BROWN AND CALDWELL

February 29, 1996

Mr. Brian Cobb
E-Z Serve Petroleum Marketing Company of California
2550 N. Loop West, Suite 600
Houston, Texas 77292-2021

11-3003-02

Subject: Fourth Quarter 1995, Groundwater Monitoring Report
Former E-Z Serve Station #100877
525 West A Street, Hayward, California

Dear Mr. Cobb:

This letter report summarizes the fourth quarter groundwater monitoring activities conducted by Brown and Caldwell at 525 West A Street, Hayward, California (Site), on December 11 and 12, 1995. The work performed at the Site included collecting depth-to-water measurements, purging, and sampling all 15 wells, and submitting the groundwater samples to an analytical laboratory for analysis. Field work was performed following the procedures outlined in Attachment A.

Field and Analytical Methods

Initially, depth-to-water and free product measurements were collected from the 15 wells by a Brown and Caldwell field technician using a static water level probe. The wells were then purged of a minimum of three well volumes, or until evacuated, using a centrifugal pump. After purging, each monitoring well was sampled by the Brown and Caldwell field technician using a disposal bailer. Samples were then transferred to appropriate laboratory-supplied containers, placed in a cooler containing crushed ice, and submitted under appropriate chain of custody to CKY Incorporated (CKY) for analysis of total petroleum hydrocarbons as gasoline (TPHg) and benzene, toluene, ethylbenzene, and total xylenes (BTEX) following EPA Methods 8015 Modified and 8020, respectively. CKY is located in Torrance, California and is certified by the State of California Department of Health Services for analysis of hazardous materials. Groundwater sample collection records and chain-of-custody documentation for this quarterly sampling event are included in Attachment A.

Environmental Engineering And Consulting • Analytical Services
P.O. Box 8045, Walnut Creek, CA 94596-1220
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Quarterly Monitoring Results

Depth-to-water measurements and calculated groundwater elevations are summarized in Table 1. Groundwater elevations have decreased in all of the monitoring wells, with the exception of wells MW-1A and MW-2 relative to the previous quarter. From the data collected on December 11, 1995, the general groundwater flow direction was determined to be towards the west. The average hydraulic gradient across the site was approximately 0.001 feet per foot (calculated between wells MW-8 and MW-11). Groundwater elevations and flow directions for December 11, 1995 are shown on Figure 1.

TPHg was identified in 12 of the 15 wells sampled at concentrations ranging from 670 micrograms per liter (μg/L) (well MW-10) to 35,400 μg/L (well MW-2). Benzene was detected in 14 of the 15 wells at concentrations ranging from 1.0 μg/L (well MW-12) to 3,500 μg/L (wellMW-2). Analytical results of groundwater samples are summarized in Table 1 and illustrated on Figure 1. The analytical laboratory report for the December 11 and 12, 1995 sampling event is included in Attachment A.

If you have any questions regarding this quarterly monitoring report, please contact me at (510) 210-2278.

Sincerely,

BROWN AND CALDWELL

Todd Miller
California Registered Geologist No. 6328

TM:lkg

Attachment

cc: Mr. John Reeves, Attorney at Law
Ms. Madhulla Logan, Alameda County Department of Environmental Health
Mr. Steve Camp, Brown and Root

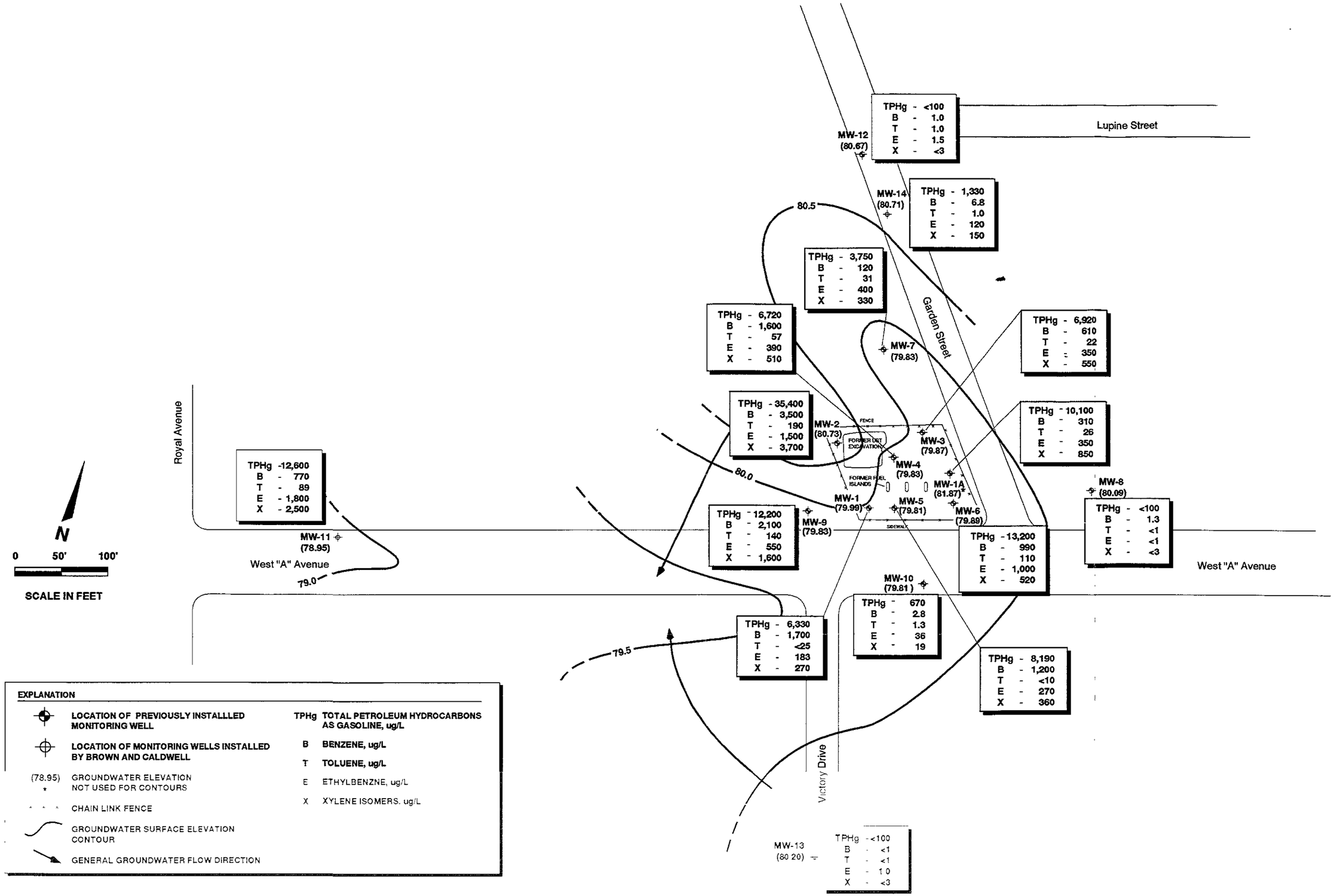

Figure 1 Groundwater Surface Elevation Contour and Petroleum Hydrocarbon Constituent Distribution Map for December 11 and 12, 1995, Former E-Z Serve Station #100877, 525 West A Street, Hayward, California

Table 1. Summary of Groundwater Elevation Data and Analytical Laboratory Results for Groundwater Samples Collected at Former E-Z Serve Station # 100877 525 West A Street, Hayward, California

Well I.D.	Date Sampled	Well Elevation (feet)[1]	Depth to Water (feet)[2]	Product Thickness (feet)	Groundwater Elevation (feet)[1]	EPA Methods 8015 and 8020 Concentration (µg/L) TPHg[3]	Benzene	Toluene	Ethylbenzene	Xylenes
MW-1	5-Feb-92	99.91	20.82		79.09	46,000	76,000	23,000	2,400	6,500
	11-Sep-92		20.08		79.83	48,000	9,000	1,200	1,800	4,600
	22-Dec-92		19.79		80.12	84,000	22,000	1,600	4,800	17,000
	3-Mar-93		16.23		83.68	54,000	16,000	1,600	1,900	4,300
	23-Jun-93	96.73	16.86		79.87	30,000	18,000	1,100	1,400	3,700
	30-Sep-93		18.04		78.69	33,000	10,000	440	940	1,700
	6-Feb-94		18.15		78.58	64,000	18,000	1,600	4,700	12,000
	2-May-94		17.26		79.47	7,200	2,100	29	490	520
	1-Jul-94		17.60		79.13	13,000	3,700	150	550	12,000
	20-Sep-94		20.59		76.14	10,000	3,100	75	440	870
	5-Dec-94		17.83		78.90	8,700	3,700	87	520	950
	10-Mar-95		14.67		82.06					
	15-Mar-95		14.43		82.30	290	56	2	12	47
	16-Jun-95		14.56		82.17	2,000	530	12	90	160
	22-Sep-95		16.05		80.68	1,600	1,400	9.0	75	110
	11-Dec-95		**16.74**		**79.99**	**6,330**	**1,700**	**<25**	**183**	**270**
MW-1A	23-Jun-93	97.59	17.80	0.21	80.00	Sample Not Analyzed				
	30-Sep-93			Not Recorded		Well Not Sampled				
	6-Feb-94		18.89		78.70	8,900	1,700	42	1,000	400
	2-May-94		18.35	0.09	79.33	Well Not Sampled				
	1-Jul-94		18.45		79.14	12,000	1,100	<1	920	1,100
	20-Sep-94		21.72	0.22	76.09	Well Not Sampled				
	5-Dec-94		18.87	0.07	78.79	Well Not Sampled				
	10-Mar-95		15.83		81.76	Well Not Sampled				
	14-Mar-95		15.55	0.05	82.09	Well Not Sampled				
	15-Jun-95		15.63	0.03	81.99	Well Not Sampled				
	22-Sep-95		17.05		80.54	2,000	180	9.2	130	310
	11-Dec-95		**15.72**		**81.87**	**10,100**	**310**	**26**	**350**	**850**

Table 1. Summary of Groundwater Elevation Data and Analytical Laboratory Results for Groundwater Samples Collected at Former E-Z Serve Station # 100877 525 West A Street, Hayward, California

Well I.D.	Date Sampled	Well Elevation (feet)[1]	Depth to Water (feet)[2]	Product Thickness (feet)	Groundwater Elevation (feet)[1]	EPA Methods 8015 and 8020 Concentration (µg/L)				
						TPHg[3]	Benzene	Toluene	Ethylbenzene	Xylenes
MW-2	5-Feb-92	101.45	22.35		79.10	67,000	13,000	4,700	820	1,300
	11-Sep-92		21.67		79.78	57,000	9,000	1,400	1,200	8,400
	22-Dec-92		21.39		80.06	31,000	9,900	350	2,000	4,100
	3-Mar-93		17.75		83.70	17,000	5,100	1,300	720	1,900
	23-Jun-93	98.06	18.42		79.64	60,000	23,000	1,500	4,500	17,000
	30-Sep-93		19.63		78.43	38,000	12,000	780	1,500	6,500
	6-Feb-94		19.61		78.45	34,000	8,900	450	2,000	5,500
	2-May-94		19.84		78.22	18,000	3,800	260	1,100	3,500
	1-Jul-94		19.18		78.88	18,000	3,700	510	870	2,600
	20-Sep-94		22.17		75.89	19,000	4,500	300	1,200	4,000
	6-Dec-94		19.37		78.69	22,000	4,700	340	1,400	4,500
	10-Mar-95		16.33		81.73	Well Not Sampled				
	15-Mar-95		16.89		81.17	29,000	5,600	350	1,900	6,300
	16-Jun-95		16.79		81.27	27,000	4,400	270	1,600	4,700
	22-Sep-95		17.54		80.52	3,700	6,700	390	1,800	6,400
	11-Dec-95		**17.33**		**80.73**	**35,400**	**3,500**	**190**	**1,500**	**3,700**
MW-3	5-Feb-92	101.50	21.85		79.65	5,900	1,100	<1	<1	<1
	11-Sep-92		21.13		80.37	9,400	1,200	180	550	1,100
	22-Dec-92		20.88		80.62	12,000	2,800	190	850	1,600
	3-Mar-93		17.29		84.21	11,000	2,200	360	570	900
	23-Jun-93	97.66	17.88		79.78	33,000	12,000	2,700	1,300	3,500
	30-Sep-93		19.18		78.48	4,300	1,100	160	690	670
	6-Feb-94		19.21		78.45	20,000	4,800	430	1,500	2,900
	2-May-94		18.30		79.36	4,200	680	48	310	540
	1-Jul-94		18.63		79.03	4,600	600	63	240	470
	20-Sep-94		21.64		76.02	8,200	2,200	130	670	930
	6-Dec-94		19.15		78.51	4,000	640	34	290	480
	10-Mar-95		15.86		81.80	Well Not Sampled				
	15-Mar-95		16.61		81.05	4,300	980	47	370	780
	16-Jun-95		16.58		81.08	3,300	520	20	280	430

