STID 3714
505

CAMBRIA

May 31, 1998

Pamela Evans
Alameda County Department of Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Re: **MTBE Investigation Report**
Shell Service Station
350 Grand Avenue
Oakland, California
WIC #204-5510-0204
Cambria Project# 240-0715-005

Dear Ms. Evans:

On behalf of Shell Oil Products Company (Shell), Cambria Environmental Technology, Inc. (Cambria) is submitting the results of the subsurface investigation conducted on April 16, 1998 at the above-referenced site. The objective of this investigation was to determine the down gradient extent of methyl tert-butyl ether (MTBE) and petroleum hydrocarbons in soil and ground water, as requested by the Alameda County Health Care Services Agency Department of Environmental Health (ACDEH) in the July 31, 1997 letter to Shell. The investigation was conducted in accordance with Cambria's September 15, 1997 *MTBE Investigation Work Plan*, which was approved in the January 15, 1998 ACDEH letter to Shell. Presented below are the site background, investigation procedures, investigation results, and our conclusions.

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

BACKGROUND

Site Description: The site is an active Shell Service Station, located at the northeast corner of the intersection of Grand Avenue and Perkins Street in Oakland, California (Figure 1). Lakeside Park is located at the southwest corner of this intersection. The area surrounding the site is mixed commercial and residential.

1990 Soil Borings: On May 11, 1990, GeoStrategies Inc. of Hayward, California (GSI) drilled five exploratory soil borings with a hollow-stem auger drilling rig. The highest hydrocarbon concentration in soil was in boring S-A, located at the southwest corner of the property in the vicinity of the gasoline underground storage tanks (USTs), at a depth of 9.5 feet below ground surface (ft bgs), at 2,900 milligrams per kilogram (mg/kg) total petroleum hydrocarbons as gasoline (TPHg), 2,400 mg/kg total petroleum hydrocarbons as diesel (TPHd), and 13 mg/kg benzene.

1991 Monitoring Well Installation: On January 7, 1991, GSI installed three monitoring wells at the site (Figure 1). The highest hydrocarbon concentrations in soil and ground water were in well S-2, located at the southwest corner of the property in the vicinity of the gasoline USTs, at 440 mg/kg TPHg, 360 mg/kg TPHd, and 4.5 mg/kg benzene in soil at 8.5 ft bgs; and 2,500 micrograms per liter (μg/L) TPHg, 1,200 μg/L TPHd, and 550 μg/L benzene in ground water. TPHg , TPHd, and benzene were not detected in the ground water sample from well S-1.

1993 Hydropunch Borings: On January 27, 1993, GSI installed three hydropunch borings off site (Figure 1). The highest hydrocarbon concentrations were in boring HP-1, located cross gradient of the USTs, at 1,500 mg/kg TPHg, 18 mg/kg TPHd, and 0.11mg/kg benzene in soil at 6.5 ft bgs; and 22,000 μg/L TPHg, 14,000 μg/L TPHd, and 2,500 μg/L benzene in ground water. TPHg and benzene were not detected in soil and ground water samples from borings HP-2 and HP-3, located down gradient of the USTs.

1996 Tank Removal: On April 22, 1996, Weiss Associates of Emeryville, California (WA) observed the removal of three 10,000-gallon gasoline USTs and one 10,000-gallon diesel UST and collected soil samples. Up to 4,800 mg/kg TPHg, 2,800 mg/kg TPHd, and 22 mg/kg benzene were detected in samples collected from the UST excavation, product piping trenches, and beneath the product dispensers.

1998 Potential Receptor Survey: In April 1998, Cambria identified wells and surface water bodies within a one-half mile radius of the site. A map showing the survey area, well locations, and water bodies; and a table listing well owners, well use, installation date, and depth are included as Attachment A. Three water producing wells are located between three-quarters and one-half mile cross gradient of the site. Lake Merrit is located approximately one-eighth of a mile down gradient of the site, and several underground creeks are located in the survey area.

Ground Water Monitoring Program: The three onsite ground water wells have been monitored since January 1991. At the time of the last monitoring event on January 8, 1998, the highest hydrocarbon concentrations were detected in well S-2 at 35,000 µg/L TPHg, 8,100 µg/L TPHd, 3,400 µg/L benzene, and 23,000 µg/L MTBE.

INVESTIGATION PROCEDURES

The procedures for this subsurface investigation, described in Cambria's approved work plan, are summarized below. Well locations are shown on Figure 1. Analytical results for soil and ground water are summarized in Tables 1 and 2, respectively, and presented as Attachment B. Boring logs and Cambria's standard field procedures for GeoProbe® sampling and pre-packed well installation are presented in Attachments C and D, respectively.

Personnel Present: Maureen Feineman, Staff Geologist, of Cambria.

Permits: Alameda County Public Works Agency Drilling Permit #98WRO96, City of Oakland Minor Encroachment Permit dated March 31, 1998, and City of Oakland Excavation Permit #X9800278 (Attachment E).

Drilling Company: Gregg Drilling of Martinez, California (C-57 License #485165).

Drilling Date: April 16, 1998.

Drilling Method: GeoProbe® (hydraulic push with roto-hammer).

Number of Borings: Two (SB-1 and SB-2).

Boring Depths: 15 ft bgs (Attachment C).

Well Specifications: Well S-4 was installed to 15 ft bgs in boring SB-2, and well S-5 was installed to 14 ft bgs in boring SB-1 (Figure 1). The wells are three-quarter-inch diameter, pre-packed wells with 0.010-inch slotted screen. Well S-4 is screened from 5 to 15 ft bgs, and well S-5 is screened from 4 to 14 ft bgs.

Ground Water Depths: [redacted] and in [redacted]

Sediment Lithology: The site subsurface consists of approximately 5-11 feet of road fill made up of gravelly sand and silty sand of moderate to high estimated permeability underlain by silty clay and sandy clay of low estimated permeability to the maximum explored depth of 15 ft bgs. (Attachment C).

Chemical Analyses: One soil sample from each boring was analyzed for:

- TPHg by modified EPA Method 8015; and
- MTBE, benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA Method 8020.

One grab water sample from each boring was analyzed for:

- TPHg by modified EPA Method 8015;
- MTBE and BTEX by EPA Method 8020;
- MTBE by EPA Method 8260; and
- TPHd by modified EPA Method 8015 (SB-1 only).

INVESTIGATION RESULTS

Hydrocarbon Distribution in Soil: No TPHg, BTEX, or MTBE were detected in soil samples collected from borings SB-1 and SB-2.

Hydrocarbon Distribution in Ground Water: [redacted] The grab water sample from boring SB-1 contained 140 μg/L TPHd. However, the TPHd chromatogram is not characteristic of the diesel standard.

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CONCLUSIONS AND RECOMMENDATIONS

The downgradient extent of MTBE and hydrocarbons in soil and ground water has been defined for this site. Blaine Tech Services of San Jose, California will develop wells S-4 and S-5 at least 72 hours prior to the next monitoring event, which is scheduled for third quarter 1998. The wells will be sampled semiannually during the 1st and 3rd Quarters, in accordance with the January 15, 1998 ACDEH letter to Shell.

CLOSING

We appreciate your continued assistance with this project. Please call if you have any questions or comments.

Sincerely,
Cambria Environmental Technology, Inc.

Maureen D. Feineman
Staff Geologist

Diane Lundquist, P.E.
Principal Engineer

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

Attachments:
A - Potential Receptor Survey
B - Analytical Reports for Soil and Ground Water
C - Soil Boring Logs
D - Standard Field Procedures for GeoProbe® Sampling and Pre-packed Well Installation
E - Permits

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

G:\OAK350\REPORTS\InvRpt.wpd

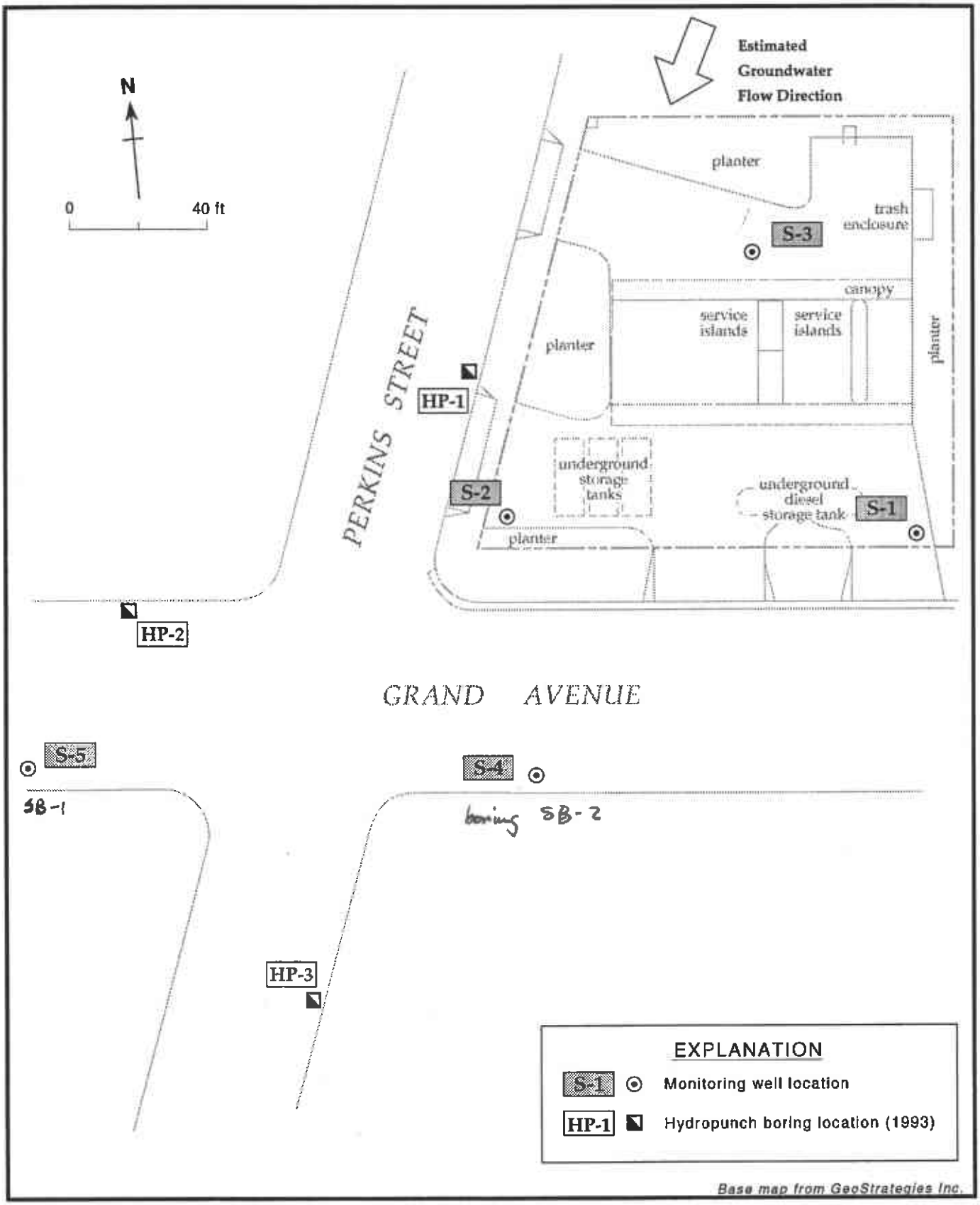

Figure 1. Ground Water Monitoring Well Locations- Shell Service Station WIC #204-5510-0204, 350 Grand Avenue, Oakland, California

