

C A M B R I A

RO 327

July 11, 2003

Mr. Amir Gholami  
Alameda County Department of Environmental Health  
1131 Harbor Bay Parkway, Suit 250  
Alameda, CA 94502-6577

Alameda County  
JUL 15 2003  
Environmental Health

Re: **Groundwater Monitoring Report - Second Quarter 2003**

Credit World Auto Sales  
2345 International Boulevard (Formerly E. 14<sup>th</sup> Street)  
Oakland, California 94601  
Case No. 2116  
Cambria Project No. 129-0741



Dear Mr. Gholami:

On behalf of Mr. Stanley and Mr. Aaron Wong, Cambria Environmental Technology, Inc. (Cambria) has prepared this groundwater monitoring report for the above-referenced site. Presented in the report are this second quarter 2003 activities and the anticipated third quarter 2003 activities.

If you have any questions or comments regarding this report, please call me at (510) 420-3307.

Sincerely,  
**Cambria Environmental Technology, Inc.**

Mary C. Holland-Ford, RG  
Project Geologist

Attachments: Groundwater Monitoring Report - Second Quarter 2003

cc: Mr. Stanley and Mr. Aaron Wong, 2200 E. 12<sup>th</sup> Street, Oakland, California 94606

**Cambria  
Environmental  
Technology, Inc.**

5900 Hollis Street  
Suite A  
Emeryville, CA 94608  
Tel (510) 420-0700  
Fax (510) 420-9170

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GROUNDWATER MONITORING REPORT - SECOND QUARTER 2003

Credit World Auto Sales  
2345 International Boulevard  
(Formerly E. 14<sup>th</sup> Street)  
Oakland, California 94601  
Case No. 2116  
Cambria Project No. 513-1000



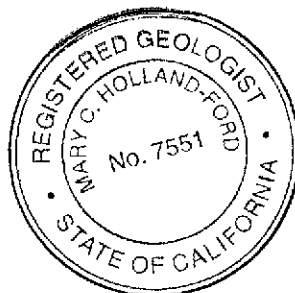
July 11, 2003

*Prepared for:*

Mr. Stanley and Mr. Aaron Wong  
2200 E. 12<sup>th</sup> Street  
Oakland, California 94606


*Prepared by:*

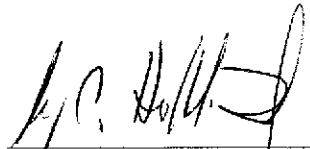
Cambria Environmental Technology, Inc.  
5900 Hollis Street, Suite A  
Emeryville, California 94608



Cambria  
Environmental  
Technology, Inc.

5900 Hollis Street  
Suite A  
Emeryville, CA 94608  
Tel (510) 420-0700  
Fax (510) 420-9170

  
\_\_\_\_\_  
Samiv Gill  
Staff Scientist

  
\_\_\_\_\_  
Mary Holland-Ford, RG  
Project Geologist

# C A M B R I A

## GROUNDWATER MONITORING REPORT - SECOND QUARTER 2003

World Credit Auto Sales  
2345 International Boulevard  
(Formerly E. 14<sup>th</sup> Street)  
Oakland, California 94601  
Case No. 2116  
Cambria Project No. 513-1000

July 11, 2003



### INTRODUCTION

On behalf of Mr. Stanley and Mr. Aaron Wong, Cambria Environmental Technology, Inc. (Cambria) has prepared this *Groundwater Monitoring Report - Second Quarter 2003* for the above-referenced site. Presented in the report is the second quarter 2003 activities and results, and the anticipated third quarter 2003 activities.

### SECOND QUARTER 2003 ACTIVITIES

#### Monitoring Activities

*Field Activities:* On May 29, 2003, Cambria conducted quarterly monitoring activities. Cambria gauged water levels and inspected for separate-phase hydrocarbon (SPH) in monitoring wells MW-1 through MW-3, TMW-4, TMW-5, and MW-6. Due to the presence of SPH, no groundwater samples were collected for analysis. Groundwater monitoring field data sheets are presented in Appendix A. See Appendix B for Geotracker electronic delivery confirmations.

#### Monitoring Results

*Groundwater Flow Direction:* Historically the groundwater flow for this site has been radial or toward the northwest. Based on depth-to-water measurements collected on May 29, 2003, groundwater flows towards the north with a gradient of 0.083 ft/ft. The groundwater gradient is consistent with the previous quarter. Depth to water and groundwater elevation data are presented in Table 1.

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**SPH Distribution:** During field activities, SPH was encountered in all accessible wells (MW-1 through MW-3, TMW-4, TMW-5, and MW-6). SPH thicknesses ranged from 0.02 to 0.44 feet and are shown on Figure 1.

## **Corrective Action Activities**

**SPH Removal:** On April 4, May 1, and May 29, 2003 Cambria removed approximately 2.70 gallons of SPH by hand bailing (Table 2). Approximately 18.59 gallons of SPH have been removed from the wells since SPH removal activities were initiated in 1992.



