



ENVIRONMENTAL
PROTECTION
97 SEP -5 PM 3:45

ST10 ST5
AD

August 25, 1997

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

Re: **Second Quarter 1997 Monitoring Report**
Former Exxon Service Station
3055 35th Avenue
Oakland, California
Cambria Project #13-105-107

Dear Mr. Tinsley:

On behalf of Mr. Lynn Worthington of Golden Empire Properties, Cambria Environmental Technology, Inc. (Cambria) is presenting the second quarter 1997 ground water monitoring results for the site referenced above. Presented below are the second quarter 1997 activities and the anticipated third quarter 1997 activities.

SECOND QUARTER 1997 ACTIVITIES

Quarterly Ground Water Sampling: On June 25, 1997, Cambria collected ground water samples from wells MW-1, MW-2, MW-3 and MW-4. The samples were analyzed for total petroleum hydrocarbons as gasoline (TPHg), total petroleum hydrocarbons as diesel (TPHd), benzene, toluene, ethylbenzene and xylenes (BTEX), and methyl tert-butyl ether (MTBE). Cambria also gauged the site wells, measured dissolved oxygen (DO) concentrations and checked for liquid-phase hydrocarbons (LPH). No LPH were detected.

Additional Work: Cambria conducted a subsurface investigation during the second quarter and submitted an *Investigation Report* on May 23, 1997. A *Risk-Based Corrective Action Analysis* based on this investigation was submitted on June 27, 1997.

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

Kevin Tinsley
August 25, 1997

CAMBRIA

ANTICIPATED THIRD QUARTER 1997 ACTIVITIES

Quarterly Ground Water Sampling: Cambria will gauge the site wells, measure DO concentrations, check the wells for LPH, and collect water samples from the wells. Cambria will tabulate the data and prepare a quarterly monitoring report.

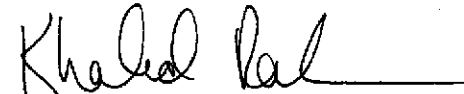
CLOSING

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

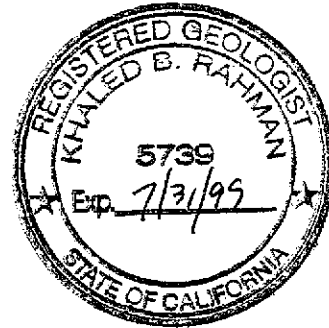
Sincerely,
Cambria Environmental Technology, Inc.



