STID 4109
Proj 4590 A

CAMBRIA

August 4, 1997

Mr. Rob Weston
Alameda County Department of Environmental Health
1131 Harbor Bay Parkway
Alameda, California 94502

Re: **Stockpile, Piping, and Dispenser Soil Sampling Report**
Shell Service Station
11989 Dublin Boulevard
Dublin, California
WIC #204-2277-0204
Cambria Project #240-548-001

Dear Mr. Weston:

On behalf of Shell Oil Products Company (Shell), Cambria Environmental Technology, Inc. (Cambria) is submitting this report presenting the results of the May 30, June 17, and June 20, 1997 soil sampling at the site referenced above. The May 30, 1997 sampling was conducted to classify soil stockpiled after electrical conduit trenching. All other sampling was conducted following the removal of four gasoline dispensers, two diesel fuel dispensers, and associated piping. Presented below are the site conditions, sampling activities, and analytic results.

SITE CONDITIONS

The site is located at the intersection of Dublin Boulevard and San Ramon Road in Dublin, California. This active Shell service station was recently remodeled by K. E. Curtis Construction of Castro Valley, California (K. E. Curtis).

K. E. Curtis excavated a trench (Figure 1), 3 to 4 feet deep and approximately 60 feet long, in which to route electrical conduit to the site facilities. Approximately two weeks after the trenching activities, K. E. Curtis removed two gasoline dispensers and one diesel fuel dispenser from each of two pump islands, along with associated piping (Figure 1).

SAMPLING ACTIVITIES AND SAMPLE ANALYSIS

Cambria's standard procedures for dispenser and piping sampling are presented as Attachment A. The samples were analyzed by Sequoia Analytical of Redwood City, California (Sequoia).

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

Utility Trench Stockpile Sampling: On May 30, 1997, Mr. Josh Bergstrom of Cambria collected four soil samples from the utility trench stockpile. The samples were analyzed individually for total purgable petroleum hydrocarbons as gasoline (TPPH) and benzene, toluene, ethylbenzene, and xylenes (BTEX). In addition, one composite sample was analyzed for California metals (CAM 17) and total organic lead.

Dispenser Sampling: On June 17, 1997, Mr. Bergstrom collected soil samples beneath six dispenser locations under the direction of Mr. Rob Weston of the Alameda County Department of Environmental Health (ACDEH). Samples were taken from approximately 4 to 5 feet below grade. Samples were analyzed for total extractable petroleum hydrocarbons as diesel (TEPH), TPPH, BTEX, and methyl tert-butyl ether (MTBE).

Piping Sampling: On June 20, 1997, Mr. Bergstrom collected soil samples beneath the dispensers' associated piping. Dispenser product pipes and ventilation pipes were identified on opposite sides of the pump islands. Samples were analyzed for TEPH, TPPH, BTEX, and MTBE.

Additional Stockpile Sampling: Additionally on June 20, 1997, Mr. Bergstrom collected eight soil samples from the stockpile produced during trenching and renovation activities. The samples were analyzed individually for TPPH and BTEX. Two composite samples were analyzed for CAM 17.

ANALYTIC RESULTS

Dispenser and piping hydrocarbon analytic results and stockpile sample hydrocarbon analytical results are summarized in Tables 1 and 2, respectively. The laboratory analytic reports are presented as Attachment B.

Utility Trench Stockpile Results: No TPPH, BTEX, or total organic lead were detected in the four samples collected on May 30, 1997. Detected CAM 17 metal concentrations were well below total threshold limit concentrations (TTLC). The stockpile was subsequently transported to Forward Landfill of Stockton, California (Forward) for disposal.

Dispenser and Piping Results: Sample TS-7 was the only sample to contain more than 100 milligrams per kilogram (mg/kg) of TPPH and more than 1,000 mg/kg of TEPH with concentrations of 690 mg/kg TPPH and 12,000 mg/kg TEPH. Only sample D-2 contained detectable concentrations of benzene at 0.55 mg/kg.

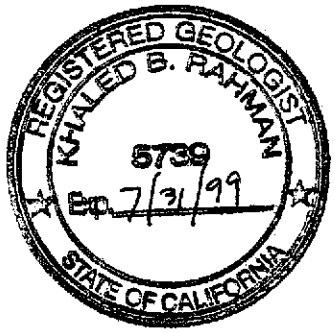
Additional Stockpile Results: None of the soil samples contained more than 100 mg/kg of TPPH, and only one soil sample contained more than 1,000 mg/kg of TEPH (SP-2 at 2,600 mg/kg). Only trace BTEX constituent concentrations were detected. Detected CAM 17 metal concentrations were well below total threshold limit concentrations (TTLC). The stockpile was subsequently transported to Forward for disposal.

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.

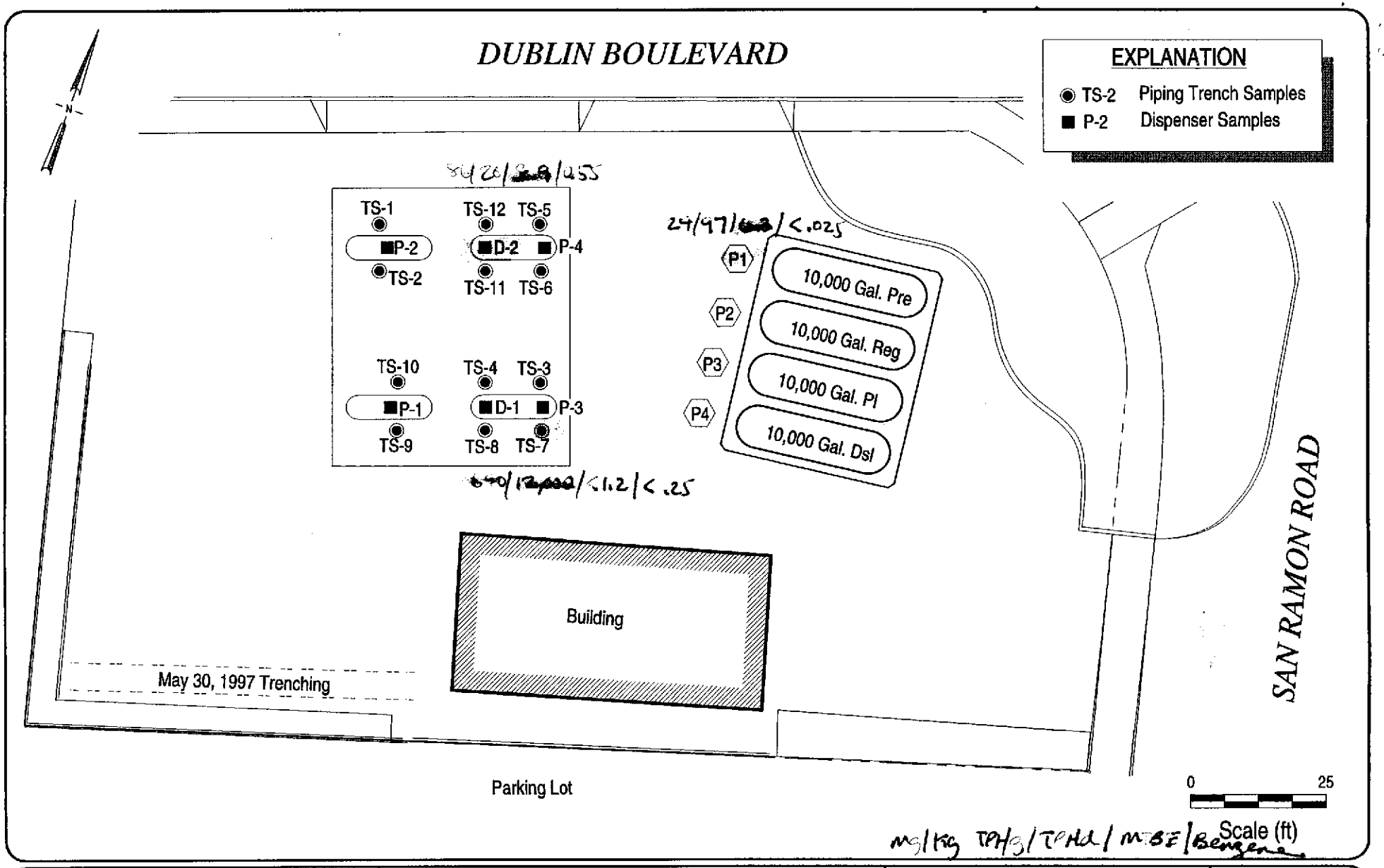
Khaled B. Rahman, R.G., C.H.G.
Senior Geologist