## **ANTICIPATED THIRD QUARTER 2003 ACTIVITIES**

### **Monitoring Activities**

Cambria will gauge the site wells, inspect wells for SPH, and collect groundwater samples from all wells not containing SPH. Groundwater samples will be analyzed for total petroleum hydrocarbons as gasoline by modified EPA Method 8015C, and benzene, toluene, ethylbenzene, xylenes and methyl tert butyl ether (MTBE) by EPA Method 8021B, with confirmation analysis for any MTBE concentrations by EPA Method 8260. Dissolved oxygen will be measured if no SPH is present. Cambria will summarize groundwater monitoring activities and results in the *Groundwater Monitoring Report – Third Quarter 2003*.

### **Corrective Action Activities**

Cambria will continue to perform SPH hand bailing during quarterly gauging and monitoring events as described in our *Groundwater Monitoring Report – First Quarter 2003*. The amount of SPH removed will be tabulated and incorporated in the quarterly groundwater monitoring reports.

Upon agency approval, Cambria will perform additional site assessment activities to further define the extent of hydrocarbons, feasibility testing activities to assist in the selection of an appropriate remedial technology, and additional interim remedial activities as described in Cambria's *Site Summary, Conduit Study and Monitoring Report* dated April 30, 2003.

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## ATTACHMENTS

Figure 1 – Groundwater Elevation Contour and Hydrocarbon Concentration Map

Table 1 – Groundwater Analytical Data

Table 2 – Separate Phase Hydrocarbon Removal

Appendix A – Groundwater Monitoring Field Data Sheets

Appendix B – Geotracker Electronic Delivery Confirmation



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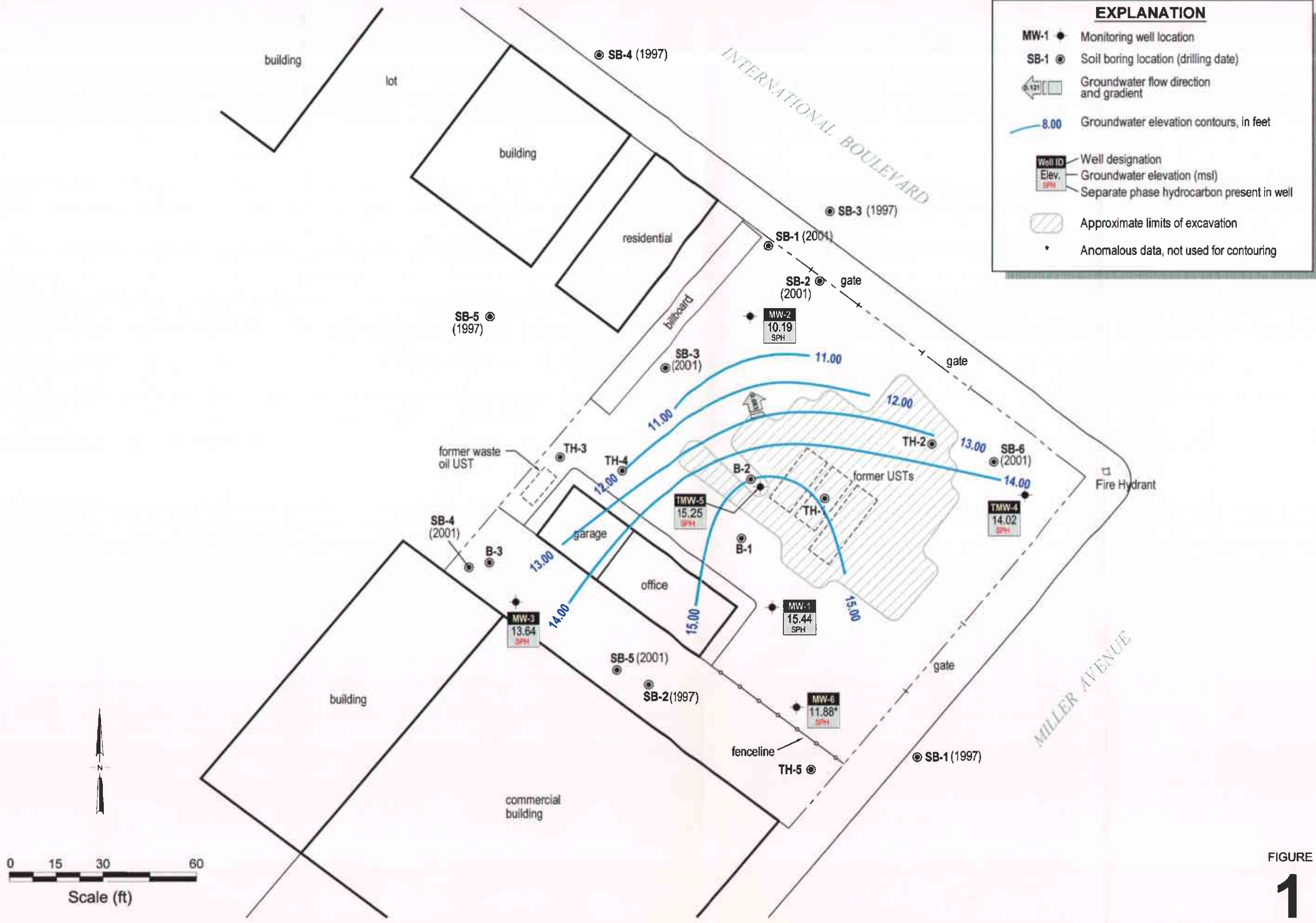


