITH INVOICE AND RESULTS