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Well I.D.	Date Sampled	Well Elevation (feet)[1]	Depth to Water (feet)[2]	Product Thickness (feet)	Groundwater Elevation (feet)[1]	EPA Methods 8015 and 8020 Concentration (µg/L)				
						TPHg[3]	Benzene	Toluene	Ethylbenzene	Xylenes
	22-Sep-95		17.02		80.64	3,800	2,100	<100	840	1,600
	11-Dec-95		**17.79**		**79.87**	**6,920**	**610**	**22**	**350**	**550**
MW-4	5-Feb-92	100.50	21.31		79.19	16,000	2,700	410	<1	3,400
	11-Sep-92		20.62		79.88	43,000	7,600	1,600	1,400	4,100
	22-Dec-92		20.37		80.13	29,000	8,800	1,200	1,500	3,700
	3-Mar-93		16.78		83.72	17,000	5,000	1,500	680	1,700
	23-Jun-93	97.10	17.45		79.65	5,700	3,000	120	560	790
	30-Sep-93		18.64		78.46	21,000	7,000	2,100	970	2,600
	6-Feb-94		18.59		78.51	24,000	7,200	1,600	990	3,200
	2-May-94		17.81		79.29	10,000	2,200	440	470	1,200
	1-Jul-94		18.13		78.97	8,200	2,000	370	350	930
	20-Sep-94		21.13		75.97	7,200	2,000	360	380	1,000
	6-Dec-94		18.36		78.74	9,000	2,300	400	440	1,100
	10-Mar-95		15.25		81.85	Well Not Sampled				
	15-Mar-95		14.89		82.21	15,000	4,400	600	770	2,660
	16-Jun-95		14.68		82.42	19,000	5,600	490	890	2,300
	22-Sep-95		16.60		80.50	3,600	9,300	1,000	1,200	3,600
	11-Dec-95		**17.27**		**79.83**	**6,720**	**1,600**	**57**	**390**	**510**
MW-5	5-Feb-92	100.48	20.93		79.55	78,000	7,900	5,000	2,900	1,800
	11-Sep-92		20.27		80.21	49,000	4,700	400	1,400	4,100
	22-Dec-92		19.99		80.49	34,000	8,600	340	2,200	4,800
	3-Mar-93		16.49		83.99	22,000	7,500	640	1,300	3,400
	23-Jun-93	96.73	17.02		79.71	15,000	5,800	120	1,100	2,100
	30-Sep-93		18.25		78.48	25,000	7,600	410	1,000	4,400
	6-Feb-94		18.26		78.47	23,000	6,000	180	2,000	5,900
	2-May-94		17.50		79.23	8,000	1,300	29	440	770
	1-Jul-94		17.79		78.94	10,000	1,700	97	600	1,400
	20-Sep-94		20.77		75.96	8,400	1,600	54	650	1,400
duplicate	20-Sep-94					9,300	1,700	56	670	1,600

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Well I.D.	Date Sampled	Well Elevation (feet)[1]	Depth to Water (feet)[2]	Product Thickness (feet)	Groundwater Elevation (feet)[1]	EPA Methods 8015 and 8020 Concentration (µg/L) TPHg[3]	Benzene	Toluene	Ethylbenzene	Xylenes
	5-Dec-94		18.02		78.71	10,000	1,800	<50	620	1,400
	10-Mar-95		14.93		81.80	Well Not Sampled				
	15-Mar-95		14.70		82.03	5,300	1,100	11	180	320
	16-Jun-95		14.82		81.91	5,300	1,400	11	180	310
	22-Sep-95		16.19		80.54	4,000	2,800	<100	350	710
	11-Dec-95		**16.92**		**79.81**	**8,190**	**1,200**	**<10**	**270**	**360**
MW-6	5-Feb-92	100.97	21.29		79.68	51,000	5,400	3,500	3,600	10,000
	11-Sep-92		20.56		80.41	24,000	2,500	830	1,400	2,300
	22-Dec-92		20.31		80.66	23,000	5,100	630	2,000	3,100
	3-Mar-93		16.83		84.14	18,000	4,400	820	1,400	2,400
	23-Jun-93	97.09	17.30		79.79	18,000	4,600	850	2,700	3,400
	30-Sep-93		19.05	0.03	78.07	Sample Not Analyzed				
	6-Feb-94		18.55		78.54	20,000	4,600	690	2,100	2,500
	2-May-94		17.74		79.35	5,300	930	54	610	240
	1-Jul-94		18.09		79.00	10,000	1,500	160	850	690
	20-Sep-94		21.05		76.04	11,000	2,000	140	1,200	760
	6-Dec-94		18.33		78.76	8,600	1,300	87	980	610
	10-Mar-95		15.35		81.74	Well Not Sampled				
	15-Mar-95		14.91		82.18	9,800	1,600	110	1,000	1,000
	16-Jun-95		15.11		81.98	9,200	1,100	78	1,000	550
	22-Sep-95		16.44		80.65	3,000	1,700	110	1,200	760
	11-Dec-95		**17.20**		**79.89**	**13,200**	**990**	**110**	**1,000**	**520**
MW-7	23-Jun-93	97.44	17.87		79.57	29,000	4,200	71	4,400	5,600
	30-Sep-93		18.94		78.50	30,000	3,200	71	2,800	3,400
	6-Feb-94		19.11	0.06	78.39	Sample Not Analyzed				
	2-May-94		18.11		79.33	5,700	630	13	660	400
	1-Jul-94		18.72		78.72	3,100	180	99	160	520
	20-Sep-94		21.41		76.03	6,100	540	6	750	730
	5-Dec-94		18.66		78.78	3,700	280	<10	430	350

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Well I.D.	Date Sampled	Well Elevation (feet)[1]	Depth to Water (feet)[2]	Product Thickness (feet)	Groundwater Elevation (feet)[1]	EPA Methods 8015 and 8020 Concentration (µg/L) TPHg[3]	Benzene	Toluene	Ethylbenzene	Xylenes
duplicate	5-Dec-94					3,900	310	<10	540	540
	10-Mar-95		15.72		81.72	Well Not Sampled				
	14-Mar-95		15.23		82.21	1,900	290	4	26	296
duplicate	14-Mar-95					1,000	330	5	30	339
	15-Jun-95		15.17		82.27	5,800	380	5	360	540
duplicate	15-Jun-95					4,800	330	<2.5	320	470
	21-Sep-95		16.83		80.61	4,020	110	<1	220	220
duplicate	21-Sep-95					4,480	140	<1	270	250
	11-Dec-95		**17.61**		**79.83**	**3,750**	**120**	**31**	**400**	**330**
duplicate	11-Dec-95					5,470	120	12	420	310
MW-8	23-Jun-93	97.61	17.64		79.97	350	43	9	35	67
	30-Sep-93		18.85		78.76	2,700	190	340	170	720
	6-Feb-94		18.91		78.70	<100	<1	1	1	2
	2-May-94		18.11		79.50	<100	<1	3	<1	7
	1-Jul-94		18.43		79.18	300	18	48	19	37
	20-Sep-94		21.43		76.18	<100	<1	<1	<1	<1
	5-Dec-94		18.72		78.89	<50	<0.5	<0.5	<0.5	<0.5
	10-Mar-95		18.69		78.92	Well Not Sampled				
	14-Mar-95		14.83		82.78	<50	<0.5	<0.5	<0.5	1
	15-Jun-95		14.92		82.69	<50	<0.5	<0.5	<0.5	<0.5
	21-Sep-95		16.52		81.09	<100	2.3	1.3	2.7	9.0
	11-Dec-95		**17.52**		**80.09**	**<100**	**1.3**	**<1**	**<1**	**<3**
MW-9	23-Jun-93	95.41	15.94		79.47	45,000	14,000	1,200	2,800	12,000
	30-Sep-93		17.05		78.36	86,000	22,000	1,100	3,300	15,000
	6-Feb-94		17.07		78.34	43,000	10,000	460	2,100	7,500
	2-May-94		16.24		79.17	17,000	5,400	270	1,300	4,700
	1-Jul-94		16.59		78.82	10,000	2,100	120	450	1,300
	20-Sep-94		19.61		75.80	7,500	2,200	97	400	1,200
	5-Dec-94		16.85		78.56	10,000	2,700	130	530	1,600

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Well I.D.	Date Sampled	Well Elevation (feet)[1]	Depth to Water (feet)[2]	Product Thickness (feet)	Groundwater Elevation (feet)[1]	EPA Methods 8015 and 8020 Concentration (µg/L) TPHg[3]	Benzene	Toluene	Ethylbenzene	Xylenes
	10-Mar-95		NR			Well Not Sampled				
	14-Mar-95		14.18		81.23	18,000	5,900	270	1,200	3,680
	15-Jun-95		14.09		81.32	12,000	2,500	130	670	1,800
	21-Sep-95		No Access			Well Not Sampled				
	11-Dec-95		**15.58**		**79.83**	**12,200**	**2,100**	**140**	**550**	**1,600**
MW-10	23-Jun-93	97.11	17.39		79.72	35,000	980	640	3,500	12,000
	30-Sep-93		18.58		78.53	4,000	230	12	100	680
	6-Feb-94		18.61		78.50	2,000	69	12	220	120
	2-May-94		17.83		79.28	710	16	6	85	62
	1-Jul-94		18.17		78.94	2,000	52	43	120	210
	20-Sep-94		21.15		75.96	2,800	34	16	270	560
	5-Dec-94		18.43		78.68	2,700	30	13	260	430
	10-Mar-95		15.37		81.74	Well Not Sampled				
	14-Mar-95		15.93		81.18	1,400	18	6	200	239
	15-Jun-95		15.97		81.14	1,600	14	4	140	98
	21-Sep-95		16.48		80.63	4,680	37	17	240	380
	11-Dec-95		**17.30**		**79.81**	**670**	**2.8**	**1.3**	**36**	**19**
MW-11	10-Feb-95	92.68	11.80		80.88	7,000	140	22	600	1,000
	10-Mar-95		11.58		81.10	Well Not Sampled				
	14-Mar-95		13.96		78.72	6,000	200	17	750	1,276
	15-Jun-95		13.84		78.84	13,000	450	63	1,600	2,200
	21-Sep-95		13.13		79.55	7,000	340	27	440	640
	11-Dec-95		**13.73**		**78.95**	**12,600**	**770**	**89**	**1,800**	**2,500**
MW-12	10-Feb-95	99.03	16.30		82.73	<50	<0.5	<0.5	<0.5	<0.5
	10-Mar-95		16.37		82.66	Well Not Sampled				
	14-Mar-95		15.69		83.34	<50	<0.5	<0.5	<0.5	0.9
	15-Jun-95		15.55		83.48	<50	<0.5	<0.5	<0.5	<0.5
	21-Sep-95		17.58		81.45	<100	<1	<1	<1	<3

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Well I.D.	Date Sampled	Well Elevation (feet)[1]	Depth to Water (feet)[2]	Product Thickness (feet)	Groundwater Elevation (feet)[1]	EPA Methods 8015 and 8020 Concentration (µg/L)				
						TPHg[3]	Benzene	Toluene	Ethylbenzene	Xylenes
	11-Dec-95		**18.36**		**80.67**	**<100**	**1.0**	**1.0**	**1.5**	**<3**
MW-13	10-Feb-95	96.80	14.45		82.35	<50	<0.5	<0.5	<0.5	<0.5
	10-Mar-95		14.30		82.50	Well Not Sampled				
	14-Mar-95		15.81		80.99	<50	<0.5	<0.5	<0.5	1
	15-Jun-95		15.79		81.01	<50	<0.5	<0.5	<0.5	<0.5
	21-Sep-95		15.50		81.30	<100	2.6	2.2	<1	9.4
	11-Dec-95		**16.60**		**80.20**	**<100**	**<1**	**<1**	**1.0**	**<3**
MW-14	10-Feb-95	99.01	16.28		82.73	12,000	42	8	740	2,100
duplicate	10-Feb-95					12,000	48	<10	800	2,300
	10-Mar-95		16.33		82.68	Well Not Sampled				
	14-Mar-95		14.87		84.14	1,400	6	2	36	298
	15-Jun-95		14.72		84.29	660	8	<0.5	6	26
	21-Sep-95		17.61		81.40	4,430	25	15	280	310
	11-Dec-95		**18.30**		**80.71**	**1,330**	**6.8**	**1.0**	**120**	**150**
QA/QC										
Field Blank	20-Sep-94					<100	<1	<1	<1	<1
Trip Blank	5-Dec-94					<50	<0.5	<0.5	<0.5	<0.5
Field Blank	5-Dec-94					<50	<0.5	<0.5	<0.5	<0.5
Trip Blank	10-Feb-95					<50	<0.5	<0.5	<0.5	<0.5
Field Blank	10-Feb-95					<50	<0.5	<0.5	<0.5	<0.5
Trip Blank	14-Mar-95					<50	<0.5	<0.5	<0.5	<0.5
Field Blank	14-Mar-95					<50	<0.5	<0.5	<0.5	<0.5
Trip Blank	15-Jun-95					<50	<0.5	<0.5	<0.5	<0.5
Field Blank	15-Jun-95					<50	<0.5	<0.5	<0.5	<0.5
Trip Blank	21-Sep-95					<100	4.6	<1	2.5	<3
Field Blank	21-Sep-95					<100	<1	1.3	4.2	<3
Trip Blank	11-Dec-95					<100	<1	<1	<1	<3
Field Blank	11-Dec-95					<100	<1	<1	<1	<3

Table 1. Summary of Groundwater Elevation Data and Analytical Laboratory Results for Groundwater Samples Collected at Former E-Z Serve Station # 100877 525 West A Street, Hayward, California

Well I.D.	Date Sampled	Well Elevation (feet)[1]	Depth to Water (feet)[2]	Product Thickness (feet)	Groundwater Elevation (feet)[1]	EPA Methods 8015 and 8020 Concentration (μg/L)				
						TPHg[3]	Benzene	Toluene	Ethylbenzene	Xylenes

[1]Relative to lower mean sea level.