FIGURE  
**1**

# CAMBRIA

**Table 1. Groundwater Analytical Data - Credit World Auto Sales, 2345 International Boulevard, Oakland, California**

Well ID TOC (ft)	Date Sampled	Depth to GW (ft)	SPII Thickness (ft)	GW Elevation (ft)	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)
MW-1	12/30/1997	10.96	0.17	16.51	61,000	4,300	1,800	1,600	6,900	1,400
100.000 <sup>a</sup>	3/24/1998	9.33	0.00	18.00	24,000	1,000	1,000	1,300	4,300	2,000
27.33 <sup>b</sup>	6/29/1998	12.20	0.00	15.13	130,000	3,800	370	1,200	4,200	3,300
	10/2/1998	13.46	0.00	13.87	22,000	66	21	26	140	<0.50
	12/10/1998	10.49	0.00	16.84	32,000	4,600	970	1,700	4,900	<250
	3/26/1999	9.44	0.00	17.89	230,000	370	290	280	720	<0.50
	6/11/1999	12.56	0.01	14.78	180,000	210	170	220	400	<0.50
	9/15/1999	14.85	1.00	13.28	21,000	3,800	280	590	2,200	<250
	12/28/1999	14.50	1.32	13.89	27,000	48	36	46	83	<0.5
	6/13/2001	15.83	4.36	12.03	--	--	--	--	--	--
	12/27/2002	8.31	0.16	16.19	--	--	--	--	--	--
	3/23/2003	10.65	0.05	16.72	--	--	--	--	--	--
	5/29/2003	12.11	0.28	15.44	--	--	--	--	--	--
MW-2	8/23/1991	13.77	0.00	84.82	10,000	<5	<5	<5	<5	--
98.585 <sup>a</sup>	4/16/1992	15.38	2.81	12.79	--	--	--	--	--	--
25.92 <sup>b</sup>	6/11/1993	13.19	0.00	12.74	--	--	--	--	--	--
	8/17/1993	14.04	0.01	11.89	49,000	94	240	250	980	--
	3/28/1994	13.61	0.54	12.74	14,000	4,200	<250	910	1,400	--
	6/27/1994	14.24	0.80	12.32	24,000	4,400	72	1,100	1,700	--
	9/16/1994	17.82	4.46	11.67	40,000	2,300	250	2,000	4,100	--
	3/31/1995	16.72	7.44	15.15	28,000	4,000	<120	1,100	1,400	--
	6/28/1995	13.50	0.73	13.00	40,000	2,700	130	1,700	2,900	--
	9/28/1995	14.63	0.54	11.72	7,500	420	14	250	190	<62
	12/26/1995	12.58	0.90	14.06	22,000	1,300	88	950	1,800	<250
	3/22/1996	11.46	0.15	14.58	9,800	2,200	<120	400	<380	<1,200
	6/20/1996	13.08	0.37	13.14	35,000	770	<0.50	240	<0.50	550
	9/30/1996	16.67	3.75	12.25	58,000	1,600	230	2,200	4,000	<5.0
	12/27/1996	15.74	7.57	16.24	29,000	2,100	<0.50	1,200	1,800	<5.0
	3/7/1997	12.55	0.00	13.37	13,000	1,300	37	290	180	<5.0
	6/28/1997	11.98	0.04	13.97	12,000	840	<0.50	640	360	<5.0
	9/18/1997	13.44	0.00	12.48	12,000	680	<0.50	320	84	<5.0
	12/30/1997	11.31	0.00	14.61	13,000	1,100	40	350	220	<5.0
	3/25/1998	10.02	0.00	15.90	8,100	1,300	51	410	230	670

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**Table 1. Groundwater Analytical Data - Credit World Auto Sales, 2345 International Boulevard, Oakland, California**

