CAMBRIA
Environmental Technology, Inc.

July 27, 1995

Susan Hugo
Alameda County Department of
Environmental Health
UST Local Oversight Program
1131 Harbor Bay Parkway, 2nd Floor
Alameda, CA 94502

Re: ***Second Quarter Monitoring Report***
Former Exxon Service Station
3055 35th Avenue
Oakland, California
Cambria Project #20-105-104

Dear Ms. Hugo:

This report summarizes the second quarter 1995 ground water monitoring results for the site referenced above. Described below are the second quarter of 1995 activities, anticipated third quarter 1995 activities and a discussion of the hydrocarbon distribution in ground water.

First Quarter 1995 Activities:

Blaine Tech Services, Inc. of San Jose, California (BTS) collected ground water samples from wells MW-1, MW-2 and MW-3 on February 27, 1995. The samples were analyzed for total petroleum hydrocarbons as gasoline (TPHg) and benzene, toluene, ethylbenzene and xylenes (BTEX). BTS also gauged all site wells and checked them for liquid-phase hydrocarbons. No liquid-phase hydrocarbons were detected.

Anticipated Third Quarter 1995 Activities:

BTS will gauge all site wells, check the wells for liquid-phase hydrocarbons, and collect water samples from the wells. Cambria will tabulate the data and prepare a quarterly monitoring report.

Hydrocarbon Distribution in Ground Water:

TPHg and benzene were detected in all three of the site wells, at up to 310,000 and 18,000 parts per billion (ppb), respectively (Table 1, Attachment A). Hydrocarbon concentrations in ground water are highest

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downgradient of the former underground gasoline tanks and the southernmost pump island. A hydrocarbon odor was observed in all monitoring wells, and a hydrocarbon sheen was observed in well MW-3. Based on the ground water flow direction (Figure 1) and hydrocarbon concentrations at the downgradient property line, it appears that hydrocarbons are migrating offsite to the west.

Please call if you have any questions or comments.

Sincerely,
Cambria Environmental Technology, Inc.

N. Scott MacLeod, R.G.
Principal Geologist

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Attachments: A - Analytic Reports for Ground Water

cc: Lynn Worthington, Better Homes Realty, 5942 MacArthur Boulevard, Suite B, Oakland, California 94605

