

C A M B R I A

January 30, 2002

Mr. Barney Chan
Alameda County Health Care Services Agency
Department of Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502

FEB 01 2002

Re: **Monitoring Well Installation Report – Addendum**
Shell-branded Service Station
4255 MacArthur Boulevard
Oakland, California
Incident #98995758
Cambria Project #244-0524



Dear Mr. Chan,

On behalf of Equiva Services LLC, Cambria Environmental Technology, Inc. is submitting the following supplement to our January 10, 2002 *Monitoring Well Installation Report* for your records. Attached is a summary of all soil data collected at the Shell-branded service station at 4255 MacArthur Boulevard since 1985, including a complete soil analytical table and boring location map. Please call Melody Munz at (510) 420-3324 if you have any questions or comments.

Sincerely,
Cambria Environmental Technology, Inc.

Melody Munz
Project Engineer

Figure: 1 - Monitoring Well and Soil Boring Location Map

Table: 1 - Soil Analytical Results Summary

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San Ramon, CA

Sonoma, CA: \\Oakland 4255 MacArthur\Corresp.2001\4255SoilDataSummary.1.02.doc

**Cambria
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EXPLANATION

- MW-1 Monitoring well location
- TB-1 Tank Backfill well location
- SB-1 Cambria soil boring location (12/98)
- BH-D Weiss Associates soil boring location (11/93, 11/94)
- S-A EMCON soil boring location (8/85)
- S1 Weiss Associates dispenser soil sample location (11/95)

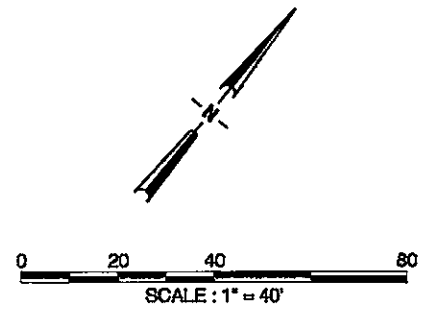


FIGURE 1
Shell-branded Service Station
 4255 MacArthur Boulevard
 Oakland, California
 Incident #98995758

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Table 1. Soil Analytical Results Summary - Shell-branded Service Station, 4255 MacArthur Boulevard, Oakland, California - Incident #98995758

Boring/Well ID	Date	Depth (fbg)	TPHg	Benzene	Toluene	Ethylbenzene (ppm)	Xylenes	MTBE (8020)	MTBE (8260)
MW-5	11/12/01	5.5	<1.0	<0.005	<0.005	<0.005	<0.005	---	<0.5
S-1	11/17/95	3.0	3200	<5.0	27	39	250	---	---
S-2	11/17/95	2.0	7800	<15	51	71	540	---	---
S-3	11/17/95	2.0	7300	<12	14	42	500	---	---
S-4	11/17/95	2.5	1.5	0.052	<0.005	0.021	0.0069	---	---
S-5	11/17/95	3.0	1.1	<0.005	<0.005	<0.005	0.013	---	---
S-6	11/17/95	2.5	1.1	0.19	<0.005	0.046	0.020	---	---
S-7	11/17/95	3.0	10	0.12	0.030	0.24	0.98	---	---
S-8	11/17/95	3.0	2800	<5.0	5.1	25	140	---	---
S-9	11/17/95	3.5	6.5	<0.005	<0.005	<0.005	0.021	---	---
S-10	11/17/95	3.5	44	<0.05	<0.05	0.051	0.22	---	---
S-11	11/17/95	3.5	2.6	0.026	<0.005	0.011	0.014	---	---
S-12	11/17/95	4.0	39	0.26	<0.05	0.42	1.7	---	---
S-13	11/17/95	4.0	12	0.85	0.46	0.31	1.5	---	---
S-14	11/17/95	4.0	300	<0.5	<0.5	3.8	10	---	---
S-15	11/17/95	5.0	210	0.28	<0.25	1.9	6.4	---	---
SB-1	2/12/94	5.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	<0.10**
	2/12/94	7.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	<0.10**