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

cc: Dan Kirk, Shell Oil Products Company, P.O. Box 4023, Concord, CA 94524

F:\PROJECT\SHELL\Dub11989\Reports\Dispenser Sampling Report.WPD



CAMBRIA Environmental Technology, Inc.	Shell Service Station 11989 Dublin Boulevard Dublin, California F:\PROJECT\SHELL\DUB11989\FIGURES\DSP-SMPL.DWG	Dispenser and Trench (Piping) Samples	FIGURE 1

07/10/97

Table 1. Dispenser and Pipe Trench Sample Analytic Data - Shell Service Station - WIC# 204-2277-0204, 11989 Dublin Boulevard, Dublin, California

Sample ID	TPPH	TEPH	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes
	(Concentrations reported in milligrams per kilogram)						
June 17, 1997 Samples:							
P-1	24	97	6.3	<0.025	0.27	0.098	2.5
P-2	<1.0	<1.0	<0.025	<0.0050	<0.0050	<0.0050	<0.0050
P-3	<1.0	1.4	<0.025	<0.0050	<0.0050	<0.0050	<0.0050
P-4	2	160	0.027	<0.0050	<0.0050	<0.0050	0.015
D-1	<1.0	9.9	0.060	<0.0050	0.014	0.0062	0.068
D-2	86	20	8.9	0.55	3.3	0.99	7.8
June 20, 1997 Samples:							
TS-1	<1.0	<1.0	<0.025	<0.0050	<0.0050	<0.0050	<0.0050
TS-2	<1.0	<1.0	<0.025	<0.0050	<0.0050	<0.0050	<0.0050
TS-3	<1.0	<1.0	<0.025	<0.0050	<0.0050	<0.0050	<0.0050
TS-4	<1.0	<1.0	<0.025	<0.0050	<0.0050	<0.0050	<0.0050
TS-5	<1.0	4.6	<0.025	<0.0050	<0.0050	<0.0050	<0.0050
TS-6	<1.0	1.7	<0.025	<0.0050	<0.0050	<0.0050	<0.0050
TS-7	690	12,000	<1.2	<0.25	<0.25	<0.25	2.2
TS-8	<1.0	1.3	<0.025	<0.0050	<0.0050	<0.0050	<0.0050
TS-9	<1.0	2.2	<0.025	<0.0050	<0.0050	<0.0050	<0.0050
TS-10	<1.0	2.6	<0.025	<0.0050	<0.0050	<0.0050	<0.0050
TS-11	<1.0	11	<0.025	<0.0050	<0.0050	<0.0050	0.0051
TS-12	<1.0	3.7	<0.025	<0.0050	<0.0050	<0.0050	<0.0050

Abbreviations/Notes:

TPPH = Total purgable petroleum hydrocarbons as gasoline by modified EPA method 8015.
TEPH = Total extractable petroleum hydrocarbons as diesel by modified EPA method 8015.
MTBE = Methyl tert-butyl ether by EPA Method 8020.
Benzene, ethylbenzene, toluene, xylenes by EPA method 8020.

All samples taken at approximately 5 feet below grade.

Table 2. Stockpile Sample Analytic Data, Petroleum Hydrocarbon Constituents - Shell Service Station - WIC# 204-2277-0204, 11989 Dublin Boulevard, Dublin, California

Sample ID	TPPH	TEPH	Benzene	Toluene	Ethylbenzene	Xylenes
May 30, 1997 Samples:						
SP-1	<1.0	---	<0.0050	<0.0050	<0.0050	<0.0050
SP-2	<1.0	---	<0.0050	<0.0050	<0.0050	0.024
SP-3	<1.0	---	<0.0050	<0.0050	<0.0050	<0.0050
SP-4	<1.0	---	<0.0050	<0.0050	<0.0050	<0.0050
June 20, 1997 Samples:						
SP-1	<1.0	9.0	<0.0050	<0.0050	<0.0050	<0.0050
SP-2	50	2,600	<0.10	<0.10	<0.10	<0.10
SP-3	<1.0	4.8	<0.0050	<0.0050	<0.0050	<0.0050
SP-4	<1.0	1.5	<0.0050	<0.0050	<0.0050	<0.0050
SP-5	<1.0	4.5	<0.0050	<0.0050	<0.0050	<0.0050
SP-6	<1.0	2.2	<0.0050	<0.0050	<0.0050	<0.0050
SP-7	8.1	620	0.046	0.042	<0.010	0.16
SP-8	2.4	7.6	<0.0050	0.0074	0.0066	0.079

Abbreviations/Notes:

TPPH = Total purgable petroleum hydrocarbons as gasoline by modified EPA method 8015.
TEPH = Total extractable petroleum hydrocarbons as diesel by modified EPA method 8015.
Benzene, ethylbenzene, toluene, xylenes by EPA method 8020.

ATTACHMENT A

Standard Piping and Dispenser Removal
and Stockpile 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.

SOIL STOCKPILE SAMPLING PROCEDURES

After confirming a release from underground gasoline storage tanks, product piping or pump islands, soil excavation is often completed to remove hydrocarbon bearing soils which for pose a threat to ground water quality beneath a site. The removed soils are typically stockpiled on site pending the results of laboratory analysis for soil samples collected from the stockpiles. Cambria has developed standard sampling procedures to characterize stockpiled soils for on- or off-site treatment, or offsite disposal. The procedures ensure that the samples are collected, handled, and documented in compliance with Federal, State and local regulatory agency guidelines.

Cambria's stockpile sampling procedures are based primarily on Bay Area Air Quality Management District regulations[1] and those of the anticipated landfill. One composite soil sample is collected for every 20 to 50 cubic yards of excavated soil. Each composite sample consists of four discreet soil samples collected from the stockpile which are combined in the laboratory. The samples are collected by dividing each 20 to 50 cubic yard volume into 4 sectors. One discreet soil sample is collected from each sector.

The samples are collected by digging away approximately 2 ft of the surface soils. A clean brass tube is then driven into the exposed soils. The ends of the tube are trimmed flush, capped with Teflon tape and plastic end caps, labeled, refrigerated and transported under chain of custody to a State certified laboratory.

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1 San Francisco Bay Area Air Quality Management District, 1989, Regulation 8, Organic Compounds, Rule 40, Aeration of Contaminated Soil and Removal of Underground Storage Tanks, February 15, 1989 7 pp.