Maureen Feineman
Staff Geologist



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









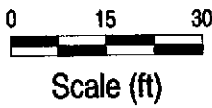
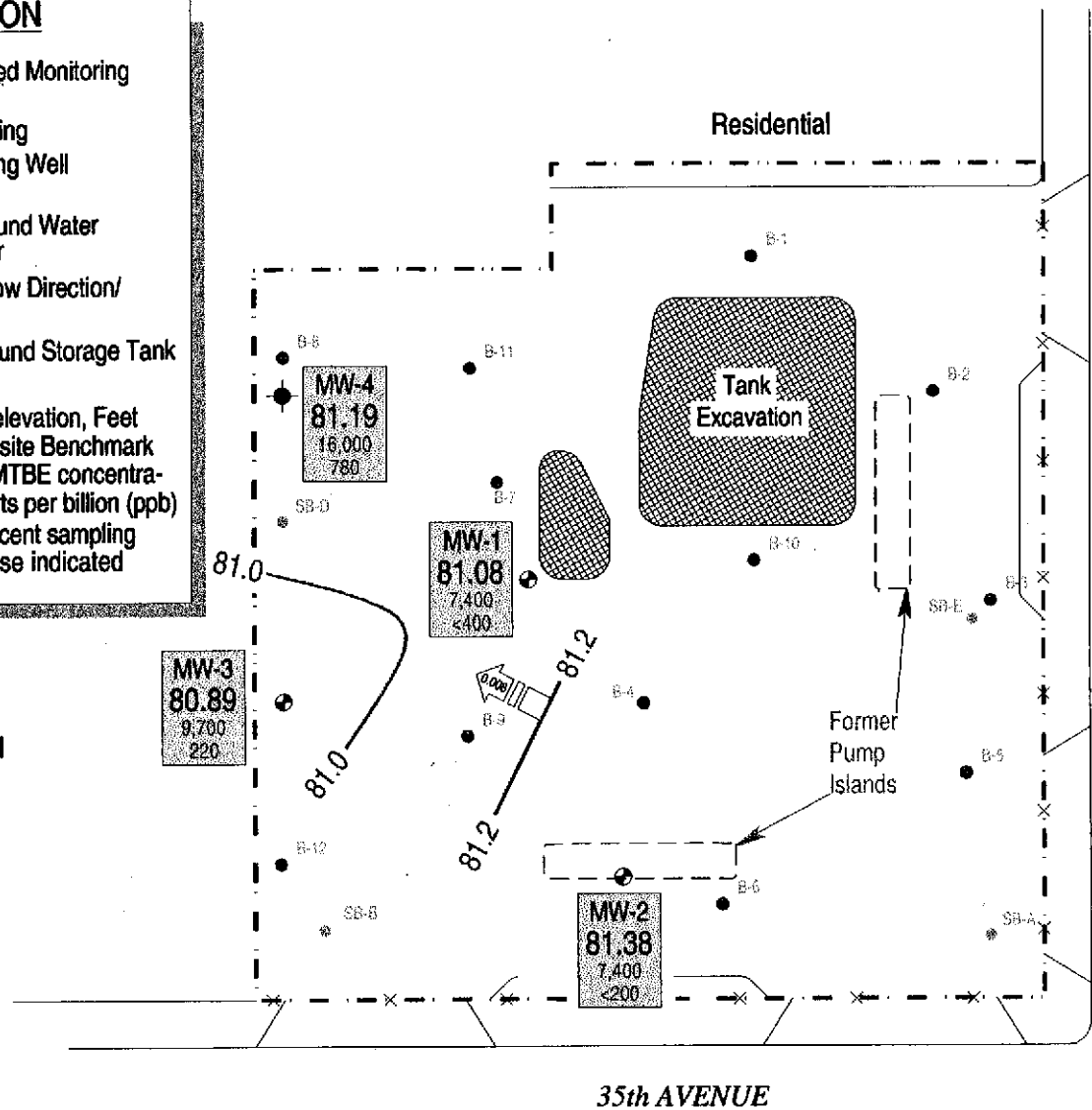
Attachments: A - Analytic Report for Ground Water Sampling

cc: Mr. Lynn Worthington, Golden Empire Properties, Inc., 5942 MacArthur Boulevard, Suite B,
Oakland, CA 94605


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EXPLANATION

-  MW-3 Previously Installed Monitoring Well
 -  SB-B/B-1 Previous Soil Boring
 -  MW-4 Cambria Monitoring Well (Feb 97)
 -  Approximate Ground Water Elevation Contour
 -  Ground Water Flow Direction/Gradient (ft/ft)
 -  Former Underground Storage Tank Excavation
- | ELEV | |
|---|------|
| Benz. | Date |
| MTBE | Date |
| 1. Ground water elevation, Feet Relative To Onsite Benchmark | |
| 2. Benzene and MTBE concentrations are in parts per billion (ppb) | |
| 3. Date is most recent sampling unless otherwise indicated | |



Former Texaco Station



CAMBRIA
Environmental Technology, Inc.