Table 1. Soil Analytical Data - Shell Service Station WIC# 204-5510-0204, 350 Grand Avenue, Oakland, California

Sample ID	Date Sampled	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
		← (Concentrations in mg/kg) →					
SB-1-7.5'	4/16/98	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025
SB-2-6.0'	4/16/98	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025

Abbreviations and Notes:

TPHg = Total petroleum hydrocarbons as gasoline by modified EPA Method 8015
Benzene, toluene, ethylbenzene, and total xylenes by EPA Method 8020
MTBE = Methyl tert-butyl ether by EPA Method 8020
mg/kg = Milligrams per kilogram
<n = Below detection limit of n mg/kg

Table 2. Ground Water Analytical Data - Shell Service Station WIC# 204-5510-0204, 350 Grand Avenue, Oakland, California

Sample ID	Date Sampled	TPHd	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
		◄ (Concentrations in µg/L) ►						
SB-1	4/16/98	140[a]	<50	<0.50	<0.50	<0.50	<0.50	<2.5 (<2.0)
SB-2	4/16/98	---	<50	<0.50	<0.50	<0.50	<0.50	<2.5 (<2.0)

Abbreviations and Notes:

TPHd = Total petroleum hydrocarbons as diesel by modified EPA Method 8015
TPHg = Total petroleum hydrocarbons as gasoline by modified EPA Method 8015
Benzene, toluene, ethylbenzene, and total xylenes by EPA Method 8020
MTBE = Methyl tert-butyl ether by EPA Method 8020. Result in parentheses indicates MTBE by EPA Method 8260.
µg/L = Micrograms per liter
<n = Below detection limit of n µg/L
--- = Not analyzed
a = Compounds detected and calculated as diesel are not characteristic of the standard diesel chromatographic pattern

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Attachment A

Potential Receptor Survey

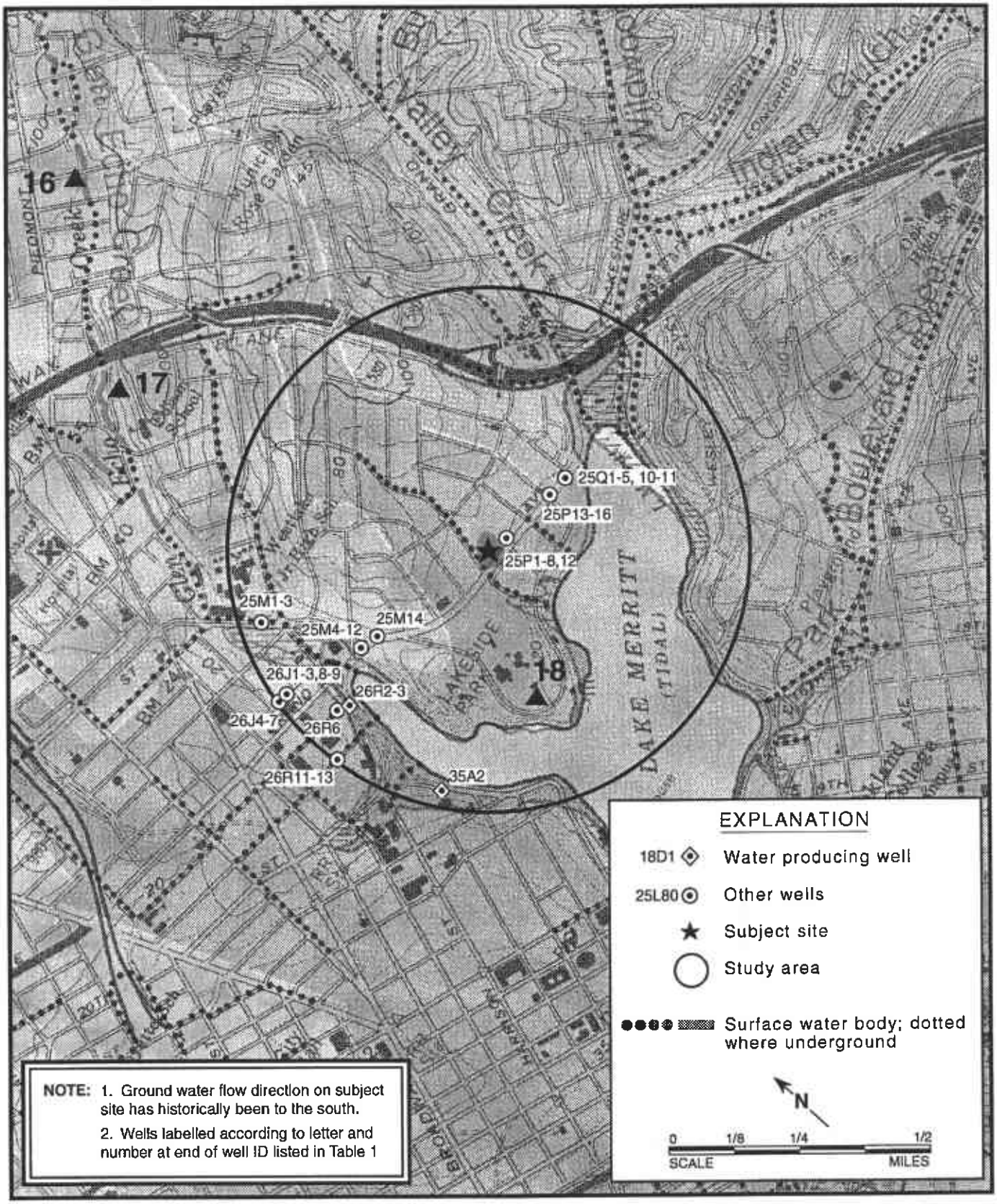

Figure 1. Well Locations - Shell Service Station WIC #204-5510-0204, 350 Grand Avenue, Oakland, California

Table 1. Well Survey - Shell Service Station - WIC# 204-5510-0204, 350 Grand Avenue, Oakland, California

Well ID	Notes	Installation Date	Owner	Use	Depth (feet)
1S/4W-25Q3	1	January 1990	Texaco Refining and Marketing	MON	15
1S/4W-25Q4	1	January 1990	Texaco Refining and Marketing	MON	15
1S/4W-25Q5	1	January 1990	Texaco Refining and Marketing	MON	15
1S/4W-25P4	1	March 1990	Quick Stop Markets, Inc.	MON	30
1S/4W-25P5	1	March 1990	Quick Stop Markets, Inc.	MON	30
1S/4W-25P6	1	March 1990	Quick Stop Markets, Inc.	MON	30
1S/4W-25P7	1	March 1990	Quick Stop Markets, Inc.	MON	24
1S/4W-25P8	1	March 1990	Quick Stop Markets, Inc.	MON	29
1S/4W-26J8	1	May 1990	Oakland Tribune	MON	27
1S/4W-26J9	1	May 1990	Oakland Tribune	MON	25
1S/4W-25M9	1	June 1990	Chevron SS#90019	MON	12
1S/4W-25M10	1	June 1990	Chevron SS#90019	MON	12
1S/4W-25M11	1	June 1990	Chevron SS#90019	MON	14
1S/4W-25M12	1	June 1990	Chevron SS#90019	MON	12
1S/4W-25P9	2	November 1990	Shell Oil Company	PIE	39
1S/4W-25P10	2	January 1991	Shell Oil Company	MON	17
1S/4W-25P11	2	January 1991	Shell Oil Company	MON	15
1S/4W-25P12	1	August 1990	Quik Stop Markets	MON	20
1S/4W-26R2	1	February 1991	Ahmanson Commercial	DOM	290
1S/4W-26R3	1	March 1991	Ahmanson Commercial	IRR	290
1S/3W-25Q1	1	July 1988	Texaco Sta 6248800	MON	15
1S/3W-25Q2	1	July 1988	Texaco Sta 6248800	MON	20
1S/3W-25Q3	1	July 1988	Texaco Sta 6248800	MON	24
1S/3W-25Q4	1	July 1988	Texaco Sta 6248800	MON	5
1S/3W-31H2	3	June 1981	East Bay Municipal Utilities District	CAT	65
1S/4W-25L80	1	August 1974	Pacific Gas and Electric	CAT	120
1S/4W-25M1	1	June 1989	Ehler Contractors	MON	13

Table 1. Well Survey - Shell Service Station - WIC# 204-5510-0204, 350 Grand Avenue, Oakland, California