[2]Below ground surface.

[3]Total Petroleum Hydrocarbons as gasoline.

ATTACHMENT A

FIELD SAMPLING PROCEDURES
GROUNDWATER SAMPLE COLLECTION RECORDS
ANALYTICAL LABORATORY DATA SHEETS

EZ-SERVE PETROLEUM MARKETING COMPANY OF CALIFORNIA
QUARTERLY GROUNDWATER MONITORING PROGRAM
SAMPLING AND ANALYSIS PLAN

The following sections describe the procedures and protocols followed during this quarterly groundwater monitoring event at the subject site.

Depth-to-Water Measurements

Prior to sampling the groundwater monitoring wells, the wells were opened to the atmosphere for approximately one-quarter of one hour, to allow the static water level to adjust to the open barometric pressure. The depth-to-groundwater was then be measured, using an oil-water interface probe. The interface probe was lowered slowly until free product or water was encountered. At this point, the mark on the interface probe wire was read to the nearest 0.01 feet at the permanent reference point on the top of the well casing. If free product was encountered the probe was lowered until water was encountered. The difference between the two depths corresponds to the thickness of the free product. The total depth of the well was then measured using the same probe. A second check for free-product on top of the water column was made using a disposable bailer. The disposable bailer was lowered into the water to approximately one-half the bailer length. The bailer was then removed from the well and a check for the presence of free petroleum product or a product sheen was made.

In the event that a dedicated bailer or purge tubing existed in the well, the dedicated equipment was removed prior to sampling, and temporarily stored in a clean, plastic garbage bag.

The depth-to-water and bottom of well measurements, and the presence or absence of free product, was recorded on the field sampling form. In addition, comments regarding the condition of the well and/or containment box were also be noted on the field sampling sheet at this time. Wells observed to contain a product sheen or free product on top of the water column were not be purged or sampled.

Groundwater Monitoring Well Purging

The depth-to-water and bottom of well measurements were used to calculate the volume of water contained in one well volume. The following values were used to calculate the volume of water contained in the well casing and filter pack surrounding the well.

Well Diameter	Gallons/linear foot
2-inch	0.16
4-inch	0.65
8-inch filter pack	0.78
10-inch filter pack	1.21

The minimum purge volume was calculated to be three times the total well volume. Once the minimum purge volume has been calculated purging was started. Purging was conducted using either a centrifugal pump connected to a dedicated Wattera tube, a 2-inch diameter submersible pump, a bladder pump, or a disposable polyethylene bailer. The type of equipment used to purge the well was selected based on depth to water, the anticipated purge rate, and the amount of sediment expected to be contained in the well, and was recorded on the Groundwater Sample Collection Record. Temperature, pH, and specific conductance of the purge water was monitored during the purging process at regular intervals. Purging was ceased when the monitored parameters stabilized (three consecutive readings not varying by more than 10-percent) **and** a minimum of three well volumes had been purged.

In the event a well dried out during purging, the well was allowed to recover to 80-percent of it's original well volume, or for 24-hours, whichever was less, prior to collecting a groundwater sample.

Groundwater Monitoring Well Sampling

Once the well was successfully purged a groundwater sample was collected using a disposable polyethylene bailer connected to clean nylon or polyethylene cord. The bailer was lowered slowly into the water to avoid agitation of the sample. A portion of the sample was placed in a container and the monitoring parameters were recorded. The remaining portion of the sample was transferred from the bailer to the appropriate, laboratory supplied sampling bottles, using a bottom emptying device. The sampling containers were filled completely, leaving a positive meniscus, so no airspace remained in the vial after sealing.

The sample bottles were labeled with the well identification (i.e. MW-1, MW-2, etc), date and time of the sample collection, the field technicians initials, job number, analyses to be performed, and other relevant information. Samples were immediately placed in an insulated cooler containing crushed ice. The samples were maintained at approximately 3 to 4°C until reaching the analytical laboratory.

Laboratory Analysis

Samples were shipped, under appropriate chain-of-custody procedures, to Southern Petroleum Laboratory in Houston, Texas (SPL). SPL Laboratory is certified by the State of California Department of Toxic Substance Control for performing the requested analyses. Samples were shipped via Federal Express to minimize the time the samples remained in the cooler. Samples were analyzed for total petroleum hydrocarbons as gasoline (TPHg), and benzene, toluene, ethylbenzene, and xylene isomers (BTEX), following Environmental Protection Agency Methods 5030, 8015 modified, and 8020. Samples were analyzed on a standard two week turn-around time.

QA/QC Procedures

Instrument calibration. Equipment used to monitor groundwater parameters was calibrated prior to beginning purging at the site. Monitoring equipment was calibrated following the manufactures instructions using laboratory grade standards.

Equipment Decontamination. Non-disposable and non-dedicated sampling equipment was cleaned prior to use and between uses in each well. Downhole equipment was cleaned by washing the equipment using a non-phosphate soap solution and rinsing the equipment twice with distilled water.

Duplicate. One duplicate sample was collected from the site from a randomly selected monitoring well. The duplicate sample was collected at the same time as the original sample and was treated in the same manner as the original sample. The duplicate sample was submitted to the laboratory for TPHg and BTEX analysis.

Trip Blank. A trip blank was prepared by the analytical laboratory and accompanied the sample bottles throughout the shipping and sampling events. The trip blank was submitted to the laboratory for TPHg and BTEX analysis.

Field Blank. One field blank was collected in the field by the field technician. The field blank was prepared, prior to sampling, by filling three 40-ml VOAs with distilled water. The field blank was submitted to the laboratory for TPHg and BTEX analysis.

BROWN & CALDWELL
WELL INFORMATION DATA

JOB NAME: EZ - Serve, Hayward

DATE: 12-11-95

B&C PERSONNEL: STINAR

JOB No: 3003-02

WEATHER: RAIN

LOCK TYPE: 9/16 + DOLPHIN

INSTRUMENT: E.I. WATER LEVEL TAPE

LID TYPE: CHRISTIE

WELL ID.	SWL	TD	DIA	TIME	COMMENTS
MW-1	16.74	32.10'	4"x 10"	1121	
MW-1A	15.72'	28.40'	2"x 8"	1111	
MW-2	17.33	32.30'	4"x 10"	1124	
MW-3	17.79	32.10'	4"x 10"	1127	
MW-4	17.27	32.11'	4"x 10"	1116	
MW-5	16.92	32.48'	4"x 10"	1119	
MW-6	17.20	32.10'	4"x 10"	1113	
MW-7	17.61	30.06'	2"x 8"	1048	
MW-8	17.52	32.15'	2"x 8"	1055	
MW-9	15.58	31.60'	2"x 8"	1101	
MW-10	17.30	31.80'	2"x 8"	1113	
MW-11	13.73	25.00'	2"x 8"	1106	
MW-12	18.36	30.00'	2"x 8"	1040	
MW-13	16.60	30.00'	2"x 8"	1109	
MW-14	18.30	30.00'	2"x 8"	1043	

BROWN AND CALDWELL

Well No. MW-1

GROUNDWATER SAMPLE COLLECTION RECORD

Project Name: EZ - Serve, Hayward Job No.: 3003-02 Date: 12-12-95

Location: Station No. 100877, 523 "A" Street @ Garden Ave., Hayward, CA

Samplers Name: STINAR

Weather Conditions: RAIN

1. WATER LEVEL DATA: (from TOC)

TOC Elevation (from LS) _____

a. Depth to water (ft) = 16.74'

Water Table Elev. _____

b. Total Well Depth = 32.10 ft.'

Tape Corr. (TC) _____

c. Length of Water Column = 15.36' (b. – a.)

Well Diameter 4"x 10"

d. Casing Volume = 9.9 gal (c. x [gal/ft casing])

e. Length of filter pack = 10'

f. Filter pack volume = 12.1 (e. x [gal/ft filter pack])

g. **TOTAL WELL VOLUME** = 22.0 gal (d. + f.)

	2-in. casing	= 0.16 gal/ft
●	4-in. casing	= 0.65 gal/ft
	6-in. casing	= 1.47 gal/ft
	6.5-in.casing	= 1.70 gal/ft
	8-in. casing	= 2.60 gal/ft
	10-in. casing	= 4.10 gal/ft
	12-in. casing	= 5.00 gal/ft
	8-in.hole filter pack	= 0.78gal/ft
●	10-in.hole filter pack	= 1.21gal/ft
	12-in.hole filter pack	= 1.47gal/ft

2. WELL PURGING DATA:

a. Purge Method TRASH PUMP/WATERRA

b. Required Purge Volume (@ 22 gallons per well volume) = 66.2

c. Field Testing; Equipment Used BECKMAN pH AS COND METER

d. Pump Rate 2.0

e. Method of GW Disposal 55 gallon drum

f. Recovery Rate: Slow (90% > 60min), Medium (90% 30-60 min) (Fast) (90% < 10 min)

Volume Removed (gal)	Time	T°c	pH	Spec. Conductivity	Turbidity (NTU's)	Color/ Description	SWL	Pump Placement
PUMP ON	1112							
20	1130	20.3	6.94	1,000		CLEAR		
45	1143	20.1	6.89	1,000		CLEAR		
68	1154	19.9	6.83	1,000		CLEAR		
SAMPLE	1158	20.0	6.81	1,000		CLEAR		

3. SAMPLE COLLECTION: Method Disposable Bailer Container 3 x 40 ml VOA Preservation HCL

Analysis TPH (gas) 8015, BTEX 8020

COMMENTS, REMARKS

BROWN AND CALDWELL

Well No. MW-1A

GROUNDWATER SAMPLE COLLECTION RECORD

Project Name: EZ - Serve, Hayward Job No.: 3003-02 Date: 12-11-95

Location: Station No. 100877, 523 "A" Street @ Garden Ave., Hayward, CA

Samplers Name: Mc STEARE

Weather Conditions: RAIN

1. WATER LEVEL DATA: (from TOC)

TOC Elevation (from LS) _____

Water Table Elev. _____

Tape Corr. (TC) _____

Well Diameter 2"x 8"

a. Depth to water (ft)	= 15.72	
b. Total Well Depth	= 28.40 ft.	
c. Length of Water Column	= 12.68'	(b. – a.)
d. Casing Volume	= 2.02 gal	(c. x [gal/ft casing])
e. Length of filter pack	= 10	
f. Filter pack volume	= 7.8 gal	(e. x [gal/ft filter pack])
g. **TOTAL WELL VOLUME**	= 9.8 gal	(d. + f.)

●	2-in. casing	= 0.16 gal/ft
	4-in. casing	= 0.65 gal/ft
	6-in. casing	= 1.47 gal/ft
	6.5-in.casing	= 1.70 gal/ft
	8-in. casing	= 2.60 gal/ft
	10-in. casing	= 4.10 gal/ft
	12-in. casing	= 5.00 gal/ft
●	8-in.hole filter pack	= 0.78gal/ft
	10-in.hole filter pack	= 1.21gal/ft
	12-in.hole filter pack	= 1.47gal/ft

2. WELL PURGING DATA:

a. Purge Method TRASH Pump

b. Required Purge Volume (@ 9.8 gallons per well volume) = 29.4 gal

c. Field Testing; Equipment Used BECKMAN pH + TEMP FISHER SCIENTIFIC COND. METER

d. Pump Rate 1.0 gpm

e. Method of GW Disposal 55 gallon drum

f. Recovery Rate: Slow (90% > 60min), Medium (90% 30-60 min), Fast (90% < 10 min)

Volume Removed (gal)	Time	T°c	pH	Spec. Conductivity	Turbidity (NTU's)	Color/ Description	SWL	Pump Placement
3	1145	19.8	6.78	1,900		CLEAR FUEL ODOR		WL + 2'
14	1157	19.7	6.80	1,400		CLEAR		
25	1208	19.4	6.73	1,400		CLEAR		
31	1215	19.6	6.68	1,090		CLEAR		
SAMPLE	1222	19.4	6.62	1070		CLEAR		

3. SAMPLE COLLECTION: Method Disposable Bailer Container 3 x 40 ml VOA Preservation HCL

Analysis TPH (gas) 8015, BTEX 8020

COMMENTS, REMARKS

BROWN AND CALDWELL

Well No. MW-2

GROUNDWATER SAMPLE COLLECTION RECORD

Project Name: EZ - Serve, Hayward Job No.: 3003-02 Date: 12-12-95

Location: Station No. 100877, 523 "A" Street @ Garden Ave., Hayward, CA

Samplers Name: STINAR

Weather Conditions: RAIN

1. WATER LEVEL DATA: (from TOC)

a. Depth to water (ft) = 17.33'

b. Total Well Depth = 32.30 ft.

c. Length of Water Column = 14.97' (b. – a.)

d. Casing Volume = 9.7 GAL (c. x [gal/ft casing])

e. Length of filter pack = 10'

f. Filter pack volume = 12.1 (e. x [gal/ft filter pack])

g. **TOTAL WELL VOLUME** = 21.8 GAL (d. + f.)