Former Exxon Service Station
3055 35th Avenue
Oakland, California

F:\PROJECT\68-2004\OAK-002\FIGURES\IGW-ELEV.DWG

Ground Water Elevation
Contours
June 25, 1997

FIGURE
1

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

Well ID	Date	GW	LPH	GW	TPHg	TPHd	TPHmo	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	DO
(quarters sampled)		Depth (ft)	(ft)	Elev. (ft)	← concentrations in parts per billion (µg/L) →								(mg/L)
MW-1	5/25/94	16.79	Sheen	84.06	120,000	25,000	<50,000	22,000	17,000	2,800	16,000	---	---
(all)	7/19/94	20.77	---	80.08	---	---	---	---	---	---	---	---	---
TOC = 100.85	8/18/94	21.04	Sheen	79.81	925,000	---	---	16,500	6,200	1,000	9,400	---	---
	11/11/94	15.80	---	85.05	57,000	---	---	14,000	4,400	1,400	6,400	---	---
	2/27/95	15.53	---	85.32	45,000	---	---	2,900	2,500	760	4,100	---	---
	5/23/95	15.29	---	85.56	22,000	---	---	9,900	990	790	2,000	---	---
	8/22/95	20.90	---	79.95	23,000	---	---	6,900	340	1,200	1,900	---	---
	11/29/95	22.19	---	78.66	37,000	---	---	9,900	530	1,600	2,900	---	---
	2/21/96	11.69	---	89.16	33,000	4,300	---	10,000	480	1,000	1,800	3,300	---
	5/21/96	14.62	---	86.23	36,000	8,500	---	8,500	1,400	1,300	2,800	1,900	---
	8/22/96	22.30	---	78.55	41,000	6,200	---	8,600	1,300	1,500	2,900	<200	8.0
	11/27/96	17.24	Sheen	83.61	38,000	6,100	---	9,600	950	1,600	3,100	<400	5.6
	3/20/97	16.65	---	84.20	33,000	10,000	---	6,100	560	970	2,200	<400	8.5
	6/25/97	19.77	---	81.08	31,000	7,400 ^a	---	7,400	440	890	1,800	<400	3.7
MW-2	5/25/94	15.65	---	84.35	61,000	6,900	<5,000	9,900	7,400	960	4,600	---	---
(all)	7/19/94	19.81	---	80.19	---	---	---	---	---	---	---	---	---
TOC = 100.00	8/18/94	20.37	---	79.63	88,000	---	---	10,750	10,500	1,850	9,600	---	---
	11/11/94	15.52	---	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	---	85.83	33,000	---	---	8,200	5,600	900	6,600	---	---
	8/22/95	19.80	---	80.20	38,000	---	---	6,400	5,000	1,100	5,600	---	---
	11/29/95	21.05	---	78.95	46,000	---	---	7,100	5,300	1,300	6,000	---	---
	2/21/96	10.53	---	89.47	59,000	---	---	8,000	6,000	1,800	8,900	4,500	---
	5/21/96	13.47	---	86.53	51,000	3,400	---	8,200	5,200	1,300	6,600	2,400	---
	8/22/96	19.12	---	80.88	37,000	5,700	---	5,100	3,500	960	4,500	<200	3.0
	11/27/96	16.61	Sheen	83.39	54,000	10,000	---	9,800	7,000	1,800	7,900	<2,000	3.1
	3/20/97	15.39	---	84.61	27,000	6,100	---	3,700	2,300	580	2,800	<400	8.1
	6/25/97	18.62	---	81.38	42,000	7,800 ^b	---	7,400	3,800	1,200	5,700	<200	0.9
MW-3	5/25/94	13.93	Sheen	82.94	56,000	14,000	<50,000	14,000	14,000	1,300	11,000	---	---
(all)	7/19/94	17.04	---	79.83	---	---	---	---	---	---	---	---	---
TOC = 96.87	8/18/94	17.75	---	79.12	116,000	---	---	28,300	26,000	2,400	15,000	---	---
	11/11/94	17.80	---	79.07	89,000	---	---	1,600	1,900	1,900	14,000	---	---

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

Well ID	Date	GW	LPH	GW	TPHg	TPHd	TPHmo	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	DO
(quarters sampled)		Depth (ft)	(ft)	Elev. (ft)	← concentrations in parts per billion (µg/L) →								(mg/L)
	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	---	---
	8/22/95	17.10	---	79.77	74,000	---	---	14,000	13,000	1,900	11,000	---	---
	11/29/95	16.34	---	80.53	220,000	---	---	25,000	25,000	3,500	19,000	---	---
	2/21/96	7.92	---	88.95	60,000	---	---	10,000	7,800	1,500	8,800	3,400	---
	5/21/96	10.86	Sheen	86.01	69,000	13,000	---	17,000	9,400	1,700	9,400	2,600	---
	8/22/96	16.50	---	80.37	94,000	16,000	---	17,000	15,000	2,100	12,000	330	2.0
	11/27/96	13.47	Sheen	83.40	82,000	24,000	---	14,000	13,000	2,400	13,000	<1,000	2.4
	3/20/97	12.86	---	84.01	56,000	11,000	---	9,900	6,900	1,300	8,000	3,500	9.0
	6/25/97	15.98	---	80.89	49,000	7,700 ^b	---	9,700	7,100	1,300	7,000	220	5.8
MW-4	3/20/97	13.75	---	83.59	47,000	3,100	---	11,000	4,500	1,100	5,200	3,400	8.4
(all)	6/25/97	16.15	---	81.19	61,000	5,800 ^b	---	16,000	6,100	1,500	5,900	780 ^c	1.4

TOC = 97.34

Abbreviations:

TOC = 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
 Benzene, Ethylbenzene, Toluene, and Xylenes by EPA Method 8020
 MTBE = Methyl Tertiary-Butyl Ether by EPA Method 8020
 DO = Dissolved oxygen
 µg/L = micrograms per liter, which is equivalent to parts per billion in water
 mg/l = milligrams per liter, which is equivalent to parts per million in water