Well ID	Notes	Installation Date	Owner	Use	Depth (feet)
1S/4W-25M2	1	June 1989	Ehler Contractors	MON	11
1S/4W-25M3	1	June 1989	Ehler Contractors	MON	8
1S/4W-25M4	1	March 1989	Chevron USA	MON	15
1S/4W-25M5	1	March 1989	Chevron USA	MON	17
1S/4W-25M6	1	March 1989	Chevron USA	MON	20
1S/4W-25M7	1	March 1989	Chevron USA	MON	17
1S/4W-25M8	1	March 1989	Chevron USA	MON	17
1S/4W-25P1	1	UNK	Quick Stop Markets, Inc.	UNK	UNK
1S/4W-25P2	1	November 1988	Quick Stop Markets, Inc.	MON	36
1S/4W-25P3	1	November 1988	Quick Stop Markets, Inc.	MON	36
1S/4W-25Q1	1	March 1989	Texaco Inc.	MON	17
1S/4W-25Q2	1	March 1989	Texaco Inc.	MON	17
1S/4W-26J1	1	August 1988	Oakland Tribune	MON	31
1S/4W-26J2	1	August 1988	Oakland Tribune	MON	31
1S/4W-26J3	1	August 1988	Oakland Tribune	MON	26
1S/4W-26J4	1	August 1989	Morrison and Foreste	MON	27
1S/4W-26J5	1	August 1989	Morrison and Foreste	MON	27
1S/4W-26J6	1	August 1989	Morrison and Foreste	MON	27
1S/4W-26J7	1	August 1989	Morrison and Foreste	MON	27
1S/4W-35A2	1	1977	Lakeside Corp	IR	~95
1S/4W-26R6	1	March 1992	Ahmanson Commercial	MON	25
1S/4W-26R11	1	March 1992	Ordway Building	MON	34
1S/4W-26R12	1	March 1992	Ordway Building	MON	32
1S/4W-26R13	1	March 1992	Ordway Building	MON	28
1S/4W-25P13	1	December 1992	Chevron	MON	15
1S/4W-25P14	1	December 1992	Chevron	MON	15
1S/4W-25P15	1	December 1992	Chevron	MON	15

Table 1. Well Survey - Shell Service Station - WIC# 204-5510-0204, 350 Grand Avenue, Oakland, California

Well ID	Notes	Installation Date	Owner	Use	Depth (feet)
1S/4W-25M14	1	February 1993	Wells Fargo Bank	MON	20
1S/4W-25Q10	1	May 1993	Texaco	MON	18
1S/4W-25Q11	1	May 1993	Texaco	MON	18
1S/4W-25P16	1	May 1995	Chevron USA	MON	20

Abbreviations:
MON = Monitoring well
DOM = Domestic well
PIE = Piezometer
CAT = Cathodic protection well
UNK = Unknown
IRR = Irrigation well

Notes
1 = Wells labelled on Figure 1 by letters and numbers after hyphen in Well ID
2 = Not shown on Figure 1, well located on subject site
3 = Not shown on Figure 1, unable to determine well location

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Attachment B

Analytical Reports for Soil and Ground Water

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

Project: Shell 350 Grand Ave., Oakland

Enclosed are the results from samples received at Sequoia Analytical on April 17, 1998. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE COLLECTED	TEST METHOD
8804B40 -01	SOLID, SB-2-6.0	04/16/98	Purgeable TPH/BTEX/MTBE
8804B40 -02	SOLID, SB-1-7.5	04/16/98	Purgeable TPH/BTEX/MTBE
8804B40 -03	LIQUID, SB-1	04/16/98	TPHD_W Extractable TPH
8804B40 -03	LIQUID, SB-1	04/16/98	Purgeable TPH/BTEX/MTBE
8804B40 -03	LIQUID, SB-1	04/16/98	MTBE by 8260
8804B40 -04	LIQUID, SB-2	04/16/98	Purgeable TPH/BTEX/MTBE
8804B40 -04	LIQUID, SB-2	04/16/98	MTBE by 8260

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

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

Cambria	Client Proj. ID: Shell 350 Grand Ave., Oakland	Sampled: 04/16/98
1144 65th St. Suite C	Sample Descript: SB-2-6.0	Received: 04/17/98
Oakland, CA 94608	Matrix: SOLID	Extracted: 04/20/98
	Analysis Method: 8015Mod/8020	Analyzed: 04/21/98
Attention: Maureen Feineman	Lab Number: 9804B40-01	Reported: 04/23/98

QC Batch Number: GC042098BTEXEXA
Instrument ID: GCHP01

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	91
4-Bromofluorobenzene	60	140	99

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: Shell 350 Grand Ave., Oakland	Sampled: 04/16/98
1144 65th St. Suite C	Sample Descript: SB-1-7.5	Received: 04/17/98
Oakland, CA 94608	Matrix: SOLID	Extracted: 04/20/98
	Analysis Method: 8015Mod/8020	Analyzed: 04/21/98
Attention: Maureen Feineman	Lab Number: 9804B40-02	Reported: 04/23/98

QC Batch Number: GC042098BTEXEXA
Instrument ID: GCHP01

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	99

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: Shell 350 Grand Ave., Oakland	Sampled: 04/16/98
1144 65th St. Suite C	Sample Descript: SB-1	Received: 04/17/98
Oakland, CA 94608	Matrix: LIQUID	Extracted: 04/21/98
	Analysis Method: EPA 8015 Mod	Analyzed: 04/21/98
Attention: Maureen Feineman	Lab Number: 9804B40-03	Reported: 04/23/98

QC Batch Number: GC0421980HBPEXA
Instrument ID: GCHP4B

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	**50**	**140**
Chromatogram Pattern:		**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

Richard Herling
Project Manager

Sequoia Analytical

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Cambria	Client Proj. ID: Shell 350 Grand Ave., Oakland	Sampled: 04/16/98
1144 65th St. Suite C	Sample Descript: SB-1	Received: 04/17/98
Oakland, CA 94608	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 04/20/98
Attention: Maureen Feineman	Lab Number: 9804B40-03	Reported: 04/23/98

QC Batch Number: GC042098BTEX03A
Instrument ID: GCHP03

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
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	94

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: Shell 350 Grand Ave., Oakland	Sampled: 04/16/98
1144 65th St. Suite C	Sample Descript: SB-1	Received: 04/17/98
Oakland, CA 94608	Matrix: LIQUID	
	Analysis Method: EPA 8260	Analyzed: 04/21/98
Attention: Maureen Feineman	Lab Number: 9804B40-03	Reported: 04/23/98

QC Batch Number: MS042098MTBEF3A
Instrument ID: F3

Methyl t-Butyl Ether (MTBE)

Analyte	Detection Limit ug/L	Sample Results ug/L
Methyl t-Butyl Ether	2.0	N.D.

Surrogates	Control Limits %		% Recovery
1,2-Dichloroethane-d4	76	114	103

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

Cambria	Client Proj. ID: Shell 350 Grand Ave., Oakland	Sampled: 04/16/98
1144 65th St. Suite C	Sample Descript: SB-2	Received: 04/17/98
Oakland, CA 94608	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 04/20/98
Attention: Maureen Feineman	Lab Number: 9804B40-04	Reported: 04/23/98

QC Batch Number: GC042098BTEX03A
Instrument ID: GCHP03

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
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	94

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
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: Shell 350 Grand Ave., Oakland	Sampled: 04/16/98
1144 65th St. Suite C	Sample Descript: SB-2	Received: 04/17/98
Oakland, CA 94608	Matrix: LIQUID	
	Analysis Method: EPA 8260	Analyzed: 04/20/98
Attention: Maureen Feineman	Lab Number: 9804B40-04	Reported: 04/23/98

QC Batch Number: MS042098MTBEF3A
Instrument ID: F3

Methyl t-Butyl Ether (MTBE)

Analyte	Detection Limit ug/L	Sample Results ug/L
Methyl t-Butyl Ether	2.0	N.D.

Surrogates	Control Limits %		% Recovery
1,2-Dichloroethane-d4	76	114	105

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 Environmental
1144 65th St., Suite C
Oakland, CA 94608
Attention: Maureen Feineman

Client Project ID: 1200 19th Ave., SF

QC Sample Group: 9804B40-01,02

Reported: Apr 24, 1998

QUALITY CONTROL DATA REPORT

Matrix: Solid
Method: EPA 8015/8020
Analyst: J. Minkel

ANALYTE	Benzene	Toluene	Ethylbenzene	Xylenes	BTEX as TPH
QC Batch #:	GC042098BTEXEXA				
Sample No.:	GS9804B40-02				
Date Prepared:	4/20/98	4/20/98	4/20/98	4/20/98	4/20/98
Date Analyzed:	4/20/98	4/20/98	4/20/98	4/20/98	4/20/98
Instrument I.D.#:	GCHP22	GCHP22	GCHP22	GCHP22	GCHP22
Sample Conc., mg/Kg:	N.D.	N.D.	N.D.	N.D.	N.D.
Conc. Spiked, mg/Kg:	0.20	0.20	0.20	0.20	0.20
Matrix Spike, mg/Kg:	0.21	0.19	0.20	0.62	1.3
% Recovery:	105	95	100	310	650
Matrix Spike Duplicate, mg/Kg:	0.20	0.19	0.20	0.59	1.2
% Recovery:	100	95	100	295	600
Relative % Difference:	4.9	0.0	0.0	5.0	8.0
RPD Control Limits:	0-25	0-25	0-25	0-25	0-25

LCS Batch#:	GSBLK042098A				
Date Prepared:	4/20/98	4/20/98	4/20/98	4/20/98	4/20/98
Date Analyzed:	4/20/98	4/20/98	4/20/98	4/20/98	4/20/98
Instrument I.D.#:	GCHP22	GCHP22	GCHP22	GCHP22	GCHP22
Conc. Spiked, mg/Kg:	0.20	0.20	0.20	0.60	1.2
Recovery, mg/Kg:	0.21	0.20	0.21	0.62	1.3
LCS % Recovery:	105	100	105	103	108
Percent Recovery Control Limits:					
MS/MSD	60-140	60-140	60-140	60-140	60-140
LCS	70-130	70-130	70-130	70-130	70-130

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

SEQUOIA ANALYTICAL

Richard Herlihy
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
1144 65th St., Suite C
Oakland, CA 94608
Attention: Maureen Feineman