Well ID TOC (ft)	Date Sampled	Depth to GW (ft)	SPH Thickness (ft)	GW Elevation (ft)	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	
MW-2 (con't)	6/29/1998	11.96	0.00	13.96	12,000	880	13	180	72	430	
	10/2/1998	13.74	0.00	12.18	47,000	140	100	110	200	<0.50	
	12/10/1998	12.91	2.10	14.69	26,000	1,000	210	1,500	1,900	<1,000	
	3/26/1999	9.06	0.20	17.02	110,000	190	150	120	380	<0.50	
	6/11/1999	12.18	0.00	13.74	190,000	310	250	320	540	<0.50	
	9/15/1999	15.59	3.00	12.73	25,000	720	<100	1,300	1,600	<1,000	
	12/28/1999	16.81	4.50	12.71	75,000	130	98	130	230	<0.50	
	6/13/2001	14.84	3.15	10.84	--	--	--	--	--	--	
	6/20/2002	14.80	0.70	8.92	53,000	2,200	140	3,300	3,000	<1,000	
	10/21/2002	16.98	0.24	6.37	--	--	--	--	--	--	
	12/27/2002	13.58	0.43	9.92	--	--	--	--	--	--	
	3/23/2003	15.49	0.29	10.66	--	--	--	--	--	--	
	<b>5/29/2003</b>	<b>16.08</b>	<b>0.44</b>	<b>10.19</b>	--	--	--	--	--	--	
	MW-3 99.25 <sup>a</sup> 27.57 <sup>b</sup>	8/23/1991	15.07	0.00	84.18	<5,000	<5	<5	<5	<5	--
		4/16/1992	14.14	0.16	13.56	--	--	--	--	--	--
6/11/1993		14.28	0.00	13.30	--	--	--	--	--	--	
8/17/1993		15.77	0.00	11.80	9,600	4.1	17	28	54	--	
3/28/1994		14.35	0.00	13.22	8,400	2,400	56	67	200	--	
6/27/1994		14.77	0.00	12.80	9,900	3,300	<22	<25	73	--	
9/16/1994		15.42	0.05	12.19	16,000	2,300	80	620	240	--	
3/31/1995		12.98	0.46	14.96	16,000	2,800	70	<25	920	--	
6/28/1995		14.20	0.05	13.41	11,000	2,300	32	81	240	--	
9/28/1995		15.17	0.00	12.40	6,300	1,900	<42	200	<120	<420	
12/26/1995		13.33	0.06	14.29	25,000	3,800	97	94	1,600	<250	
3/22/1995		12.81	0.04	14.79	16,000	3,100	75	69	350	250	
6/20/1996		13.95	0.07	13.68	8,500	1,400	28	140	15	220	
9/24/1996		14.86	0.04	12.74	12,000	2,400	87	340	110	<5.0	
12/27/1996		11.04	0.06	16.58	5,800	1,700	28	<0.50	42	240	
3/10/1997	13.80	0.00	13.77	9,000	1,700	<0.50	110	<0.50	<5.0		
6/28/1997	13.72	0.06	13.90	15,000	2,200	<0.50	160	190	<5.0		
9/18/1997	14.76	0.00	12.81	28,000	3,800	<0.50	100	<0.50	<5.0		
12/30/1997	12.97	0.00	14.60	21,000	2,200	<0.50	31	<0.50	300		
3/24/1998	11.75	0.00	15.82	2,300	870	7.2	20	<0.50	85		
6/29/1998	13.38	0.00	14.19	6,500	1,300	12	62	14	140		



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Well ID TOC (ft)	Date Sampled	Depth to GW (ft)	SPH Thickness (ft)	GW Elevation (ft)	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)
MW-3 (cont)	10/2/1998	14.42	0.00	13.15	11,000	31	27	35	69	<0.50
	12/10/1998	12.55	0.00	15.02	<2,500	2,800	68	42	55	<250
	3/26/1999	10.54	0.00	17.03	10,000	21	14	10	41	<0.50
	6/15/1999	13.91	0.00	13.66	87,000	90	71	92	180	<0.50
	9/15/1999	14.70	0.00	12.87	8,700	2,100	71	110	66	<100
	12/28/1999	15.16	0.25	12.61	4,300	7.7	5.2	7.2	13	<0.50
	6/13/2001	14.70	0.40	13.19	8,400	1,300	25	64	32	<20
	6/20/2002	14.68	0.02	12.91	7,800	1,100	23	66	15	<50
	12/27/2002	11.37	0.17	16.34	--	--	--	--	--	--
	3/23/2003	--	--	--	--	--	--	--	--	--
	<b>5/29/2003</b>	<b>13.99</b>	<b>0.08</b>	<b>13.64</b>	--	--	--	--	--	--
TMW-4 26.50 <sup>b</sup>	8/17/1993	13.26	0.00	13.24	150	<0.50	0.8	1.4	3.7	--
	3/28/1994	12.40	0.00	14.10	<50	<0.50	<0.50	<0.50	<1.5	--
	6/27/1994	12.84	0.00	13.66	<50	<0.50	<0.50	<0.50	<1.5	--
	9/16/1994	13.58	0.00	12.92	<50	<0.50	<0.50	<0.50	<1.5	--
	3/31/1995	10.23	0.00	16.27	<50	<0.50	<0.50	<0.50	<1.5	--
	6/28/1995	12.21	0.00	14.29	<50	<0.50	<0.50	<0.50	<1.5	--
	9/28/1995	13.38	0.00	13.12	<50	<0.50	<0.50	<0.50	<1.5	<5.0
	12/26/1995	11.32	0.00	15.18	<50	<0.50	<0.50	<0.50	<1.5	<5.0
	3/22/1996	10.54	0.00	15.96	<50	<0.50	<0.50	<0.50	<1.5	<5.0
	6/20/1996	12.14	0.00	14.36	<50	<0.50	<0.50	<0.50	<0.50	<5.0
	9/24/1996	13.01	0.00	13.49	<50	<0.50	<0.50	<0.50	<0.50	<5.0
	12/27/1996	9.51	0.00	16.99	<50	<0.50	<0.50	<0.50	<0.50	<5.0
	3/10/1997	11.92	0.00	14.58	<50	<0.50	<0.50	<0.50	<0.50	<5.0
	6/27/1997	10.70	0.00	15.80	<50	<0.50	<0.50	<0.50	<0.50	<5.0
	9/18/1997	12.94	0.00	13.56	<50	<0.50	<0.50	<0.50	<0.50	<5.0
	12/30/1997	10.92	0.00	15.58	<50	<0.50	<0.50	<0.50	<0.50	<5.0
	3/25/1998	9.60	0.00	16.90	<50	<0.50	<0.50	<0.50	<0.50	<5.0
	6/29/1998	11.32	0.00	15.18	<50	<0.50	<0.50	<0.50	<0.50	<5.0
10/2/1998	12.56	0.00	13.94	<50	<0.50	<0.50	<0.50	<0.50	<0.50	
12/10/1998	10.44	0.00	16.06	<50	<0.50	<0.50	<0.50	<0.50	<0.50	
3/26/1999	9.38	0.00	17.12	<50	<0.50	<0.50	<0.50	<0.50	<0.50	
6/15/1999	11.58	0.00	14.92	<50	<0.50	<0.50	<0.50	<0.50	<0.50	