ATTACHMENT B

Laboratory Analytic Reports for Soil

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 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

Cambria	Client Proj. ID: Shell 204-2277-0204, Dublin	Sampled: 06/20/97
1144 65th St. Suite C	Sample Descript: TS-10	Received: 06/20/97
Oakland, CA 94608	Matrix: SOLID	Extracted: 06/27/97
	Analysis Method: 8015Mod/8020	Analyzed: 06/27/97
Attention: Josh Bergstrom	Lab Number: 9706C46-10	Reported: 07/02/97

QC Batch Number: GC062797BTEXEXB
Instrument ID: GCHP07

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	79
4-Bromofluorobenzene	60	140	82

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

SEQUOIA ANALYTICAL - ELAP #1210

Kevin Follett
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 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

Cambria	Client Proj. ID: Shell 204-2277-0204, Dublin	Sampled: 06/20/97
1144 65th St. Suite C	Sample Descript: TS-11	Received: 06/20/97
Oakland, CA 94608	Matrix: SOLID	Extracted: 06/27/97
	Analysis Method: 8015Mod/8020	Analyzed: 06/27/97
Attention: Josh Bergstrom	Lab Number: 9706C46-11	Reported: 07/02/97

QC Batch Number: GC062797BTEXEXB
Instrument ID: GCHP07

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**	**0.0051**
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	80
4-Bromofluorobenzene	60	140	80

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

SEQUOIA ANALYTICAL - ELAP #1210

Kevin Follett
Project Manager

Sequoia Analytical

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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

Cambria	Client Proj. ID: Shell 204-2277-0204, Dublin	Sampled: 06/20/97
1144 65th St. Suite C	Sample Descript: TS-12	Received: 06/20/97
Oakland, CA 94608	Matrix: SOLID	Extracted: 06/27/97
	Analysis Method: 8015Mod/8020	Analyzed: 06/27/97
Attention: Josh Bergstrom	Lab Number: 9706C46-12	Reported: 07/02/97

QC Batch Number: GC062797BTEXEXB
Instrument ID: GCHP07

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	80
4-Bromofluorobenzene	60	140	80

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

SEQUOIA ANALYTICAL - ELAP #1210

Kevin Follett
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 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

Cambria Environmental.Tech.	Client Project ID:	Shell 204-2277-0204, Dublin	
1144 65th St., Ste. C	Matrix:	Solid	
Oakland, CA 94608			
Attention: Josh Bergstrom	Work Order #:	9706C46 -01-12	Reported: Jul 9, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Diesel
QC Batch#:	GC0626970HBPEXA
Analy. Method:	EPA 8015M
Prep. Method:	EPA 3550
Analyst:	B. Sullivan
MS/MSD #:	970691301
Sample Conc.:	97
Prepared Date:	6/26/97
Analyzed Date:	6/27/97
Instrument I.D.#:	GCHP19
Conc. Spiked:	25 mg/Kg
Result:	124
MS % Recovery:	108
Dup. Result:	160
MSD % Recov.:	252
RPD:	25
RPD Limit:	0-50

LCS #:	BLK062697
Prepared Date:	6/26/97
Analyzed Date:	6/27/97
Instrument I.D.#:	GCHP19
Conc. Spiked:	25 mg/Kg
LCS Result:	20
LCS % Recov.:	80

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

SEQUOIA ANALYTICAL

Kevin Follett
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

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD

Serial No: ______

Date: 6/20/97
Page 1 of 3

Site Address: 11989 Dublin, Dublin

WIC#: 204-22773-0204

Shell Engineer: Dan Kirk
Phone No.: 510 675-6141
Fax #: 675-6130

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

Consultant Contact: Josh Bergstrom
Phone No.: 510 420-0700
Fax #: 420-9170

Comments:

Sampled by: [signature]

Printed Name: Josh Bergstrom

LAB: Sequoia

CHECK ONE (1) BOX ONLY	CT/DT	TURN AROUND TIME
G.W. Monitoring [ ]	4461	24 hours [ ]
Site Investigation [X]	4441	48 hours [ ]
Soil Classify/Disposal [ ]	4442	15 days [X] (Normal)
Water Classify/Disposal [ ]	4443	Other [ ] ______
Soil/Air Rem. or Sys. O & M [ ]	4452	NOTE: Notify Lab as soon as Possible of 24/48 hrs. TAT.
Water Rem. or Sys. O & M [ ]	4453	
Other [ ]		9706C46

UST AGENCY: Alameda County

Analysis Required

Sample ID	Date	Sludge	Soil	Water	Air	No. of conts.	TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602) / MTBE	Volatile Organics (EPA 8240)	Test for Disposal	Combination TPH 8015 & BTEX 8020			Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
TS-1	6/20		X			1	X	X	X											
TS-2	6/20		X			1	X	X	X											
TS-3	6/20		X			1	X	X	X											
TS-4	6/20		X			1	X	X	X											
TS-5	6/20		X			1	X	X	X											
TS-6	6/20		X			1	X	X	X											
TS-7	6/20		X			1	X	X	X											
TS-8	6/20		X			1	X	X	X											

Relinquished By (signature):	Printed Name:	Date/Time	Received (signature):	Printed Name:	Date/Time
[signature]	[signature] Bergstrom	Date: 6/20/97 Time: 4:07	Patrick Parker UX 106	PATRICK PARKER	Date: 6-20-97 Time: 1609
		Date: Time:			Date: Time:
		Date: Time:	Mara Grislis	Mara Grislis	Date: 6/20/97 Time: 1800

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

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 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

Cambria
1144 65th St. Suite C
Oakland, CA 94608
Attention: Josh Bergstrom

Client Proj. ID: Shell 204-2277-0204, Dublin
Lab Proj. ID: 9706C46

Received: 06/20/97
Reported: 07/02/97

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 31 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

SEQUOIA ANALYTICAL

Kevin Follett
Project Manager

Sequoia Analytical

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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Cambria	Client Proj. ID: Shell 204-2277-0204 Dublin	Sampled: 06/20/97
1144 65th St. Suite C	Sample Descript: SP-(1-4) comp	Received: 06/20/97
Oakland, CA 94608	Matrix: SOLID	Extracted: 06/26/97
	Analysis Method: Title 22	Analyzed: 06/27/97
Attention: Josh Bergstrom	Lab Number: 9706C73-01	Reported: 06/27/97

QC Batch Number: ME0626976010MDE

Inorganic Persistent and Bioaccumulative Toxic Substances : TTLC

Analyte	Max. Limit mg/Kg	Detection Limit mg/Kg	Sample Results mg/Kg
Antimony, Sb	**500**	**5.0**	**17**
Arsenic, As	**500**	**5.0**	**16**
Barium, Ba	**10000**	**5.0**	**78**
Beryllium, Be	75	0.50	N.D.
Cadmium, Cd	100	0.50	N.D.
Chromium, Cr	**2500**	**0.50**	**39**
Cobalt, Co	**8000**	**2.5**	**10**
Copper, Cu	**2500**	**0.50**	**28**
Lead, Pb	**1000**	**5.0**	**7.8**
Mercury, Hg	**20**	**0.020**	**0.055**
Molybdenum, Mo	**3500**	**2.5**	**3.7**
Nickel, Ni	**2000**	**2.5**	**38**
Selenium, Se	100	5.0	N.D.
Silver, Ag	500	0.50	N.D.
Thallium, Tl	**700**	**5.0**	**11**
Vanadium, V	**2400**	**2.5**	**47**
Zinc, Zn	**5000**	**0.50**	**84**

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

SEQUOIA ANALYTICAL - ELAP #1210

Kevin Follett
Project Manager

Sequoia Analytical

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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Cambria	Client Proj. ID: Shell 204-2277-0204 Dublin	Sampled: 06/20/97
1144 65th St. Suite C	Sample Descript: SP-1	Received: 06/20/97
Oakland, CA 94608	Matrix: SOLID	Extracted: 06/23/97
	Analysis Method: EPA 8015 Mod	Analyzed: 06/26/97
Attention: Josh Bergstrom	Lab Number: 9706C73-03	Reported: 06/27/97

QC Batch Number: GC0623970HBPEXD
Instrument ID: GCHP4A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel	**1.0**	**9.0**
Chromatogram Pattern:		
Unidentified HC		**C9-C24**

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	97

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

SEQUOIA ANALYTICAL - ELAP #1210

Kevin Follett
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 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