Client Project ID: 1200 19th Ave., SF

QC Sample Group: 9804B40-03

Reported: Apr 24, 1998

QUALITY CONTROL DATA REPORT

Matrix:	Liquid
Method:	EPA 8015A
Analyst:	A. Porter
ANALYTE	Diesel

QC Batch #: GC0421980HBPEXA

Sample No.:	BLK041698DS/DSD
Date Prepared:	4/16/98
Date Analyzed:	4/17/98
Instrument I.D.#:	GCHP5A
Sample Conc., ug/L:	N.D.
Conc. Spiked, ug/L:	1000
Matrix Spike, ug/L:	690
% Recovery:	69
Matrix Spike Duplicate, ug/L:	660
% Recovery:	66
Relative % Difference:	4.4
RPD Control Limits:	0-50

LCS Batch#: BLK042198AS

Date Prepared:	4/21/98
Date Analyzed:	4/21/98
Instrument I.D.#:	GCHP19B
Conc. Spiked, ug/L:	1000
Recovery, ug/L:	930
LCS % Recovery:	93

Percent Recovery Control Limits:

MS/MSD	60-140
LCS	50-150

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

Please Note:
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SEQUOIA ANALYTICAL

Richard Herling
Project Manager

Sequoia Analytical

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

Client Project ID: 1200 19th Ave., SF

QC Sample Group: 9804B40-03, 04

Reported: Apr 24, 1998

QUALITY CONTROL DATA REPORT

Matrix: Liquid
Method: EPA 8015/8020
Analyst: C. Demartini

ANALYTE	Benzene	Ethylbenzene	Toluene	Xylenes	BTEX as TPH
QC Batch #:	GC042098BTEX03A				
Sample No.:	GW9804908-1				
Date Prepared:	4/20/98	4/20/98	4/20/98	4/20/98	4/20/98
Date Analyzed:	4/20/98	4/20/98	4/20/98	4/20/98	4/20/98
Instrument I.D.#:	GCHP3	GCHP3	GCHP3	GCHP3	GCHP3
Sample Conc., ug/L:	N.D.	N.D.	N.D.	N.D.	N.D.
Conc. Spiked, ug/L:	10	10	10	30	60
Matrix Spike, ug/L:	11	11	11	34	71
% Recovery:	110	110	110	113	118
Matrix Spike Duplicate, ug/L:	11	11	11	34	71
% Recovery:	110	110	110	113	118
Relative % Difference:	0.0	0.0	0.0	0.0	0.0
RPD Control Limits:	0-25	0-25	0-25	0-25	0-25

LCS Batch#:	GAWBLK042098A				
Date Prepared:	4/20/98	4/20/98	4/20/98	4/20/98	4/20/98
Date Analyzed:	4/20/98	4/20/98	4/20/98	4/20/98	4/20/98
Instrument I.D.#:	GCHP3	GCHP3	GCHP3	GCHP3	GCHP3
Conc. Spiked, ug/L:	10	10	10	30	60
LCS Recovery, ug/L:	11	11	11	34	72
LCS % Recovery:	110	110	110	113	120

Percent Recovery Control Limits:

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

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

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.

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Cambria Environmental Tech.	Client Project ID:	Shell 350 Grand Ave., Oakland	
1144 65th St., Ste. C	Matrix:	Solid	
Oakland, CA 94608			
Attention: Maureen Feineman	Work Order #:	9804B40 03	Reported: Apr 28, 1998

QUALITY CONTROL DATA REPORT

Analyte:	MTBE
QC Batch#:	MS042098MTBEF3A
Analy. Method:	EPA 8260
Prep. Method:	

Analyst:	E. Manuel
MS/MSD #:	980490801
Sample Conc.:	N.D.
Prepared Date:	N.A.
Analyzed Date:	4/20/98
Instrument I.D.#:	F3
Conc. Spiked:	50 µg/L
Result:	60
MS % Recovery:	120
Dup. Result:	58
MSD % Recov.:	116
RPD:	3.4
RPD Limit:	0-25

LCS #:	LCS042098
Prepared Date:	N.A.
Analyzed Date:	4/20/98
Instrument I.D.#:	F3
Conc. Spiked:	50 µg/L
LCS Result:	62
LCS % Recov.:	124

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

SEQUOIA ANALYTICAL

Richard Herling
Project Manager

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

Sequoia Analytical

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Cambria Environmental Tech.	Client Project ID:	Shell 350 Grand Ave., Oakland		
1144 65th St., Ste. C	Matrix:	Solid		
Oakland, CA 94608				
Attention: Maureen Feineman	Work Order #:	9804B40	04	Reported: Apr 28, 1998

QUALITY CONTROL DATA REPORT

Analyte:	MTBE
QC Batch#:	MS042098MTBEF3A
Analy. Method:	EPA 8260
Prep. Method:	
Analyst:	E. Manuel
MS/MSD #:	980490801
Sample Conc.:	N.D.
Prepared Date:	N.A.
Analyzed Date:	4/20/98
Instrument I.D.#:	F3
Conc. Spiked:	50 µg/L
Result:	60
MS % Recovery:	120
Dup. Result:	58
MSD % Recov.:	116
RPD:	3.4
RPD Limit:	0-25

LCS #:	LCS042198
Prepared Date:	4/21/98
Analyzed Date:	4/21/98
Instrument I.D.#:	F3
Conc. Spiked:	50 µg/L
LCS Result:	58
LCS % Recov.:	116

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

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

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD

Serial No: ________________

Date: 4/16/98
Page ___ of ___

Site Address: 350 Grand Ave, Oakland

WIC#: 204-5510-0204

Shell Engineer: Alex Perez | **Phone No.:** 510-535-5027 | **Fax #:** -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: 9804B40

Sampled by: Maureen Feineman

Printed Name: Maureen Feineman

LAB: Sequoia

CHECK ONE (1) BOX ONLY	CT/DT
G.W. Monitoring [ ]	4461
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 ~~(Normal)~~
Other [X] 5-DAY

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

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)	Volatile Organics (EPA 8240)	Test for Disposal	Combination TPH 8015 & BTEX 8020/ MTBE 8020	[illegible]	[illegible]	Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
SB-2-6.0	4/16		X			1						X								
SB-2-9.0			X			1													HOLD	
SB-2-12.0			X			1													HOLD	
SB-2-14.5			X			1													HOLD	
SB-1-7.5			X			1						X								
SB-1-11.0			X			1													HOLD	
SB-1-11.5			X			1													HOLD	
SB-1-14.9	↓		X			1													HOLD	

Relinquished By (signature):	Printed Name:	Date/Time	Received (signature):	Printed Name:	Date/Time
Maureen Feineman	Maureen Feineman	Date: 4/17 Time: 1640	[signature]	LANCE A. DAVIDSON	Date: Time: 1640
[signature]	LANCE A. DAVIDSON	Date: 4/17 Time:	Received (signature):	Printed Name:	Date: Time:
Relinquished By (signature):	Printed Name:	Date: Time:	[signature]	Kevin Kegel	Date: 4/17 Time: 1740

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

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD Serial No: _____ Date: 4/17/98 Page 2 of 2

Site Address: 350 Grand Ave Oakland, CA

WIC#: 204-5510-0204

Shell Engineer: Alex Perez — Phone No.: 510-335-5027 Fax #: -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: Maura Feineman

Printed Name: Maureen Feineman

LAB: Sequoia

CHECK ONE (1) BOX ONLY	C1/D1
G.W. Monitoring	[ ] 4461
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 [ ] 10 days ~~(Normal)~~ [ ] Other [X] 5 DAY

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

UST AGENCY: Alameda County

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 + MTBE Confirm	MTBE 8260	Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/COMMENTS
SB-1	4/16			X		2 L 3 VOA		X				X	X						
SB-2	4/16			X		3 VOA						X	X						

	Printed Name	Date	Time	Received (signature)	Printed Name	Date	Time
Relinquished By (signature): Maura Feineman	Maureen Feineman	4.17	1640		Lance A. Davidson	4.17.98	1640
Relinquished By (signature):	Lance A. Davidson	4.17					
Relinquished By (signature):				Kevin Kegel	Kevin Kegel	4/17	1240

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

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: Maureen Feineman	Client Proj. ID: Shell 350 Grand Ave., Oakland Lab Proj. ID: 9804B40	Received: 04/17/98 Reported: 04/23/98

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 16 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