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Well ID TOC (ft)	Date Sampled	Depth to GW (ft)	SPH Thickness (ft)	GW Elevation (ft)	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)
TMW-4 (con't)	9/15/1999	12.89	0.00	13.61	<50	<0.50	<0.50	<0.50	<0.50	<5.0
	12/28/1999	12.92	0.00	13.58	<50	<0.50	<0.50	<0.50	<0.50	<0.50
	10/21/2002	12.70	0.00	13.80	--	--	--	--	--	--
	12/27/2002	9.07	0.12	17.53	--	--	--	--	--	--
	3/23/2003	10.73	0.03	15.79	--	--	--	--	--	--
	<b>5/29/2003</b>	<b>12.50</b>	<b>0.02</b>	<b>14.02</b>	--	--	--	--	--	--
TMW-5 26.51 <sup>b</sup>	8/17/1993	12.98	0.03	13.55	120,000	640	730	790	3,600	--
	3/28/1994	11.39	0.00	15.12	70,000	23,000	1,500	4,100	15,000	--
	6/28/1994	12.24	0.00	14.27	56,000	26,000	940	5,500	26,000	--
	9/16/1994	13.02	0.05	13.53	96,000	17,000	720	3,500	12,000	--
	3/31/1995	7.38	0.00	19.13	64,000	13,000	470	3,500	6,100	--
	6/28/1995	11.31	0.06	15.25	65,000	9,000	240	2,600	5,300	--
	9/28/1995	14.42	0.00	12.09	79,000	17,000	1,800	2,700	7,000	<1,200
	12/26/1995	10.16	0.05	16.39	110,000	11,000	800	2,300	4,500	<1,200
	3/22/1996	7.59	0.05	18.96	--	--	--	--	--	--
	6/26/1996 <sup>d</sup>	7.12	0.00	--	30,000	4,000	180	1,500	2,500	830
	9/30/1996	7.42	0.00	--	6,900	1,600	79	130	370	<5.0
	12/27/1996	6.38	0.00	--	78,000	12,000	1,900	2,900	9,700	<5.0
	3/10/1997	11.12	0.00	--	84,000	9,900	1,100	2,600	8,800	<5.0
	8/17/1997	12.98	0.03	--	--	--	--	--	--	--
	9/18/1997	12.00	0.00	--	65,000	8,000	<0.5	2,000	4,700	<5.0
	12/30/1997	8.97	0.00	--	79,000	6,400	340	2,300	5,500	<5.0
	3/25/1998	7.32	0.00	--	20,000	6,000	260	2,700	5,800	2,400
	6/29/1998	11.50	0.00	--	--	--	--	--	--	--
	10/8/1998	12.56	0.00	--	46,000	120	98	120	240	<0.50
	12/8/1998	10.14	0.00	--	46,000	5,900	320	2,200	5,400	<1,200
3/26/1999	7.08	0.00	--	35,000	69	61	37	120	<0.50	
6/11/1999	11.40	0.00	--	26,000	29	32	43	72	<0.50	
9/15/1999	12.52	0.00	--	37,000	7,300	400	2,400	6,000	<1,000	
12/28/1999	12.44	0.00	--	25,000	44	32	41	75	<0.50	
5/23/2001	11.31	0.00	--	12.54	--	--	--	--	--	
6/20/2002	11.29	0.05	--	12.60	51,000	5,100	290	2,300	5,800	<250
10/21/2002	13.60	0.10	--	10.33	--	--	--	--	--	
12/27/2002	6.60	0.07	--	17.31	--	--	--	--	--	

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**Table 1. Groundwater Analytical Data - Credit World Auto Sales, 2345 International Boulevard, Oakland, California**