TOC Elevation (from LS) _____

Water Table Elev. _____

Tape Corr. (TC) _____

Well Diameter 4"x 10"

	2-in. casing	= 0.16 gal/ft
●	4-in. casing	= 0.65 gal/ft
	6-in. casing	= 1.47 gal/ft
	6.5-in.casing	= 1.70 gal/ft
	8-in. casing	= 2.60 gal/ft
	10-in. casing	= 4.10 gal/ft
	12-in. casing	= 5.00 gal/ft
	8-in.hole filter pack	= 0.78gal/ft
●	10-in.hole filter pack	= 1.21gal/ft
	12-in.hole filter pack	= 1.47gal/ft

2. WELL PURGING DATA:

a. Purge Method TRASH PUMP / WATERRA

b. Required Purge Volume (@ 21.8' gallons per well volume) = ~~43.6 GAL~~ 65.4 GAL

c. Field Testing; Equipment Used BECKMAN pH A.S. COND. METER

d. Pump Rate 2 GPM

e. Method of GW Disposal 55 gallon drum

f. Recovery Rate: Slow (90% > 60min), Medium (90% 30-60 min), Fast (90% < 10 min) _____

Volume Removed (gal)	Time	T°c	pH	Spec. Conductivity	Turbidity (NTU's)	Color/ Description	SWL	Pump Placement
PUMP ON	0950							
21	1012	19.5	7.11	980		CLEAR		
50	1044	19.8	7.14	970		CLEAR		
66	1053	19.9	7.18	950		CLEAR		
SAMPLE	1100	20.0	7.20	950		CLEAR		

3. SAMPLE COLLECTION: Method Disposable Bailer Container 3 x 40 ml VOA Preservation HCL

Analysis TPH (gas) 8015, BTEX 8020

COMMENTS, REMARKS

BROWN AND CALDWELL

Well No. MW-3

GROUNDWATER SAMPLE COLLECTION RECORD

Project Name: EZ - Serve, Hayward Job No.: 3003-02 Date: 12-12-95

Location: Station No. 100877, 523 "A" Street @ Garden Ave., Hayward, CA

Samplers Name: STUAR

Weather Conditions: RAIN

1. WATER LEVEL DATA: (from TOC)

a. Depth to water (ft) = 17.79'

b. Total Well Depth = 32.10 ft.

c. Length of Water Column = 14.31' (b. – a.)

d. Casing Volume = 9.3 gal (c. x [gal/ft casing])

e. Length of filter pack = 10'

f. Filter pack volume = 12.1 (e. x [gal/ft filter pack])

g. **TOTAL WELL VOLUME** = 21.5 gal (d. + f.)

TOC Elevation (from LS) _____

Water Table Elev. _____

Tape Corr. (TC) _____

Well Diameter 4"x 10"

	2-in. casing	= 0.16 gal/ft
●	4-in. casing	= 0.65 gal/ft
	6-in. casing	= 1.47 gal/ft
	6.5-in.casing	= 1.70 gal/ft
	8-in. casing	= 2.60 gal/ft
	10-in. casing	= 4.10 gal/ft
	12-in. casing	= 5.00 gal/ft
	8-in.hole filter pack	= 0.78gal/ft
●	10-in.hole filter pack	= 1.21gal/ft
	12-in.hole filter pack	= 1.47gal/ft

2. WELL PURGING DATA:

a. Purge Method TRASH PUMP / WATERRA

b. Required Purge Volume (@ 21.5 gallons per well volume) = 64.5

c. Field Testing; Equipment Used Beckman pH & Temp A.S. Cond. Meter

d. Pump Rate 2.0 gpm

e. Method of GW Disposal 55 gallon drum

f. Recovery Rate: Slow (90% > 60min), Medium (90% 30-60 min) (Fast) (90% < 10 min)

Volume Removed (gal)	Time	T°C	pH	Spec. Conductivity	Turbidity (NTU's)	Color/ Description	SWL	Pump Placement
PUMP ON	0900							
15	0916	20.9	7.07	1,050		CLEAR		
40	0920	21.0	7.03	1,100		SAME		
65	0933	21.1	7.00	1,100		SAME		
SAMPLE	0940	21.0	7.01	1,100		SAME		

3. SAMPLE COLLECTION: Method Disposable Bailer Container 3 x 40 ml VOA Preservation HCL

Analysis TPH (gas) 8015, BTEX 8020

COMMENTS, REMARKS

BROWN AND CALDWELL

Well No. MW-4

GROUNDWATER SAMPLE COLLECTION RECORD

Project Name: EZ - Serve, Hayward Job No.: 3003-02 Date: 12-2-95

Location: Station No. 100877, 523 "A" Street @ Garden Ave., Hayward, CA

Samplers Name: STWAR

Weather Conditions: RAIN

1. WATER LEVEL DATA: (from TOC)

a. Depth to water (ft) = 17.27'

b. Total Well Depth = 32.11 ft.

c. Length of Water Column = 14.84' (b. – a.)

d. Casing Volume = 9.6 GAL (c. x [gal/ft casing])

e. Length of filter pack = 10'

f. Filter pack volume = 12.1 gal (e. x [gal/ft filter pack])

g. **TOTAL WELL VOLUME** = gal (d. + f.)

TOC Elevation (from LS)

Water Table Elev.

Tape Corr. (TC)

Well Diameter 4"x 10"

	2-in. casing	= 0.16 gal/ft
●	4-in. casing	= 0.65 gal/ft
	6-in. casing	= 1.47 gal/ft
	6.5-in.casing	= 1.70 gal/ft
	8-in. casing	= 2.60 gal/ft
	10-in. casing	= 4.10 gal/ft
	12-in. casing	= 5.00 gal/ft
	8-in.hole filter pack	= 0.78gal/ft
●	10-in.hole filter pack	= 1.21gal/ft
	12-in.hole filter pack	= 1.47gal/ft

2. WELL PURGING DATA:

a. Purge Method TRASH PUMP / WATERRA

b. Required Purge Volume (@ 1. gallons per well volume) = 65.1 gal

c. Field Testing; Equipment Used BECKMAN pH A.S. COND METER

d. Pump Rate 2.5

e. Method of GW Disposal 55 gallon drum

f. Recovery Rate: Slow (90% > 60min), Medium (90% 30-60 min), Fast (90% < 10 min)

Volume Removed (gal)	Time	T°c	pH	Spec. Conductivity	Turbidity (NTU's)	Color/ Description	SWL	Pump Placement
PUMP ON	1251							
20	1259	21.1	7.12	1,190		CLEAR		
43	1308	21.2	7.01	1,200		CLEAR		
67	1319	20.3	6.87	1,200		CLEAR		
SAMP	1325	20.5	6.83	1,200		CLEAR		

3. SAMPLE COLLECTION: Method Disposable Bailer Container 3 x 40 ml VOA Preservation HCL

Analysis TPH (gas) 8015, BTEX 8020

COMMENTS, REMARKS

BROWN AND CALDWELL

Well No. MW-5

GROUNDWATER SAMPLE COLLECTION RECORD

Project Name: EZ - Serve, Hayward Job No.: 3003-02 Date: _____

Location: Station No. 100877, 523 "A" Street @ Garden Ave., Hayward, CA

Samplers Name: _____

Weather Conditions: _____

1. WATER LEVEL DATA: (from TOC)

TOC Elevation (from LS) _____

a. Depth to water (ft) = 16.92'

Water Table Elev. _____

b. Total Well Depth = 32.48 ft.

Tape Corr. (TC) _____

c. Length of Water Column = 15.56' (b. – a.)

Well Diameter 4"x 10"

d. Casing Volume = 10.1 (c. x [gal/ft casing])

e. Length of filter pack = 10'

f. Filter pack volume = 12.1 (e. x [gal/ft filter pack])

g. **TOTAL WELL VOLUME** = 22.2 gal (d. + f.)

	2-in. casing	= 0.16 gal/ft
●	4-in. casing	= 0.65 gal/ft
	6-in. casing	= 1.47 gal/ft
	6.5-in.casing	= 1.70 gal/ft
	8-in. casing	= 2.60 gal/ft
	10-in. casing	= 4.10 gal/ft
	12-in. casing	= 5.00 gal/ft
	8-in.hole filter pack	= 0.78gal/ft
●	10-in.hole filter pack	= 1.21gal/ft
	12-in.hole filter pack	= 1.47gal/ft

2. WELL PURGING DATA:

a. Purge Method TRASH PUMP / WATERRA

b. Required Purge Volume (@ 22.2 gallons per well volume) = 66.0

c. Field Testing; Equipment Used BECKMAN pH + TEMP & S.S. COND-METER

d. Pump Rate 2.5

e. Method of GW Disposal 55 gallon drum

f. Recovery Rate: Slow (90% > 60min), Medium (90% 30-60 min), Fast (90% < 10 min) _____

Volume Removed (gal)	Time	T°c	pH	Spec. Conductivity	Turbidity (NTU's)	Color/ Description	SWL	Pump Placement
PUMP ON	1206	19.9						
26	1217	20.0	7.17	1,050		CLEAR		
46	1228	20.0	7.21	1,010		CLEAR		
66	1239	19.8	7.19	1,020		CLEAR		
SAMPLE	1243	20.1	7.20	1,030		CLEAR		

3. SAMPLE COLLECTION: Method Disposable Bailer Container 3 x 40 ml VOA Preservation HCL

Analysis TPH (gas) 8015, BTEX 8020

COMMENTS, REMARKS

_____

_____

_____

BROWN AND CALDWELL

Well No. MW-6

GROUNDWATER SAMPLE COLLECTION RECORD

Project Name: EZ - Serve, Hayward Job No.: 3003-02 Date: 12-11-95

Location: Station No. 100877, 523 "A" Street @ Garden Ave., Hayward, CA

Samplers Name: STIWAR

Weather Conditions: OVERCAST

1. WATER LEVEL DATA: (from TOC)

TOC Elevation (from LS) _____

a. Depth to water (ft) = 17.20

Water Table Elev. _____

b. Total Well Depth = 32.10 ft.

Tape Corr. (TC) _____

c. Length of Water Column = 14.90' (b. – a.)

Well Diameter 4"x 10"

d. Casing Volume = 9.6 gal (c. x [gal/ft casing])

e. Length of filter pack = 10'

f. Filter pack volume = 12.1 gal (e. x [gal/ft filter pack])

g. **TOTAL WELL VOLUME** = 21.7 gal (d. + f.)

	2-in. casing = 0.16 gal/ft
●	4-in. casing = 0.65 gal/ft
	6-in. casing = 1.47 gal/ft
	6.5-in.casing = 1.70 gal/ft
	8-in. casing = 2.60 gal/ft
	10-in. casing = 4.10 gal/ft
	12-in. casing = 5.00 gal/ft
	8-in.hole filter pack = 0.78gal/ft
●	10-in.hole filter pack = 1.21gal/ft
	12-in.hole filter pack = 1.47gal/ft

2. WELL PURGING DATA:

a. Purge Method TRASH PUMP / WATERRA

b. Required Purge Volume (@ 21.7 gallons per well volume) = 65.3 gal

c. Field Testing; Equipment Used BECKMAN pH + TEMP AMBER SCIENTIFIC COND. METER

d. Pump Rate 2.0 gpm

e. Method of GW Disposal 55 gallon drum

f. Recovery Rate: Slow (90% > 60min), Medium (90% 30-60 min) Fast (90% < 10 min) _____

Volume Removed (gal)	Time	T°c	pH	Spec. Conductivity	Turbidity (NTU's)	Color/ Description	SWL	Pump Placement
PUMP ON	1240							
20	1250	18.9	6.52	1,190		CLEAR		4W.+2'
40	1301	19.0	6.47	1,180		CLEAR		
66	1315	18.9	6.48	1,180		CLEAR	20.17	
SAMPLE	1325	18.9	6.45	1,180		CLEAR		

3. SAMPLE COLLECTION: Method Disposable Bailer Container 3 x 40 ml VOA Preservation HCL

Analysis TPH (gas) 8015, BTEX 8020

COMMENTS, REMARKS

BROWN AND CALDWELL

Well No. MW-7

GROUNDWATER SAMPLE COLLECTION RECORD

Project Name: EZ - Serve, Hayward Job No.: 3003-02 Date: 12/11/95

Location: Station No. 100877, 523 "A" Street @ Garden Ave., Hayward, CA

Samplers Name: John Vicksan

Weather Conditions: Cool w/ Showers All day

1. WATER LEVEL DATA: (from TOC)

TOC Elevation (from LS) _____

Water Table Elev. _____

Tape Corr. (TC) _____

Well Diameter 2"x 8"

a. Depth to water (ft) = 17.61

b. Total Well Depth = 30.06 ft.

c. Length of Water Column = 12.45' (b. – a.)

d. Casing Volume = 1.99 (c. x [gal/ft casing])

e. Length of filter pack = 10'

f. Filter pack volume = 7.8 (e. x [gal/ft filter pack])

g. **TOTAL WELL VOLUME** = 9.79 (d. + f.)