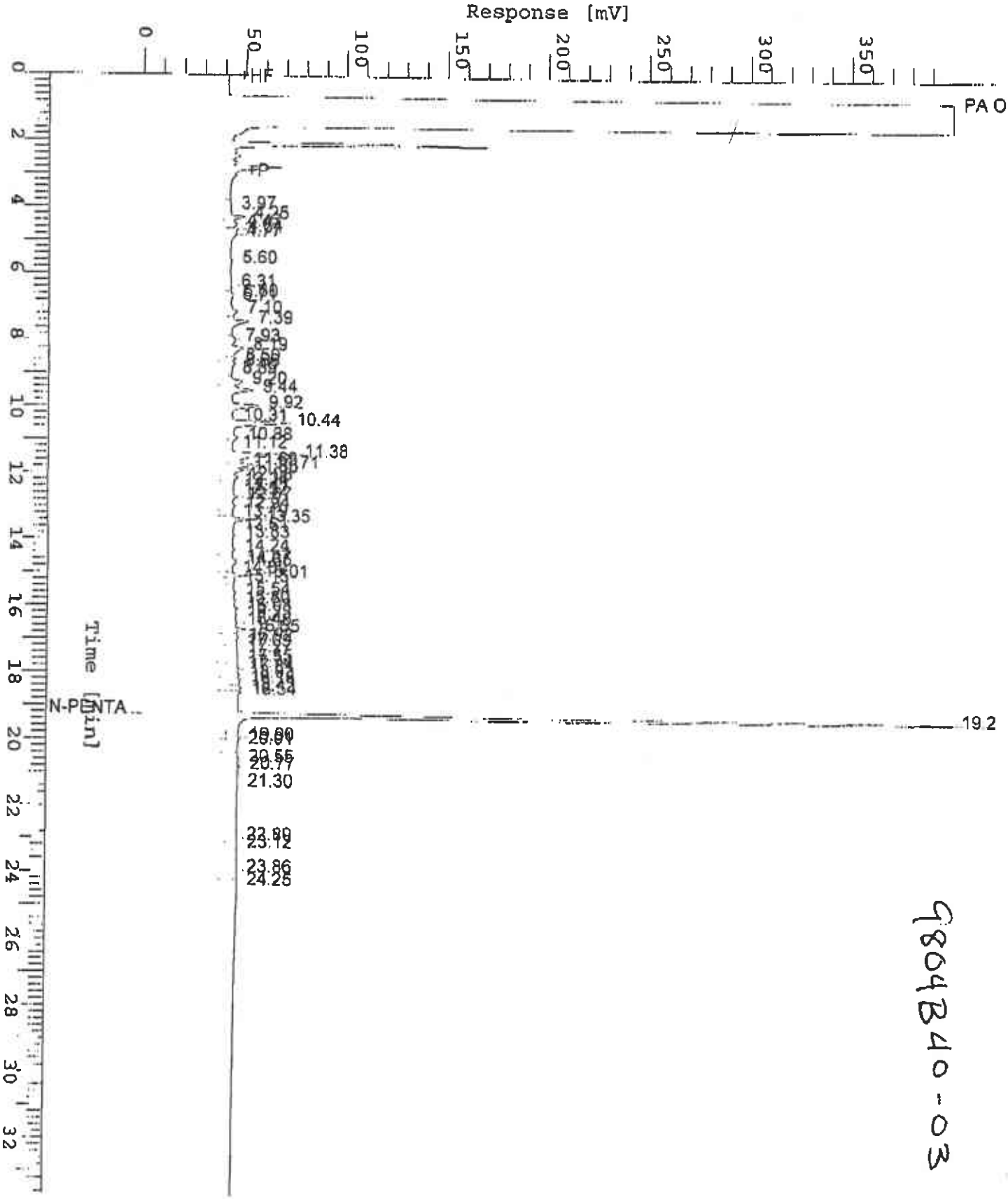
SEQUOIA ANALYTICAL

Richard Herling
Project Manager

Chromatogram

Sample Name : DW9804B40-3 (500:1)
FileName : S:\GHP_04\0426\420B035.raw
Method : TPH04A
Start Time : 0.00 min End Time : 33.65 min
Scale Factor: 0.0 Plot Offset: 0 mV

Sample #: SB-1 Page 1 of 1
Date : 4/27/98 16:17
Time of Injection: 4/21/98 20:17
Low Point : 0.00 mV High Point : 400.00 mV
Plot Scale: 400.0 mV



9804B40-03

CAMBRIA

Attachment C

Soil Boring Logs

DRILLING LOG

Client: Shell Oil Products Company

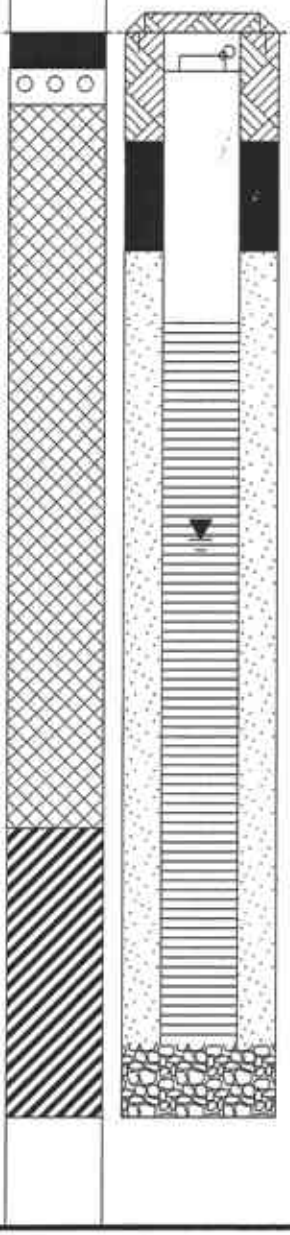
Project No: 240-0715 Phase Task005

Well ID S-5 Boring ID SB-1

Location 350 Grand Avenue Oakland, California

Surface Elev. NA ft, Page 1 of 1

Depth (feet)	Blow Count	Sample	% Rec	Lithologic Description
0	Ground Surface			
				ASPHALT
				CONCRETE
				Silty SAND, FILL: brown; loose; damp; 5% clay; 15% silt; 80% coarse sand; no to low plasticity; moderate to high estimated permeability.
5				
				Wet.
10				
				Silty CLAY: (CH); brown to grey; stiff; damp; 80% clay, 20% silt; high plasticity; low estimated permeability.
15				



Well Construction Details

T.O.C. Elev. NA

Water level @ 7.0 ft

Bottom of well @ 14.0 ft

Bottom of boring @ 15.0 ft

Driller Gregg Drilling

Logged By Maureen Feineman

Drilling Started 4/16/98

Drilling Completed 4/16/98

Construction Completed 4/16/98

Development Completed NA

Water Bearing Zones NA

Development Yield NA

Well Casing 0.75" Dia. 4.0' to 0.0'

Casing Type Schedule 40 PVC

Well Screen 0.75" Dia. 14.0' to 4.0'

Screen Type Slotted Schedule 40 PVC

Slot Size 0.010"

Drilling Mud NA

Grout Type Portland Type I/II

Bentonite Seal 3.0' to 1.5'

Sand Pack 14.0' to 3.0'

Sand Pack Type #2/12 Monterrey Sand

Static Water Level 7.00 ft Depth

Date NA

Notes: South side of Grand Avenue, west of Perkins Street.

WELL 24715 6/1/98

Cambria Environmental Technology, Inc.

DRILLING LOG

Client: Shell Oil Products Company

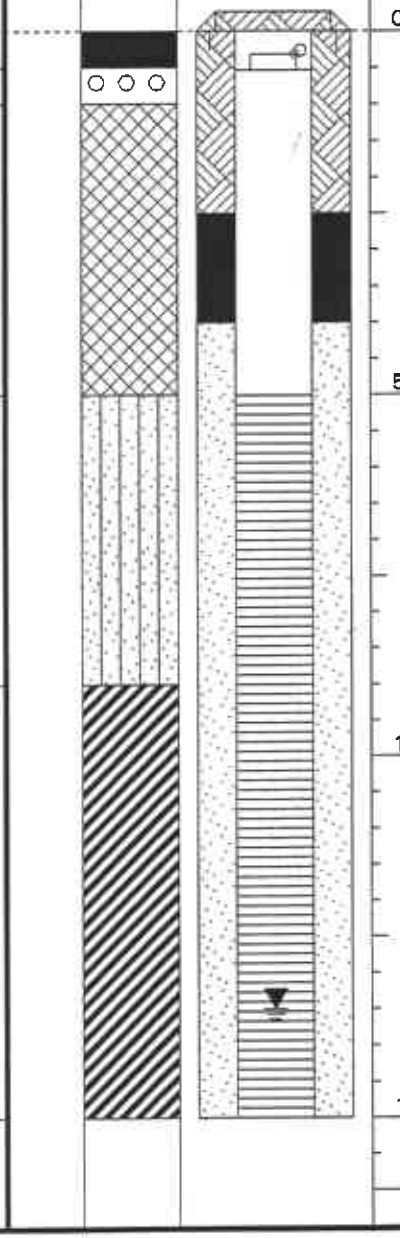
Project No: 240-0715 Phase Task005

Well ID S-4 Boring ID SB-2

Location 350 Grand Avenue Oakland, California

Surface Elev. NA ft, Page 1 of 1

Depth (feet)	Blow Count	Sample	% Rec	Lithologic Description
0	Ground Surface			
				ASPHALT
				CONCRETE
				Gravelly SAND, FILL: brown to grey; very dense; damp; 10% silt, 50% sand; 40% gravel; no plasticity; high estimated permeability.
5				
				Silty SAND: SM; grey; loose; moist; 40% silt, 60% very fine sand; low plasticity; moderate estimated permeability.
10				Silty sandy CLAY: CH; brown; stiff; damp; 70% clay, 15% silt, 15% coarse sand; high plasticity; low estimated permeability.
				Silty CLAY: CH; brown; very stiff; damp; 80% clay, 20% silt; high plasticity, low estimated permeability.
15				



Well Construction Details

T.O.C. Elev. NA

Water Level @ 13.5 ft

Bottom of well @ 15.0 ft

Driller Gregg Drilling

Logged By Maureen Feineman

Drilling Started 4/16/98

Drilling Completed 4/16/98

Construction Completed 4/16/98

Development Completed NA

Water Bearing Zones NA

Development Yield NA

Well Casing 0.75" Dia. 5.0' to 0.0'

Casing Type Schedule 40 PVC

Well Screen 0.75" Dia. 15.0' to 5.0'

Screen Type Slotted Schedule 40 PVC

Slot Size 0.010"

Drilling Mud NA

Grout Type Portland Type I/II

Bentonite Seal 4.0' to 2.5'

Sand Pack 15.0' to 4.0'

Sand Pack Type #2/12 Monterrey Sand

Static Water Level 13.50 ft Depth

Date NA

Notes: South side of Grand Avenue, east of Perkins Street.

WELL 24715 6/1/98

Cambria Environmental Technology, Inc.

CAMBRIA

Attachment D

Standard Field Procedures for GeoProbe® Sampling
and Pre-packed Well Installation

STANDARD FIELD PROCEDURES FOR GeoProbe® SAMPLING AND PRE-PACKED WELL INSTALLATION

This document describes Cambria Environmental Technology's standard field methods for GeoProbe® soil and ground water sampling and pre-packed well installation. These procedures are designed to comply with Federal, State and local regulatory guidelines. Specific field procedures are summarized below.

Objectives

Soil samples are collected to characterize subsurface lithology, assess whether the soils exhibit obvious hydrocarbon or other compound vapor odor or staining, estimate ground water depth and quality, and to submit samples for chemical analysis.