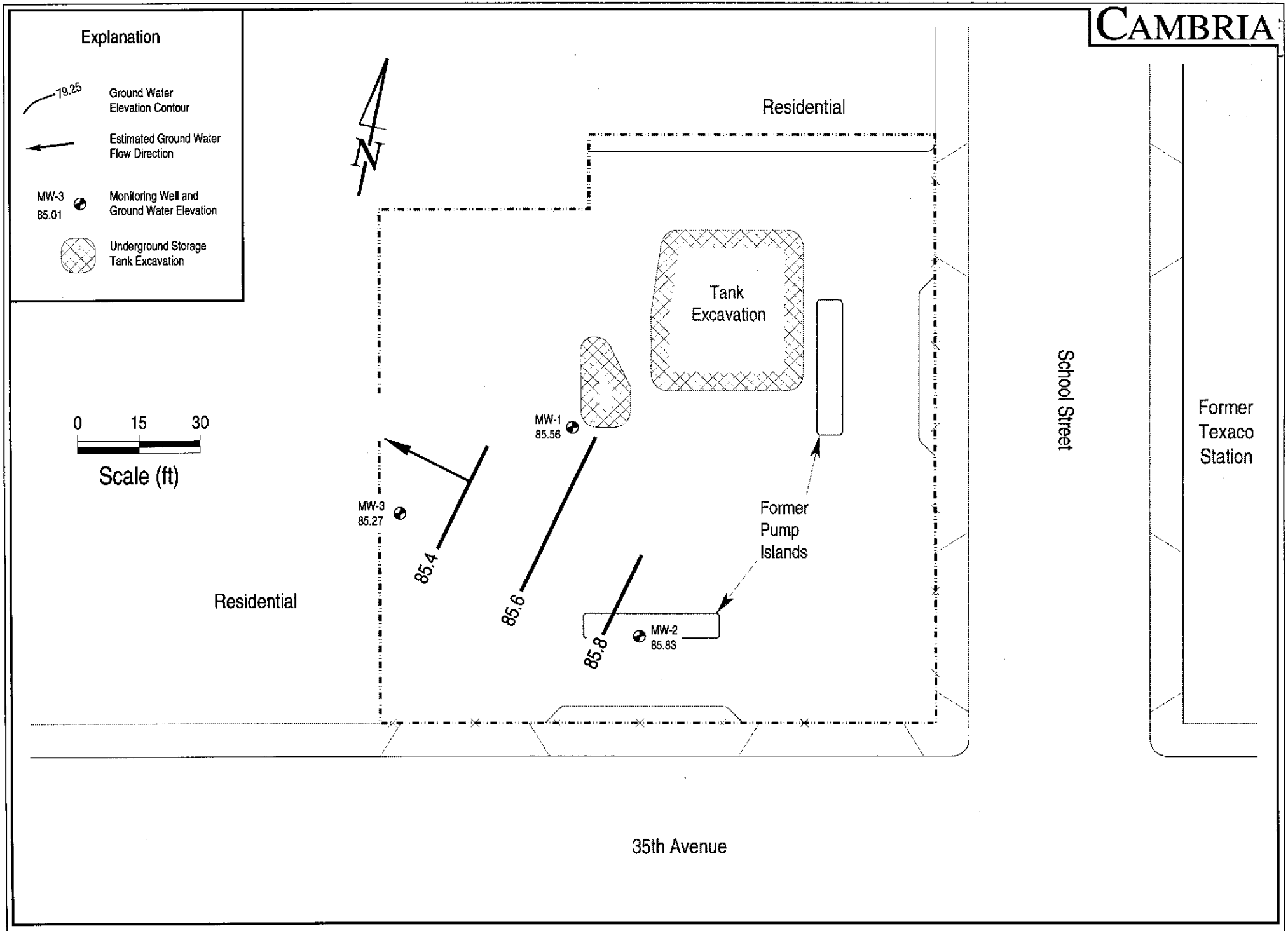

Figure 1. Ground Water Elevations - May 23, 1995 - 3055 35th Avenue, Oakland, California

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Table 1. Ground Water Elevation and Analytic Data - 3055 35th Avenue, Oakland, California

Well/ Boring ID	Date	Casing Elev. (ft)	GW Depth (ft)	LPH (ft)	GW Elev. (ft)	TPH	TPHd	TPHmo	B	T	E	X	Notes
						(Concentration in parts per billion)							
Wells													
MW-1	5/25/94	100.85	16.79	Sheen	84.06	120,000	25,000	<50,000	22,000	17,000	2,800	16,000	a
	7/19/94		20.77	0	80.08	---	---	---	---	---	---	---	
	8/18/94		21.04	Sheen	79.81	925,000	---	---	16,500	6,200	1,000	9,400	
	11/11/94		15.80	0	85.05	57,000	---	---	14,000	4,400	1,400	6,400	
	2/27/95		15.53	0	85.32	45,000	---	---	2,900	2,500	760	4,100	
	5/23/95		15.29	0	85.56	22,000	---	---	9,900	990	790	2,000	
MW-2	5/25/94	100.00	15.65	0	84.35	61,000	6,900	<5,000	9,900	7,400	960	4,600	a
	7/19/94		19.81	0	80.19	---	---	---	---	---	---	---	
	8/18/94		20.37	0	79.63	88,000	---	---	10,750	10,500	1,850	9,600	
	11/11/94		15.52	0	84.48	54,000	---	---	5,900	6,700	1,300	7,500	
	2/27/95		14.46	Sheen	85.54	44,000	---	---	5,100	5,300	930	6,400	
	5/23/95		14.17	0	85.83	33,000	---	---	8,200	5,600	900	6,600	
MW-3	5/25/94	96.87	13.93	Sheen	82.94	56,000	14,000	<50,000	14,000	14,000	1,300	11,000	a
	7/19/94		17.04	0	79.83	---	---	---	---	---	---	---	
	8/18/94		17.75	0	79.12	116,000	---	---	28,300	26,000	2,400	15,000	
	11/11/94		17.80	0	79.07	89,000	---	---	1,600	1,900	1,900	14,000	
	2/27/95		11.86	Sheen	85.01	250,000	---	---	22,000	26,000	7,800	21,000	
	5/23/95		11.60	Sheen	85.27	310,000	---	---	18,000	17,000	4,500	2,800	

Abbreviations

Casing Elevation = Top of casing elevation with respect to an onsite benchmark
GW = Ground water
LPH = Liquid-phase hydrocarbons
TPHg = Total petroleum hydrocarbons as gasoline by modified EPA Method 8015
TPHd = Total petroleum hydrocarbons as diesel by modified EPA Method 8015
TPHmo = Total petroleum hydrocarbons as motor oil by modified EPA Method 8015
B = Benzene by EPA Method 8020
E = Ethylbenzene by EPA Method 8020
T = Toluene by EPA Method 8020
X = Xylenes by EPA Method 8020
DTSC MCLs = Department of Toxic Substances Control maximum contaminant level for drinking water
NE = Not established

Notes

a = The positive TPHd result appears to be a hydrocarbon lighter than diesel.