●	2-in. casing	= 0.16 gal/ft
	4-in. casing	= 0.65 gal/ft
	6-in. casing	= 1.47 gal/ft
	6.5-in.casing	= 1.70 gal/ft
	8-in. casing	= 2.60 gal/ft
	10-in. casing	= 4.10 gal/ft
	12-in. casing	= 5.00 gal/ft
●	8-in.hole filter pack	= 0.78gal/ft
	10-in.hole filter pack	= 1.21gal/ft
	12-in.hole filter pack	= 1.47gal/ft

2. WELL PURGING DATA:

a. Purge Method Fish Rnd w/ Water

b. Required Purge Volume (@ 9.79 gallons per well volume) = 29.37 Gallons

c. Field Testing; Equipment Used Beckman = pH & Temp / Amber Science = Cond / Hach Turb.

d. Pump Rate _____

e. Method of GW Disposal 55 gallon drum

f. Recovery Rate: Slow (90% > 60min), Medium (90% 30-60 min), Fast (90% < 10 min) _____

Volume Removed (gal)	Time	T°c	pH	Spec. Conductivity	Turbidity (NTU's)	Color/ Description	SWL	Pump Placement
6	1403	19.0°	6.57	900	7100 mNs	cloudy w/ Strong Fuel odor	–	Bottom
11	1407	19.1°	6.73	980	7100 mNs	Same	–	Bottom
20	1415	19.3°	6.77	910	85 NTUs	Same	–	T.O.W.C.
30	1422	19.4°	6.73	910	69 NTUs	Some Clearing	–	T.O.W.C.
		Samples	Taken @	1435 /	Collected	100877-MW-7		
Sample Removed	1435	19.6°	6.75	910	37 NTUs	Clear w/ light odor.	–	N/A

3. SAMPLE COLLECTION: Method Disposable Bailer Container 3 x 40 ml VOA Preservation HCL

Analysis TPH (gas) 8015, BTEX 8020

COMMENTS, REMARKS

*Note:
Also collected Duplicate Sample & Field Blank @ this Location.

BROWN AND CALDWELL

Well No. MW-8

GROUNDWATER SAMPLE COLLECTION RECORD

Project Name: EZ - Serve, Hayward Job No.: 3003-02 Date: 12/11/95

Location: Station No. 100877, 523 "A" Street @ Garden Ave., Hayward, CA

Samplers Name: John Wickes

Weather Conditions: Cool w/showers All day

1. WATER LEVEL DATA: (from TOC)

TOC Elevation (from LS) _____

Water Table Elev. _____

Tape Corr. (TC) _____

Well Diameter 2"x 8"

a. Depth to water (ft)	= 17.52'	
b. Total Well Depth	= 32.15 ft.	
c. Length of Water Column	= 14.63'	(b. – a.)
d. Casing Volume	= 2.34 gal	(c. x [gal/ft casing])
e. Length of filter pack	= 10.00	
f. Filter pack volume	= 7.80 gal	(e. x [gal/ft filter pack])
g. **TOTAL WELL VOLUME**	= 10.14 gal	(d. + f.)

●	2-in. casing	= 0.16 gal/ft
	4-in. casing	= 0.65 gal/ft
	6-in. casing	= 1.47 gal/ft
	6.5-in.casing	= 1.70 gal/ft
	8-in. casing	= 2.60 gal/ft
	10-in. casing	= 4.10 gal/ft
	12-in. casing	= 5.00 gal/ft
●	8-in.hole filter pack	= 0.78gal/ft
	10-in.hole filter pack	= 1.21gal/ft
	12-in.hole filter pack	= 1.47gal/ft

2. WELL PURGING DATA:

a. Purge Method Trash Pump w/Waterra

b. Required Purge Volume (@ 10.14 gallons per well volume) = 30.42

c. Field Testing; Equipment Used Beckman = pH; Temp/Amber Science = Cond/Hach = Turb

d. Pump Rate _____

e. Method of GW Disposal 55 gallon drum

f. Recovery Rate: Slow (90% > 60min), Medium (90% 30-60 min), Fast (90% < 10 min) _____

Volume Removed (gal)	Time	T°c	pH	Spec. Conductivity	Turbidity (NTU's)	Color/ Description	SWL	Pump Placement
5	1515	19.9°	6.84	930	7100 NTU's	Heavy Silt/No odor	-	Bottom
11	1519	20.6°	6.79	940	81 NTU's	Clearing	-	Bottom
19	1522	20.9°	6.75	940	20 NTU's	Clear w/ No odor	-	T.O.W.C.
31	1526	21.0°	6.73	940	18 NTU's	Some	-	T.O.W.C.
		Samples Taken @		1535/Collected 100877-MW-8				
S.W.L. Recovery	1535	19.9°	6.72	940	92 NTU's	Slightly Cloudy	-	N/A

3. SAMPLE COLLECTION: Method Disposable Bailer Container 3 x 40 ml VOA Preservation HCL

Analysis TPH (gas) 8015, BTEX 8020

COMMENTS, REMARKS

BROWN AND CALDWELL

Well No. MW-9

GROUNDWATER SAMPLE COLLECTION RECORD

Project Name: EZ - Serve, Hayward Job No.: 3003-02 Date: 12-11-95

Location: Station No. 100877, 523 "A" Street @ Garden Ave., Hayward, CA

Samplers Name: STNAR

Weather Conditions: RAIN

1. WATER LEVEL DATA: (from TOC)

a. Depth to water (ft) = 15.58'

b. Total Well Depth = 31.60 ft.

c. Length of Water Column = 16.02' (b. – a.)

d. Casing Volume = 2.5 gal (c. x [gal/ft casing])

e. Length of filter pack = 10'

f. Filter pack volume = 7.8 gal (e. x [gal/ft filter pack])

g. **TOTAL WELL VOLUME** = 10.3 gal (d. + f.)

TOC Elevation (from LS) _____

Water Table Elev. _____

Tape Corr. (TC) _____

Well Diameter 2"x 8"

●	2-in. casing	= 0.16 gal/ft
	4-in. casing	= 0.65 gal/ft
	6-in. casing	= 1.47 gal/ft
	6.5-in.casing	= 1.70 gal/ft
	8-in. casing	= 2.60 gal/ft
	10-in. casing	= 4.10 gal/ft
	12-in. casing	= 5.00 gal/ft
●	8-in.hole filter pack	= 0.78gal/ft
	10-in.hole filter pack	= 1.21gal/ft
	12-in.hole filter pack	= 1.47gal/ft

2. WELL PURGING DATA:

a. Purge Method TRASH PUMP / WATERRA

b. Required Purge Volume (@ 10.3 gallons per well volume) = 31.0 gal

c. Field Testing; Equipment Used BECKMAN pH TEMP, AMBER SCIENTIFIC COND. METER

d. Pump Rate 1.0

e. Method of GW Disposal 55 gallon drum

f. Recovery Rate: Slow (90% > 60min), Medium (90% 30-60 min), Fast (90% < 10 min) _____

Volume Removed (gal)	Time	T°c	pH	Spec. Conductivity	Turbidity (NTU's)	Color/ Description	SWL	Pump Placement
PUMP ON	1459							
10	1510	18.8	6.51	1,050		CLEAR		
20	1521	19.1	6.47	1,050		CLEAR		
32	1534	19.0	6.38	1,050		CLEAR		
SAMPLE	1539	19.1	6.36	1,050		CLEAR		

3. SAMPLE COLLECTION: Method Disposable Bailer Container 3 x 40 ml VOA Preservation HCL

Analysis TPH (gas) 8015, BTEX 8020

COMMENTS, REMARKS

BROWN AND CALDWELL

Well No. MW-10

GROUNDWATER SAMPLE COLLECTION RECORD

Project Name: EZ - Serve, Hayward Job No.: 3003-02 Date: 12-12-95

Location: Station No. 100877, 523 "A" Street @ Garden Ave., Hayward, CA

Samplers Name: STINAR

Weather Conditions: RAIN

1. WATER LEVEL DATA: (from TOC)

a. Depth to water (ft) = 17.30

b. Total Well Depth = 31.80 ft.

c. Length of Water Column = 14.5 (b. – a.)

d. Casing Volume = 2.3 gal (c. x [gal/ft casing])

e. Length of filter pack = 10'

f. Filter pack volume = 7.8 gal (e. x [gal/ft filter pack])

g. **TOTAL WELL VOLUME** = 10.1 gal (d. + f.)

TOC Elevation (from LS) _____

Water Table Elev. _____

Tape Corr. (TC) _____

Well Diameter 2"x 8"

●	2-in. casing	= 0.16 gal/ft
	4-in. casing	= 0.65 gal/ft
	6-in. casing	= 1.47 gal/ft
	6.5-in.casing	= 1.70 gal/ft
	8-in. casing	= 2.60 gal/ft
	10-in. casing	= 4.10 gal/ft
	12-in. casing	= 5.00 gal/ft
●	8-in.hole filter pack	= 0.78gal/ft
	10-in.hole filter pack	= 1.21gal/ft
	12-in.hole filter pack	= 1.47gal/ft

2. WELL PURGING DATA:

a. Purge Method TRASH PUMP / WATERRA

b. Required Purge Volume (@ 10.1 gallons per well volume) = 30.3 gal

c. Field Testing; Equipment Used BECKMAN

d. Pump Rate 1.0 gpm

e. Method of GW Disposal 55 gallon drum

f. Recovery Rate: Slow (90% > 60min), Medium (90% 30-60 min), (Fast) (90% < 10 min)

Volume Removed (gal)	Time	T°c	pH	Spec. Conductivity	Turbidity (NTU's)	Color/ Description	SWL	Pump Placement
PUMP ON	1340							
10	1351	20.2	7.31	1,000		CLEAR		
20	1402	20.3	7.27	1,000		CLEAR		
32	1415	20.5	7.24	1,000		CLEAR		
SAMPLE	1418	20.5	7.23	1,000		CLEAR		

3. SAMPLE COLLECTION: Method Disposable Bailer Container 3 x 40 ml VOA Preservation HCL

Analysis TPH (gas) 8015, BTEX 8020

COMMENTS, REMARKS

BROWN AND CALDWELL

Well No. MW-11

GROUNDWATER SAMPLE COLLECTION RECORD

Project Name: EZ - Serve, Hayward Job No.: 3003-02 Date: 12-11-95

Location: Station No. 100877, 523 "A" Street @ Garden Ave., Hayward, CA

Samplers Name: STNAR

Weather Conditions: RAIN

1. WATER LEVEL DATA: (from TOC)

a. Depth to water (ft) = 13.73

b. Total Well Depth = 25.00 ft.

c. Length of Water Column = 11.27 (b. – a.)

d. Casing Volume = 1.8 GAL (c. x [gal/ft casing])

e. Length of filter pack = 10'

f. Filter pack volume = 7.8 (e. x [gal/ft filter pack])

g. **TOTAL WELL VOLUME** = 9.6 GAL (d. + f.)

TOC Elevation (from LS) _____

Water Table Elev. _____

Tape Corr. (TC) _____

Well Diameter 2"x 8"

●	2-in. casing	= 0.16 gal/ft
	4-in. casing	= 0.65 gal/ft
	6-in. casing	= 1.47 gal/ft
	6.5-in.casing	= 1.70 gal/ft
	8-in. casing	= 2.60 gal/ft
	10-in. casing	= 4.10 gal/ft
	12-in. casing	= 5.00 gal/ft
●	8-in.hole filter pack	= 0.78gal/ft
	10-in.hole filter pack	= 1.21gal/ft
	12-in.hole filter pack	= 1.47gal/ft

2. WELL PURGING DATA:

a. Purge Method TRASH PUMP / WATERRA

b. Required Purge Volume (@ 9.6 gallons per well volume) = 28.8 GAL

c. Field Testing; Equipment Used BECKMAN pH + TEMP AMBER SCIENTIFIC COND. METER

d. Pump Rate 1.0 GPM

e. Method of GW Disposal 55 gallon drum

f. Recovery Rate: Slow (90% > 60min), Medium (90% 30-60 min), ~~Fast~~ (90% < 10 min) _____

Volume Removed (gal)	Time	T°c	pH	Spec. Conductivity	Turbidity (NTU's)	Color/ Description	SWL	Pump Placement
1354	PUMP ON							
10	1405	20.0	6.40	1,160	–	GREY, FUEL ODOR		
20	1416	20.9	6.38	1,150		CLEARING		
30	1427	19.9	6.35	1,150		CLEAR		
SAMPLE	1432	19.8	6.34	1,150		CLEAR		

3. SAMPLE COLLECTION: Method Disposable Bailer Container 3 x 40 ml VOA Preservation HCL

Analysis TPH (gas) 8015, BTEX 8020

COMMENTS, REMARKS

BROWN AND CALDWELL

Well No. MW-12

GROUNDWATER SAMPLE COLLECTION RECORD

Project Name: EZ - Serve, Hayward Job No.: 3003-02 Date: 12/11/95

Location: Station No. 100877, 523 "A" Street @ Garden Ave., Hayward, CA

Samplers Name: John Nielsen

Weather Conditions: Cool & Strong Rain All Day

1. WATER LEVEL DATA: (from TOC)

TOC Elevation (from LS) _____

Water Table Elev. _____

Tape Corr. (TC) _____

Well Diameter 2"x 8"

a. Depth to water (ft) = 18.36

b. Total Well Depth = 30.00 ft.

c. Length of Water Column = 11.64' (b. – a.)

d. Casing Volume = 1.86 (c. x [gal/ft casing])

e. Length of filter pack = 10.00'

f. Filter pack volume = 7.8 (e. x [gal/ft filter pack])

g. **TOTAL WELL VOLUME** = 9.665 (d. + f.)