Cambria	Client Proj. ID: Shell 204-2277-0204 Dublin	Sampled: 06/20/97
1144 65th St. Suite C	Sample Descript: SP-2	Received: 06/20/97
Oakland, CA 94608	Matrix: SOLID	Extracted: 06/25/97
	Analysis Method: EPA 8015 Mod	Analyzed: 06/26/97
Attention: Josh Bergstrom	Lab Number: 9706C73-04	Reported: 06/27/97

QC Batch Number: GC0623970HBPEXD
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel	**100**	**2600**
Chromatogram Pattern: **Weathered Diesel**		**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 #1210

Kevin Follett
Project Manager

Sequoia Analytical

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Cambria	Client Proj. ID: Shell 204-2277-0204 Dublin	Sampled: 06/20/97
1144 65th St. Suite C	Sample Descript: SP-3	Received: 06/20/97
Oakland, CA 94608	Matrix: SOLID	Extracted: 06/25/97
	Analysis Method: EPA 8015 Mod	Analyzed: 06/26/97
Attention: Josh Bergstrom	Lab Number: 9706C73-05	Reported: 06/27/97

QC Batch Number: GC0623970HBPEXD
Instrument ID: GCHP4A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel	1.0	4.8
Chromatogram Pattern:		
Unidentified HC		C9-C24

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	83

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

SEQUOIA ANALYTICAL - ELAP #1210

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Project Manager

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Cambria	Client Proj. ID: Shell 204-2277-0204 Dublin	Sampled: 06/20/97
1144 65th St. Suite C	Sample Descript: SP-4	Received: 06/20/97
Oakland, CA 94608	Matrix: SOLID	Extracted: 06/23/97
	Analysis Method: EPA 8015 Mod	Analyzed: 06/26/97
Attention: Josh Bergstrom	Lab Number: 9706C73-06	Reported: 06/27/97

QC Batch Number: GC0623970HBPEXD
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel	1.0	1.5
Chromatogram Pattern:		
Unidentified HC		**C9-C24**

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	83

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

SEQUOIA ANALYTICAL - ELAP #1210

Kevin Follett
Project Manager

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Cambria	Client Proj. ID: Shell 204-2277-0204 Dublin	Sampled: 06/20/97
1144 65th St. Suite C	Sample Descript: SP-5	Received: 06/20/97
Oakland, CA 94608	Matrix: SOLID	Extracted: 06/23/97
	Analysis Method: EPA 8015 Mod	Analyzed: 06/26/97
Attention: Josh Bergstrom	Lab Number: 9706C73-07	Reported: 06/27/97

QC Batch Number: GC0623970HBPEXD
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel	**1.0**	**4.5**
Chromatogram Pattern:		
Weathered Diesel		**C9-C24**

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	86

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

SEQUOIA ANALYTICAL - ELAP #1210

Kevin Follett
Project Manager

Sequoia Analytical

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Cambria	Client Proj. ID: Shell 204-2277-0204 Dublin	Sampled: 06/20/97
1144 65th St. Suite C	Sample Descript: SP-6	Received: 06/20/97
Oakland, CA 94608	Matrix: SOLID	Extracted: 06/23/97
	Analysis Method: EPA 8015 Mod	Analyzed: 06/26/97
Attention: Josh Bergstrom	Lab Number: 9706C73-08	Reported: 06/27/97

QC Batch Number: GC0623970HBPEXD
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel	1.0	2.2
Chromatogram Pattern: **Weathered Diesel**		C9-C24

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	78

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

SEQUOIA ANALYTICAL - ELAP #1210

Kevin Follett
Project Manager

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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Cambria	Client Proj. ID: Shell 204-2277-0204 Dublin	Sampled: 06/20/97
1144 65th St. Suite C	Sample Descript: SP-7	Received: 06/20/97
Oakland, CA 94608	Matrix: SOLID	Extracted: 06/25/97
	Analysis Method: EPA 8015 Mod	Analyzed: 06/27/97
Attention: Josh Bergstrom	Lab Number: 9706C73-09	Reported: 06/27/97

QC Batch Number: GC0623970HBPEXD
Instrument ID: GCHP4B

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel	**20**	**620**
Chromatogram Pattern:		
Weathered Diesel		**C9-C24**

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	436 Q

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

SEQUOIA ANALYTICAL - ELAP #1210

Kevin Follett
Project Manager

Sequoia Analytical

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Cambria	Client Proj. ID: Shell 204-2277-0204 Dublin	Sampled: 06/20/97
1144 65th St. Suite C	Sample Descript: SP-8	Received: 06/20/97
Oakland, CA 94608	Matrix: SOLID	Extracted: 06/23/97
	Analysis Method: EPA 8015 Mod	Analyzed: 06/26/97
Attention: Josh Bergstrom	Lab Number: 9706C73-10	Reported: 06/27/97

QC Batch Number: GC0623970HBPEXD
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel	**1.0**	**7.6**
Chromatogram Pattern:		
Weathered Diesel		**C9-C24**

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	89

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

SEQUOIA ANALYTICAL - ELAP #1210

Kevin Follett
Project Manager

9706C46

ISSUED DATE: 02/17/95
CANCELS ISSUE: 11/01/92
ISSUED BY: RLG

MATERIAL: CALIFORNIA UNDERGROUND STORAGE TANK (UST) SOIL CONTAMINATED WITH GASOLINE/DIESEL

MINIMUM REQUIRED TESTING

TPH = TOTAL PETROLEUM HYDROCARBONS, DHS GC-FID MOD 8015
GASOLINE OR DIESEL AS REQUIRED.
BTXE = EPA 8020
CAM METALS = TTLC ALL:
STLC ON ALL TTLC METALS 10 X STLC MAXIMUM:
TTLC LEAD => 13 MG/KG REQUIRES ORGANIC ANALYSIS
EP TOX METALS FOR STLC METALS AT OR ABOVE
STLC REGULATORY LEVEL.

AQUATIC BIOASSAY (FISH TOX) IS ONLY TO BE RUN ON SAMPLES WITH GREATER THAN 5000 PPM TPH. COMPOSITE A MAXIMUM OF 4 SAMPLES.

AQUATIC BIOASSAY (FISH TOX) = PART 800 OF "STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER (15TH EDITION)"

LABORATORY INSTRUCTIONS (MINIMUM GUIDELINES ONLY)

- 8015/8020 TO BE BILLED AS "COMBO" WITHOUT EXCEPTION
- TPH REQUIRED FOR ALL SAMPLES.
- ALL OTHER TESTS REQUIRED TO BE RUN ON COMPOSITE(S). MAXIMUM 4 SAMPLES PER COMPOSITE.
- STLC REQUIRED FOR METALS WITH TTLC VALUE 10 X STLC MAXIMUM.
- ORGANIC ANALYSIS REQUIRED FOR TTLC LEAD OF 13 MG/KG OR GREATER WOULD REQUIRE ORGANIC ANALYSIS).
- LABORATORY IS TO SUPPLY QA/QC INFORMATION WITH ALL ANALYTICAL REPORTS.
- MAIL OR FAX ALL ANALYSIS TO PERSON REQUESTING ANALYSIS. **DO NOT** FAX OR MAIL ANALYSES TO RON GEMEINHARDT OR THE WASTE DISPOSAL COORDINATOR UNLESS SPECIFICALLY REQUESTED.
- QUESTIONS REGARDING ANALYSIS, CONTACT RON GEMEINHARDT AT (713) 241-3577.

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: _____

Date: 6/20/97
Page 3 of 3

Site Address: 11984 Dubling Dublin

WIC#: 204-2277-0204

Shell Engineer: Dan Kirk
Phone No.: 510 675-6141
Fax #: 675-6130

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

Consultant Contact: Josh Bergstrom
Phone No.: 510 420-0700
Fax #: 420-9170

Comments: Follow attached protocol !!

Sampled by: [signature]

Printed Name: Josh Bergstrom

LAB: Sequoia

CHECK ONE (1) BOX ONLY	C1/D1
G.W. Monitoring	4461
Site Investigation	4441
Soil Classify/Disposal	X 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 hr. TAT.