Soil Classification/Logging

All soil samples are classified according to the Unified Soil Classification System by a trained geologist or engineer working under the supervision of a California Registered Geologist (RG), Certified Engineering Geologist (CEG), or Professional Engineer (PE). The following soil properties are noted for each soil sample:

- Principal and secondary grain size category (i.e., sand, silt, clay or gravel)
- Approximate percentage of each grain size category,
- Color,
- Approximate water or separate-phase hydrocarbon saturation percentage,
- Observed odor and/or discoloration,
- Other significant observations (i.e., cementation, presence of marker horizons, mineralogy), and
- Estimated permeability.

Soil Sampling

GeoProbe® soil samples are collected from borings using hydraulic push technologies. A minimum of one and one half ft of the soil column is collected for every five ft of drilled depth. Additional soil samples can be collected near the water table and at lithologic changes. Samples are collected using samplers lined with polyethylene or brass tubes driven into undisturbed sediments at the bottom of the borehole. The ground surface immediately adjacent to the boring is used as a datum to measure sample depth. The horizontal location of each boring is measured in the field relative to a permanent on-site reference using a measuring wheel or tape measure.

Drilling equipment is steam-cleaned or washed prior to drilling and between borings to prevent cross-contamination. Sampling equipment is washed between samples with trisodium phosphate or an equivalent EPA-approved detergent.

Sample Storage, Handling and Transport

Sampling tubes chosen for analysis are trimmed of excess soil and capped with Teflon® tape and plastic end caps and sealed in an individual zip-lock bag. Soil samples are labeled and stored at or below 4°C on either crushed or dry ice, depending upon local regulations. Samples are transported under chain-of-custody to a State-certified analytic laboratory.

Field Screening

After a soil sample has been collected, soil from the remaining tubing is placed inside a sealed plastic bag and set aside to allow hydrocarbons to volatilize from the soil. After ten to fifteen minutes, a photoionization detector measures volatile hydrocarbon vapor concentrations in the bag's headspace, extracting the vapor through a slit in the plastic bag. The measurements are used along with the field observations, odors, stratigraphy and ground water depth to select soil samples for laboratory analysis.

Grab Ground Water Sampling

Ground water samples are collected from the open borehole using bailers, by advancing disposable Tygon® tubing into the borehole and extracting ground water using a diaphragm pump, or by using a hydro-punch style sampler with a bailer or tubing. The ground water samples are decanted into the appropriate containers supplied by the analytic laboratory. Samples are labeled, placed in protective foam sleeves, stored on crushed ice at or below 4°C, and transported under chain-of-custody to the laboratory.

Duplicates and Blanks

Blind duplicate water samples are usually collected only for monitoring well sampling programs, at a rate of one blind sample for every 10 wells sampled. Laboratory-supplied trip blanks accompany samples collected for all sampling programs to check for cross-contamination caused by sample handling and transport. These trip blanks are analyzed if the internal laboratory quality assurance/quality control (QA/QC) blanks contain the suspected field contaminants. An equipment blank may also be analyzed if non-dedicated sampling equipment is used.

Grouting

If the borings are not completed as wells, the borings are filled to the ground surface with cement grout poured or pumped through a tremie pipe. When required by local regulations, the borings are abandoned using chipped or pellitized bentonite.

Pre-Packed Well Installation and Surveying

Ground water monitoring wells are installed in soil borings to monitor ground water quality and determine the ground water elevation, flow direction and gradient. Well depths and screen lengths are based on ground water depth, occurrence of hydrocarbons or other compounds in the borehole, stratigraphy, and State and local regulatory guidelines. Well screens typically extend 10 to 15 feet below and 5 feet above the static water level at the time of drilling. However, the well screen will generally not extend into or through a clay layer that is at least three feet thick.

Prior to well installation, a 2-inch rod casing with an expendable point is advanced to the desired depth. The 3-foot length pre-packed filter sections are then threaded together with the associated PVC riser and placed through the 2-inch rod casing. The pre-packed well is comprised of sand filter media housed by a stainless steel exterior and schedule-80 PVC screen inner core that is coupled together to create the desired filtered well length. Screen slot size varies according to the sediments screened, but slots are generally 0.010 or 0.020 inches wide. A rinsed and graded sand occupies the annular space between the boring and the well screen to about one to two ft above the well screen. A two feet thick hydrated bentonite seal separates the sand from the overlying sanitary surface seal composed of Portland type I, II cement.

Well-heads are secured by locking well-caps inside traffic-rated vaults finished flush with the ground surface using concrete. A stovepipe may be installed between the well-head and the vault cap for additional security. The well top-of-casing elevation is surveyed with respect to mean sea level and the well may be surveyed for horizontal location with respect to an onsite or nearby offsite landmark.

Well Development

Wells are generally developed using a combination of ground water surging and extraction. Surging agitates the ground water and dislodges fine sediments from the sand pack. After about ten minutes of surging, ground water is extracted from the well using bailing, pumping and/or reverse air-lifting through an eductor pipe to remove the sediments from the well. Surging and extraction continue until at least ten well-casing volumes of ground water are extracted and the sediment volume in the ground water is negligible. This process usually occurs prior to installing the sanitary surface seal to ensure sand pack stabilization. If development occurs after surface seal installation, then development occurs 24 to 72 hours after seal installation to ensure that the Portland cement has set up correctly.

All equipment is steam-cleaned prior to use and air used for air-lifting is filtered to prevent oil entrained in the compressed air from entering the well. Wells that are developed using air-lift evacuation are not sampled until at least 24 hours after they are developed.

CAMBRIA

Attachment E

Permits

ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION
951 TURNER COURT, SUITE 300, HAYWARD, CA 94545-2651
PHONE (510) 670-5575 ANDREAS GODFREY FAX (510) 670-5262
(510) 670-5248 ALVIN KAN

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT 350 Grand Avenue
Oakland, CA

California Coordinates Source _____ ft. Accuracy ± ___ ft.
CCN _____ ft. CCE _____ ft.
APN _____

CLIENT
Name Shell Oil Products Company
Address PO Box 8080 Phone 510-335-5027
City Martinez Zip 94553

APPLICANT
Name Cambria Environmental Tech.
Maureen Fitzsimon Fax 510-420-9170
Address 1144 65th Street Ste B Phone 510-420-0700
City Oakland Zip 94608

TYPE OF PROJECT

Well Construction		Geotechnical Investigation	
Cathodic Protection	☐	General	
Water Supply	☐	Contamination	☐
Monitoring	☒	Well Destruction	☐

PROPOSED WATER SUPPLY WELL USE

New Domestic	☐	Replacement Domestic	☐
Municipal	☐	Irrigation	☐
Industrial	☐	Other _____	☐

DRILLING METHOD:

Mud Rotary	☐	Air Rotary	☐	Auger	☐
Cable	☐	Other	☒		

DRILLER'S LICENSE NO. 705927

WELL PROJECTS
Drill Hole Diameter 7 in. Maximum
Casing Diameter 1 3/4 in. Depth 15 ft.
Surface Seal Depth 1.5 ft. Number 2

GEOTECHNICAL PROJECTS
Number of Borings 4 Maximum
Hole Diameter _____ in. Depth 15 ft.

ESTIMATED STARTING DATE 3/11/98
ESTIMATED COMPLETION DATE 3/11/98

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.

APPLICANT'S SIGNATURE Maureen Fitzsimon DATE 2/17/98

FOR OFFICE USE

PERMIT NUMBER 98WR096
WELL NUMBER _____
APN _____

PERMIT CONDITIONS

Circled Permit Requirements Apply

(A) GENERAL
1. A permit application should be submitted so as to arrive at the ACPWA office five days prior to proposed starting date.
(2.) Submit to ACPWA within 60 days after completion of permitted work the original Department of Water Resources Water Well Drillers Report or equivalent for well projects, or drilling logs and location sketch for geotechnical projects.
(3.) Permit is void if project not begun within 90 days of approval date.

B. WATER SUPPLY WELLS
1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.

(C.) GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS
1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

D. GEOTECHNICAL
Backfill bore hole with compacted cuttings or heavy bentonite and upper two feet with compacted material. In areas of known or suspected contamination, tremied cement grout shall be used in place of compacted cuttings.

E. CATHODIC
Fill hole above anode zone with concrete placed by tremie.

F. WELL DESTRUCTION
See attached.

G. SPECIAL CONDITIONS

APPROVED Alvin Kan DATE 3/4/98

Recording requested by:
City of Oakland

When Recorded Mail to:
City of Oakland
Community & Econ. Develop. Agency
Building Services, Eng. info.
1330 Broadway, 2nd Floor
Oakland, CA 94612

TAX ROLL PARCEL NUMBER
(ASSESSOR'S REFERENCE NUMBER)

MAP	BLOCK	PARCEL	SUB
010	776	13	-

SPACE ABOVE FOR RECORDER'S USE ONLY

Address: 350 Grand Avenue, Oakland

MINOR ENCROACHMENT PERMIT AND AGREEMENT

Shell Oil Products Company, 350 Grand Avenue is hereby granted a Conditional Revocable Permit to encroach into the public right-of-way areas of Grand Avenue and Perkins Street, Oakland with three monitoring wells. The location of said encroachments shall be as delineated in Exhibit 'A' attached hereto and made a part hereof.

The permittee agrees to comply with and be bound by the conditions for granting an Encroachment Permit attached hereto and made a part hereof.

This agreement shall be binding upon the permitees described above, and their successors in interest thereof.

In witness whereof, I have set my signature this 31 day of March, 1998.

Shell Oil Products Company

Alejandro Perez

Print name ALEJANDRO E. PEREZ

Title ENVIRONMENTAL ENGINEER

-- -- -- -- -- -- -- -- -- -- -- -- -- -- -- -- -- --

BELOW FOR OFFICIAL USE ONLY

CITY OF OAKLAND

Dated_____ By:_____

CALVIN N. WONG
Chief of Building Services
For
WILLIAM E. CLAGGETT
Interim Director, Community &
Economic Development Agency

file: minenc.3)

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

State of California

County of Contra Costa

On March 31, 1998 (Date) before me, Jennifer Corrie Jones, Notary Public, (Name and Title of Officer (e.g., "Jane Doe, Notary Public"))

personally appeared Alejandro E. Perez (Name(s) of Signer(s))

☑ personally known to me – OR – ☐ proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

JENNIFER CORRIE JONES
Commission # 1156955
Notary Public - California
Contra Costa County
My Comm. Expires Sep 27, 2001

WITNESS my hand and official seal.