●	2-in. casing	= 0.16 gal/ft
	4-in. casing	= 0.65 gal/ft
	6-in. casing	= 1.47 gal/ft
	6.5-in.casing	= 1.70 gal/ft
	8-in. casing	= 2.60 gal/ft
	10-in. casing	= 4.10 gal/ft
	12-in. casing	= 5.00 gal/ft
●	8-in.hole filter pack	= 0.78gal/ft
	10-in.hole filter pack	= 1.21gal/ft
	12-in.hole filter pack	= 1.47gal/ft

2. WELL PURGING DATA:

a. Purge Method Trash Pump w/ Hoses

b. Required Purge Volume (@ 9.66 gallons per well volume) = 28.98 Gallons

c. Field Testing; Equipment Used Beckman = pH & Temp / Amber Science = Cond / Hach = Turb.

d. Pump Rate _____

e. Method of GW Disposal 55 gallon drum

f. Recovery Rate: Slow (90% > 60min), Medium (90% 30-60 min), Fast (90% < 10 min) _____

Volume Removed (gal)	Time	T°c	pH	Spec. Conductivity	Turbidity (NTU's)	Color/ Description	SWL	Pump Placement
5	1224	19.0°	6.76	680	7100 mcs	Cloudy w/ Fine Silts	–	Bottom
17	1233	19.40	6.79	690	7100 mcs	Some Clearing	–	T.O.W.C.
24	1237	19.40	6.78	690	7100 mcs	Same	–	T.O.W.C.
28.5	1241	19.5°	6.71	690	7100 mcs	Same	–	T.O.W.C.
		Sample Taken @ 1255 / Collected 100877-MW-12						
Sample Parameters	1255	19.10	6.75	690	7100 mcs	Cloudy w/ Fine Silts	–	N/A

3. SAMPLE COLLECTION: Method Disposable Bailer Container 3 x 40 ml VOA Preservation HCL

Analysis TPH (gas) 8015, BTEX 8020

COMMENTS, REMARKS

BROWN AND CALDWELL

Well No. MW-13

GROUNDWATER SAMPLE COLLECTION RECORD

Project Name: EZ - Serve, Hayward Job No.: 3003-02 Date: 12-11-95

Location: Station No. 100877, 523 "A" Street @ Garden Ave., Hayward, CA

Samplers Name: STONE

Weather Conditions: RAIN

1. WATER LEVEL DATA: (from TOC)

TOC Elevation (from LS) _____

Water Table Elev. _____

Tape Corr. (TC) _____

Well Diameter 2"x 8"

a. Depth to water (ft) = 16.60

b. Total Well Depth = 30.00 ft.

c. Length of Water Column = 13.40 (b. – a.)

d. Casing Volume = 2.1 GAL (c. x [gal/ft casing])

e. Length of filter pack = 10"

f. Filter pack volume = 7.8 GAL (e. x [gal/ft filter pack])

g. **TOTAL WELL VOLUME** = 9.9 GAL (d. + f.)

●	2-in. casing	= 0.16 gal/ft
	4-in. casing	= 0.65 gal/ft
	6-in. casing	= 1.47 gal/ft
	6.5-in.casing	= 1.70 gal/ft
	8-in. casing	= 2.60 gal/ft
	10-in. casing	= 4.10 gal/ft
	12-in. casing	= 5.00 gal/ft
●	8-in.hole filter pack	= 0.78gal/ft
	10-in.hole filter pack	= 1.21gal/ft
	12-in.hole filter pack	= 1.47gal/ft

2. WELL PURGING DATA:

a. Purge Method TRASH PUMP / WATERRA

b. Required Purge Volume (@ 9.9 gallons per well volume) = 29.8 GAL

c. Field Testing; Equipment Used BECKMAN pH-TEMP AMBER SCIENTIFIC COND. METER

d. Pump Rate 1.0

e. Method of GW Disposal 55 gallon drum

f. Recovery Rate: Slow (90% > 60min), Medium (90% 30-60 min), Fast (90% < 10 min) _____

Volume Removed (gal)	Time	T°c	pH	Spec. Conductivity	Turbidity (NTU's)	Color/ Description	SWL	Pump Placement
1557	PUMP ON							
5	1605	20.2	7.02	1,105		SLTS, BROWN		
12	1612	21.4	6.81	1,050		SAME		
13.5	1614	21.2	6.75	1,050		SAME		
SAMPLE	1630	20.9	6.75	1,070		CLEAR		

DRY

3. SAMPLE COLLECTION: Method Disposable Bailer Container 3 x 40 ml VOA Preservation HCL

Analysis TPH (gas) 8015, BTEX 8020

COMMENTS, REMARKS

NEED TO HAND ASSIST WATERRA PUMP.

BROWN AND CALDWELL

Well No. MW-14

GROUNDWATER SAMPLE COLLECTION RECORD

Project Name: EZ - Serve, Hayward Job No.: 3003-02 Date: 12/4/95

Location: Station No. 100877, 523 "A" Street @ Garden Ave., Hayward, CA

Samplers Name: John Nielsen

Weather Conditions: Cool & Showers All Day

1. WATER LEVEL DATA: (from TOC)

TOC Elevation (from LS) _____

Water Table Elev. _____

Tape Corr. (TC) _____

Well Diameter 2"x 8"

a. Depth to water (ft)	= 18.30	
b. Total Well Depth	= 30.00 ft.	
c. Length of Water Column	= 11.70'	(b. – a.)
d. Casing Volume	= 1.87 gal	(c. x [gal/ft casing])
e. Length of filter pack	= 10'	
f. Filter pack volume	= 7.80 gal	(e. x [gal/ft filter pack])
g. **TOTAL WELL VOLUME**	= 9.67 gal	(d. + f.)

●	2-in. casing	= 0.16 gal/ft
	4-in. casing	= 0.65 gal/ft
	6-in. casing	= 1.47 gal/ft
	6.5-in.casing	= 1.70 gal/ft
	8-in. casing	= 2.60 gal/ft
	10-in. casing	= 4.10 gal/ft
	12-in. casing	= 5.00 gal/ft
●	8-in.hole filter pack	= 0.78gal/ft
	10-in.hole filter pack	= 1.21gal/ft
	12-in.hole filter pack	= 1.47gal/ft

2. WELL PURGING DATA:

a. Purge Method Teflon Bailer & Waterra

b. Required Purge Volume (@ _____ gallons per well volume) = ≈9.0 Gallons

c. Field Testing; Equipment Used Beckman = PH & Temp/Amber Science = Cond/ Hach = Turb.

d. Pump Rate _____

e. Method of GW Disposal 55 gallon drum

f. Recovery Rate: Slow (90% > 60min), Medium (90% 30-60 min), Fast (90% < 10 min) _____

Volume Removed (gal)	Time	T°c	pH	Spec. Conductivity	Turbidity (NTU's)	Color/ Description	SWL	Pump Placement
5	1317	19.4°	6.75	830	7100	Cloudy w/Silts/Mod silt	–	Bottom
12	1321	19.4°	6.76	840	7100	Cloudy w/ Mod silt	–	T.O.W.C.
22	1328	19.4°	6.74	840	63 NTU's	Clearing/No odor	–	T.O.W.C.
29	1332	19.5°	6.74	840	81 NTU's	Clear w/No odor	–	T.O.W.C.
		Samples	Taken @	1340	Labeled 100877-MW-14			
Sonic Recovery	1340	19.6°	6.75	840	39 NTU's	Slightly Cloudy/No odor	–	N/A

3. SAMPLE COLLECTION: Method Disposable Bailer Container 3 x 40 ml VOA Preservation HCL

Analysis TPH (gas) 8015, BTEX 8020

COMMENTS, REMARKS

C K Y incorporated
Analytical Laboratories

Date: 01-17-1996
CKY Batch No.: 95L072

Attn.: Todd Miller

Brown & Root Environmental
3480 Buskirk Avenue
Pleasant Hill, CA 94523

Subject: Laboratory Report
Project: Brown & Root - 3003-02

Enclosed is the Laboratory report for samples received on 12/13/95. The samples were received in coolers with ice and intact; the chain-of-custody forms were properly filled out. The data reported include :

Sample ID	Control No.	Matrix	Analysis
MW-1A	L072-01	Water	EPA 5030/M8015 EPA 8020
MW-1	L072-02	Water	EPA 5030/M8015 EPA 8020
MW-2	L072-03	Water	EPA 5030/M8015 EPA 8020
MW-3	L072-04	Water	EPA 5030/M8015 EPA 8020
MW-4	L072-05	Water	EPA 5030/M8015 EPA 8020
MW-5	L072-06	Water	EPA 5030/M8015 EPA 8020
MW-6	L072-07	Water	EPA 5030/M8015 EPA 8020
MW-7	L072-08	Water	EPA 5030/M8015 EPA 8020
MW-7D	L072-09	Water	EPA 5030/M8015 EPA 8020
MW-7FB	L072-10	Water	EPA 5030/M8015 EPA 8020
MW-8	L072-11	Water	EPA 5030/M8015 EPA 8020
MW-9	L072-12	Water	EPA 5030/M8015 EPA 8020
MW-10	L072-13	Water	EPA 5030/M8015 EPA 8020
MW-11	L072-14	Water	EPA 5030/M8015 EPA 8020
MW-12	L072-15	Water	EPA 5030/M8015 EPA 8020

Sample ID	Control No.	Matrix	Analysis
MW-13	L072-16	Water	EPA 5030/M8015 EPA 8020
MW-14	L072-17	Water	EPA 5030/M8015 EPA 8020
TRIP BLANK	L072-18	Water	EPA 5030/M8015 EPA 8020

The results are summarized on the following pages.

Please feel free to call if you have any questions concerning these results.

Sincerely yours,

Kam Y. Pang, Ph.D.
Laboratory Director

P.S. - All analyses requested for the above referenced project have been completed. Therefore, unless instructed, the remaining portions of the samples will be disposed after fifteen (15) days from the date of this report.

EPA 5030/M8015
TOTAL PETROLEUM HYDROCARBONS BY PURGE & TRAP

CLIENT:	Brown & Root Environmental	DATE COLLECTED:	12/11/95
PROJECT:	Brown & Root - 3003-02	DATE RECEIVED:	12/13/95
BATCH NO.:	95L072	DATE EXTRACTED:	NA
MATRIX:	WATER	DATE ANALYZED:	12/19/95

SAMPLE ID	CONTROL NO	RESULT (mg/L)	% RECOVERY SURR	DILUTION FACTOR	MDL (mg/L)
MW-1A	L072-01	10.1	76	10	1
MW-1	L072-02	6.33	82	25	2.5
MW-2	L072-03	35.4	89	50	5
MW-3	L072-04	6.92	98	5	.5
MW-4	L072-05	6.72	88	5	.5
MW-5	L072-06	8.19	68	10	1
MW-6	L072-07	13.2	106	10	1
MW-7	L072-08	3.75	106	2	.2
MW-7D	L072-09	5.47	68	10	1
MW-7FB	L072-10	ND	92	1	.1
MW-8	L072-11	ND	94	1	.1
MW-9	L072-12	12.2	93	10	1
MW-10	L072-13	0.67	98	1	.1
MW-11	L072-14	12.6	89	10	1
MW-12	L072-15	ND	90	1	.1
MW-13	L072-16	ND	81	1	.1
MW-14	L072-17	1.33	111	1	.1
TRIP BLANK	L072-18	ND	106	1	.1
MBLK1W	VAL1814B	ND	92	1	.1
MBLK2W	VAL1914B	ND	99	1	.1

QC LIMIT: 60-140
SURR : Bromofluorobenzene
MDL : Method Detection Limit
DATE COLLECTED: 12/12/95, for L072-02 to 06 and 13
DATE ANALYZED: 12/18/95, for VAL1814B
12/20/95, for L072-04

CKY QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT: Brown & Root Environmental
PROJECT: Brown & Root - 3003-02
METHOD: EPA M8015G
MATRIX: WATER
% MOISTURE: NA

BATCH NO.: 95L072
SAMPLE ID: MW-13
CONTROL NO.: L072-16

DATE RECEIVED: 12/13/95
DATE EXTRACTED: NA
DATE ANALYZED: 12/19/95

ACCESSION: 95L072

PARAMETER	SMPL RSLT (mg/L)	SPIKE AMT (mg/L)	MS RSLT (mg/L)	MS % REC	SPIKE AMT (mg/L)	MSD RSLT (mg/L)	MSD % REC	RPD %	QC LIMIT %	RPD LIMIT %
Gasoline	ND	1.00	.93	93	1.00	1.01	101	8	65-135	30

CKY QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: Brown & Root Environmental
PROJECT: Brown & Root - 3003-02
METHOD: EPA M8015G
MATRIX: WATER
% MOISTURE: NA

BATCH NO.: 95L072
SAMPLE ID: LCS1W/LCS1WD
CONTROL NO.: VAL1814L/C

DATE RECEIVED: NA
DATE EXTRACTED: NA
DATE ANALYZED: 12/18/95

ACCESSION: 95L072

PARAMETER	BLNK RSLT (mg/L)	SPIKE AMT (mg/L)	BS RSLT (mg/L)	BS % REC	SPIKE AMT (mg/L)	BSD RSLT (mg/L)	BSD % REC	RPD %	QC LIMIT %	RPD LIMI %
Gasoline	ND	1.00	.96	96	1.00	1.03	103	7	70-125	3(

CKY QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: Brown & Root Environmental
PROJECT: Brown & Root - 3003-02
METHOD: EPA M8015G
MATRIX: WATER
% MOISTURE: NA