9706C46

UST AGENCY: _____

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)	Test for Disposal	Combination TPH 8015 & BTEX 8020	Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
13 SP-1	6/20		X			1	X	X	X			4:1 Composite for metals						
14 SP-2	6/20		X			1	X	X	X									
15 SP-3	6/20		X			1	X	X	X									
16 SP-4	6/20		X			1	X	X	X									
17 SP-5	6/20		X			1	X	X	X			4:1 Composite for metals						
18 SP-6	6/20		X			1	X	X	X									
19 SP-7	6/20		X			1	X	X	X									
20 SP-8	6/20		X			1	X	X	X									

	Printed Name	Date / Time		Printed Name	Date / Time
Relinquished By (signature): [signature]	Josh Bergstrom	Date: 6/20/97 Time: 4:12	Received (signature): Patrick Parker UX-156	PATRICK PARKER 156	Date: 6-20-97 Time: 1612
Relinquished By (signature):	Printed Name:	Date: Time:	Received (signature):	Printed Name:	Date: Time:
Relinquished By (signature):	Printed Name:	Date: Time:	Received (signature): Mara Grisli's	Printed Name: Mara Grisli's	Date: 6/20/97 Time: 1800

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

Sequoia Analytical

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Cambria Environmental Tech.	Client Project ID:	Shell 204-2277-0204 Dublin	
1144 65th St., Ste. C	Matrix:	Solid	
Oakland, CA 94608			
Attention: Josh Bergstrom	Work Order #:	9706C73-04-05, 09-10	Reported: Jul 8, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Diesel
QC Batch#:	GC0623970HBPEXD
Analy. Method:	EPA 8015M
Prep. Method:	EPA 3550
Analyst:	B. Sullivan
MS/MSD #:	9706B8403
Sample Conc.:	3.7
Prepared Date:	6/23/97
Analyzed Date:	6/24/97
Instrument I.D.#:	GCHP4
Conc. Spiked:	25 mg/Kg
Result:	26
MS % Recovery:	89
Dup. Result:	26
MSD % Recov.:	89
RPD:	0.0
RPD Limit:	0-50

LCS #:	BLK062597
Prepared Date:	6/25/97
Analyzed Date:	6/26/97
Instrument I.D.#:	GCHP5
Conc. Spiked:	25 mg/Kg
LCS Result:	20
LCS % Recov.:	80

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

SEQUOIA ANALYTICAL

Kevin Follett
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

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Cambria Environmental Tech.	Client Project ID:	Shell 204-2277-0204 Dublin	
1144 65th St., Ste. C	Matrix:	Solid	
Oakland, CA 94608			
Attention: Josh Bergstrom	Work Order #:	9706C73-01, 02	Reported: Jul 8, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Beryllium	Cadmium	Chromium	Nickel
QC Batch#:	ME0625976010MDE	ME0625976010MDE	ME0625976010MDE	ME0625976010MDE
Analy. Method:	EPA 6010	EPA 6010	EPA 6010	EPA 6010
Prep. Method:	EPA 3010	EPA 3010	EPA 3010	EPA 3010
Analyst:	R. Butler	R. Butler	R. Butler	R. Butler
MS/MSD #:	970695813	970695813	970695813	970695813
Sample Conc.:	N.D.	N.D.	68	110
Prepared Date:	6/25/97	6/25/97	6/25/97	6/25/97
Analyzed Date:	6/26/97	6/26/97	6/26/97	6/26/97
Instrument I.D.#:	MTJA2	MTJA2	MTJA2	MTJA2
Conc. Spiked:	100 mg/Kg	100 mg/Kg	100 mg/Kg	100 mg/Kg
Result:	91	94	160	190
MS % Recovery:	91	94	92	80
Dup. Result:	91	94	160	180
MSD % Recov.:	91	94	92	70
RPD:	0.0	0.0	0.0	5.4
RPD Limit:	0-20	0-20	0-20	0-20
LCS #:	BLK062597	BLK062597	BLK062597	BLK062597
Prepared Date:	6/25/97	6/25/97	6/25/97	6/25/97
Analyzed Date:	6/26/97	6/26/97	6/26/97	6/26/97
Instrument I.D.#:	MTJA2	MTJA2	MTJA2	MTJA2
Conc. Spiked:	100 mg/Kg	100 mg/Kg	100 mg/Kg	100 mg/Kg
LCS Result:	98	100	100	110
LCS % Recov.:	98	100	100	110
MS/MSD Control Limits	80-120	80-120	80-120	80-120
LCS Control Limits	80-120	80-120	80-120	80-120

SEQUOIA ANALYTICAL

Kevin Follett
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

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Cambria
1144 65th St. Suite C
Oakland, CA 94608
Attention: Paul Waite

Project: Shell 204-2277-0204, Dublin

Enclosed are the results from samples received at Sequoia Analytical on May 30, 1997.
The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE COLLECTED	TEST METHOD
9705G19 -01	SOLID, SP-1	05/30/97	TPHGBS Purgeable TPH/BTEX
9705G19 -02	SOLID, SP-2	05/30/97	TPHGBS Purgeable TPH/BTEX
9705G19 -03	SOLID, SP-3	05/30/97	TPHGBS Purgeable TPH/BTEX
9705G19 -04	SOLID, SP-4	05/30/97	TPHGBS Purgeable TPH/BTEX
9705G19 -05	SOLID, SP-(1-4) comp	05/30/97	ITTLCS Title 22: Metals, T
9705G19 -05	SOLID, SP-(1-4) comp	05/30/97	Organic Lead

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

Kevin Follett
Project Manager

Sequoia Analytical

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Cambria	Client Proj. ID: Shell 204-2277-0204, Dublin	Sampled: 05/30/97
1144 65th St. Suite C	Sample Descript: SP-1	Received: 05/30/97
Oakland, CA 94608	Matrix: SOLID	Extracted: 06/03/97
	Analysis Method: 8015Mod/8020	Analyzed: 06/04/97
Attention: Paul Waite	Lab Number: 9705G19-01	Reported: 06/11/97

QC Batch Number: GC060397BTEXEXA
Instrument ID: GCHP07

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	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	95
4-Bromofluorobenzene	60	140	90

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

SEQUOIA ANALYTICAL - ELAP #1210

Kevin Follett
Project Manager

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Cambria	Client Proj. ID: Shell 204-2277-0204, Dublin	Sampled: 05/30/97
1144 65th St. Suite C	Sample Descript: SP-3	Received: 05/30/97
Oakland, CA 94608	Matrix: SOLID	Extracted: 06/03/97
	Analysis Method: 8015Mod/8020	Analyzed: 06/04/97
Attention: Paul Waite	Lab Number: 9705G19-03	Reported: 06/11/97

QC Batch Number: GC060397BTEXEXA
Instrument ID: GCHP07

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	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	92
4-Bromofluorobenzene	60	140	93

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

SEQUOIA ANALYTICAL - ELAP #1210

Kevin Follett
Project Manager

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Cambria	Client Proj. ID: Shell 204-2277-0204, Dublin	Sampled: 05/30/97
1144 65th St. Suite C	Sample Descript: SP-(1-4) comp	Received: 05/30/97
Oakland, CA 94608	Matrix: SOLID	Extracted: 06/04/97
	Analysis Method: Title 22	Analyzed: 06/04/97
Attention: Paul Waite	Lab Number: 9705G19-05	Reported: 06/11/97