Notes:

a = Result has an atypical pattern for diesel analysis
 b = Result appears to be a lighter hydrocarbon than diesel
 c = There is a >40% difference between primary and confirmation analysis

TOC Elevation of Well MW-4 surveyed relative to an arbitrary site datum by David Hop Licensed Surveyor on April 19, 1997

ATTACHMENT A

Analytic Report for Ground Water Sampling

LEGEND

Analytical Services

3636 N. Laughlin Road, Suite 110 Santa Rosa, California 95403 707.526.7200 Fax 707.541.2333 E-Mail: info@legendlab.com

John Espinoza
Cambria Env. Technology
1144 65th Street
Suite C
Oakland, CA 94608

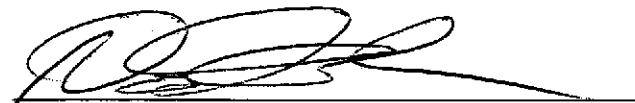
Date: 07/09/1997
LEGEND Client Acct. No: 98900
LEGEND Job No: 97.01189
Received: 06/27/1997

Client Reference Information

Oak-002/Project No. 13-105-107

Sample analysis in support of the project referenced above has been completed and results are presented on the following pages. Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety. Facsimile transmission of this report is non-confidential. If received in error, please contact sender immediately at the number listed and return the information to us by mail. Please refer to the enclosed "Key to Result Flags" for definition of terms. Should you have questions regarding procedures or results, please feel free to call me at (707) 541-2313.

Submitted by:



Ned Engleson
Project Manager

Enclosure(s)

Client Name: Cambria Env. Technology
Client Acct: 98900
LEGEND Job No: 97.01189

Date: 07/09/1997
ELAP Cert: 2193
Page: 2

Ref: Oak-002/Project No. 13-105-107

SAMPLE DESCRIPTION: MW-3

Date Taken: 06/25/1997

Time Taken: 11:40

LEGEND Sample No: 276362

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
TPH (Gas/BTXE, Liquid)								
5030/M8015	--						07/01/1997	3863
DILUTION FACTOR*	50						07/01/1997	3863
as Gasoline	49		2.5	mg/L	5030		07/01/1997	3863
8020 (GC, Liquid)	--						07/01/1997	3863
Benzene	9,700	FH	250	ug/L	8020		07/02/1997	3864
Toluene	7,100	FH	250	ug/L	8020		07/02/1997	3864
Ethylbenzene	1,300		25	ug/L	8020		07/01/1997	3863
Xylenes (Total)	7,000		25	ug/L	8020		07/01/1997	3863
Methyl-tert-butyl ether	220		100	ug/L	8020		07/01/1997	3863
SURROGATE RESULTS	--						07/01/1997	3863
Bromofluorobenzene (SURR)	94			% Rec.	5030		07/01/1997	3863

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Ref: Oak-002/Project No. 13-105-107

SAMPLE DESCRIPTION: MW-4

Date Taken: 06/25/1997

Time Taken: 14:10

LEGEND Sample No: 276363

Parameter	Results	Flags	Reporting		Method	Date	Date	Run
			Limit	Units		Extracted	Analyzed	Batch
TPH (Gas/BTEXE,Liquid)								
5030/M8015	--						07/02/1997	3864
DILUTION FACTOR*	200						07/02/1997	3864
as Gasoline	61		10	mg/L	5030		07/02/1997	3864
8020 (GC,Liquid)	--						07/02/1997	3864
Benzene	16,000	FH	250	ug/L	8020		07/02/1997	3864
Toluene	6,100		100	ug/L	8020		07/02/1997	3864
Ethylbenzene	1,500		100	ug/L	8020		07/02/1997	3864
Xylenes (Total)	5,900		100	ug/L	8020		07/02/1997	3864
Methyl-tert-butyl ether	780	P	400	ug/L	8020		07/02/1997	3864
SURROGATE RESULTS	--						07/02/1997	3864
Bromofluorobenzene (SURR)	92			% Rec.	5030		07/02/1997	3864

Client Name: Cambria Env. Technology
Client Acct: 98900
LEGEND Job No: 97.01189

Date: 07/09/1997
ELAP Cert: 2193
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Ref: Oak-002/Project No. 13-105-107