CAMBRIA

ATTACHMENT A

Analytic Reports for Ground Water

NATIONAL ENVIRONMENTAL TESTING, INC.

Santa Rosa Division
3636 North Laughlin Road
Suite 110
Santa Rosa, CA 95403-8226
Tel: (707) 526-7200
Fax: (707) 541-2333

Scott Macleod
Cambria Env. Technology
1144 65th Street
Suite C
Oakland, CA 94608

Date: 06/08/1995
NET Client Acct. No: 98900
NET Job No: 95.02113
Received: 05/25/1995

Client Reference Information

Cambria Environmental Oakland, CA./950523-K3

Sample analysis in support of the project referenced above has been completed and results are presented on following pages. Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety. Please refer to the enclosed "Key to Abbreviations" for definition of terms. Should you have questions regarding procedures or results, please feel welcome to contact Client Services.

Approved by:

Ken Larson
Division Manager

Jennifer L. Roseberry
Project Manager

Enclosure(s)

Ref: Cambria Environmental Oakland, CA./950523-K3

SAMPLE DESCRIPTION: MW1
Date Taken: 05/23/1995
Time Taken: 14:50
NET Sample No: 242882

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
TPH (Gas/BTXE,Liquid)								
METHOD 5030/M8015	--						06/02/1995	2899
DILUTION FACTOR*	10						06/02/1995	2899
as Gasoline	22		0.5	mg/L	5030		06/02/1995	2899
METHOD 8020 (GC,Liquid)	--						06/02/1995	2899
Benzene	9,900	FG	100	ug/L	8020		06/05/1995	2901
Toluene	990	FG	100	ug/L	8020		06/05/1995	2901
Ethylbenzene	790	FG	100	ug/L	8020		06/05/1995	2901
Xylenes (Total)	2,000	FG	100	ug/L	8020		06/05/1995	2901
SURROGATE RESULTS	--						06/02/1995	2899
Bromofluorobenzene (SURR)	105			% Rec.	5030		06/02/1995	2899

FG : Compound quantitated at a 200X dilution factor.

Ref: Cambria Environmental Oakland, CA./950523-K3

SAMPLE DESCRIPTION: MW2
Date Taken: 05/23/1995
Time Taken: 14:10
NET Sample No: 242883

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
TPH (Gas/BTXE,Liquid)								
METHOD 5030/M8015	--						06/02/1995	2899
DILUTION FACTOR*	20						06/02/1995	2899
as Gasoline	33		1	mg/L	5030		06/02/1995	2899
METHOD 8020 (GC,Liquid)	--						06/02/1995	2899
Benzene	8,200	FG	100	ug/L	8020		06/05/1995	2901
Toluene	5,600	FG	100	ug/L	8020		06/05/1995	2901
Ethylbenzene	900		10	ug/L	8020		06/02/1995	2899
Xylenes (Total)	6,600	FG	100	ug/L	8020		06/05/1995	2901
SURROGATE RESULTS	--						06/02/1995	2899
Bromofluorobenzene (SURR)	102			% Rec.	5030		06/02/1995	2899

FG : Compound quantitated at a 200X dilution factor.

Ref: Cambria Environmental Oakland, CA./950523-K3

SAMPLE DESCRIPTION: MW3
Date Taken: 05/23/1995
Time Taken: 14:30
NET Sample No: 242884

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
TPH (Gas/BTXE,Liquid)								
METHOD 5030/M8015	--						06/05/1995	2901
DILUTION FACTOR*	1000						06/05/1995	2901
as Gasoline	310		50	mg/L	5030		06/05/1995	2901
METHOD 8020 (GC,Liquid)	--						06/05/1995	2901
Benzene	18,000		500	ug/L	8020		06/05/1995	2901
Toluene	17,000		500	ug/L	8020		06/05/1995	2901
Ethylbenzene	4,500		500	ug/L	8020		06/05/1995	2901
Xylenes (Total)	28,000		500	ug/L	8020		06/05/1995	2901
SURROGATE RESULTS	--						06/05/1995	2901
Bromofluorobenzene (SURR)	104			% Rec.	5030		06/05/1995	2901