Inorganic Persistent and Bioaccumulative Toxic Substances : TTLC

Analyte	Max. Limit mg/Kg	Detection Limit mg/Kg	Sample Results mg/Kg
Antimony, Sb	500	5.0	N.D.
Arsenic, As	**500**	**5.0**	**13**
Barium, Ba	**10000**	**5.0**	**90**
Beryllium, Be	75	0.50	N.D.
Cadmium, Cd	100	0.50	N.D.
Chromium, Cr	**2500**	**0.50**	**37**
Cobalt, Co	**8000**	**2.5**	**11**
Copper, Cu	**2500**	**0.50**	**32**
Lead, Pb	**1000**	**5.0**	**14**
Mercury, Hg	**20**	**0.020**	**0.10**
Molybdenum, Mo	3500	2.5	N.D.
Nickel, Ni	**2000**	**2.5**	**39**
Selenium, Se	100	5.0	N.D.
Silver, Ag	500	0.50	N.D.
Thallium, Tl	**700**	**5.0**	**5.4**
Vanadium, V	**2400**	**2.5**	**45**
Zinc, Zn	**5000**	**0.50**	**73**

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

SEQUOIA ANALYTICAL - ELAP #1210

Kevin Follett
Project Manager

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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Cambria Environmental Tech.	Client Project ID:	Shell 204-2277-0204, Dublin	
1144 65th St., Ste. C	Matrix:	Solid	
Oakland, CA 94608			
Attention: Paul Waite	Work Order #:	9705G19 -05	Reported: Jun 14, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Organic Lead	Mercury	
QC Batch#:	ME0609977000MDA	ME0606977471M4A	
Analy. Method:	LUFT	EPA 7471	
Prep. Method:	LUFT	7471	
Analyst:	J. Hills	W. Thant	
MS/MSD #:	9705G17-05	9706200-03	
Sample Conc.:	N.D.	0.18	
Prepared Date:	6/9/97	6/6/97	
Analyzed Date:	6/9/97	6/6/97	
Instrument I.D.#:	MV2	MPE4	
Conc. Spiked:	8.0 mg/Kg	0.40 mg/Kg	
Result:	N.D.	0.83 *	
MS % Recovery:	0.0	163	* Non-homogenous Sample
Dup. Result:	N.D.	0.50 *	
MSD % Recov.:	0.0	80	
RPD:	-	50.0	
RPD Limit:	0-30	0-30	
LCS #:	BLK060997BS	BLK060697	
Prepared Date:	6/9/97	6/6/97	
Analyzed Date:	6/9/97	6/6/97	
Instrument I.D.#:	MV2	MPE4	
Conc. Spiked:	8.0 mg/Kg	0.40 mg/Kg	
LCS Result:	7.2	0.35	
LCS % Recov.:	90	88	
MS/MSD LCS Control Limits	75-125	75-125	

SEQUOIA ANALYTICAL

Kevin Follett
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

ISSUED DATE: 02/17/95
CANCELS ISSUE: 11/01/92
ISSUED BY: RLG

MATERIAL: CALIFORNIA UNDERGROUND STORAGE TANK (UST) SOIL CONTAMINATED WITH GASOLINE/DIESEL

MINIMUM REQUIRED TESTING

TPH = TOTAL PETROLEUM HYDROCARBONS, DHS GC-FID MOD 8015
GASOLINE OR DIESEL AS REQUIRED.
BTXE = EPA 8020
CAM METALS = TTLC ALL:
STLC ON ALL TTLC METALS 10 X STLC MAXIMUM:
TTLC LEAD => 13 MG/KG REQUIRES ORGANIC ANALYSIS
EP TOX METALS FOR STLC METALS AT OR ABOVE
STLC REGULATORY LEVEL.

AQUATIC BIOASSAY (FISH TOX) IS ONLY TO BE RUN ON SAMPLES WITH GREATER THAN 5000 PPM TPH. COMPOSITE A MAXIMUM OF 4 SAMPLES.

AQUATIC BIOASSAY (FISH TOX) = PART 800 OF "STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER (15TH EDITION)"

LABORATORY INSTRUCTIONS (MINIMUM GUIDELINES ONLY)

- 8015/8020 TO BE BILLED AS "COMBO" WITHOUT EXCEPTION
- TPH REQUIRED FOR ALL SAMPLES.
- ALL OTHER TESTS REQUIRED TO BE RUN ON COMPOSITE(S). MAXIMUM 4 SAMPLES PER COMPOSITE.
- STLC REQUIRED FOR METALS WITH TTLC VALUE 10 X STLC MAXIMUM.
- ORGANIC ANALYSIS REQUIRED FOR TTLC LEAD OF 13 MG/KG OR GREATER WOULD REQUIRE ORGANIC ANALYSIS).
- LABORATORY IS TO SUPPLY QA/QC INFORMATION WITH ALL ANALYTICAL REPORTS.
- MAIL OR FAX ALL ANALYSIS TO PERSON REQUESTING ANALYSIS. **DO NOT** FAX OR MAIL ANALYSES TO RON GEMEINHARDT OR THE WASTE DISPOSAL COORDINATOR UNLESS SPECIFICALLY REQUESTED.
- QUESTIONS REGARDING ANALYSIS, CONTACT RON GEMEINHARDT AT (713) 241-3577.

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: _____

Date: 5/30/97
Page 1 of 2

Site Address: 11989 Dublin Blvd., Dublin

WIC#: 204-2277-0204

Shell Engineer: Alex Perez
Phone No.: 510-675-6168
Fax #: 675-6130

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

Consultant Contact: Paul Waite
Phone No.: 510 420-0700
Fax #: 420-9170

Comments: Follow attached protocol!

Sampled by: [signature]

Printed Name: Josh Bergstrom

Analysis Required 9705619

LAB: _____

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)	Test for Disposal	Combination TPH 8015 & BTEX 8020			Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
SP-1	5/30		X			1	X		X										4:1 Composite for metals	
SP-2	5/30		X			1	X		X											
SP-3	5/30		X			1	X		X											
SP-4	5/30		X			1	X		X											
T-1	5/30		X			1														HOLD
T-2	5/30		X			1														HOLD

CHECK ONE (1) BOX ONLY — CT/DI

- G.W. Monitoring ☐ 4461
- Site Investigation ☐ 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 ☐ (Normal)
- Other ☐ _____

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

UST AGENCY: _____

Relinquished By (signature): [signature]	Printed Name: Josh Bergstrom	Date: 5/30/97 Time: 4:45pm	Received (signature): [signature]	Printed Name: Steve Teu
Relinquished By (signature): [signature]	Printed Name: Steve Teu	Date: 5/30/97 Time:	Received (signature):	Printed Name:
Relinquished By (signature):	Printed Name:	Date: Time:	Received (signature): [signature]	Printed Name: P. HUFANO

Date: 5/30/97 Time: 4:45pm
Date: 5/30/97 Time: 1809

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

6 09

Sequoia Analytical

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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Cambria	Client Proj. ID: Shell 204-2277-0204, Dublin	Sampled: 06/17/97
1144 65th St. Suite C	Sample Descript: P-1	Received: 06/17/97
Oakland, CA 94608	Matrix: SOLID	Extracted: 06/19/97
	Analysis Method: 8015Mod/8020	Analyzed: 06/19/97
Attention: Paul Waite	Lab Number: 9706913-01	Reported: 07/02/97

QC Batch Number: GC061997BTEXEXA
Instrument ID: GCHP07

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	**5.0**	**24**
Methyl t-Butyl Ether	**0.12**	**6.3**
Benzene	0.025	N.D.
Toluene	**0.025**	**0.27**
Ethyl Benzene	**0.025**	**0.098**
Xylenes (Total)	**0.025**	**2.5**
Chromatogram Pattern:		**C6-C12**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	86
4-Bromofluorobenzene	60	140	140

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

SEQUOIA ANALYTICAL - ELAP #1210

Kevin Follett
Project Manager

Sequoia Analytical

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Cambria	Client Proj. ID: Shell 204-2277-0204, Dublin	Sampled: 06/17/97
1144 65th St. Suite C	Sample Descript: P-2	Received: 06/17/97
Oakland, CA 94608	Matrix: SOLID	Extracted: 06/19/97
	Analysis Method: 8015Mod/8020	Analyzed: 06/19/97
Attention: Paul Waite	Lab Number: 9706913-02	Reported: 07/02/97