SAMPLE DESCRIPTION: MW-1

Date Taken: 06/25/1997

Time Taken: 13:40

LEGEND Sample No: 276364

Parameter	Results	Flags	Reporting			Date	Date	Run
			Limit	Units	Method	Extracted	Analyzed	Batch No.
TPH (Gas/BTEX, Liquid)								
5030/M8015	--						07/02/1997	3864
DILUTION FACTOR*	200						07/02/1997	3864
as Gasoline	31		10	mg/L	5030		07/02/1997	3864
8020 (GC, Liquid)	--						07/02/1997	3864
Benzene	7,400		100	ug/L	8020		07/02/1997	3864
Toluene	440		100	ug/L	8020		07/02/1997	3864
Ethylbenzene	890		100	ug/L	8020		07/02/1997	3864
Xylenes (Total)	1,800		100	ug/L	8020		07/02/1997	3864
Methyl-tert-butyl ether	ND		400	ug/L	8020		07/02/1997	3864
SURROGATE RESULTS	--						07/02/1997	3864
Bromofluorobenzene (SURR)	90			% Rec.	5030		07/02/1997	3864

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Client Name: Cambria Env. Technology
Client Acct: 98900
LEGEND Job No: 97.01189

Date: 07/09/1997
ELAP Cert: 2193
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Ref: Oak-002/Project No. 13-105-107

SAMPLE DESCRIPTION: MW-2
Date Taken: 06/25/1997
Time Taken: 12:30
LEGEND Sample No: 276365

Parameter	Results	Flags	Reporting			Date	Date	Run
			Limit	Units	Method	Extracted	Analyzed	Batch
								No.
TPH (Gas/BTEX,Liquid)								
5030/M8015	--						07/01/1997	3863
DILUTION FACTOR*	100						07/01/1997	3863
as Gasoline	42		5.0	mg/L	5030		07/01/1997	3863
8020 (GC,Liquid)	--						07/01/1997	3863
Benzene	7,400	FH	250	ug/L	8020		07/02/1997	3864
Toluene	3,800		50	ug/L	8020		07/01/1997	3863
Ethylbenzene	1,200		50	ug/L	8020		07/01/1997	3863
Xylenes (Total)	5,700		50	ug/L	8020		07/01/1997	3863
Methyl-tert-butyl ether	ND		200	ug/L	8020		07/01/1997	3863
SURROGATE RESULTS	--						07/01/1997	3863
Bromofluorobenzene (SURR)	98			% Rec.	5030		07/01/1997	3863

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Client Name: Cambria Env. Technology
Client Acct: 98900
LEGEND Job No: 97.01189

Date: 07/09/1997
ELAP Cert: 2193
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Ref: Oak-002/Project No. 13-105-107

SAMPLE DESCRIPTION: MW-3

Date Taken: 06/25/1997

Time Taken: 11:45

LEGEND Sample No: 276366

Parameter	Results	Flags	Reporting			Date	Date	Run
			Limit	Units	Method	Extracted	Analyzed	Batch
M8015 (EXT., Liquid)						07/01/1997		
DILUTION FACTOR*	5						07/08/1997	1344
as Diesel	7.7	DL	0.2	mg/L	3510		07/08/1997	1344
SURROGATE RESULTS	--						07/08/1997	1344
Ortho-terphenyl (SURR)	82			% Rec.	3510		07/08/1997	1344

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Client Name: Cambria Env. Technology
Client Acct: 98900
LEGEND Job No: 97.01189

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ELAP Cert: 2193
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Ref: Oak-002/Project No. 13-105-107

SAMPLE DESCRIPTION: MW-4

Date Taken: 06/25/1997

Time Taken: 14:15

LEGEND Sample No: 276367

Parameter	Results	Flags	Reporting			Date	Date	Run
			Limit	Units	Method	Extracted	Analyzed	Batch
MS015 (EXT., Liquid)						07/01/1997		
DILUTION FACTOR*	4						07/09/1997	1344
as Diesel	5.8	DL	0.2	mg/L	3510		07/09/1997	1344
SURROGATE RESULTS	--						07/09/1997	1344
Ortho-terphenyl (SURR)	91			% Rec.	3510		07/09/1997	1344

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Client Name: Cambria Env. Technology
Client Acct: 98900
LEGEND Job No: 97.01189

Date: 07/09/1997
ELAP Cert: 2193
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Ref: Oak-002/Project No. 13-105-107