Jennifer Corrie Jones
Signature of Notary Public

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

Description of Attached Document

Title or Type of Document: Minor Encroachment Permit & Agreement

Document Date: March 25, 1998 Number of Pages: 9

Signer(s) Other Than Named Above: _____

Capacity(ies) Claimed by Signer(s)

Signer's Name: _____

☐ Individual
☐ Corporate Officer
Title(s): _____
☐ Partner — ☐ Limited ☐ General
☐ Attorney-in-Fact
☐ Trustee
☐ Guardian or Conservator
☐ Other: _____

RIGHT THUMBPRINT OF SIGNER
Top of thumb here

Signer Is Representing:

_____

_____

Signer's Name: _____

☐ Individual
☐ Corporate Officer
Title(s): _____
☐ Partner — ☐ Limited ☐ General
☐ Attorney-in-Fact
☐ Trustee
☐ Guardian or Conservator
☐ Other: _____

RIGHT THUMBPRINT OF SIGNER
Top of thumb here

Signer Is Representing:

_____

_____

Prod. No. 5907

Reorder: Call Toll-Free 1-800-876-6827

EXHIBIT "A"

CAMBRIA
Environmental Technology, Inc.

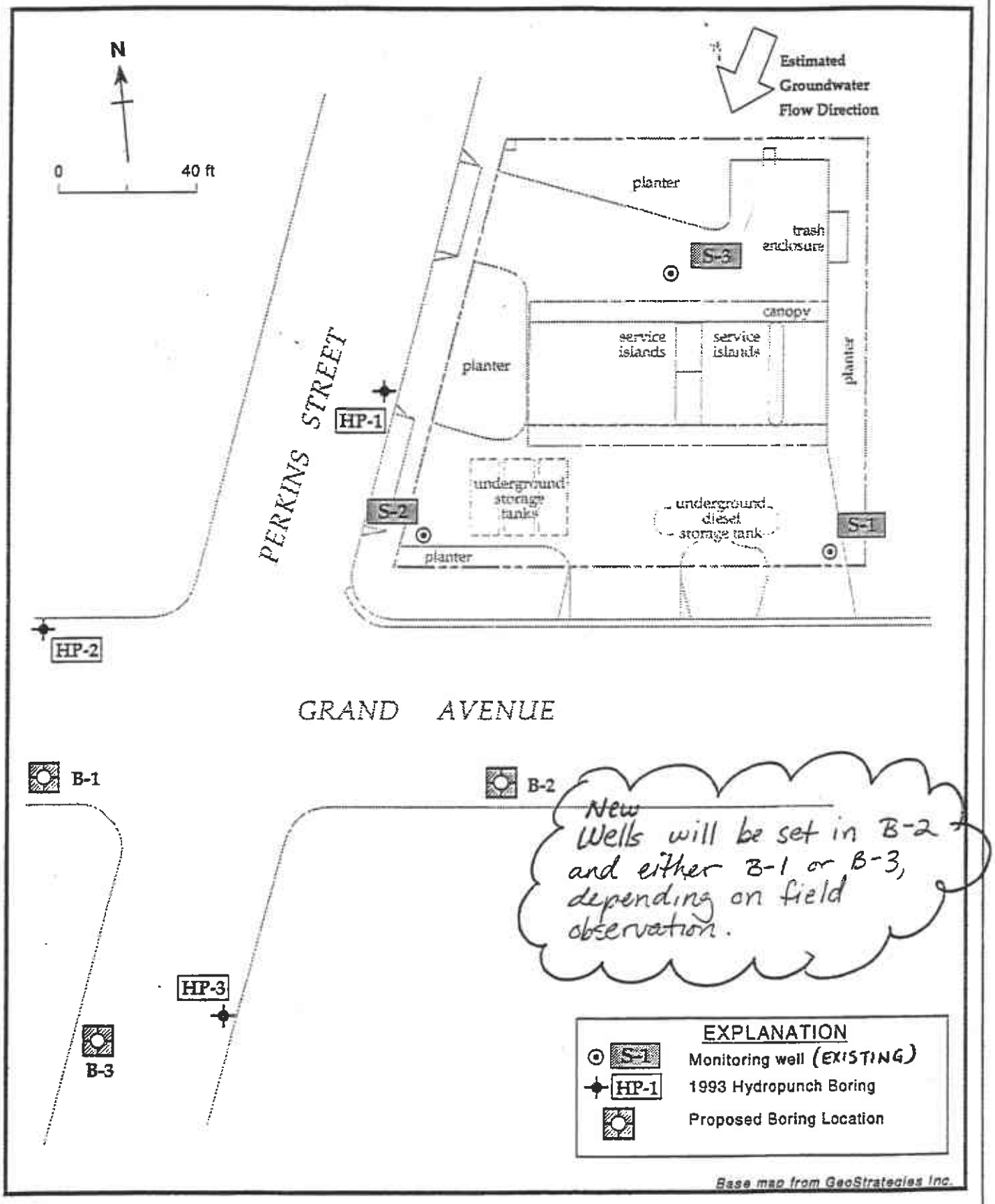


Figure 2. Proposed Boring Locations - Shell Service Station WIC #204-5510-0204, 350 Grand Avenue, Oakland, California

08/15/97

TO: Shell Oil Products Company

Address: 350 Grand Avenue, Oakland, CA

RE: Minor Encroachment Permit for Monitoring Wells in Grand Avenue and Perkins Street

CONDITIONS FOR GRANTING A MINOR ENCROACHMENT PERMIT

1. That this permit shall be revocable at the pleasure of the Chief of Building Services.

2. That the permittee, by the acceptance, either expressed or implied, of the minor encroachment permit hereby disclaims any right, title, or interest in or to any portion of the public sidewalk or street area, and agrees that said temporary use of said area does not constitute an abandonment on the part of the City of Oakland of any of its rights for street purposes and otherwise.

3. The permittee shall maintain in force and effect at all times that said encroachment occupies said public sidewalk or street area, good and sufficient public liability insurance in the amount of $300,000 for each occurrence, and property damage insurance in the amount of $50,000 for each occurrence, both including contractual liability insuring the City of Oakland against any and all claims arising out of the existence of said encroachment in said public sidewalk or street area, and that a certificate of such insurance and subsequent notices of the renewal thereof, shall be filed with the Chief of Building Services of the City of Oakland, and that such certificate shall state that said insurance coverage shall not be canceled or be permitted to lapse without thirty (30) days written notice to said Chief of Building Services. The Permittee also agrees that the City may review the type and amount of insurance required of the Permittee every five (5) years and may require the permittee to increase the amount of and/or change the type of insurance coverage required.

4. That the permittee, by the acceptance, either expressed or implied, of this revocable permit shall be solely and fully responsible for the repair or replacement of any portion or all of said improvements in the event that said improvements shall have failed or have been damaged to the extent of creating a menace or of becoming a hazard to the safety of the general public; and that the permittee shall be liable for the expenses connected therewith.

5. That the permittee is aware that the proposed work is out of the ordinary and does not comply with City standard installations. Permittee is also aware that the City has to conduct work in the public right-of-way which may include, but may not be limited to, excavation, trenching, and relocation of its facilities, all of which may damage encroachments. Permittee is further aware that the City takes no responsibility for repair or replacement of encroachments which are damaged by the City or its contractors. That the permittee, by the acceptance, either expressed or implied, of the encroachment permit hereby agrees that upon receipt of notification from the City, permittee shall immediately repair or replace within 30 days all damages to permittee's encroachments within the public right-of-way which are damaged by the City or its contractors in carrying out the City's work. Permittee agrees to employ interim measures required and approved by the City until repair or replacement work is completed.

6. That upon the termination of the permission herein granted, permittee shall immediately remove said encroachment from the sidewalk and street area, and any damage resulting therefrom shall be repaired to the satisfaction of the Chief of Building Services.

7. That the permittee shall file with the City of Oakland for recordation a Minor Encroachment Permit and Agreement, and shall be bound by and comply with all the terms and conditions of said permit.

8. That said permittee shall obtain an excavation permit prior to the construction and a separate excavation permit prior to the removal of the ground water monitoring wells.

9. That said permittee shall provide to the City of Oakland an AS BUILT plan showing the actual location of the ground water monitoring wells and the results of all data collected from the monitoring wells.

10. That said permittee shall remove the monitoring wells and repair any damage to the sidewalk or street area in accordance with City standards two (2) years after construction or as soon as monitoring is complete.

11. That said permittee shall notify Building Services, Community and Economic Development Agency after the monitoring well(s) is/are removed and the sidewalk or street area restored to initiate the procedure to rescind the minor encroachment permit.

12. That monitoring well covers installed within the sidewalk area shall have a skidproof surface. A precast concrete utility

box may be used in conjunction with the bolted cast iron cover with City approval.

13. That the ground water monitoring well casting and cover shall be cast iron and shall meet H-20 load rating. The cover shall be secured with a minimum of two stainless steel bolts. Bolts and cover shall be mounted flush with the surrounding surface.

14. That the permittee acknowledges that the City makes no representations or warranties as to the conditions beneath said encroachment. By accepting this revocable permit, permittee agrees that it will use the encroachment area at its own risk, is responsible for the proper coordination of its activities with all other permittees, underground utilities, contractors, or workmen operating within the encroachment area and for the safety of itself and any of its personnel in connection with its entry under this revocable permit.

15. That the permittee acknowledges that the City is unaware of the existence of any hazardous substances beneath the encroachment area, and hereby waives and fully releases and forever discharges the City and its officers, directors, employees, agents, servants, representatives, assigns and successors from any and all claims, demands, liabilities, damages, actions, causes of action, penalties, fines, liens, judgments, costs, or expenses whatsoever (including, without limitation, attorneys' fees and costs), whether direct or indirect, known or unknown, foreseen or unforeseen, that may arise out of or in any way connected with the physical condition, or required remediation of the excavation area or any law or regulation applicable thereto, including, without limitation, the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended (42 U.S.C. Sections 9601 et seq.), the Resource Conservation and Recovery Act of 1976 (42 U.S.C. Section 6901 et seq.), the Clean Water Act (33 U.S.C. Section 466 et Seq.), the Safe Drinking Water Act (14 U.S.C. Sections 1401-1450), the Hazardous Materials Transportation Act (49 U.S.C. Section 1801 et seq.), the Toxic Substance Control Act (15 U.S.C. Sections 2601-2629), the California Hazardous Waste Control Law (California Health and Safety Code Sections 25100 et seq.), the Porter-Cologne Water Quality Control Act (California Health and Safety Code Section 13000 et seq.), the Hazardous Substance Account Act (California Health and Safety Code Section 25300 et seq.), and the Safe Drinking Water and Toxic Enforcement Act (California Health and Safety Code Section 25249.5 et seq.).