Ref: Cambria Environmental Oakland, CA./950523-K3

SAMPLE DESCRIPTION: TB
Date Taken: 05/23/1995
Time Taken:
NET Sample No: 242885

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
TPH (Gas/BTXE,Liquid)								
METHOD 5030/M8015	--						06/02/1995	2899
DILUTION FACTOR*	1						06/02/1995	2899
as Gasoline	ND		0.05	mg/L	5030		06/02/1995	2899
METHOD 8020 (GC,Liquid)	--						06/02/1995	2899
Benzene	ND		0.5	ug/L	8020		06/02/1995	2899
Toluene	ND		0.5	ug/L	8020		06/02/1995	2899
Ethylbenzene	ND		0.5	ug/L	8020		06/02/1995	2899
Xylenes (Total)	ND		0.5	ug/L	8020		06/02/1995	2899
SURROGATE RESULTS	--						06/02/1995	2899
Bromofluorobenzene (SURR)	81			% Rec.	5030		06/02/1995	2899

Ref: Cambria Environmental Oakland, CA./950523-K3

CONTINUING CALIBRATION VERIFICATION STANDARD REPORT

Parameter	CCV Standard % Recovery	CCV Standard Amount Found	CCV Standard Amount Expected	Units	Date Analyzed	Analyst Initials	Run Batch Number
TPH (Gas/BTXE,Liquid)							
as Gasoline	94.0	0.47	0.50	mg/L	06/02/1995		2899
Benzene	100.4	5.02	5.00	ug/L	06/02/1995		2899
Toluene	97.6	4.88	5.00	ug/L	06/02/1995		2899
Ethylbenzene	91.2	4.56	5.00	ug/L	06/02/1995		2899
Xylenes (Total)	108.0	16.2	15.0	ug/L	06/02/1995		2899
Bromofluorobenzene (SURR)	90.0	90	100	% Rec.	06/02/1995		2899
TPH (Gas/BTXE,Liquid)							
as Gasoline	106.0	0.53	0.50	mg/L	06/05/1995	tts	2901
Benzene	98.8	4.94	5.00	ug/L	06/05/1995	tts	2901
Toluene	91.2	4.56	5.00	ug/L	06/05/1995	tts	2901
Ethylbenzene	91.2	4.56	5.00	ug/L	06/05/1995	tts	2901
Xylenes (Total)	99.3	14.9	15.0	ug/L	06/05/1995	tts	2901
Bromofluorobenzene (SURR)	91.0	91	100	% Rec.	06/05/1995	tts	2901

Ref: Cambria Environmental Oakland, CA./950523-K3

METHOD BLANK REPORT

Parameter	Method Blank Amount Found	Reporting Limit	Units	Date Analyzed	Analyst Initials	Run Batch Number
TPH (Gas/BTXE,Liquid)						
as Gasoline	ND	0.05	mg/L	06/02/1995		2899
Benzene	ND	0.5	ug/L	06/02/1995		2899
Toluene	ND	0.5	ug/L	06/02/1995		2899
Ethylbenzene	ND	0.5	ug/L	06/02/1995		2899
Xylenes (Total)	ND	0.5	ug/L	06/02/1995		2899
Bromofluorobenzene (SURR)	83		% Rec.	06/02/1995		2899
TPH (Gas/BTXE,Liquid)						
as Gasoline	ND	0.05	mg/L	06/05/1995	tts	2901
Benzene	ND	0.5	ug/L	06/05/1995	tts	2901
Toluene	ND	0.5	ug/L	06/05/1995	tts	2901
Ethylbenzene	ND	0.5	ug/L	06/05/1995	tts	2901
Xylenes (Total)	ND	0.5	ug/L	06/05/1995	tts	2901
Bromofluorobenzene (SURR)	88		% Rec.	06/05/1995	tts	2901