SAMPLE DESCRIPTION: MW-1

Date Taken: 06/25/1997

Time Taken: 13:45

LEGEND Sample No: 276368

Parameter	Results	Flags	Reporting		Method	Date	Date	Run
			Limit	Units		Extracted	Analyzed	Batch
MS015 (EXT., Liquid)						07/01/1997		
DILUTION FACTOR*	5						07/08/1997	1344
as Diesel	7.4	D-	0.2	mg/L	3510		07/08/1997	1344
SURROGATE RESULTS	--						07/08/1997	1344
Ortho-terphenyl (SURR)	99			% Rec.	3510		07/08/1997	1344

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Client Name: Cambria Env. Technology
Client Acct: 98900
LEGEND Job No: 97.01189

Date: 07/09/1997
ELAP Cert: 2193
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Ref: Oak-002/Project No. 13-105-107

SAMPLE DESCRIPTION: MW-2
Date Taken: 06/25/1997
Time Taken: 12:30
LEGEND Sample No: 276369

Parameter	Results	Flags	Reporting			Date	Date	Run
			Limit	Units	Method	Extracted	Analyzed	Batch
M8015 (EXT., Liquid)						07/01/1997		
DILUTION FACTOR*	5						07/08/1997	1344
as Diesel	7.8	DL	0.2	mg/L	3510		07/08/1997	1344
SURROGATE RESULTS	--						07/08/1997	1344
Ortho-terphenyl (SURR)	85			% Rec.	3510		07/08/1997	1344

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Ref: Oak-002/Project No. 13-105-107

CONTINUING CALIBRATION VERIFICATION STANDARD REPORT

Parameter	CCV	CCV	Flags	Units	Date Analyzed	Analyst Initials	Run Batch Number
	Standard % Recovery	Standard Amount Found					
TPH (Gas/BTXE,Liquid)							
as Gasoline	95.4	0.477	0.50	mg/L	07/02/1997	cjy	3864
Benzene	94.1	18.81	20.0	ug/L	07/02/1997	cjy	3864
Toluene	93.4	18.68	20.0	ug/L	07/02/1997	cjy	3864
Ethylbenzene	100.4	20.07	20.0	ug/L	07/02/1997	cjy	3864
Xylenes (Total)	98.1	58.88	60.0	ug/L	07/02/1997	cjy	3864
Methyl-tert-butyl ether	106.9	85.51	80.0	ug/L	07/02/1997	cjy	3864
Bromofluorobenzene (SURRE)	90.0	90	100	% Rec.	07/02/1997	cjy	3864
M8015 (EXT., Liquid)							
as Diesel	109.8	1098	1000	mg/L	07/02/1997	vah	1344
Ortho-terphenyl (SURRE)	99.0	99	100	% Rec.	07/02/1997	vah	1344
M8015 (EXT., Liquid)							
as Diesel	106.8	1068	1000	mg/L	07/03/1997	vah	1344
Ortho-terphenyl (SURRE)	98.0	98	100	% Rec.	07/03/1997	vah	1344
M8015 (EXT., Liquid)							
as Diesel	113.8	1138	1000	mg/L	07/08/1997	vah	1344
Ortho-terphenyl (SURRE)	79.0	79	100	% Rec.	07/08/1997	vah	1344
M8015 (EXT., Liquid)							
as Diesel	106.1	1061	1000	mg/L	07/09/1997	vah	1344
Ortho-terphenyl (SURRE)	76.0	76	100	% Rec.	07/09/1997	vah	1344

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Ref: Oak-002/Project No. 13-105-107

METHOD BLANK REPORT

Parameter	Method	Reporting	Flags	Units	Date	Analyst	Run
	Blank						
TPH (Gas/BTXE, Liquid)	Found						
as Gasoline	ND	0.050		mg/L	07/02/1997	cjy	3864
Benzene	ND	0.50		ug/L	07/02/1997	cjy	3864
Toluene	ND	0.50		ug/L	07/02/1997	cjy	3864
Ethylbenzene	ND	0.50		ug/L	07/02/1997	cjy	3864
Xylenes (Total)	ND	0.50		ug/L	07/02/1997	cjy	3864
Methyl-tert-butyl ether	ND	2.0		ug/L	07/02/1997	cjy	3864
Bromofluorobenzene (SURR)	93			% Rec.	07/02/1997	cjy	3864
M8015 (EXT., Liquid)							
as Diesel	ND	0.050		mg/L	07/02/1997	vah	1344
Ortho-terphenyl (SURR)	101			% Rec.	07/02/1997	vah	1344

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Ref: Oak-002/Project No. 13-105-107