16. Permittee further acknowledges that it understands and agrees that it hereby expressly waives all rights and benefits which it now has or in the future may have, under and by virtue of the terms of California Civil Code Section 1542, which reads as follows: "A GENERAL RELEASE DOES NOT EXTEND TO CLAIMS WHICH THE CREDITOR DOES NOT KNOW OR SUSPECT TO EXIST IN HIS FAVOR AT THE TIME OF EXECUTING THE RELEASE, WHICH IF KNOWN BY

HIM MUST HAVE MATERIALLY AFFECTED HIS SETTLEMENT WITH THE DEBTOR."

17. Permittee recognizes that by waiving the provisions of this section, permittee will not be able to make any claims for damages that may exist, and to which, if known, would materially affect his/her decision to execute this encroachment agreement, regardless of whether permittee's lack of knowledge is the result of ignorance, oversight, error, negligence, or any other cause.

18. (a) That the permittee, by the acceptance of this revocable permit, agrees and promises to indemnify, defend, and hold harmless the City of Oakland, its officers, agents, and employees, to the maximum extent permitted by law, from any and all claims, demands, liabilities, damages, actions, causes of action, penalties, fines, liens, judgments, costs, or expenses whatsoever (including, without limitation, attorneys' fees and costs; collectively referred to as "claims"), whether direct or indirect, known or unknown, foreseen or unforeseen, to the extent that such claims were caused by the permittee, its agents, employees, contractors or representatives.

(b) That, if any contamination is discovered below or in the immediate vicinity of the encroachment, and the contaminants found are of the type used, housed, stored, processed or sold on or from the 350 Grand Avenue, Oakland, California site, such shall amount to a rebuttable presumption that the contamination below, or in the immediate vicinity of, the encroachment was caused by the permittee, its agents, employees, contractors or representatives.

(c) That the permittee shall comply with all applicable federal, state, county and local laws, rules, and regulations governing the installation, maintenance, operation and abatement of the encroachment.

(d) That the permittee hereby does remise, release, and forever discharge, and agree to defend, indemnify and save harmless, the City, its officers, agents and employees and each of them, from any and all actions, claims, and demands of whatsoever kind or nature, and any damage, loss or injury which may be sustained directly or by the undersigned and any other person or persons, and arising out of, or by reason of, the occupation of said public property, and the future removal of the above-mentioned encroachment.

19. That the hereinabove conditions shall be binding upon the permittee and the successive owners and assigns thereof.

20. That said Minor Encroachment Permit and Agreement shall take effect when all the conditions hereinabove set forth shall have been complied with to the satisfaction of the Chief of Building Services, and shall become null and void upon the failure of the permittee to comply with all conditions hereinabove set forth.

NOTICE TO APPLICANTS

This document **must** be signed in the presence of a notary public.

If the benefiting property is owned by an individual, or individuals, all deeded owners must sign. Signatures, and typed or printed names must appear **exactly** as they do on the grant deed. If the benefiting property is owned by a corporation, or a partnership, etc., the document must be signed by the corporate officer(s), or authorized person(s) with the authority to execute such a document. The signature(s) of the person(s) signing must match the printed (or typed) name exactly (i.e. same spelling, middle initial, etc.).

Return the **original** document to our office to the attention of Albert Hall, City of Oakland-CEDA, 1330 Broadway, Oakland, CA 94612 for final review, and transmittal to the Alameda County Recorder's office for recordation. You should make copies of the document for your records, as the recorded document will **not** be mailed to you after it is recorded.

NOTICE TO NOTARY PUBLIC

Do not make changes to the document. Print your name on the acknowledgment in the space provided on the acknowledgment form and sign in the space provided. Affix the notary seal to the acknowledgment slip only. Do not place the seal over any inked or colored portion; it will be returned unrecorded, causing a delay in the transaction.

If the document is signed in California:

You must attach a **full-paged** California All-Purpose Acknowledgment Slip and fill in all necessary information and check the appropriate boxes.

For signers other than individuals (i.e. corporate officers, company representatives, etc.), you must check the appropriate box and fill in the name of the entity the signer(s) is (are) representing under "SIGNER IS REPRESENTING" in the "CAPACITY CLAIMED BY SIGNER" section.

Oakland
All-America City
1993

CITY OF OAKLAND

OFFICE OF PLANNING & BUILDING • 1330 BROADWAY • OAKLAND, CALIFORNIA 94612

Administration	238-7200	Building Services	238-3587	Planning	238-3941
Engineering Services	238-2110	Operations	238-3443	Zoning	238-7206

Shell Oil Products Company
C/O Aubrey Cool
Cambria Environmental Technology, Inc.
1144-65th Street, Suite C
Oakland, CA 94608

March 25, 1998

Dear Applicant:

RE: MINOR ENCROACHMENT PERMIT FOR MONITORING WELLS IN GRAND AVENUE AND PERKINS STREET, OAKLAND

Enclosed are the Minor Encroachment Permit and Agreement and the Conditions For Granting a Minor Encroachment Permit allowing you to place two monitoring wells within the public right-of-way area of Grand Avenue and one monitoring well in the public right-of-way of Perkins Street.

Before the permit will become effective, however, it must be signed by the person(s) having the legal authority to do so, properly notarized with notary acknowledgment slip(s) attached, and returned to this office to the attention of Albert Hall for recordation.

You must also obtain a street excavation permit from the Engineering Information Counter, 2nd Floor, 1330 Broadway, prior to the start of the proposed work in the City right of way. For questions regarding the street excavation permit, call the Engineering Information Counter at (510) 238-4777 between 8 a.m. and 4 p.m., Monday through Friday.

If you have any other questions regarding this minor encroachment permit, please call Albert Hall at (510) 238-3238.

Very truly yours,

CALVIN N. WONG
Chief of Building Services

By Philip A. Grubstick
PHILIP A. GRUBSTICK
Engineering Services Manager

Enclosures

:ah

file: minenc.cov5

CITY OF OAKLAND
Office of Planning and Building

EXCAVATION PERMIT

TO EXCAVATE IN STREETS OR OTHER SPECIFIED WORK

CIVIL ENGINEERING

PAGE 2 of 2

ON PERKINS

PERMIT NUMBER	SITE ADDRESS/LOCATION
X9800278	350 GRAND
APPROX. START DATE / APPROX. END DATE	24-HOUR EMERGENCY PHONE NUMBER (Permit not valid without 24-Hour number)
CONTRACTOR'S LICENSE # AND CLASS	CITY BUSINESS TAX #

ATTENTION:

1) State law requires that the contractor/owner call *Underground Service Alert (USA)* two working days before excavating. This permit is not valid unless applicant has secured an inquiry identification number issued by USA. The USA telephone number is 1 (800) 642-2444. UNDERGROUND SERVICE ALERT (USA) #: _____

2) **48 hours prior to starting work, YOU MUST CALL (510) 238-3651 TO SCHEDULE AN INSPECTION.**

OWNER/BUILDER

I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5 Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he is licensed pursuant to the provisions of the Contractor's License law Chapter 9 (commencing with Sec. 7000) of Division 3 of the Business and Professions Code, or that he is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than $500):

☐ I, as an owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale).

☐ I, as owner of the property, am exempt from the sale requirements of the above due to: (1) I am improving my principal place of residence or appurtenances thereto, (2) the work will be performed prior to sale, (3) I have resided in the residence for the 12 months prior to completion of the work, and (4) I have not claimed exemption on this subdivision on more than two structures more than once during any three-year period. (Sec. 7044 Business and Professions Code).

☐ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project, (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License law).

☐ I am exempt under Sec. _____, B&PC for this reason _____

WORKER'S COMPENSATION

☐ I hereby affirm that I have a certificate of consent to self-insure, or a certificate of Worker's Compensation Insurance, or a certified copy thereof (Sec. 3700, Labor Code).

Policy # _____ Company Name _____

☐ I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Worker's Compensation Laws of California (not required for work valued at one hundred dollars ($100) or less).

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Worker's Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked. This permit is issued pursuant to all provisions of Title 12 Chapter 12.12 of the Oakland Municipal Code. It is granted upon the express condition that the permittee shall be responsible for all claims and liabilities arising out of work performed under the permit or arising out of permittee's failure to perform the obligations with respect to street maintenance. The permittee shall, and by acceptance of the permit agrees to defend, indemnify, save and hold harmless the City, its officers and employees, from and against any and all suits, claims, or actions brought by any person for or on account of any bodily injuries, disease or illness or damage to persons and/or property sustained or arising in the construction of the work performed under the permit or in consequence of permittee's failure to perform the obligations with respect to street maintenance. This permit is void 90 days from the date of issuance unless an extension is granted by the Director of the Office of Planning and Building.

I hereby affirm that I am licensed under provisions of Chapter 9 of Division 3 of the Business and Professions Code and my license is in full force and effect (if contractor), that I have read this permit and agree to its requirements, and that the above information is true and correct under penalty of law.

X _____ Date _____

Signature of Permittee ☐ Agent for ☐ Contractor ☐ Owner

DATE STREET CUT RESURFACED 7-9-98	SPECIAL PAVING DETAIL REQUIRED? ☐ YES ☒ NO	HOLIDAY RESTRICTION (NOV 1 - JAN 1) ☐ YES ☒ NO	LIMITED OPERATION AREA? (6AM-9AM & 4PM-6PM) ☐ YES ☒ NO
ISSUED BY J. Curtis		DATE ISSUED 4-8-98	