Well ID TOC (ft)	Date Sampled	Depth to GW (ft)	SPH Thickness (ft)	GW Elevation (ft)	TPH <sub>g</sub> (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)
	3/23/2003	9.79	0.04	16.75	--	--	--	--	--	--
	5/29/2003	11.29	0.04	15.25	--	--	--	--	--	--
MW-6	5/23/2001	12.47	0.00	11.34	--	--	--	--	--	--
23.81 <sup>c</sup>	6/13/2001	12.47	0.00	11.34	7,600	1,400	42	19	14	<10
	6/20/2002	12.45	0.00	11.36	79	5.7	<0.5	<0.5	<0.5	<5.0
	12/27/2002	7.24	0.04	16.60	--	--	--	--	--	--
	3/23/2003	--	--	--	--	--	--	--	--	--
	5/29/2003	11.95	0.02	11.88	--	--	--	--	--	--

**Abbreviations and Methods:**

bgs = below grade surface

(ug/L) = micrograms per Liter

TOC = elevation measured in feet below top of casing

Depth to GW = Depth to groundwater relative to top of casing

SPH = Separate phase hydrocarbons

TPH<sub>g</sub> = Total petroleum hydrocarbons as gasoline by modified EPA Method 8015

Benzene, Toluene, Ethylbenzene, Xylenes by EPA Method 8020, and by 8260 if in parenthesis

MTBE methyl tert butyl ether by EPA Method 8020

VOCs = volatile organic compounds by EPA Method 8260

ND\* = not detected with the exception of reported concentrations for benzene, toluene, ethylbenzene and xylenes

GW Elevation = Groundwater elevation in relation to mean sea level; calculated according to the relationship  $GW\ elevation = TOC - D'1W + (0.8)(SPH\ thickness)$

a = Relative to site datum established by Earth Systems Engineering surveyed August 1981

b = Top of casing elevation surveyed 8/10/93 by professional engineer (unknown datum)

c = Top of casing elevation surveyed 6/13/01 to City of Oakland datum by Renner Survey Company of Burlingame, CA. for Sequoia Environmental.

# CAMBRIA

**Table 2. Separate Phase Hydrocarbon Removal**  
Credit World Auto Sales, 2345 International Blvd, Oakland, California

Sample ID/ Well ID	Date Sampled	Depth to GW (feet bgs)	Depth to SPH (feet bgs)	SPH Thickness (feet)	Hydrocarbons Removed (gallons)	Cumulative Hydrocarbons Removed (gallons.)
MW-1	12/30/1997	10.96	10.79	0.17	0.03	0.03
MW-1	6/11/1999	12.56	12.55	0.01	0.00	0.03
MW-1	9/15/1999	14.85	13.85	1.00	0.16	0.19
MW-1	12/28/1999	8.31	8.15	0.16	0.03	0.21
MW-1	6/13/2001	8.31	8.15	0.16	0.03	0.24
MW-1	12/27/2003	8.31	8.15	0.16	0.79	1.03
MW-1	3/23/2003	10.65	10.60	0.05	0.33	1.36
<b>MW-1</b>	<b>4/4/2003</b>	<b>10.23</b>	<b>10.19</b>	<b>0.04</b>	<b>0.25</b>	<b>1.61</b>
MW-1	5/1/2003	9.85	9.80	0.05	0.13	1.74
<b>MW-1</b>	<b>5/29/2003</b>	<b>12.11</b>	<b>11.83</b>	<b>0.28</b>	<b>0.26</b>	<b>2.00</b>
MW-2	6/28/1995	13.50	12.77	0.73	0.12	2.12
MW-2	9/28/1995	14.63	14.09	0.54	0.09	2.20
MW-2	12/26/1995	12.58	11.68	0.90	0.14	2.35
MW-2	3/22/1996	11.46	11.31	0.15	0.02	2.37
MW-2	6/20/1996	13.08	12.71	0.37	0.06	2.43
MW-2	9/30/1996	16.67	12.92	3.75	0.59	3.02
MW-2	12/27/1996	15.74	8.17	7.57	1.20	4.22
MW-2	6/28/1997	11.98	11.94	0.04	0.01	4.23
MW-2	9/18/1997	13.44	13.44	0.00	0.00	4.23
MW-2	12/10/1998	12.91	10.81	2.10	0.33	4.56
MW-2	3/26/1999	9.06	8.86	0.20	0.03	4.59
MW-2	9/15/1999	15.59	12.59	3.00	0.48	5.07
MW-2	12/28/1999	16.81	12.31	4.50	0.71	5.78
MW-2	6/13/2001	14.84	11.69	3.15	0.50	6.28
MW-2	6/20/2002	14.80	14.10	0.70	0.11	6.39
MW-2	10/21/2002	16.98	16.74	0.24	0.04	6.43
MW-2	12/27/2002	13.58	13.15	0.43	0.79	7.22
MW-2	3/23/2003	15.49	15.20	0.29	1.50	8.72
<b>MW-2</b>	<b>4/4/2003</b>	<b>14.80</b>	<b>14.72</b>	<b>0.08</b>	<b>1.00</b>	<b>9.72</b>
MW-2	5/1/2003	13.63	13.59	0.04	0.13	9.85
<b>MW-2</b>	<b>5/29/2003</b>	<b>16.08</b>	<b>15.64</b>	<b>0.44</b>	<b>0.26</b>	<b>10.11</b>
MW-3	4/16/1992	14.14	13.98	0.16	0.03	0.03
MW-3	9/16/1994	15.42	15.37	0.05	0.01	0.03
MW-3	3/31/1995	12.98	12.52	0.46	0.07	0.11
MW-3	6/28/1995	14.20	14.15	0.05	0.01	0.11
MW-3	12/26/1995	13.33	13.27	0.06	0.01	0.12
MW-3	3/22/1995	12.81	12.77	0.04	0.01	0.13
MW-3	6/20/1996	13.95	13.88	0.07	0.01	0.14
MW-3	9/24/1996	14.86	14.82	0.04	0.01	0.15
MW-3	12/27/1996	11.04	10.98	0.06	0.01	0.16
MW-3	6/28/1997	13.72	13.66	0.06	0.01	0.17
MW-3	12/28/1999	15.16	14.91	0.25	0.04	0.21
MW-3	6/13/2001	14.70	14.30	0.40	0.06	0.27
MW-3	6/20/2002	14.68	14.66	0.02	0.00	0.27
MW-3	12/27/2002	11.37	11.20	0.17	0.79	1.07
<b>MW-3</b>	<b>5/29/2003</b>	<b>13.99</b>	<b>13.91</b>	<b>0.08</b>	<b>0.03</b>	<b>1.09</b>