QC Batch Number: GC061997BTEXEXA
Instrument ID: GCHP22

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	96
4-Bromofluorobenzene	60	140	85

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

SEQUOIA ANALYTICAL - ELAP #1210

Kevin Follett
Project Manager

Sequoia Analytical

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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Cambria	Client Proj. ID: Shell 204-2277-0204, Dublin	Sampled: 06/17/97
1144 65th St. Suite C	Sample Descript: P-3	Received: 06/17/97
Oakland, CA 94608	Matrix: SOLID	Extracted: 06/19/97
	Analysis Method: 8015Mod/8020	Analyzed: 06/19/97
Attention: Paul Waite	Lab Number: 9706913-03	Reported: 07/02/97

QC Batch Number: GC061997BTEXEXA
Instrument ID: GCHP22

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	100
4-Bromofluorobenzene	60	140	88

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

SEQUOIA ANALYTICAL - ELAP #1210

Kevin Follett
Project Manager

Sequoia Analytical

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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Cambria	Client Proj. ID: Shell 204-2277-0204, Dublin	Sampled: 06/17/97
1144 65th St. Suite C	Sample Descript: P-4	Received: 06/17/97
Oakland, CA 94608	Matrix: SOLID	Extracted: 06/19/97
	Analysis Method: 8015Mod/8020	Analyzed: 06/19/97
Attention: Paul Waite	Lab Number: 9706913-04	Reported: 07/02/97

QC Batch Number: GC061997BTEXEXA
Instrument ID: GCHP22

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	**1.0**	**2.0**
Methyl t-Butyl Ether	**0.025**	**0.027**
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	**0.0050**	**0.015**
Chromatogram Pattern:		
Weathered Gas		**C9-C12**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	104
4-Bromofluorobenzene	60	140	84

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

SEQUOIA ANALYTICAL - ELAP #1210

Kevin Follett
Project Manager

Sequoia Analytical

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Cambria	Client Proj. ID: Shell 204-2277-0204, Dublin	Sampled: 06/17/97
1144 65th St. Suite C	Sample Descript: D-1	Received: 06/17/97
Oakland, CA 94608	Matrix: SOLID	Extracted: 06/19/97
	Analysis Method: 8015Mod/8020	Analyzed: 06/19/97
Attention: Paul Waite	Lab Number: 9706913-05	Reported: 07/02/97

QC Batch Number: GC061997BTEXEXA
Instrument ID: GCHP22

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**	**0.060**
Benzene	0.0050	N.D.
Toluene	**0.0050**	**0.014**
Ethyl Benzene	**0.0050**	**0.0062**
Xylenes (Total)	**0.0050**	**0.068**
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	94
4-Bromofluorobenzene	60	140	86

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

SEQUOIA ANALYTICAL - ELAP #1210

Kevin Follett
Project Manager

Sequoia Analytical

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Cambria	Client Proj. ID: Shell 204-2277-0204, Dublin	Sampled: 06/17/97
1144 65th St. Suite C	Sample Descript: D-2	Received: 06/17/97
Oakland, CA 94608	Matrix: SOLID	Extracted: 06/19/97
	Analysis Method: 8015Mod/8020	Analyzed: 06/19/97
Attention: Paul Waite	Lab Number: 9706913-06	Reported: 07/02/97

QC Batch Number: GC061997BTEXEXA
Instrument ID: GCHP07

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	**10**	**86**
Methyl t-Butyl Ether	**0.25**	**8.9**
Benzene	**0.050**	**0.55**
Toluene	**0.050**	**3.3**
Ethyl Benzene	**0.050**	**0.99**
Xylenes (Total)	**0.050**	**7.8**
Chromatogram Pattern:		**C6-C12**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	82
4-Bromofluorobenzene	60	140	130

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

SEQUOIA ANALYTICAL - ELAP #1210

Kevin Follett
Project Manager

Sequoia Analytical

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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Cambria Environmental Tech.	Client Project ID:	Shell 204-2277-0204, Dublin	
1144 65th St., Ste. C	Matrix:	Solid	
Oakland, CA 94608			
Attention: Paul Waite	Work Order #:	9706913 -01-06	Reported: Jul 2, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Diesel
QC Batch#:	GC0626970HBPEXA
Analy. Method:	EPA 8015M
Prep. Method:	EPA 3550
Analyst:	B. Sullivan
MS/MSD #:	970691301
Sample Conc.:	97
Prepared Date:	6/26/97
Analyzed Date:	6/27/97
Instrument I.D.#:	GCHP19
Conc. Spiked:	25 mg/Kg
Result:	124
MS % Recovery:	108
Dup. Result:	160
MSD % Recov.:	252
RPD:	25
RPD Limit:	0-50

LCS #:	BLK062697
Prepared Date:	6/26/97
Analyzed Date:	6/27/97
Instrument I.D.#:	GCHP19
Conc. Spiked:	25 mg/Kg
LCS Result:	20
LCS % Recov.:	80

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

SEQUOIA ANALYTICAL

Kevin Follett
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

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: _____

Date: 6/17/97
Page 1 of 1

Site Address: 11989 Dublin Blvd., Dublin

WIC#: 204-2277-0204

Shell Engineer: Alex Perez — Phone No.: 510 675-6168 — Fax #: 675-6130

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

Consultant Contact: Paul Welte — Phone No.: 510 420-0700 — Fax #: 420-9170

Comments:

Sampled by: John B

Printed Name: Josh Bergstrom

LAB: Sequoia

UST AGENCY: Alameda County

97 06 913

Sample ID	Date	Sludge	Soil	Water	Air	No. of conts.	TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602) / MTBE	Volatile Organics (EPA 8240)	Test for Disposal	Combination TPH 8015 & BTEX 8020	Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
1 P-1	6/17		X			1	X	X	X									
2 P-2	6/17		X			1	X	X	X									
3 P-3	6/17		X			1	X	X	X									
4 P-4	6/17		X			1	X	X	X									
5 D-1	6/17		X			1	X	X	X									
6 D-2	6/17		X			1	X	X	X									

Relinquished By (signature)	Printed Name	Date / Time	Received (signature)	Printed Name	Date / Time
John B	Josh Bergstrom	Date: 6/17/97 Time: 10:50	S Wright	S Wright	Date: 6/17/97 Time: 1050
S Wright	S WRIGHT	Date: 6/17/97 Time: 1153			Date: Time:
		Date: Time:	Mara Grisis	Mara Grisis	Date: 6/17/97 Time: 1205

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

Sequoia Analytical

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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Cambria
1144 65th St. Suite C
Oakland, CA 94608
Attention: Josh Bergstrom