BATCH NO.: 95L072
SAMPLE ID: LCS2W/LCS2WD
CONTROL NO.: VAL1914L/C

DATE RECEIVED: NA
DATE EXTRACTED: NA
DATE ANALYZED: 12/19/95

ACCESSION: 95L072

PARAMETER	BLNK RSLT (mg/L)	SPIKE AMT (mg/L)	BS RSLT (mg/L)	BS % REC	SPIKE AMT (mg/L)	BSD RSLT (mg/L)	BSD % REC	RPD %	QC LIMIT %	RPD LIMIT %
Gasoline	ND	1.00	1.01	101	1.00	.98	98	3	70-125	30

EPA METHOD 8020
BTEX

CLIENT:	Brown & Root Environmental	DATE COLLECTED:	12/11/95
PROJECT:	Brown & Root - 3003-02	DATE RECEIVED:	12/13/95
BATCH NO.:	95L072	DATE EXTRACTED:	NA
SAMPLE ID:	MW-1A	DATE ANALYZED:	12/21/95
CONTROL NO.:	L072-01	MATRIX:	WATER
% MOISTURE:	NA	DILUTION FACTOR:	1

PARAMETERS	RESULTS (ug/L)	MDL (ug/L)
Benzene	310	1
Toluene	26	1
Ethylbenzene	350	1
Total Xylenes	850	3

SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	116	65-135

MDL: Method Detection Limit

EPA METHOD 8020
BTEX

CLIENT:	Brown & Root Environmental	DATE COLLECTED:	12/12/95
PROJECT:	Brown & Root - 3003-02	DATE RECEIVED:	12/13/95
BATCH NO.:	95L072	DATE EXTRACTED:	NA
SAMPLE ID:	MW-1	DATE ANALYZED:	12/19/95
CONTROL NO.:	L072-02	MATRIX:	WATER
% MOISTURE:	NA	DILUTION FACTOR:	25

PARAMETERS	RESULTS (ug/L)	MDL (ug/L)
Benzene	1700	25
Toluene	ND	25
Ethylbenzene	183	25
Total Xylenes	270	75

SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	84	65-135

MDL: Method Detection Limit

EPA METHOD 8020
BTEX

CLIENT:	Brown & Root Environmental	DATE COLLECTED:	12/12/95
PROJECT:	Brown & Root - 3003-02	DATE RECEIVED:	12/13/95
BATCH NO.:	95L072	DATE EXTRACTED:	NA
SAMPLE ID:	MW-2	DATE ANALYZED:	12/19/95
CONTROL NO.:	L072-03	MATRIX:	WATER
% MOISTURE:	NA	DILUTION FACTOR:	50

PARAMETERS	RESULTS (ug/L)	MDL (ug/L)
Benzene	3500	50
Toluene	190	50
Ethylbenzene	1500	50
Total Xylenes	3700	150

SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	91	65-135

MDL: Method Detection Limit

EPA METHOD 8020
BTEX

CLIENT:	Brown & Root Environmental	DATE COLLECTED:	12/12/95
PROJECT:	Brown & Root - 3003-02	DATE RECEIVED:	12/13/95
BATCH NO.:	95L072	DATE EXTRACTED:	NA
SAMPLE ID:	MW-3	DATE ANALYZED:	12/20/95
CONTROL NO.:	L072-04	MATRIX:	WATER
% MOISTURE:	NA	DILUTION FACTOR:	5

PARAMETERS	RESULTS (ug/L)	MDL (ug/L)
Benzene	610	5
Toluene	22	5
Ethylbenzene	350	5
Total Xylenes	550	15

SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	87	65-135

MDL: Method Detection Limit

EPA METHOD 8020
BTEX

CLIENT:	Brown & Root Environmental	DATE COLLECTED:	12/12/95
PROJECT:	Brown & Root - 3003-02	DATE RECEIVED:	12/13/95
BATCH NO.:	95L072	DATE EXTRACTED:	NA
SAMPLE ID:	MW-4	DATE ANALYZED:	12/19/95
CONTROL NO.:	L072-05	MATRIX:	WATER
% MOISTURE:	NA	DILUTION FACTOR:	5

PARAMETERS	RESULTS (ug/L)	MDL (ug/L)
Benzene	1600	5
Toluene	57	5
Ethylbenzene	390	5
Total Xylenes	510	15

SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	88	65-135

MDL: Method Detection Limit

EPA METHOD 8020
BTEX

CLIENT:	Brown & Root Environmental	DATE COLLECTED:	12/12/95
PROJECT:	Brown & Root - 3003-02	DATE RECEIVED:	12/13/95
BATCH NO.:	95L072	DATE EXTRACTED:	NA
SAMPLE ID:	MW-5	DATE ANALYZED:	12/19/95
CONTROL NO.:	L072-06	MATRIX:	WATER
% MOISTURE:	NA	DILUTION FACTOR:	10

PARAMETERS	RESULTS (ug/L)	MDL (ug/L)
Benzene	1200	10
Toluene	ND	10
Ethylbenzene	270	10
Total Xylenes	360	30

SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	69	65-135

MDL: Method Detection Limit

EPA METHOD 8020
BTEX

CLIENT:	Brown & Root Environmental	DATE COLLECTED:	12/11/95
PROJECT:	Brown & Root - 3003-02	DATE RECEIVED:	12/13/95
BATCH NO.:	95L072	DATE EXTRACTED:	NA
SAMPLE ID:	MW-6	DATE ANALYZED:	12/21/95
CONTROL NO.:	L072-07	MATRIX:	WATER
% MOISTURE:	NA	DILUTION FACTOR:	1

PARAMETERS	RESULTS (ug/L)	MDL (ug/L)
Benzene	990	1
Toluene	110	1
Ethylbenzene	1000	1
Total Xylenes	520	3

SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	102	65-135

MDL: Method Detection Limit

EPA METHOD 8020
BTEX

CLIENT:	Brown & Root Environmental	DATE COLLECTED:	12/11/95
PROJECT:	Brown & Root - 3003-02	DATE RECEIVED:	12/13/95
BATCH NO.:	95L072	DATE EXTRACTED:	NA
SAMPLE ID:	MW-7	DATE ANALYZED:	12/21/95
CONTROL NO.:	L072-08	MATRIX:	WATER
% MOISTURE:	NA	DILUTION FACTOR:	1

PARAMETERS	RESULTS (ug/L)	MDL (ug/L)
Benzene	120	1
Toluene	31	1
Ethylbenzene	400	1
Total Xylenes	330	3

SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	116	65-135

MDL: Method Detection Limit

EPA METHOD 8020
BTEX

CLIENT:	Brown & Root Environmental	DATE COLLECTED:	12/11/95
PROJECT:	Brown & Root - 3003-02	DATE RECEIVED:	12/13/95
BATCH NO.:	95L072	DATE EXTRACTED:	NA
SAMPLE ID:	MW-7D	DATE ANALYZED:	12/21/95
CONTROL NO.:	L072-09	MATRIX:	WATER
% MOISTURE:	NA	DILUTION FACTOR:	1

PARAMETERS	RESULTS (ug/L)	MDL (ug/L)
Benzene	120	1
Toluene	12	1
Ethylbenzene	420	1
Total Xylenes	310	3

SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	90	65-135

MDL: Method Detection Limit

EPA METHOD 8020
BTEX

CLIENT:	Brown & Root Environmental	DATE COLLECTED:	12/11/95
PROJECT:	Brown & Root - 3003-02	DATE RECEIVED:	12/13/95
BATCH NO.:	95L072	DATE EXTRACTED:	NA
SAMPLE ID:	MW-7FB	DATE ANALYZED:	12/21/95
CONTROL NO.:	L072-10	MATRIX:	WATER
% MOISTURE:	NA	DILUTION FACTOR:	1

PARAMETERS	RESULTS (ug/L)	MDL (ug/L)
Benzene	ND	1
Toluene	ND	1
Ethylbenzene	ND	1
Total Xylenes	ND	3

SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	70	65-135

MDL: Method Detection Limit

EPA METHOD 8020
BTEX

CLIENT:	Brown & Root Environmental	DATE COLLECTED:	12/11/95
PROJECT:	Brown & Root - 3003-02	DATE RECEIVED:	12/13/95
BATCH NO.:	95L072	DATE EXTRACTED:	NA
SAMPLE ID:	MW-8	DATE ANALYZED:	12/21/95
CONTROL NO.:	L072-11	MATRIX:	WATER
% MOISTURE:	NA	DILUTION FACTOR:	1

PARAMETERS	RESULTS (ug/L)	MDL (ug/L)
Benzene	1.3	1
Toluene	ND	1
Ethylbenzene	ND	1
Total Xylenes	ND	3

SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	86	65-135

MDL: Method Detection Limit

EPA METHOD 8020
BTEX

CLIENT:	Brown & Root Environmental	DATE COLLECTED:	12/11/95
PROJECT:	Brown & Root - 3003-02	DATE RECEIVED:	12/13/95
BATCH NO.:	95L072	DATE EXTRACTED:	NA
SAMPLE ID:	MW-9	DATE ANALYZED:	12/21/95
CONTROL NO.:	L072-12	MATRIX:	WATER
% MOISTURE:	NA	DILUTION FACTOR:	1

PARAMETERS	RESULTS (ug/L)	MDL (ug/L)
Benzene	2100	1
Toluene	140	1
Ethylbenzene	550	1
Total Xylenes	1600	3

SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	108	65-135

MDL: Method Detection Limit

EPA METHOD 8020
BTEX

CLIENT:	Brown & Root Environmental	DATE COLLECTED:	12/12/95
PROJECT:	Brown & Root - 3003-02	DATE RECEIVED:	12/13/95
BATCH NO.:	95L072	DATE EXTRACTED:	NA
SAMPLE ID:	MW-10	DATE ANALYZED:	12/19/95
CONTROL NO.:	L072-13	MATRIX:	WATER
% MOISTURE:	NA	DILUTION FACTOR:	1

PARAMETERS	RESULTS (ug/L)	MDL (ug/L)
Benzene	2.8	1
Toluene	1.3	1
Ethylbenzene	36	1
Total Xylenes	19	3

SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	97	65-135

MDL: Method Detection Limit

EPA METHOD 8020
BTEX

CLIENT:	Brown & Root Environmental	DATE COLLECTED:	12/11/95
PROJECT:	Brown & Root - 3003-02	DATE RECEIVED:	12/13/95
BATCH NO.:	95L072	DATE EXTRACTED:	NA
SAMPLE ID:	MW-11	DATE ANALYZED:	12/21/95
CONTROL NO.:	L072-14	MATRIX:	WATER
% MOISTURE:	NA	DILUTION FACTOR:	1

PARAMETERS	RESULTS (ug/L)	MDL (ug/L)
Benzene	770	1
Toluene	89	1
Ethylbenzene	1800	1
Total Xylenes	2500	3

SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	93	65-135

MDL: Method Detection Limit

EPA METHOD 8020
BTEX

CLIENT:	Brown & Root Environmental	DATE COLLECTED:	12/11/95
PROJECT:	Brown & Root - 3003-02	DATE RECEIVED:	12/13/95
BATCH NO.:	95L072	DATE EXTRACTED:	NA
SAMPLE ID:	MW-12	DATE ANALYZED:	12/21/95
CONTROL NO.:	L072-15	MATRIX:	WATER
% MOISTURE:	NA	DILUTION FACTOR:	1

PARAMETERS	RESULTS (ug/L)	MDL (ug/L)
Benzene	1.0	1
Toluene	1.0	1
Ethylbenzene	1.5	1
Total Xylenes	ND	3

SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	97	65-135

MDL: Method Detection Limit

EPA METHOD 8020
BTEX

CLIENT:	Brown & Root Environmental	DATE COLLECTED:	12/11/95
PROJECT:	Brown & Root - 3003-02	DATE RECEIVED:	12/13/95
BATCH NO.:	95L072	DATE EXTRACTED:	NA
SAMPLE ID:	MW-13	DATE ANALYZED:	12/21/95
CONTROL NO.:	L072-16	MATRIX:	WATER
% MOISTURE:	NA	DILUTION FACTOR:	1

PARAMETERS	RESULTS (ug/L)	MDL (ug/L)
Benzene	ND	1
Toluene	ND	1
Ethylbenzene	1.0	1
Total Xylenes	ND	3

SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	68	65-135

MDL: Method Detection Limit

EPA METHOD 8020
BTEX

CLIENT:	Brown & Root Environmental	DATE COLLECTED:	12/11/95
PROJECT:	Brown & Root - 3003-02	DATE RECEIVED:	12/13/95
BATCH NO.:	95L072	DATE EXTRACTED:	NA
SAMPLE ID:	MW-14	DATE ANALYZED:	12/21/95
CONTROL NO.:	L072-17	MATRIX:	WATER
% MOISTURE:	NA	DILUTION FACTOR:	1

PARAMETERS	RESULTS (ug/L)	MDL (ug/L)
Benzene	6.8	1
Toluene	1.0	1
Ethylbenzene	120	1
Total Xylenes	150	3

SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	107	65-135

MDL: Method Detection Limit

EPA METHOD 8020
BTEX

CLIENT:	Brown & Root Environmental	DATE COLLECTED:	12/11/95
PROJECT:	Brown & Root - 3003-02	DATE RECEIVED:	12/13/95
BATCH NO.:	95L072	DATE EXTRACTED:	NA
SAMPLE ID:	TRIP BLANK	DATE ANALYZED:	12/19/95
CONTROL NO.:	L072-18	MATRIX:	WATER
% MOISTURE:	NA	DILUTION FACTOR:	1