Ref: Cambria Environmental Oakland, CA./950523-K3

MATRIX SPIKE / MATRIX SPIKE DUPLICATE

Parameter	Matrix Spike % Rec.	Matrix Spike Dup % Rec.	RPD	Spike Amount	Sample Conc.	Matrix Spike Conc.	Matrix Spike Dup. Conc.	Units	Date Analyzed	Run Batch	Sample Spiked
TPH (Gas/BTXE,Liquid)											
as Gasoline	88.0	88.0	0.0	0.50	ND	0.44	0.44	mg/L	06/02/1995	2899	
Benzene	101.3	103.9	2.5	7.6	ND	7.7	7.9	ug/L	06/02/1995	2899	
Toluene	101.5	101.5	0.0	26.6	ND	27.0	27.0	ug/L	06/02/1995	2899	
TPH (Gas/BTXE,Liquid)											
as Gasoline	108.0	110.0	1.8	0.50	ND	0.54	0.55	mg/L	06/05/1995	2901	
Benzene	93.9	91.9	2.2	9.90	ND	9.3	9.1	ug/L	06/05/1995	2901	
Toluene	87.4	88.0	0.7	31.7	ND	27.7	27.9	ug/L	06/05/1995	2901	

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KEY TO ABBREVIATIONS and METHOD REFERENCES

<	:	Less than; When appearing in results column indicates analyte not detected at the value following. This datum supercedes the listed Reporting Limit.
*	:	Reporting Limits are a function of the dilution factor for any given sample. To obtain the actual reporting limits for this sample, multiply the stated Reporting Limits by the dilution factor (but do not multiply reported values).
ICVS	:	Initial Calibration Verification Standard (External Standard).
mean	:	Average; sum of measurements divided by number of measurements.
mg/Kg (ppm)	:	Concentration in units of milligrams of analyte per kilogram of sample, wet-weight basis (parts per million).
mg/L	:	Concentration in units of milligrams of analyte per liter of sample.
mL/L/hr	:	Milliliters per liter per hour.
MPN/100 mL	:	Most probable number of bacteria per one hundred milliliters of sample.
N/A	:	Not applicable.
NA	:	Not analyzed.
ND	:	Not detected; the analyte concentration is less than applicable listed reporting limit.
NTU	:	Nephelometric turbidity units.
RPD	:	Relative percent difference, 100 [Value 1 - Value 2]/mean value.
SNA	:	Standard not available.
ug/Kg (ppb)	:	Concentration in units of micrograms of analyte per kilogram of sample, wet-weight basis (parts per billion).
ug/L	:	Concentration in units of micrograms of analyte per liter of sample.
umhos/cm	:	Micromhos per centimeter.

Method References

Methods 100 through 493: see "Methods for Chemical Analysis of Water & Wastes", U.S. EPA, 600/4-79-020, rev. 1983.

Methods 601 through 625: see "Guidelines Establishing Test Procedures for the Analysis of Pollutants" U.S. EPA, 40 CFR, Part 136, rev. 1988.

Methods 1000 through 9999: see "Test Methods for Evaluating Solid Waste", U.S. EPA SW-846, 3rd edition, 1986.

SM: see "Standard Methods for the Examination of Water & Wastewater, 17th Edition, APHA, 1989.

#6945

BLAINE TECH SERVICES INC.

985 TIMOTHY DRIVE
SAN JOSE, CA 95133
(408) 995-5535
FAX (408) 293-8773

CHAIN OF CUSTODY 950523-K3

CLIENT Cambria Environmental

SITE 3055 35th Ave
Oakland, CA

CONDUCT ANALYSIS TO DETECT: TPH-G, BTEX

LAB NET | DHS #

ALL ANALYSES MUST MEET SPECIFICATIONS AND DETECTION LIMITS SET BY CALIFORNIA DHS AND

- ☐ EPA
- ☐ LIA
- ☐ OTHER
- ☐ RWQCB REGION

SPECIAL INSTRUCTIONS
Invoice & Report to:
Cambria Environmental
Attn: Scott Macleod

C = COMPOSITE ALL CONTAINERS

SAMPLE I.D.		MATRIX (S = SOIL, W = H2O)	CONTAINERS TOTAL	VOAs HCl	TPH-G, BTEX	ADD'L INFORMATION	STATUS	CONDITION	LAB SAMPLE #
MW1	1450	W	3	↓	X				
MW2	1410	↓		↓	X				
MW3	1430	↓		↓	X				
TB	—	↓	2	↓	X				

(5/24/95 ... Seal Intact)

SAMPLING COMPLETED: DATE 5/23 TIME 1500
SAMPLING PERFORMED BY Keith Brown

RESULTS NEEDED NO LATER THAN Standard TAT

RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME
[signature]	5/24/95	10:45	[signature]	5/24/95	10:45
[signature]	5/24/95	18:00	[signature]	5/25/95	08:00

SHIPPED VIA	DATE SENT	TIME SENT	COOLER #
NCS			