MATRIX SPIKE / MATRIX SPIKE DUPLICATE

Parameter	Matrix Spike				Matrix Spike				Date Analyzed	Run Batch	Sample Spiked	
	Spike % Rec.	Dup % Rec.	RPD	Spike Amount	Sample Conc.	Spike Conc.	Dup. Conc.	Flags				Units
TPH (Gas/BTXE,Liquid)												276397
as Gasoline	102.4	92.2	10.4	5.00	0.6	5.72	5.21		mg/L	07/02/1997	3864	276397
Benzene	90.5	94.7	4.5	71.8	97	162	165	PC	ug/L	07/02/1997	3864	276397
Toluene	98.0	99.7	1.7	346	ND	339	345		ug/L	07/02/1997	3864	276397
Bromofluorobenzene (SURR)	101.0	100.0	1.0	100	93	101	100		% Rec.	07/02/1997	3864	276397
M8015 (EXT., Liquid)												276322
as Diesel	111.6	98.9	12.0	1.89	0.07	2.18	1.94	HX	mg/L	07/02/1997	1344	276322
Ortho-terphenyl (SURR)	128.0	115.0	10.7	100	112	128	115		% Rec.	07/02/1997	1344	276322

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

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Client Acct: 98900
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LABORATORY CONTROL SAMPLE REPORT

Parameter	DUP		RPD	DUP			Flags	Units	Date Analyzed	Analyst Initials	Run Batch
	LCS % Rec.	LCS % Rec.		LCS Amount Found	LCS Amount Found	LCS Amount					
M8015 (EXT., Liquid) as Diesel	89.0			0.89		1.00		mg/L	07/02/1997	vah	1344
Ortho-terphenyl (SURR)	114.0			114		100		% Rec.	07/02/1997	vah	1344

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

KEY TO RESULT FLAGS

- * : RPD between sample duplicates exceeds 30%.
- *M : RPD between sample duplicates or MS/MSD exceeds 20%.
- + : Correlation coefficient for the Method of Standard Additions is less than 0.995.
- < : Sample result is less than reported value.
- B-I : Value is between Method Detection Limit and Reporting Limit.
- B-0 : Analyte found in blank and sample.
- C : The result confirmed by secondary column or GC/MS analysis.
- CNA : Cr+6 not analyzed; Total Chromium concentration below Cr+6 regulatory level.
- COMP : Sample composited by equal volume prior to analysis.
- CV : 2-Chloroethylvinyl ether cannot be determined in a preserved sample.
- CWT : Due to the sample matrix, constant weight could not be achieved.
- D- : The result has an atypical pattern for Diesel analysis.
- D1 : The result for Diesel is an unknown hydrocarbon which consists of a single peak.
- DB : ND for hydrocarbons, non-discrete baseline rise detected.
- DH : The result appears to be a heavier hydrocarbon than Diesel.
- DL : The result appears to be a lighter hydrocarbon than Diesel.
- DR : Elevated Reporting Limit due to Matrix.
- DS : Surrogate diluted out of range.
- DX : The result for Diesel is an unknown hydrocarbon which consists of several peaks.
- FA : Compound quantitated at a 2X dilution factor.
- FB : Compound quantitated at a 5X dilution factor.
- FC : Compound quantitated at a 10X dilution factor.
- FD : Compound quantitated at a 20X dilution factor.
- FE : Compound quantitated at a 50X dilution factor.
- FF : Compound quantitated at a 100X dilution factor.
- FG : Compound quantitated at a 200X dilution factor.
- FH : Compound quantitated at a 500X dilution factor.
- FI : Compound quantitated at a 1000X dilution factor.
- FJ : Compound quantitated at a greater than 1000x dilution factor.
- FK : Compound quantitated at a 25X dilution factor.
- FL : Compound quantitated at a 250X dilution factor.
- G- : The result has an atypical pattern for Gasoline.
- G1 : The result for Gasoline is an unknown single peak.
- GH : The result appears to be a heavier hydrocarbon than Gasoline.
- GL : The result appears to be a lighter hydrocarbon than Gasoline.
- GX : The result for Gasoline is an unknown hydrocarbon which consists of several peaks.
- HT : Analysis performed outside of the method specified holding time.
- HTC : Confirmation analyzed outside of the method specified holding time.
- HTP : Prep procedure performed outside of the method specified holding time.
- HTR : Received after holding time expired, analyzed ASAP after receipt.
- HX : Peaks detected within the quantitation range do not match standard used.
- J : Value is estimated.
- MI : Matrix Interference Suspected.
- MSA : Value determined by Method of Standard Additions.
- MSA* : Value obtained by Method of Standard Additions; Correlation coefficient is <0.995.
- NI1 : Sample spikes outside of QC limits; matrix interference suspected.
- NI2 : Sample concentration is greater than 4X the spiked value; the spiked value is considered insignificant.
- NI3 : Matrix Spike values exceed established QC limits, post digestion spike is in control.
- NI4 : MS/MSD outside of control limits, serial dilution within control.
- P : There is >40% difference between primary and confirmation analysis.
- P7 : pH of sample > 2; sample analyzed past 7 days.
- RSC : Refer to subcontract laboratory report for QC data.
- S2 : Matrix interference confirmed by repeat analysis.
- SCN : Thiocyanate not analyzed separately; total value is below the Reporting Limit for Free Cyanide.
- SIM : Analysis performed by Selective Ion Monitoring.
- TND : Conc. of the total analyte ND; therefore this analyte is ND also.
- UMDL : Undetected at the Method Detection Limit.
- UTD : Unable to perform requested analysis.