PARAMETERS	RESULTS (ug/L)	MDL (ug/L)
Benzene	ND	1
Toluene	ND	1
Ethylbenzene	ND	1
Total Xylenes	ND	3

SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	118	65-135

MDL: Method Detection Limit

EPA METHOD 8020
BTEX

CLIENT:	Brown & Root Environmental	DATE COLLECTED:	NA
PROJECT:	Brown & Root - 3003-02	DATE RECEIVED:	NA
BATCH NO.:	95L072	DATE EXTRACTED:	NA
SAMPLE ID:	MBLK1W	DATE ANALYZED:	12/19/95
CONTROL NO.:	VAL1914B	MATRIX:	WATER
% MOISTURE:	NA	DILUTION FACTOR:	1

PARAMETERS	RESULTS (ug/L)	MDL (ug/L)
Benzene	ND	1
Toluene	ND	1
Ethylbenzene	ND	1
Total Xylenes	ND	3

SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	96	65-135

MDL: Method Detection Limit

EPA METHOD 8020
BTEX

CLIENT:	Brown & Root Environmental	DATE COLLECTED:	NA
PROJECT:	Brown & Root - 3003-02	DATE RECEIVED:	NA
BATCH NO.:	95L072	DATE EXTRACTED:	NA
SAMPLE ID:	MBLK2W	DATE ANALYZED:	12/19/95
CONTROL NO.:	VAL1815B	MATRIX:	WATER
% MOISTURE:	NA	DILUTION FACTOR:	1

PARAMETERS	RESULTS (ug/L)	MDL (ug/L)
Benzene	ND	1
Toluene	ND	1
Ethylbenzene	ND	1
Total Xylenes	ND	3

SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	104	65-135

MDL: Method Detection Limit

EPA METHOD 8020
BTEX

CLIENT:	Brown & Root Environmental	DATE COLLECTED:	NA
PROJECT:	Brown & Root - 3003-02	DATE RECEIVED:	NA
BATCH NO.:	95L072	DATE EXTRACTED:	NA
SAMPLE ID:	MBLK3W	DATE ANALYZED:	12/21/95
CONTROL NO.:	VAL247B	MATRIX:	WATER
% MOISTURE:	NA	DILUTION FACTOR:	1

PARAMETERS	RESULTS (ug/L)	MDL (ug/L)
Benzene	ND	1
Toluene	ND	1
Ethylbenzene	ND	1
Total Xylenes	ND	3

SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	83	65-135

MDL: Method Detection Limit

CKY QUALITY CONTROL DATA
SPIKE/SPIKE DUPLICATE ANALYSIS

CLIENT: Brown & Root Environmental
PROJECT: Brown & Root - 3003-02
METHOD: EPA 8020
MATRIX: WATER

==========

BATCH NO.: 95L072 DATE RECEIVED: 12/13/95
SAMPLE ID: MW-13 DATE EXTRACTED: NA
CONTROL NO.: L072-16 DATE ANALYZED: 12/19/95

ACCESSION: 95L072

Parameter	SAMPLE CONC (ug/L)	SPIKE ADDED (ug/L)	MS CONC (ug/L)	MS % REC	SPIKE ADDED (ug/L)	MSD CONC (ug/L)	MSD % REC	% RPD
Benzene	ND	6.00	5.00	83	6.00	5.00	83	0
Toluene	ND	30.00	20.00	67	30.00	22.00	73	9
Ethylbenzene	ND	8.00	6.00	75	8.00	6.00	75	0
Total Xylenes	ND	53.00	36.00	68	53.00	40.00	75	10
QC LIMIT:				65-135			65-135	30

CKY QUALITY CONTROL DATA
SPIKE/SPIKE DUPLICATE ANALYSIS

CLIENT: Brown & Root Environmental
PROJECT: Brown & Root - 3003-02
METHOD: EPA 8020
MATRIX: WATER

BATCH NO.: 95L072 DATE RECEIVED: NA
SAMPLE ID: MW-2 DATE EXTRACTED: NA
CONTROL NO.: L070-03 DATE ANALYZED: 12/21/95

ACCESSION: 95L070 95L072

Parameter	SAMPLE CONC (ug/L)	SPIKE ADDED (ug/L)	MS CONC (ug/L)	MS % REC	SPIKE ADDED (ug/L)	MSD CONC (ug/L)	MSD % REC	% RPD
Benzene	ND	50.00	46.30	93	50.00	50.10	100	8
Toluene	ND	50.00	47.80	96	50.00	51.60	103	8
Ethylbenzene	ND	50.00	44.30	89	50.00	50.00	100	12
Total Xylenes	ND	150	136	91	150	151	101	10
QC LIMIT:				65-135			65-135	30

CKY QUALITY CONTROL DATA
LABORATORY CONTROL SAMPLE ANALYSIS

CLIENT: Brown & Root Environmental
PROJECT: Brown & Root - 3003-02
METHOD: EPA 8020
MATRIX: WATER

BATCH NO.: 95L072
SAMPLE ID: LCS1W/LCS1WD
CONTROL NO.: VAL1914L/C

DATE RECEIVED: NA
DATE EXTRACTED: NA
DATE ANALYZED: 12/19/95

ACCESSION: 95L072

Parameter	SAMPLE CONC (ug/L)	SPIKE ADDED (ug/L)	LCS CONC (ug/L)	LCS % REC	SPIKE ADDED (ug/L)	LCSD CONC (ug/L)	LCSD % REC	% RPD
Benzene	ND	6.00	7.00	117	6.00	7.00	117	0
Toluene	ND	30.00	32.00	107	30.00	30.00	100	7
Ethylbenzene	ND	8.00	8.00	100	8.00	9.00	113	12
Total Xylenes	ND	53.00	57.00	108	53.00	57.00	108	0
QC LIMIT:				70-125			70-125	30

CKY QUALITY CONTROL DATA
LABORATORY CONTROL SAMPLE ANALYSIS

CLIENT: Brown & Root Environmental
PROJECT: Brown & Root - 3003-02
METHOD: EPA 8020
MATRIX: WATER

BATCH NO.: 95L072 DATE RECEIVED: NA
SAMPLE ID: LCS2W/LCS2WD DATE EXTRACTED: NA
CONTROL NO.: VAL247L/C DATE ANALYZED: 12/21/95

ACCESSION: 95L072

Parameter	SAMPLE CONC (ug/L)	SPIKE ADDED (ug/L)	LCS CONC (ug/L)	LCS % REC	SPIKE ADDED (ug/L)	LCSD CONC (ug/L)	LCSD % REC	% RPD
Benzene	ND	20.00	19.10	96	20.00	19.40	97	2
Toluene	ND	20.00	19.30	97	20.00	20.30	102	5
Ethylbenzene	ND	20.00	18.60	93	20.00	19.70	99	6
Total Xylenes	ND	60.00	58.50	98	60.00	58.50	98	0
QC LIMIT:				70-125			70-125	30

9 L072 **CHAIN OF CUSTODY RECORD** EZ-Serve Hayward 1 of 2 BCA Log Number

Client name	Project or PO#
BC-PH WC3	3003-02
Address	**Phone #**
3480 Buskirk	510-937-900
City, State, Zip	**Report attention**
Pleasant Hill CA	Todd Miller

Sampled by: M. Stmar

Lab Sample number	Date sampled	Time sampled	Type* See key below	Sample description	Number of containers	TPH-G 8015	BTEX 8020	Hazardous sample Special handling required	Remarks
1	12-11	1222	GW	MW-1A	3	X	X		T=2°C 9
2	12-12	1158		MW-1					
3	12-12	1100		MW-2					
4	12-12	0940		MW-3					
5	12-12	1325		MW-4					
6	12-12	1243		MW-5					
7	12-11	1325		MW-6					
8	12-11	1435		MW-7					
9	12-11	1435		MW-70					
10	12-11	1435		MW-7FB					
11	12-11	1535		MW-8					
12	12-11	1539		MW-9					

	Signature	Print Name	Company	Date	Time
Relinquished by	M. Stmar	Michael Stmar	BC	12-12-95	1500
Received by	Steve Hinman	Steve Hinman	BC	12/12/95	1500
Relinquished by	Steve Hinman	Steve Hinman	BC		
Received by					
Relinquished by					
Received by Laboratory		I&T Pate	CKy	12/13/95	10:15

B C ANALYTICAL
☐ 1085 Shary Circle, Concord, CA 94518 (510) 825-3894
☐ 801 Western Avenue, Glendale, CA 91201 (818) 247-5737
☐ 1200 Gene Autry Way Anaheim CA 92805 (714) 978-0113

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client's expense.

Disposal arrangements: _____

*KEY. AG—Aqueous NA—Nonaqueous SL—Sludge GW—Groundwater SO—Soil PE—Petroleum

9[illegible]2072 WC3 **CHAIN OF CUSTODY RECORD** EZ-Serv Hayward 2 of 2

BCA Log Number _____

Client name	Project or PO#
BC-PH	3003-02
Address	**Phone #**
3480 BUSKIRK	510-937-9010
City, State, Zip	**Report attention**
Pleasant Hill CA	TODD MILLER

Sampled by M. STIWAR

Lab Sample number	Date sampled	Time sampled	Type* See key below	Sample description	Number of containers	TPH-G 8015	BTEX 8020	Hazardous sample Special handling required	Remarks
13	12-12	1318	GW	MW-10	3	X	X		T=2 C 9
14	12-11	1432		MW-11					
15	12-11	1255		MW-12					
16	12-11	1630		MW-13					
17	12-11	1340		MW-14					
18				TRIP BLANK	2	X	X		

	Signature	Print Name	Company	Date	Time
Relinquished by	M. Stiwar	MICHAEL STIWAR	BC	12-12-95	1500
Received by	Steve Hinman	Steve Hinman	BC	12/12/95	1500
Relinquished by	Steve Hinman	Steve Hinman	BC		
Received by					
Relinquished by					
Received by Laboratory	[signature]	DK PATEL	CKY	12/13/95	10.15

B C ANALYTICAL

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Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client's expense

Disposal arrangements: _____

*KEY: AG—Aqueous NA—Nonaqueous SL—Sludge GW—Groundwater SO—Soil PE—Petroleum

CKY INC., ANALYTICAL LABORATORIES, 630 Maple Ave., Torrance, Calif. 90503 Tel. (310) 618-8889 F

CKY

SAMPLE RECEIPT FORM

CONTROL NO.	95LO72
CLIENT	BROWN & ROOT
PROJECT	3003-02

DATE	12-13-95
TIME	10:15
RECIPIENT	I. PATEL

SAMPLE TRANSPORTATION TO CKY LABORATORY:	BY	ON(DATE)	AT(TIME)	FROM(SITE/CO.)	COMMENTS
PICKED-UP BY CKY COURIER					
DELIVERED BY CLIENT ✓					
SHIPPED/AIRBILL NO: FEDEX APTNS: 309465314 4 MPS 960 044845 3 SEE AIRBILL					

SAMPLE BATCH PACKAGING/SEALING UPON RECEIPT:	NO CONTAINER	✓ INTACT	DAMAGED	✓ NOT SEALED	SEALED

CONTAINER:	INSIDE TEMPERATURE: 2° C			CUSTODY SEAL /OTHER SEAL		LOCATION	NUMBER
2 COOLER S	PACKAGING	TYPE	SUFFICIENCY	INTACT	DAMAGED		
BOX	INSULATION:		OK	NAME:			
OTHER:	ICE/COOLANT:	REGULAR	↓	DATE:			
	PACKING MATERIAL:	BUBBLE PAK	↓	TIME:			

SAMPLE DOCUMENTATION/CHAIN-OF-CUSTODY(COC)	NONE	HANDCARRIED	✓ ENCLOSED	FAXED	SEALED

SAMPLE LOG-IN:	CRITERIA	COMMENTS	DISCREPANCY
SAMPLE CUSTODY SEAL	EVERY SAMPLE	NONE	
CONTAINER TYPE/MATERIAL	APPROPRIATE	OK	
SAMPLE AMOUNT	ENOUGH	↓	
SAMPLE PRESERVATION/HOLDING TIME	SUFFICIENT	↓	
HEADSPACE/BUBBLES	ZERO/NONE	↓	
SAMPLE LABEL INFORMATION	SUFFICIENT	}	
CHAIN-OF-CUSTODY INFORMATION	SUFFICIENT	} SEE BELOW	

SAMPLE INFO.:	SAMPLE ID ✓	DATE ✓	TIME ✓	SIGNATURE ✓	ANALYSES ✓	PRESERVATIVE	CONTAINER ✓
INDIVIDUAL SAMPLE CONTAINER:		NONE	✓ PLASTIC BAG	CAN	OTHER(SPECIFY): BUBBLE PAK		SEALED

SAMPLE NUMBER	CLIENT ID	DISCREPANCY	ACTION
		NO PREFIX 100877 BEFORE ID IN THE COC VS LABELS.	- please prefix 100877 before ID in COC
2 TO 12		NO. NO. OF CONTAINERS INFO - REQ'D (3)	
-9		S. TIME 14:40 ON THE LABEL (NO INFO - ANALYSIS)	
-10		S. TIME 14:45 ON THE LABEL	

CLIENT SERVICES COPY RECEIVED BY	Neeta 12/12	DATE		TIME	