# CAMBRIA

**Table 2. Separate Phase Hydrocarbon Removal**  
Credit World Auto Sales, 2345 International Blvd, Oakland, California

Sample ID/ Well ID	Date Sampled	Depth to GW (feet bgs)	Depth to SPH (feet bgs)	SPH Thickness (feet)	Hydrocarbons Removed (gallons)	Cumulative Hydrocarbons Removed (gallons.)
TMW-4	12/27/2002	9.07	8.95	0.12	0.40	0.40
TMW-4	3/23/2003	10.73	10.70	0.03	0.25	0.65
TMW-4	4/4/2003	10.40	10.35	0.05	0.25	0.90
TMW-4	5/1/2003	10.09	10.07	0.02	0.13	1.02
TMW-4	5/29/2003	12.50	12.48	0.02	0.01	1.03
TMW-5	8/17/1993	12.98	12.95	0.03	0.00	0.00
TMW-5	9/16/1994	13.02	12.97	0.05	0.01	0.01
TMW-5	6/28/1995	11.31	11.25	0.06	0.01	0.02
TMW-5	12/26/1995	10.16	10.11	0.05	0.01	0.03
TMW-5	3/22/1996	7.59	7.54	0.05	0.01	0.04
TMW-5	8/17/1997	12.98	12.95	0.03	0.00	0.04
TMW-5	5/23/2001	11.31	--	0.00	0.00	0.04
TMW-5	6/20/2002	11.29	11.24	0.05	0.01	0.05
TMW-5	10/21/2002	13.60	13.50	0.10	0.02	0.07
TMW-5	12/27/2002	13.60	13.50	0.10	0.40	0.46
TMW-5	3/23/2003	9.79	9.75	0.04	0.25	0.71
TMW-5	4/4/2003	9.45	9.40	0.05	0.13	0.84
TMW-5	5/1/2003	8.95	8.93	0.02	0.10	0.94
TMW-5	5/29/2003	11.29	11.25	0.04	0.01	0.95
MW-6	12/27/2002	7.24	7.20	0.04	0.39	0.39
MW-6	5/29/2003	11.95	11.93	0.02	0.01	0.40
<i>Hydrocarbons Removed by bailing or purging (gallons) =</i>						<i>13.59</i>
<i>Estimated 5 gallons removed by Tank Protect (see Note) (gallons) =</i>						<i>5.0</i>
<i>Total Estimated Hydrocarbons removed (gallons) =</i>						<i>18.59</i>

Note - approximately 3 to 5 gallons reported removed by Tank Protect between 8/20/97 and 1/14/98 with continuous free product removal system.  
bgs = below ground surface  
SPH removal volumes were provided for 5/23/01, 6/13/01, and 12/27/02 data.  
The volume of hydrocarbons removed prior to 12/27/2002 were estimated by multiplying the well casing volume (2" diameter casing = 0.60L/ft) by the SPH thickness (feet)

**APPENDIX A**

Groundwater Monitoring Field Data Sheets

Product Bailing Sheet

Well ID	Order	DTP	DTW	DOP	Amount of Product Removed	Casing Dia	Comment
MW-1		10.23	10.19	0.04	1/4 gal		dark brown SPH
MW-2		14.72	14.80	0.08	1 gal		" " "
MW-3		covered by car					" " "
TMW-4		10.35	10.40	0.05	1/4 gal		" " "
TMW-5		9.40	9.45	0.05	1/8 gal		" " "
TMW-6		covered by car					" " "

Project Name: World Credit Auto

Project Number: 513-1000

Technician: J. Hill

Date: 4-4-03

Product Bailing Sheet

Well ID	Order	DTP	DTW	DOP	Amount of Product Removed	Casing Dia	Comment
MW-1		9.80	9.85	0.05	1/8 gal		dark brown SPH
MW-2		13.59	13.63	0.04	1/8 gal		" " "
MW-3		unaccessable		-			
TMW-4		10.07	10.09	0.02	1/8 gal		" " "
TMW-5		8.93	<del>8.95</del>	0.02	1/8 gal		" " "
TMW-6		unaccessable					