KEY TO ABBREVIATIONS

:CVS : Initial Calibration Verification Standard (External Standard).
mean : Average; sum of measurements divided by number of measurements.
mg/Kg : Concentration in units of milligrams of analyte per kilogram of sample.
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.
NTU : Nephelometric turbidity units.
RPD : Relative percent difference.
SNA : Standard not available.
ug/Kg : Concentration in units of micrograms of analyte per kilogram of sample.
ug/L : Concentration in units of micrograms of analyte per liter of sample.
umhos/cm : Micromhos per centimeter.

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LEGEND

Analytical Services

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E-Mail: info@legendlab.com

WALTER CUCULIC

CHAIN OF CUSTODY RECORD

COMPANY CAMBRIA ENV TECH
 ADDRESS 1144 65th ST.
 PHONE 510-420-0700 FAX 510-420-9170
 PROJECT NAME/LOCATION DAK-002
 PROJECT NUMBER 13-105-107
 PROJECT MANAGER John Espinoza

REPORT TO: John ESPINOZA

INVOICE TO: _____

P.O. NO. _____

LEGEND QUOTE NO. _____

SAMPLED BY

(PRINT NAME) _____

SIGNATURE _____

(PRINT NAME) _____

SIGNATURE _____

ANALYSES

DATE	TIME	SAMPLE ID/DESCRIPTION	MATRIX	GRAB	COMP	# and Type of Containers						TPH ₂ /BIC/LM/BE	TPHA
						HCl	NaOH	HNO ₃	H ₂ SO ₄	OTHER			
6/25	11:40	MW-3	W			3000s						X	
6/25	11:45	MW-3	W						IL				X
6/25	2:10	MW-4	W			3000s						X	
6/25	2:15	MW-4	W						IL				X
6/25	1:40	MW-1	W			3000s						X	
6/25	1:45	MW-1	W						IL				X
6/25	12:30	MW-2	W			3000s						X	
6/25	12:30	MW-2	W						IL				X

To assist us in selecting the proper method

Is this work being conducted for regulatory compliance monitoring? Yes No

Is this work being conducted for regulatory enforcement action? Yes No

Which regulations apply: RCRA NPDES Wastewater
 UST Drinking Water
 Other None

COMMENTS

CUSTODY SEALED

Date 6-26-97 Time 1:00 Initials JA

SEAL INTACT?

Yes No Initials JB

CONDITION OF SAMPLE: BOTTLES INTACT? YES/NO
FIELD FILTERED? YES/NO

COC SEALS PRESENT AND INTACT? YES/NO
VOLATILES FREE OF HEADSPACE? YES/NO

TEMPERATURE UPON RECEIPT: 2.4°C
Bottles supplied by Legend? YES/NO

SAMPLE REMAINDER DISPOSAL: RETURN SAMPLE REMAINDER TO CLIENT VIA _____
LEGEND MAY DISPOSE OF ALL SAMPLE REMAINDERS Walter Cuculic

DATE 6/25/97

RELINQUISHED BY: Walter Cuculic
DATE 6/24/97 TIME 10:30

RECEIVED BY: Shirley Repp

RELINQUISHED BY: Shirley Repp
DATE 6-26-97 TIME 1:00

RECEIVED FOR LEGEND BY: Shirley Repp

METHOD OF SHIPMENT: COURIER VIA CBS

REMARKS: 6/27/97 0925