Project: Shell 204-2277-0204, Dublin

Enclosed are the results from samples received at Sequoia Analytical on June 20, 1997. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE COLLECTED	TEST METHOD
9706C46 -01	SOLID, TS-1	06/20/97	TPGBMS Purgeable TPH/BTEX
9706C46 -01	SOLID, TS-1	06/20/97	TPHD_S Extractable TPH
9706C46 -02	SOLID, TS-2	06/20/97	TPGBMS Purgeable TPH/BTEX
9706C46 -02	SOLID, TS-2	06/20/97	TPHD_S Extractable TPH
9706C46 -03	SOLID, TS-3	06/20/97	TPGBMS Purgeable TPH/BTEX
9706C46 -03	SOLID, TS-3	06/20/97	TPHD_S Extractable TPH
9706C46 -04	SOLID, TS-4	06/20/97	TPGBMS Purgeable TPH/BTEX
9706C46 -04	SOLID, TS-4	06/20/97	TPHD_S Extractable TPH
9706C46 -05	SOLID, TS-5	06/20/97	TPGBMS Purgeable TPH/BTEX
9706C46 -05	SOLID, TS-5	06/20/97	TPHD_S Extractable TPH
9706C46 -06	SOLID, TS-6	06/20/97	TPGBMS Purgeable TPH/BTEX
9706C46 -06	SOLID, TS-6	06/20/97	TPHD_S Extractable TPH
9706C46 -07	SOLID, TS-7	06/20/97	TPGBMS Purgeable TPH/BTEX
9706C46 -07	SOLID, TS-7	06/20/97	TPHD_S Extractable TPH
9706C46 -08	SOLID, TS-8	06/20/97	TPGBMS Purgeable TPH/BTEX
9706C46 -08	SOLID, TS-8	06/20/97	TPHD_S Extractable TPH
9706C46 -09	SOLID, TS-9	06/20/97	TPGBMS Purgeable TPH/BTEX
9706C46 -09	SOLID, TS-9	06/20/97	TPHD_S Extractable TPH
9706C46 -10	SOLID, TS-10	06/20/97	TPGBMS Purgeable TPH/BTEX
9706C46 -10	SOLID, TS-10	06/20/97	TPHD_S Extractable TPH
9706C46 -11	SOLID, TS-11	06/20/97	TPGBMS Purgeable TPH/BTEX

SEQUOIA ANALYTICAL

Sequoia Analytical

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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Cambria	Client Proj. ID: Shell 204-2277-0204, Dublin	Sampled: 06/20/97
1144 65th St. Suite C	Sample Descript: TS-1	Received: 06/20/97
Oakland, CA 94608	Matrix: SOLID	Extracted: 06/27/97
	Analysis Method: 8015Mod/8020	Analyzed: 06/27/97
Attention: Josh Bergstrom	Lab Number: 9706C46-01	Reported: 07/02/97

QC Batch Number: GC062797BTEXEXB
Instrument ID: GCHP07

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	97
4-Bromofluorobenzene	60	140	72

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

SEQUOIA ANALYTICAL - ELAP #1210

Kevin Follett
Project Manager

Sequoia Analytical

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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Cambria	Client Proj. ID: Shell 204-2277-0204, Dublin	Sampled: 06/20/97
1144 65th St. Suite C	Sample Descript: TS-2	Received: 06/20/97
Oakland, CA 94608	Matrix: SOLID	Extracted: 06/27/97
	Analysis Method: 8015Mod/8020	Analyzed: 06/30/97
Attention: Josh Bergstrom	Lab Number: 9706C46-02	Reported: 07/02/97

QC Batch Number: GC062797BTEXEXB
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	96
4-Bromofluorobenzene	60	140	89

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

SEQUOIA ANALYTICAL - ELAP #1210

Kevin Follett
Project Manager

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Cambria	Client Proj. ID: Shell 204-2277-0204, Dublin	Sampled: 06/20/97
1144 65th St. Suite C	Sample Descript: TS-3	Received: 06/20/97
Oakland, CA 94608	Matrix: SOLID	Extracted: 06/27/97
	Analysis Method: 8015Mod/8020	Analyzed: 06/27/97
Attention: Josh Bergstrom	Lab Number: 9706C46-03	Reported: 07/02/97

QC Batch Number: GC062797BTEXEXB
Instrument ID: GCHP07

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	86
4-Bromofluorobenzene	60	140	82

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

SEQUOIA ANALYTICAL - ELAP #1210

Kevin Follett
Project Manager

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Cambria	Client Proj. ID: Shell 204-2277-0204, Dublin	Sampled: 06/20/97
1144 65th St. Suite C	Sample Descript: TS-4	Received: 06/20/97
Oakland, CA 94608	Matrix: SOLID	Extracted: 06/27/97
	Analysis Method: 8015Mod/8020	Analyzed: 06/27/97
Attention: Josh Bergstrom	Lab Number: 9706C46-04	Reported: 07/02/97

QC Batch Number: GC062797BTEXEXB
Instrument ID: GCHP07

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	94
4-Bromofluorobenzene	60	140	74

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

SEQUOIA ANALYTICAL - ELAP #1210

Kevin Follett
Project Manager

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Cambria	Client Proj. ID: Shell 204-2277-0204, Dublin	Sampled: 06/20/97
1144 65th St. Suite C	Sample Descript: TS-5	Received: 06/20/97
Oakland, CA 94608	Matrix: SOLID	Extracted: 06/27/97
	Analysis Method: 8015Mod/8020	Analyzed: 06/27/97
Attention: Josh Bergstrom	Lab Number: 9706C46-05	Reported: 07/02/97

QC Batch Number: GC062797BTEXEXB
nstrument ID: GCHP07

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	83
4-Bromofluorobenzene	60	140	78

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

SEQUOIA ANALYTICAL - ELAP #1210

Kevin Follett
Project Manager

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Cambria	Client Proj. ID: Shell 204-2277-0204, Dublin	Sampled: 06/20/97
1144 65th St. Suite C	Sample Descript: TS-6	Received: 06/20/97
Oakland, CA 94608	Matrix: SOLID	Extracted: 06/27/97
	Analysis Method: 8015Mod/8020	Analyzed: 06/27/97
Attention: Josh Bergstrom	Lab Number: 9706C46-06	Reported: 07/02/97

QC Batch Number: GC062797BTEXEXB
Instrument ID: GCHP07

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	84
4-Bromofluorobenzene	60	140	75

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

SEQUOIA ANALYTICAL - ELAP #1210

Kevin Follett
Project Manager

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Cambria	Client Proj. ID: Shell 204-2277-0204, Dublin	Sampled: 06/20/97
1144 65th St. Suite C	Sample Descript: TS-7	Received: 06/20/97
Oakland, CA 94608	Matrix: SOLID	Extracted: 06/27/97
	Analysis Method: 8015Mod/8020	Analyzed: 06/30/97
Attention: Josh Bergstrom	Lab Number: 9706C46-07	Reported: 07/02/97

QC Batch Number: GC062797BTEXEXB
Instrument ID: GCHP07

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	**50**	**690**
Methyl t-Butyl Ether	1.2	N.D.
Benzene	0.25	N.D.
Toluene	0.25	N.D.
Ethyl Benzene	0.25	N.D.
Xylenes (Total)	**0.25**	**2.2**
Chromatogram Pattern:		
Weathered Gas		**C8-C12**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	100
4-Bromofluorobenzene	60	140	950 Q

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

SEQUOIA ANALYTICAL - ELAP #1210

Kevin Follett
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Cambria	Client Proj. ID: Shell 204-2277-0204, Dublin	Sampled: 06/20/97
1144 65th St. Suite C	Sample Descript: TS-8	Received: 06/20/97
Oakland, CA 94608	Matrix: SOLID	Extracted: 06/27/97
	Analysis Method: 8015Mod/8020	Analyzed: 06/27/97
Attention: Josh Bergstrom	Lab Number: 9706C46-08	Reported: 07/02/97

QC Batch Number: GC062797BTEXEXB
Instrument ID: GCHP07

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	82
4-Bromofluorobenzene	60	140	89

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

SEQUOIA ANALYTICAL - ELAP #1210

Kevin Follett
Project Manager

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Cambria	Client Proj. ID: Shell 204-2277-0204, Dublin	Sampled: 06/20/97
1144 65th St. Suite C	Sample Descript: TS-9	Received: 06/20/97
Oakland, CA 94608	Matrix: SOLID	Extracted: 06/27/97
	Analysis Method: 8015Mod/8020	Analyzed: 06/30/97
Attention: Josh Bergstrom	Lab Number: 9706C46-09	Reported: 07/02/97

QC Batch Number: GC062797BTEXEXB
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	98
4-Bromofluorobenzene	60	140	93

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ENVIRONMENTAL PROTECTION

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

SEQUOIA ANALYTICAL - ELAP #1210

Kevin Follett
Project Manager