Project Name: World Credit Auto  
 Technician: S. Hill

Project Number: 513-1000  
 Date: 5-1-03



Product Bailing Sheet

Well ID	Order	DTP	DTW	<del>DTP</del> SPH Thickness	Amount of Product Removed	Casing Dia	Comment
MW-1	4	11.83	12.11	0.28	1 liter		dark brown SPM
MW-2	6	15.64	16.08	0.44	1 liter		" " "
MW-3	1	13.91	13.99	0.08	100 ml		" " "
TMW-4	2	12.48	12.50	0.02	<del>50 ml</del> 20 ml		dark brown SPM & slightly yellow
TMW-5	5	11.25	11.29	0.04	50 ml		dark brown SPM
MW-6	3	11.93	11.95	0.02	50 ml		" " "

Project Name: World Credit Auto

Project Number: 513-1000

Technician: S. Hill

Date: 5-29-03

**APPENDIX B**

Geotracker Electronic Delivery Confirmations

CAMBRIA  
Supplemental Billing Form 2003  
Standard, State Fund, and ChevronTexaco Rates

2348 R14 OAK  
**FILE COPY**  
R0327

Date: 3-23-03 Project Name: World Credit Auto

Employee Name Sanjiv Gill Project Number 513-1000 Task 006

\* Indicates ChevronTexaco eligible

Unit #	Item	Unit	Unit Cost (\$)	Qty Used
<b>Equipment</b>				
00003	Air Compressor	Day	35.00	
00060	Bailer (PVC)	Day	8.00	
00004	Bailer (products thickness)	Day	20.00	
00005	Bailer (Teflon)	Day	20.00	
00245*	Core Saw	Day	100.00	
00246*	Dual-Phase Extraction Trailer	Day	300.00	
00051*	Generator	Day	50.00	
00023	Hand Auger Kit w/ core sampler/hammer	Day	30.00	
00049	Meter - Combustible Gas/O2 Level	Day	50.00	
00001	Meter - Dissolved Oxygen Meter	Day	40.00	
00008	Meter - Interface	Day	40.00	1
00002	Meter - pH, Conductivity, Temperature	Day	40.00	
00052*	Meter - Photo-ionization Detector (PID)	Day	100.00	
00233*	Meter - Flame-ionization Detector (FID)	Day	150.00	
00037	Meter - Turbidity	Day	20.00	
00057	Meter - Vacuum/Pressure Gauges	Day	20.00	
00050	Meter - Vapor Flow Meter	Day	20.00	
00066	Meter - Water Level	Day	25.00	
00058	Pump - DC Purging 2" (3 gpm to 40ft deep)	Day	15.00	
00040	Pump - Hand Purging, 2" (3 gpm to 40 ft deep)	Day	15.00	
00244*	Pump - Submersible w/ Hose Assembly and Controller	Day	200.00	
00044	Pump - Submersible 2" (8 gpm)	Day	50.00	
00045	Pump - Submersible 4" (40 gpm)	Day	60.00	
00011	Pump - Trash (150 gpm)	Day	55.00	
00235	Traffic Control - Cones	Each 25	8.00	1
00037	Traffic Control - Signs, Barricades (no flagmen or lightboards)	Day	30.00	
<b>Report Production</b>				
00241	Report Production (Standard, <1/2 in)	Each	25.00	
00242	Report Production (Oversized, >1/2 in)	Each	50.00	
<b>Field Supplies</b>				
00056	Bailers ( Disposable) Polypropylene	Each	8.00	2
00020	Personal Protective Equipment: Level C (per person/day)	Unit	40.00	
00010	Personal Protective Equipment: Level D (per person /day)	Unit	0.00	
00238	Padlocks	Each	10.00	
00038	Soil Sampling Liners (Brass)	Each	6.00	
00234	Soil Sampling Liners (Stainless Steel)	Each	10.00	
00239	Tedlar Bags (1 Liter)	Each	10.00	
00025	Film	Photo	2.00	
00035	55-Gallon Drum	Each	40.00	
00014	Miscellaneous field supplies (gloves, water, rope, caution tape, etc.)	Unit	25.00	1
<b>Travel</b>	<b>Standard/ChevronTexaco</b>			
00061	Mileage Standard	Mile	0.40	
00243*	Mileage ChevronTexaco (Company Truck)	Mile	0.36	
00063*	Truck (2WD Pick-up, van)	Day	55.00	
00236*	Specialized vehicle (4WD)	Day	75.00	
00015*	Per diem	Day	85.00	
	<b>UST Fund</b>			
00067	Mileage - Truck/Auto (2WD Pick-up, van) if miles/day under 120	Mile	0.50	15
00063	Truck (2WD Pick-up, van) if miles/day over 120	Day	60.00	
00061	Mileage - Specialized vehicle (4WD) if miles/day under 125	Mile	0.60	
00236	Specialized vehicle (4WD) if miles/day over 125	Day	75.00	
00015	Per diem	Day	85.00	