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Boring/Well ID	Date	Depth (fbg)	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE (8020)	MTBE (8260)
			←----- (ppm) -----→						
SB-2	2/12/94	5.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.10	<0.10**
	2/12/94	7.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	1.4	0.88**
BH-D	11/3/94	5.0	<1	<0.0025	<0.0025	<0.0025	<0.0025	---	---
	11/3/94	10.0	<1	0.13	<0.0025	0.011	0.01	---	---
	11/3/94	15.0	<1	<0.0025	<0.0025	<0.0025	<0.0025	---	---
	11/3/94	20.0	<1	<0.0025	<0.0025	<0.0025	0.015	---	---
BH-E	11/3/94	5.0	5900	23	160	120	430	---	---
	11/3/94	10.0	<1	0.031	<0.0025	<0.0025	<0.0025	---	---
	11/3/94	15.0	<1	0.0053	0.0033	<0.0025	0.007	---	---
	11/3/94	20.0	<1	<0.0025	0.0077	<0.0025	0.015	---	---
BH-F (MW-4)	11/3/94	5.0	<1	<0.0025	<0.0025	<0.0025	<0.0025	---	---
	11/3/94	10.0	13	0.029	0.14	0.17	0.54	---	---
	11/3/94	15.0	<1	0.044	0.0033	0.017	0.032	---	---
	11/3/94	20.0	<1	<0.0025	<0.0025	<0.0025	<0.0025	---	---
BH-A (MW-1)	11/3/93	6.0	<1	<0.0025	<0.0025	<0.0025	<0.0025	---	---
	11/3/93	10.5	24	0.4	0.028	0.12	1	---	---
	11/3/93	14.0	26	0.028	0.02	0.062	0	---	---

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Table 1. Soil Analytical Results Summary - Shell-branded Service Station, 4255 MacArthur Boulevard, Oakland, California - Incident #98995758

Boring/Well ID	Date	Depth (fbg)	TPHg	Benzene	Toluene	Ethylbenzene (ppm)	Xylenes	MTBE (8020)	MTBE (8260)
	11/3/93	18.0	<1	<0.0025	<0.0025	<0.0025	<0.0025	---	---
	11/3/93	22.0	<1	0.0063	0.0094	0.0097	0.057	---	---
BH-B (MW-2)	11/3/93	6.0	<1	<0.0025	<0.0025	<0.0025	<0.0025	---	---
	11/3/93	9.0	7.6	0.069	<0.0025	0.044	0.11	---	---
	11/3/93	14.0	66	0.07	0.44	0.53	2.6	---	---
	11/3/93	18.5	<1	0.032	0.012	0.0042	0.02	---	---
	11/3/93	24.0	<1	0.021	0.023	0.0037	0.021	---	---
BH-C (MW-3)	11/4/93	6.5	<1	<0.0025	<0.0025	<0.0025	<0.0025	---	---
	11/4/93	11.3	1700	1.1	2.5	33	44	---	---
	11/4/93	16.0	610	3.3	5.7	6.9	33	---	---
	11/4/93	22.5	<1	<0.0025	<0.0025	<0.0025	<0.0025	---	---
S-1	6/10/85	13.5-15	ND*	---	---	---	---	---	---
	6/10/85	18.5-20	ND*	---	---	---	---	---	---
S-A	6/10/85	4-5.5	15800*	---	---	---	---	---	---
	6/10/85	8.5-10	2*	---	---	---	---	---	---
	6/10/85	10-11.5	ND*	---	---	---	---	---	---
S-B	6/10/85	13.5-15	2*	---	---	---	---	---	---

Abbreviations and Notes:

Table 1. Soil Analytical Results Summary - Shell-branded Service Station, 4255 MacArthur Boulevard, Oakland, California - Incident #98995758

Boring/Well ID	Date	Depth (fbg)	TPHg	Benzene	Toluene	Ethylbenzene (ppm)	Xylenes	MTBE (8020)	MTBE (8260)
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ppm = parts per million (milligrams per kilogram).

TPHg = Total Petroleum Hydrocarbons as gasoline, analyzed by EPA Method 8015 except MW-5-5.5 analyzed by 8260B.

Benzene, toluene, ethylbenzene, and xylene analyzed by EPA Method 8020 except MW-5-5.5 analyzed by 8260B.

MTBE (8020) = Methyl tertiary butyl ether, analyzed by EPA Method 8020.

MTBE (8260) = Methyl tertiary butyl ether, analyzed by EPA Method 8260B.

--- = not analyzed for this constituent.

<n = below detection limit of n ppm.

*Sample analysis method unknown.

**Results reported after sample hold time had expired.

Referenced documents:

Cambria, Offsite Monitoring Well Installation Report, 1/02 (MW-5)

Cambria, Subsurface Investigation, 3/19/98 (S-1, S-2)

Weiss, Subsurface Investigation, 1/26/95 (BH-D through BH-F)

Weiss, Subsurface Investigation, 3/15/94 (BH-A through BH-C)

Weiss, Dispenser Replacement Sampling, 4/1/96 (S-1 through S-15)

Emcon, Shell Service Station, 7/26/85 (S-A, S-B, and S-1)